
PLANNING COMMISSIONERS

PATRICIA KORZEC
Chairperson

ALVIN DEJOHNETTE
Vice Chairperson

JEFFREY SIMS
Commissioner



RAFAEL BRUGUERAS
Commissioner

VACANT
Commissioner

VACANT
Commissioner

VACANT
Commissioner

PLANNING COMMISSION Regular Meeting

Agenda

Thursday, August 26, 2021 at 7:00 PM
City Hall Council Chamber – 14177 Frederick Street

CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

APPROVAL OF AGENDA

PUBLIC COMMENTS PROCEDURE

Any person wishing to address the Commission on any matter, either under the Public Comments section of the Agenda or scheduled items or public hearings, must fill out a "Request to Speak" form available at the door. The completed form must be submitted to the Secretary prior to the Agenda item being called by the Chairperson. In speaking to the Commission, member of the public may be limited to three minutes per person, except for the applicant for entitlement. The Commission may establish an overall time limit for comments on a particular Agenda item. Members of the public must direct their questions to the Chairperson of the Commission and not to other members of the Commission, the applicant, the Staff, or the audience.

PUBLIC COMMENTS

CONSENT CALENDAR

All matters listed under Consent Calendar are considered to be routine and non-controversial, and may be enacted by one roll call vote. There will be no discussion of these items unless a member of the Planning Commission requests that an item be removed for separate action.

1. Planning Commission Minutes – Regular Meeting – July 8, 2021 7:00 PM
2. Planning Commission Minutes – Regular Meeting – July 22, 2021 7:00 PM
3. Planning Commission Minutes – Regular Meeting – August 12, 2021 7:00 PM

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, in compliance with the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to the ADA Coordinator, at 951.413.3120 at least 72 hours before the meeting. The 72-hour notification will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

NON-PUBLIC HEARING ITEMS

No items for discussion.

PUBLIC HEARING ITEMS

- 1. Case: PEN20-0118 General Plan Amendment
PEN20-0119 Change of Zone
PEN20-0120 Tentative Parcel Map 37944
PEN20-0121 Plot Plan
PEN20-0124 Plot Plan

- Applicant: CDRE Holdings 17 LLC, Mark Bachli

- Property Owner Moreno Valley Centerpoint LLC

- Representative MIG, Inc., Pamela Steele

- Location: South side of Alessandro Boulevard between Frederick Street and Graham Street (APN 297-170-002 and 003)

- Case Planner: Julia Descoteaux

- Council District: 1

- Proposal The applicant requests approval of the following entitlements for a 17.67 acre site: 1) General Plan Amendment (GPA) amending "Map LCC-4: General Plan Land Use Map of the Moreno Valley General Plan to change the land use designation of the Project Site from Commercial (C) to Business Park (BP); 2) Change of Zone amending the City of Moreno Valley Zoning Atlas to rezone the Project Site from Community Commercial District (CC) to Light Industrial District (LI); 3) Tentative Parcel Map 37944 for two (2) lots; 4) Plot Plan for an approximately 290,729 square foot light industrial building; and 5) Plot Plan for an approximately 98,877 square foot light industrial building with associated public improvements.

OTHER COMMISSION BUSINESS

No items for discussion.

STAFF COMMENTS

PLANNING COMMISSIONER COMMENTS

ADJOURNMENT

Planning Commission Regular Meeting, September 9, 2021 at 7:00 P.M., City of Moreno Valley, City Hall Council Chamber, and 14177 Frederick Street, Moreno Valley, CA 92553.

**OFFICIAL MINUTES OF THE
PLANNING COMMISSION
OF THE CITY OF MORENO VALLEY**

**REGULAR MEETING – 7:00 PM
July 8, 2021**

CALL TO ORDER

This regular meeting of the Planning Commission of the City of Moreno Valley was called to order at 7:01 p.m., by Chairperson Korzec in the Council Chambers located at 14177 Frederick Street, Moreno Valley, California.

ROLL CALL

Planning Commission:	Patricia Korzec	Chairperson	Present
	Alvin DeJohnette	Vice Chairperson	Present
	Rafael Brugueras	Commissioner	Present
	Jeffrey Sims	Commissioner	Present

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Commissioner Brugueras.

APPROVAL OF AGENDA

Motion to approve the Agenda was made by Commissioner Sims and seconded by Commissioner Brugueras.

Vote: 4-0

Ayes: Commissioner Sims, Brugueras, Vice Chairperson DeJohnette and Chairperson Korzec

Action: **Approved**

PUBLIC COMMENTS PROCEDURE

PUBLIC COMMENTS

No public comments.

CONSENT CALENDAR

1. Planning Commission - Regular Meeting - May 13, 2021 7:00 PM
2. Planning Commission - Regular Meeting - May 27, 2021 7:00 PM
3. Planning Commission - Adjourned Meeting - May 28, 2021 7:30 PM
4. Planning Commission - Adjourned Meeting - June 8, 2021 7:00 PM

Motion to approve the minutes of May 13, 2021, May 27, 2021, May 28, 2021, and June 8, 2021 with modifications to the June 8, 2021 meeting minutes to update the

vote for Resolution Number 2021-19 to 3-1, was made by Commissioner Sims and seconded by Vice Chairperson DeJohnette.

Vote: 4-0

Ayes: Commissioner Sims, Vice Chairperson DeJohnette, Commissioner Brugueras, and Chairperson Korzec

Action: **Approved**

NON-PUBLIC HEARING ITEMS

No items for discussion.

PUBLIC HEARING ITEMS

1. Modification to Conditions of Approval for Tentative Tract Map 31590 deleting Condition of Approval no. 110.F., requiring construction of a traffic signal at the intersection of Alessandro Boulevard and Oliver Street. (Report of Planning Commission)

A. Staff recommends that the Planning Commission:

1. FINDS AND DECLARES that the proposed Modification to Conditions PEN20-0144 ("Project") has been evaluated against criteria set forth in the California Environmental Quality Act (CEQA) and CEQA Guidelines Sections 15161 and 15164 and that preparation of a subsequent Negative Declaration or an Addendum is not required since the Project has been determined to be minor and that the Project is consistent with the findings of the original Negative Declaration prepared for Tentative Tract Map 31590 that was approved by the Planning Commission on August 23, 2012; and
2. APPROVE Modifications to Conditions PEN20-0144 ("Project") subject to the attached Conditions of Approval as Exhibit A to the Resolution.

Public Hearing Opened: 7:18 p.m.

Speakers:

No Public Speakers

Public Hearing Closed: 7:18 p.m.

Motion to approve Resolution Number 2021-29 was made by Commissioner Sims and seconded by Vice Chairperson DeJohnette.

Vote: 4-0

Ayes: Commissioner Sims, Vice Chairperson DeJohnette, Commissioner Brugueras, and Chairperson Korzec

Action: **Approved**

2. Variance request for an increase in the maximum height of on-site retaining walls to not more than twelve feet six inches (12'6") for interior walls within an approved condominium project. (Report of Planning Commission)

A. Staff recommends that the Planning Commission APPROVE Resolution No. 2021-22 and thereby:

1. FINDS AND DETERMINES that Variance PEN21-0085 has been evaluated against criteria set forth in the California Environmental Quality Act (CEQA) and CEQA Guidelines Sections 15161 and 15164 and that preparation of a subsequent Negative Declaration or an Addendum is not required since the proposed changes to the project are minor and that the project is consistent with the findings or the original Negative Declaration for this project that was certified by the Planning Commission on August 23, 2012; and
2. APPROVE Variance PEN21-0085 subject to the attached Conditions of Approval as Exhibit A to the Resolution.

Public Hearing Opened: 7:36 p.m.

Speakers:

No Public Speakers

Public Hearing Closed: 7:36 p.m.

Motion to approve Resolution Number 2021-22 was made by Vice Chairperson DeJohnette and seconded by Commissioner Brugueras.

Vote: 4-0

Ayes: Vice Chairperson DeJohnette, Commissioner Brugueras, Sims, and Chairperson Korzec

Action: **Approved**

OTHER COMMISSION BUSINESS

No items for discussion.

STAFF COMMENTS

No staff comments.

PLANNING COMMISSIONER COMMENTS

Commissioner Sims stated that the Planning Commission and Council work very hard at approving projects that would attract a nice quality of life and would hope that it is

possible to stop the encroachment of the homelessness along the 60 freeway. It is not inviting and is counterproductive to the good things we try to do.

Commissioner Brugueras agreed with Commissioner Sims.

Planning Official Nevins addressed noted that the area requires coordination with State agencies.

Commissioner Brugueras asked if a retaining wall can be built along the 60 freeway because people cut a hole in the fence that is currently there.

Chairperson Korzec stated that she did not know if the staff can answer that because it is not in their purview. It is a deeper issue then that.

Commissioner DeJohnette states that perhaps the city can make stricter Code Enforcement to help address the homeless issue.

ADJOURNMENT

There being no further business to come before the Planning Commission, Chairperson Korzec adjourned the meeting at 7:45 PM.

Submitted by:

Approved by:

Naudia Samuels
Planning Commission Secretary

Patricia Korzec
Chairperson

Minutes Acceptance: Minutes of Jul 8, 2021 7:00 PM (CONSENT CALENDAR)

**OFFICIAL MINUTES OF THE
PLANNING COMMISSION
OF THE CITY OF MORENO VALLEY**

**REGULAR MEETING – 7:00 PM
July 22, 2021**

CALL TO ORDER

This regular meeting of the Planning Commission of the City of Moreno Valley was called to order at 7:02 p.m., by Chairperson Korzec in the Council Chambers located at 14177 Frederick Street, Moreno Valley, California.

ROLL CALL

Planning Commission:	Patricia Korzec	Chairperson	Present
	Alvin DeJohnette	Vice Chairperson	Present
	Rafael Brugueras	Commissioner	Present
	Jeffrey Sims	Commissioner	Present

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Ashley Aparicio.

APPROVAL OF AGENDA

Motion to approve the Agenda was made by Commissioner Sims and seconded by Commissioner DeJohnette.

Vote: 4-0

Ayes: Commissioner Sims, Vice Chairperson DeJohnette, Commissioner Brugueras, and Chairperson Korzec

Action: **Approved**

PUBLIC COMMENTS PROCEDURE

PUBLIC COMMENTS

No Public Speakers.

CONSENT CALENDAR

No items for discussion.

NON-PUBLIC HEARING ITEMS

No items for discussion.

PUBLIC HEARING ITEMS

Minutes Acceptance: Minutes of Jul 22, 2021 7:00 PM (CONSENT CALENDAR)

1. A Plot Plan for a 8,624 square foot multi-tenant retail building with a 999 square foot hydrogen equipment room, fueling stations with canopy, and a 2,485 square foot carwash building with 17 vacuum stations and Conditional Use Permit for the gasoline, propane, and hydrogen fuel service station use, accessory convenience store use (5,006 sq. ft. of the multi-tenant retail building), and carwash with vacuum stations uses. (Report of Planning Commission).

A. Staff recommends that the Planning Commission APPROVE Resolution No. 2021-30, and thereby:

1. CERTIFY the Initial Study/Mitigated Negative Declaration prepared for Plot Plan PEN20-0141 and Conditional Use Permit PEN20-0142 on file with the Community Development Department, incorporated herein by this reference, completed in compliance with the California Environmental Quality Act and CEQA Guidelines, and that the Planning Commission reviewed and considered the information contained in the Initial Study/Mitigated Negative Declaration, and that the document reflects the City's independent judgment and analysis; attached hereto as Exhibit A; and
2. ADOPT the Mitigation Monitoring and Reporting Program prepared for the Project, Plot Plan PEN20-0141 and Conditional Use Permit PEN20-0142 pursuant to the California Environmental Quality Act (CEQA) Guidelines, and included as Exhibit A.

B. APPROVE Resolution No. 2021-31 and thereby:

1. APPROVE PEN20-0141 Plot Plan based on the findings contained in this resolution, and as shown on the attachment included as Exhibit A.

C. APPROVE Resolution No. 2021-32, and thereby:

1. APPROVE PEN20-0142 Conditional Use Permit based on the findings contained in this resolution, and as shown on the attachment included as Exhibit A.

Public Hearing Opened: 7:28 p.m.

Speakers

Tom Jerele Sr. supported the item.

Public Hearing Closed: 7:31 p.m.

Motion to approve Resolution Numbers 2021-30, 2021-31, and 2021-32 was made by Commissioner Sims and seconded by Commissioner Bruguera with modifications to Conditional of Approval No. 153 and Mitigation Measure TRANS-1 of the Mitigation Monitoring and Reporting Program.

Vote: 4-0
Ayes: Commissioner Sims, Brugueras, Vice Chairperson DeJohnette, and Chairperson Korzec
Action: **Approved**

2. Conditional Use Permit for an approximately 2,348 square foot fast food drive-through restaurant located in the existing Stoneridge Town Center. (Report of Planning Commission).

A. Staff recommends that the Planning Commission APPROVE Resolution No. 2021-23, and thereby:

1. FIND AND DETERMINE that Conditional Use Permit PEN21-0086 is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) as a Class 32 Exemption (Section 15332, In-Fill Development Projects); and
2. APPROVE Conditional Use Permit PEN21-0086 subject to the attached Conditions of Approval included as Exhibit A to the Resolution.

Public Hearing Opened: 7:44 p.m.

Speakers
No public speakers.

Public Hearing Closed: 7:45 p.m.

Motion to approve Resolution Number 2021-23 was made by Vice Chairperson DeJohnette and seconded by Commissioner Sims with added Conditional of Approval Nos. 46, 47, and 48 for Moreno Valley Utility, Conditional of Approval No. 76 for Transportation.

Vote: 4-0
Ayes: Vice Chairperson DeJohnette, Commissioner Sims, Brugueras, and Chairperson Korzec
Action: **Approved**

OTHER COMMISSION BUSINESS

No items for discussion.

STAFF COMMENTS

Planning Official Nevins thanked the Planning Commission for their patients with the modifications tonight and identified that the City had implemented a new electronic application system and plan checking system. Additionally, Ms. Nevins identified that Staff will be exploring a transition to all electronic Planning Commissions agendas.

PLANNING COMMISSIONER COMMENTS

Commissioner DeJohnette welcomed the two new Staff and identified that they are working with fantastic people and is sure they will support them in their transition. Welcome to a fantastic Team.

Commissioner Brugueras seconded what Commissioner DeJohnette stated.

Commissioner Brugueras stated that you have pick a wonderful career, City of Moreno Valley, and thanked the staff for bringing development to the City.

Commissioner Sims identified that he is thoroughly happy with the improvements of all of our off ramps and hope it stay that way.

ADJOURNMENT

There being no further business to come before the Planning Commission, Chairperson Korzec adjourned the meeting at 7:52 PM.

Submitted by:

Approved by:

Naudia Samuels
Planning Commission Secretary

Patricia Korzec
Chairperson

Minutes Acceptance: Minutes of Jul 22, 2021 7:00 PM (CONSENT CALENDAR)

**OFFICIAL MINUTES OF THE
PLANNING COMMISSION
OF THE CITY OF MORENO VALLEY**

**REGULAR MEETING – 7:00 PM
August 12, 2021**

CALL TO ORDER

This regular meeting of the Planning Commission of the City of Moreno Valley was called to order at 7:02 p.m., by Chairperson Korzec in the Council Chambers located at 14177 Frederick Street, Moreno Valley, California.

ROLL CALL

Planning Commission:	Patricia Korzec	Chairperson	Present
	Alvin DeJohnette	Vice Chairperson	Present
	Rafael Brugueras	Commissioner	Present
	Jeffrey Sims	Commissioner	Present

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Ashley Aparicio.

APPROVAL OF AGENDA

Motion to approve the Agenda was made by Commissioner Sims and seconded by Commissioner DeJohnette.

Vote: 4-0

Ayes: Commissioner Sims, Vice Chairperson DeJohnette, Commissioner Brugueras, and Chairperson Korzec

Action: **Approved**

PUBLIC COMMENTS PROCEDURE

PUBLIC COMMENTS

No Public Speakers.

CONSENT CALENDAR

No items for discussion.

NON-PUBLIC HEARING ITEMS

No items for discussion.

PUBLIC HEARING ITEMS

Minutes Acceptance: Minutes of Aug 12, 2021 7:00 PM (CONSENT CALENDAR)

1. A Plot Plan for a 8,624 square foot multi-tenant retail building with a 999 square foot hydrogen equipment room, fueling stations with canopy, and a 2,485 square foot carwash building with 17 vacuum stations and Conditional Use Permit for the gasoline, propane, and hydrogen fuel service station use, accessory convenience store use (5,006 sq. ft. of the multi-tenant retail building), and carwash with vacuum stations uses. (Report of Planning Commission).

A. Staff recommends that the Planning Commission APPROVE Resolution No. 2021-30, and thereby:

1. CERTIFY the Initial Study/Mitigated Negative Declaration prepared for Plot Plan PEN20-0141 and Conditional Use Permit PEN20-0142 on file with the Community Development Department, incorporated herein by this reference, completed in compliance with the California Environmental Quality Act and CEQA Guidelines, and that the Planning Commission reviewed and considered the information contained in the Initial Study/Mitigated Negative Declaration, and that the document reflects the City's independent judgment and analysis; attached hereto as Exhibit A; and
2. ADOPT the Mitigation Monitoring and Reporting Program prepared for the Project, Plot Plan PEN20-0141 and Conditional Use Permit PEN20-0142 pursuant to the California Environmental Quality Act (CEQA) Guidelines, and included as Exhibit A.

B. APPROVE Resolution No. 2021-31 and thereby:

1. APPROVE PEN20-0141 Plot Plan based on the findings contained in this resolution, and as shown on the attachment included as Exhibit A.

C. APPROVE Resolution No. 2021-32, and thereby:

1. APPROVE PEN20-0142 Conditional Use Permit based on the findings contained in this resolution, and as shown on the attachment included as Exhibit A.

Public Hearing Opened: 7:28 p.m.

Speakers

Tom Jerele Sr. supported the item.

Public Hearing Closed: 7:31 p.m.

Motion to approve Resolution Numbers 2021-30, 2021-31, and 2021-32 was made by Commissioner Sims and seconded by Commissioner Bruguera with modifications to Conditional of Approval No. 153 and Mitigation Measure TRANS-1 of the Mitigation Monitoring and Reporting Program.

Vote: 4-0
Ayes: Commissioner Sims, Brugueras, Vice Chairperson DeJohnette, and Chairperson Korzec
Action: **Approved**

2. Conditional Use Permit for an approximately 2,348 square foot fast food drive-through restaurant located in the existing Stoneridge Town Center. (Report of Planning Commission).

A. Staff recommends that the Planning Commission APPROVE Resolution No. 2021-23, and thereby:

1. FIND AND DETERMINE that Conditional Use Permit PEN21-0086 is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) as a Class 32 Exemption (Section 15332, In-Fill Development Projects); and
2. APPROVE Conditional Use Permit PEN21-0086 subject to the attached Conditions of Approval included as Exhibit A to the Resolution.

Public Hearing Opened: 7:44 p.m.

Speakers
No public speakers.

Public Hearing Closed: 7:45 p.m.

Motion to approve Resolution Number 2021-23 was made by Vice Chairperson DeJohnette and seconded by Commissioner Sims with added Conditional of Approval Nos. 46, 47, and 48 for Moreno Valley Utility, Conditional of Approval No. 76 for Transportation.

Vote: 4-0
Ayes: Vice Chairperson DeJohnette, Commissioner Sims, Brugueras, and Chairperson Korzec
Action: **Approved**

OTHER COMMISSION BUSINESS

No items for discussion.

STAFF COMMENTS

Planning Official Nevins thanked the Planning Commission for their patients with the modifications tonight and identified that the City had implemented a new electronic application system and plan checking system. Additionally, Ms. Nevins identified that Staff will be exploring a transition to all electronic Planning Commissions agendas.

PLANNING COMMISSIONER COMMENTS

Commissioner DeJohnette welcomed the two new Staff and identified that they are working with fantastic people and is sure they will support them in their transition. Welcome to a fantastic Team.

Commissioner Brugueras seconded what Commissioner DeJohnette stated.

Commissioner Brugueras stated that you have pick a wonderful career, City of Moreno Valley, and thanked the staff for bringing development to the City.

Commissioner Sims identified that he is thoroughly happy with the improvements of all of our off ramps and hope it stay that way.

ADJOURNMENT

There being no further business to come before the Planning Commission, Chairperson Korzec adjourned the meeting at 7:52 PM.

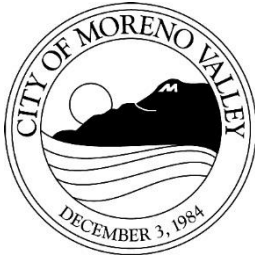
Submitted by:

Approved by:

Naudia Samuels
Planning Commission Secretary

Patricia Korzec
Chairperson

Minutes Acceptance: Minutes of Aug 12, 2021 7:00 PM (CONSENT CALENDAR)



PLANNING COMMISSION

STAFF REPORT

Meeting Date: August 26, 2021

PROPOSED GENERAL PLAN AMENDMENT AND CHANGE OF ZONE AMENDING "MAP LCC-4: GENERAL PLAN LAND USE" OF THE MORENO VALLEY GENERAL PLAN AND THE CITY ZONING ATLAS, RESPECTIVELY, PROPOSED TENTATIVE PARCEL MAP 37944 FOR TWO (2) LOTS, A PLOT PLAN FOR AN APPROXIMATELY 290,726 SQUARE FOOT LIGHT INDUSTRIAL BUILDING, AND A PLOT PLAN FOR AN APPROXIMATELY 98,877 SQUARE FOOT LIGHT INDUSTRIAL BUILDING

Case: PEN20-0118 General Plan Amendment
 PEN20-0119 Change of Zone
 PEN20-0120 Tentative Parcel Map 37944
 PEN20-0121 Plot Plan
 PEN20-0124 Plot Plan

Applicant: CDRE Holdings 17 LLC, Mark Bachli

Property Owner Moreno Valley Centerpoint LLC

Representative MIG, Inc., Pamela Steele

Location: South side of Alessandro Boulevard between Frederick Street and Graham Street (297-170-002 and 003)

Case Planner: Julia Descoteaux

Council District: 1

Proposal The applicant requests approval of the following entitlements for a 17.67 acre site: 1) General Plan Amendment (GPA) amending "Map LCC-4: General Plan Land Use Map of the Moreno Valley General Plan to change the land use designation of the Project Site from Commercial (C) to Business Park (BP); 2)

Change of Zone amending the City of Moreno Valley Zoning Atlas to rezone the Project Site from Community Commercial District (CC) to Light Industrial District (LI); 3) Tentative Parcel Map 37944 for two (2) lots; 4) Plot Plan for an approximately 290,729 square foot light industrial building; and 5) Plot Plan for an approximately 98,877 square foot light industrial building with associated public improvements.

SUMMARY

CDRE Holdings 17, LLC (“Applicant”) is requesting approval of the following: a General Plan Amendment (PEN20-0118) to amend the General Plan land use designation from Commercial (C) to Business Park (BP), a Change of Zone (PEN20-0119) to amend the Zoning Atlas from Community Commercial District (CC) to Light Industrial District (LI), a Tentative Parcel Map (PEN20-0120) for two parcels, a Plot Plan (PEN20-0121) for a 290,726 square foot light industrial building and a Plot Plan (PEN20-0124), a Plot Plan for a 98,877 square foot light industrial building located on the south side of Alessandro Boulevard between Frederick Street and Graham Street, Assessor Parcel Nos. 297-170-002 and 003.

PROJECT DESCRIPTION

General Plan Amendment

The City of Moreno Valley General Plan Land Use Map designates the Project Site, as described in the Summary above, as Commercial (C) and the proposal would change this land use designation to Business Park (BP).

The primary purpose of areas designated Commercial (C) is to provide property for business purposes, including, but not limited to, retail stores, restaurants, banks, hotels, professional offices, personal services and repair services. The primary purpose of the Business Park (BP) is to provide for manufacturing, research and development, warehousing and distribution, as well as office and support for commercial activities. While the purpose of the two land use designations are different, the proposed General Plan Amendment will be consistent with adjacent parcels to the south and east, and would result in a total increase of approximately 17.67-acres of the Business Park (BP) land use designation and a corresponding reduction of approximately 17.67-acres of the Commercial (C) land use designation.

Change of Zone

The Project site is currently zoned Community Commercial District (CC), and the proposal would rezone it to Light Industrial District (LI).

The primary purpose of the Community Commercial District (CC) is to provide for the general shopping needs of area residents and workers with a variety of business, retail, personal and related or similar services.

The primary purpose of the Light Industrial District (LI) is to provide light manufacturing, light industrial, research and development, warehousing and distribution and multitenant industrial uses, as well as certain supporting administrative and professional offices and commercial on a limited basis. While the purpose of the two zoning designations are different the proposed Change of Zone will be consistent with adjacent parcels to the south.

Tentative Parcel Map

The Applicant is proposing a Tentative Parcel Map 37944 to relocate the existing property line to provide separate parcels for Building 1 and Building 2. Staff has reviewed the proposed Tentative Parcel Map and confirmed that the proposed lots comply with the City's development standards.

Plot Plan

The Applicant is proposing the construction of two light industrial buildings, one approximately 290,726 square feet in size and one approximately 98,877 square feet in size ("Project") with associated parking, landscape improvements and off-site public improvements.

The current proposal anticipates both buildings will be constructed in conjunction with each other. However, should one building be delayed, all on-site and off-site improvements shall be constructed with the first building, prior to building final. Conditions have been included to address the improvements and the maintenance of an unconstructed parcel should this situation arise.

Site/ Surrounding Area

The approximately 17.67-acre site is located on the south side of Alessandro Boulevard between Frederick Street and Graham Street in the center of the block.

The surrounding area includes existing Neighborhood Commercial District (NC), Residential 20 District (R20), and Residential 5 District (R5) to the north across Alessandro Boulevard. The property to the west is vacant land zoned Community Commercial District (CC), to the south are developed with industrial buildings within Light Industrial District (LI), and to the east are vacant land within the Business Park-Mixed Use District (BPX) and Community Commercial District (CC).

Access/Parking

Access to the Project site will be from three new driveways on Alessandro Boulevard. All driveways will be right-in right-out only, with two driveways designed to accommodate truck traffic.

Parking for both automobiles and trucks exceed the Municipal Code requirements. Overall, a total of 217 parking spaces are provided for both buildings which include standard automobile, ADA, EV, EVCS and Clean Air spaces, as well as, 44-truck space in the truck court areas. Bicycle parking is also included in the site design as required.

Design/Landscaping

The proposed light industrial type buildings incorporate a contemporary architectural design. Dark bronze metal tower elements at the building corners provide a focal point with textured concrete sections, glass, tile and various awning types, bringing an office aesthetic to the buildings. The elements are included on the side elevations for continuity of the buildings. The colors of off-white, taupe and warm grey provide the background for the dark bronze metal tower and brown metal window treatments, which include flat awnings above the pained windows and elongated awnings at intervals, which break up the massing of the buildings.

Extensive landscaping is provided along the building frontage in addition to the required front set back and right of way landscaping which includes plant, ground covers, street trees and on-site trees.

REVIEW PROCESS

The Project has been considered by all appropriate agencies within and outside of the City, consistent with the standard review process required for these types of development applications. The Project was reviewed by the Project Review Staff Committee as required by the Municipal Code. Following subsequent revisions and review by various staff, the Project's entitlement package was deemed complete for processing for Planning Commission review and consideration, and staff is recommending the Planning Commission recommend to the City Council approval of the Project as designed and conditioned.

ENVIRONMENTAL

An Initial Study was prepared by T&B Planning, Inc., in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study examined the potential Project impacts on the environment. The Initial Study/Mitigation Negative Declaration (IS/MND) provides information in support of the finding that a Mitigated Negative Declaration serves as the appropriate CEQA documentation for the proposed Project in that the proposed Project, with the implementation of the proposed mitigation measures, will not have a significant effect on the environment. Technical studies prepared in support of the IS/MND include the following: Air Quality Impact Analysis, Mobile Source Health Risk Assessment, MSHCP General Biological Resources Assessment & Compliance Analysis, Jurisdictional Delineation Report and Impact Analysis, MSHCP Determination of Biologically Equivalent or Superior Preservation, Burrowing Owl Focused Survey Report, Least Bell's Vireo Focused Survey Report, Phase I Cultural Resources Survey, Energy Analysis, Geotechnical

Engineering Investigation, Greenhouse Gas Analysis, Phase I Environmental Site Assessment Report, Paleontological Assessment, Preliminary Water Quality Management Plan, Preliminary Drainage Study, Noise Impact Analysis, Traffic Analysis, and Vehicle Miles Traveled (VMT) Analysis. The electronic files for the IS/MND with appendices are attached to this staff report. Anyone wishing to view the documents can also do so at City Hall.

Mitigation Measures are recommended for the proposed Project in the following areas: Biological Resources, Geology and Soils, and Tribal Cultural Resources. The measures for Tribal resources have been included to address input from the Tribal governments. The measures are intended to ensure that potential resources that might be discovered are protected. However, these measures are not required to address a known significant impact. Based on the Initial Study, and the proposed mitigation measures, the Project will not cause any significant impacts or environmental damage.

The public comment period for the Notice of Availability for the Initial Study/Mitigated Negative Declaration began on July 26, 2021, and ends on August 25, 2021, which satisfies the required 30-day, review period. As of the preparation of this staff report, no comments have been received. Should comments regarding the Project be received prior to the Planning Commission they will be provided at the public hearing.

NOTIFICATION

Notice of the public hearing was sent to all property owners of record within 600 feet of the Project Site. The public hearing notice was also posted on the Project Site and published in the Press Enterprise newspaper.

REVIEW AGENCY COMMENTS

Staff has coordinated with outside trustee and responsible agencies where applicable, as is the standard review process with these types of development applications.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission take the following actions:

- A. That the Planning Commission **ADOPT** Resolution No. 2021-24, attached hereto, **RECOMMENDING** that the City Council:
 1. **APPROVE** the Initial Study/Mitigated Negative Declaration prepared for General Plan Amendment PEN20-0118, Change of Zone PEN20-0119. Tentative Parcel Map 37944 PEN20-0120 and Plot Plans PEN20-0121 and PEN20-0124 on file with the Community Development Department, incorporated herein by this reference, and any necessary and corresponding amendment to the City's Zoning Atlas to reflect the proposed changes in the zoning classification and/or redistricting associated with the General Plan Amendment and Change of Zone, which was completed in compliance with CEQA and the CEQA Guidelines, and

reflects that the Planning Commission reviewed and considered the information contained in the Initial Study/Mitigated Negative Declaration, and exercised its independent judgment and analysis of the proposed Project's potential environmental impacts; and

2. **ADOPT** the Mitigation Monitoring and Reporting Program prepared for the Project, which consists of General Plan Amendment PEN20-0118, Change of Zone PEN20-0119, Tentative Parcel Map 37944 PEN20-0120, and Plot Plans PEN20-0121 and PEN20-0124 and any necessary and corresponding amendment to the City's Zoning Atlas to reflect the proposed changes in the zoning classification and/or redistricting associated with the General Plan Amendment and Change of Zone pursuant to CEQA and the CEQA Guidelines.
- B. That the Planning Commission **ADOPT** Resolution No. 2021-25 attached hereto, **RECOMMENDING** that the City Council:
1. **APPROVE** PEN20-0118 General Plan Amendment based on the Recitals, Evidence contained in the Administrative Record and Findings set forth in Resolution No. 2021-25 and any necessary and corresponding amendment to the City's Zoning Atlas to reflect the proposed changes in the zoning classification and/or redistricting associated with the General Plan Amendment.
- C. That the Planning Commission **ADOPT** Resolution No. 2021-26, attached hereto, **RECOMMENDING** that the City Council:
1. **APPROVE** PEN20-0119 Change of Zone based on the Recitals, Evidence contained in the Administrative Record and Findings as set forth in Resolution No. 2021-26 and any necessary and corresponding amendment to the City's Zoning Atlas to reflect the proposed change in the zoning classification and/or redistricting associated with the Change of Zone.
- D. That the Planning Commission **ADOPT** Resolution No. 2021-27, attached hereto, **RECOMMENDING** that the City Council:
1. **APPROVE** Tentative Parcel Map PEN21-0120 based on the Recitals, Evidence contained in the Administrative Records and Findings as set forth in Resolution No. 2021-27.
- E. That the Planning Commission **ADOPT** Resolution No. 2021-28, attached hereto, **RECOMMENDING** that the City Council:
1. **APPROVE** Plot Plans PEN20-0121 and PEN20-0124 based on the Recitals, Evidence contained in the Administrative Records and Findings as set forth in Resolution No. 2021-28.

Prepared by:
Julia Descoteaux
Associate Planner

Approved by:
Manuel A. Mancha
Community Development Director

ATTACHMENTS

1. Resolution No. 2021-24 Initial Study MND
2. Exhibit A to Resolution No. 2021-24 Initial Study MND
3. Appendix A1-Air Quality Impact Analysis
4. Appendix A2-Mobile Source Heath Risk Assessment
5. Appendix B1-MSHCP General Biological Resources Assessment and Compliance Analysis
6. Appendix B2-Jurisdictional Delineation Report and Impact Analysis
7. Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation
8. Appendix B4-Burrowing Owl Focused Survey Report
9. Appendix B5-Least Bells Vireo Focused Survey Report
10. Appendix C-Phase I Cultural Resources Survey
11. Appendix D-Energy Analysis
12. Appendix E-Geotechnical Engineering Investigation
13. Appendix F-Greenhouse Gas Analysis
14. Appendix G-Phase I Environmental Site Assessment Report
15. Appendix H-Paleontological Assessment
16. Appendix I1-Preliminary Water Quality Management Plan
17. Appendix I2-Preliminary Drainage Study
18. Appendix J-Noise Impact Analysis
19. Appendix K1-Traffic Analysis
20. Appendix K2-Vehicle Miles Traveled (VMT) Assessment
21. Exhibit B to Resolution No. 2021-24 Initial Study MND
22. Exhibit C to Resolution No. 2021-24 Initial Study MND
23. Resolution No. 2021-25 General Plan Amendment
24. Resolution No. 2021-26 Change of Zone
25. Resolution No. 2021-27 Tentative Parcel Map
26. Exhibit A to Resolution 2021-27 Tentative Parcel Map
27. Resolution No. 2021-28 Plot Plans
28. Exhibit A to Resolution 2021-28 Plot Plans
29. Tentative Parcel Map 37944
30. Site Plan
31. Project Plans
32. Conceptual Grading Plan
33. Conceptual Landscape Plan

34.600 Foot Mailing Notice

RESOLUTION NUMBER 2021-24

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL ADOPT A MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM FOR THE COMPASS DANBE CENTERPOINTE PROJECT LOCATED ON THE SOUTH SIDE OF ALESSANDRO BOULEVARD BETWEEN FREDERICK STREET AND GRAHAM STREET (APN'S 297-170-002 AND 003)

WHEREAS, the City of Moreno Valley (“City”) is a general law city and a municipal corporation of the State of California, and the lead agency for the preparation and consideration of environmental documents for local projects that are subject to requirements of the California Environmental Quality Act (CEQA) and CEQA Guidelines; and

WHEREAS, CDRE Holdings, LLC., (“Developer”) is seeking approval for the development of the Compass Danbe Centerpointe project, a two building light industrial complex on a 17.67-acre site that includes: 1) a General Plan Amendment (GPA) (PEN20-0118) amending the “Land Use Map” (Map LCC-4) of the Moreno Valley General Plan to change the land use designation of the Project site from Commercial to Business Park; 2) a Change of Zone (PEN20-0119) to change the zoning designation of the site from Community Commercial District (CC) to Light Industrial District (LI); 3) a Tentative Parcel Map (PEN20-0120) for two lots; 4) a Plot Plan (PEN20-0121) for an approximately 290,726 square foot light industrial building; 5) a Plot Plan (PEN21-0124) for an approximately 98,877 square foot light industrial building with associated public improvements located on the south side of Alessandro Boulevard between Frederick Street and Graham Street (APN'S 297-170-002-003); and

WHEREAS, the proposed “Project” shall include not only the General Plan Amendment (GPA) (PEN20-0118), Change of Zone (PEN20-0119), Tentative Parcel Map (PEN20-0120), and two Plot Plans (PEN20-0121 and PEN20-0124), but also a corresponding amendment to the City’s Zoning Atlas to reflect the proposed changes in the zoning classification and/or redistricting associated with the General Plan Amendment; and

WHEREAS, Planning Division Staff completed an environmental assessment for the proposed Project, and, based on the assessment, decided to prepare an Initial Study (“IS”) and a Mitigated Negative Declaration (“MND”) in accordance with Section 6 (ND Procedures) of the City’s Rules and Procedures for the Implementation of the California Environmental Quality Act and the requirements of the CEQA Guidelines Sections 15070 – 15075; and

WHEREAS, a Notice of Intent to Adopt a Mitigated Negative Declaration was duly noticed and circulated for public review for a period of 30 days commencing on July 26, 2021, through August 25, 2021; and

WHEREAS, in conformance with CEQA and the CEQA Guidelines, a Mitigation Monitoring and Reporting Program (“MMRP”) that includes a program for reporting on and monitoring Project mitigation measures was prepared for the proposed Project and noticed with the Mitigated Negative Declaration; and

WHEREAS, on August 26, 2021, a hearing was conducted by the Planning Commission to consider a recommendation that the City Council approve the Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program and approve the proposed Project; and

WHEREAS, at the conclusion of the public hearing, in the exercise of its own independent judgment, the Planning Commission recommends that the City Council determine that the Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program will reduce the environmental impacts of the Project to levels of insignificance and that there is no substantial evidence supporting a fair argument that the Project will have a significant effect on the environment.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals and Exhibits

That the foregoing Recitals and attached exhibits are true and correct and are hereby incorporated by this reference.

Section 2. Evidence

That the Planning Commission has considered all the evidence submitted into the Administrative Record for the Mitigated Negative Declaration and Mitigation Monitoring Plan, including, but not limited to, the following:

- (a) Mitigated Negative Declaration/Initial Study prepared for the proposed Project, attached hereto as Exhibit A;
- (b) Notice of Intent to Adopt a Mitigated Negative Declaration/Newspaper Notice, attached hereto as Exhibit B;
- (c) Mitigation Monitoring and Reporting Program, attached hereto as Exhibit C;
- (d) Staff Report prepared for the Planning Commission’s consideration and all documents, records and references related thereto, and Staff’s presentation at the public hearing; and
- (e) Testimony, comments and correspondence from all persons that were provided at, or prior to, the public hearing.

Section 3. Findings

That based on the content of the foregoing Recitals and the Evidence contained in the Administrative Record as set forth above, the Planning Commission makes the following findings:

- (a) That the City has independently reviewed, analyzed, and considered the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, and the whole record before it, including, the Initial Study and comments received;
- (b) That the proposed mitigation measures will reduce all environmental impacts of the proposed Project to levels of insignificance and there is no substantial evidence supporting a fair argument that the Project will have a significant effect on the environment;
- (c) That the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program have been completed in compliance with CEQA and the CEQA Guidelines consistent the City's Rules and Procedures for the Implementation of the California Environmental Quality Act.
- (d) That the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program reflect the independent judgment and analysis of the City as lead agency for the proposed Project; and
- (e) That the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program are adequate to serve as the required CEQA environmental documentation for the proposed Project.

Section 4. Adoption

That based on the foregoing Recitals, Evidence contained in the Administrative Record and Findings, as set forth herein, the Planning Commission hereby recommends that the City Council adopt the Mitigated Negative Declaration/Initial Study attached hereto as Exhibit A and the Mitigation Monitoring and Reporting Program attached hereto as Exhibit C.

Section 5. Repeal of Conflicting Provisions

That all the provisions as heretofore adopted by the Planning Commission that are in conflict with the provisions of this Resolution are hereby repealed.

Section 6. Severability

That the Planning Commission declares that, should any provision, section, paragraph, sentence or word of this Resolution be rendered or declared invalid by any final court action in a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of this Resolution as hereby adopted shall remain in full force and effect.

Section 7. Effective Date

That this Resolution shall take effect immediately upon the date of adoption.

Section 8. Certification

That the Secretary of the Planning Commission shall certify to the passage of this Resolution.

PASSED AND ADOPTED THIS __ day of _____, 2021

CITY OF MORENO VALLEY
PLANNING COMMISSION

Patricia Korzec, Chairperson

ATTEST:

Patty Nevins,
Planning Official

APPROVED AS TO FORM:

Steven B. Quintanilla,
Interim City Attorney

Exhibits:

Exhibit A: Mitigated Negative Declaration/Initial Study

Exhibit B: Notice of Intent to Adopt a Mitigated Negative Declaration / Newspaper Notice

Exhibit C: Mitigation Monitoring Plan

Attachment: Resolution No. 2021-24 Initial Study MND [Revision 1] (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Exhibit A
INITIAL STUDY

Attachment: Resolution No. 2021-24 Initial Study MND [Revision 1] (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Exhibit B

**NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION /
NEWSPAPER NOTICE**

Attachment: Resolution No. 2021-24 Initial Study MND [Revision 1] (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Exhibit C

MITIGATION MONITORING AND REPORTING PROGRAM

Attachment: Resolution No. 2021-24 Initial Study MND [Revision 1] (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)



CITY OF MORENO VALLEY

MITIGATED NEGATIVE DECLARATION FOR THE COMPASS DANBE CENTERPOINTE PROJECT



**General Plan Amendment (PEN20-0118)
Change of Zone (PEN20-0119)
Tentative Parcel Map No. 37944 (PEN20-0120)
Plot Plan (PEN20-0121 & PEN20-0124)**

July 2021

**Lead Agency
CITY OF MORENO VALLEY
14177 Frederick Street
Moreno Valley, CA 92552**

**Prepared By
T&B PLANNING, INC.
3200 El Camino Real, Suite 100
Irvine, CA, 92602**

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE OF CONTENTS

MITIGATED NEGATIVE DECLARATION..... 1

BACKGROUND INFORMATION AND PROJECT DESCRIPTION: 2

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:..... 26

DETERMINATION (To be completed by the Lead Agency): 26

EVALUATION OF ENVIRONMENTAL IMPACTS: 27

ISSUES & SUPPORTING INFORMATION SOURCES:..... 28

 I. AESTHETICS 28

 II. AGRICULTURE AND FOREST RESOURCES 30

 III. AIR QUALITY 31

 IV. BIOLOGICAL RESOURCES 37

 V. CULTURAL RESOURCES 43

 VI. ENERGY 44

 VII. GEOLOGY AND SOILS 46

 VIII. GREENHOUSE GAS EMISSIONS 50

 IX. HAZARDS AND HAZARDOUS MATERIALS 52

 X. HYDROLOGY AND WATER QUALITY 56

 XI. LAND USE AND PLANNING 60

 XII. MINERAL RESOURCES 60

 XIII. NOISE 61

 XIV. POPULATION AND HOUSING 66

 XV. PUBLIC SERVICES 66

 XVI. RECREATION 68

 XVII. TRANSPORTATION 68

 XVIII. TRIBAL CULTURAL RESOURCES 72

 XIX. UTILITIES AND SERVICE SYSTEMS 75

 XX. WILDFIRE 79

 XXI. MANDATORY FINDINGS OF SIGNIFICANCE 79

FIGURES

Figure 1 Regional Map 11

Figure 2 Vicinity Map 12

Figure 3 USGS Topographic Map 13

Figure 4 Existing General Plan 14

Figure 5 Existing Zoning 15

Figure 6 Aerial Photograph 16

Figure 7 Site Photographs 17

Figure 8 General Plan Amendment (PEN20-0118) 18

Figure 9 Change of Zone (PEN20-0119) 19

Figure 10 Tentative Parcel Map No. 37944 (PEN20-0120) 20

Figure 11 Site Plan 21

Figure 12 Architectural Elevations 22

Figure 13 Conceptual Landscape Plan 23

Figure 14 Conceptual Utilities Plan 24

Figure 15 Conceptual Grading Plan 25

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)



MITIGATED NEGATIVE DECLARATION FOR COMPASS DANBE CENTERPOINTE PROJECT

Project Description:

The Compass Danbe Centerpointe project comprises a proposal for a General Plan Amendment (PEN20-0118); Change of Zone (PEN20-0119); Tentative Parcel Map No. 37944 (PEN20-0120); and two Plot Plans (PEN20-0121 and PEN20-0124) that provide for the development of an approximately 17.7-acre property with two light industrial buildings with a total combined building floor area of 389,603 square feet. The Project also would include cargo loading areas at each building (within an enclosed truck court with loading docks on the south sides of the proposed buildings), parking areas, landscaping, signage, and lighting.

Project Location:

The Project site is located south of Alessandro Boulevard, between Frederick Street and Graham Street, in the City of Moreno Valley, Riverside County, California (APNs: 297-170-002 and -003).

Project Proponent:

Mark Bachli
CDRE Holdings 17 LLC
523 Main Street
El Segundo, CA 90245

Findings:

It is hereby determined that, based on the information contained in the attached Initial Study, the Project would not have a significant adverse effect on the environment.

Mitigation Measures:

No.	Mitigation Measure
BR-1	<p>Within 30 days prior to grading, a qualified biologist shall conduct a survey of suitable habitat on site and make a determination regarding the presence or absence of the burrowing owl. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Moreno Valley prior to the issuance of a grading permit and subject to the following provisions:</p> <ul style="list-style-type: none"> a) In the event that the pre-construction survey identifies no burrowing owls on the property a grading permit may be issued without restriction. b) In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit. c) In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

No.	Mitigation Measure
	<p>Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that Objectives 1-4 have been met. A grading permit shall be issued, either:</p> <ul style="list-style-type: none"> i) Upon approval and implementation of a property-specific Determination of Biologically Superior Preservation (DBESP) report for the burrowing owl by the CDFW; or ii) A determination by the biologist that the site is part of an area supporting less than 35 acres of suitable Habitat, and upon passive or active relocation of the species following accepted CDFW protocols. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.
BR-2	<p>All vegetation clearing and ground disturbance shall be prohibited during the bird nesting season (February 1 through September 15), unless a nesting bird survey is completed in accordance with the following requirements:</p> <ul style="list-style-type: none"> a) A bird nesting survey of the Project Site, including suitable habitat within a 100-foot radius, shall be conducted by a qualified biologist within five (5) days prior to initiating vegetation clearing or ground disturbance at the respective property. A copy of the nesting bird survey results report shall be provided to the City of Moreno Valley. b) If the survey does not identify the presence of any active nests, then construction activities can proceed without restriction. c) If the survey identifies the presence of active nests, then the qualified biologist shall provide the City with a copy of maps showing the location of all nests and a species-appropriate buffer zone around each nest sufficient to protect the nest from substantial adverse direct and/or indirect impacts. The size and location of all buffer zones, if required, shall be subject to review and approval by the City but shall be no less than a 100-foot radius around the nest for non-raptor species and no more than a 500-foot radius around the nest for raptor species and any endangered, threatened, or candidate species. <ul style="list-style-type: none"> i) The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing. No construction vehicles shall be permitted within restricted areas (i.e., bird protection zones), unless directly related to the management or protection of the legally protected species, until after the nest becomes inactive (or the nest has failed), the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by the activities. ii) In the event that a nest is abandoned despite efforts to minimize disturbance and, if the nestlings are still alive, the Project Applicant/Developer shall contact the California Department of Fish and

No.	Mitigation Measure
	Wildlife (CDFW) and, subject to CDFW approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s).
BR-3	Prior to the issuance of grading permits, the Project Applicant shall obtain all applicable permits for impacts to jurisdictional features, which may include a 1602 Streambed Alteration Agreement from CDFW and a 401 Certification issued by the RWQCB pursuant to the California Water Code Section 13260. In addition, the Project Applicant shall purchase a minimum of 0.81-acre of re-establishment credits (a 1:1 mitigation-to-impact ratio for impacts to wetland meadow habitat) and 0.82-acre of rehabilitation credits (a 2:1 mitigation-to-impact ratio for impacts to black willow riparian woodland and disturbed wetland-cattail habitats). Habitat mitigation credits can be purchased either at an approved Habitat Mitigation Bank (e.g., Riverpark Mitigation Bank) or via an In-Lieu Fee Program (e.g., Riverside-Corona Resource Conservation District and the Southwest Resource Management Association Santa Ana River Watershed In-Lieu Fee Program). Approval to purchase the mitigation credits must be granted in advance by the resource agencies. The Project Applicant shall provide evidence to the City of Moreno Valley that the applicable permits have been obtained and that the required habitat mitigation credits have been purchased prior to issuance of grading permits.
GEO-1	Prior to the issuance of a grading permit, the Project Applicant shall provide evidence to the City of Moreno Valley that a qualified paleontologist has been retained by the Project Applicant to conduct monitoring of excavation activities and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.
GEO-2	The paleontological monitor shall conduct full-time monitoring during grading and excavation operations in undisturbed, very old alluvial fan sediments at depths exceeding five feet below the existing ground surface and shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontological monitor shall be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have a low potential to contain or yield fossil resources.
GEO-3	Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the Western Science Museum in Hemet, California, is required for significant discoveries.
GEO-4	A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the City of Moreno Valley prior to building final.
TCR-1	Prior to the issuance of a grading permit, the Developer shall retain a professional archaeologist to conduct monitoring of all mass grading and trenching activities. The Project Archaeologist shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction. The Project Archaeologist, in consultation with the Consulting Tribe(s), the contractor, and the City, shall develop a Cultural Resources Management Plan (CRMP) in consultation pursuant to the definition in

No.	Mitigation Measure
	<p>AB52 to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the project site. A consulting tribe is defined as a tribe that initiated the AB 52 tribal consultation process for the Project, has not opted out of the AB52 consultation process, and has completed AB 52 consultation with the City as provided for in Cal Pub Res Code Section 21080.3.2(b)(1) of AB52. Details in the Plan shall include:</p> <ul style="list-style-type: none"> a) Project grading and development scheduling; b) The Project archeologist and the Consulting Tribes(s) as defined in MM TCR-1 shall attend the pre-grading meeting with the City, the construction manager and any contractors and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project archaeologist and Consulting Tribe(s) shall make themselves available to provide the training on an as-needed basis; c) The protocols and stipulations that the contractor, City, Consulting Tribe(s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.
TCR-2	<p>Prior to the issuance of a grading permit, the Developer shall secure agreements with the Pechanga Band of Luiseño Indians and Soboba Band of Luiseño Indians for tribal monitoring. The Developer is also required to provide a minimum of 30 days advance notice to the tribes of all mass grading and trenching activities. The Native American Tribal Representatives shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed. If the Native American Tribal Representatives suspect that an archaeological resource may have been unearthed, the Project Archaeologist or the Tribal Representatives shall immediately redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. In consultation with the Native American Tribal Representatives, the Project Archaeologist shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2.</p>
TCR-3	<p>In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:</p> <ul style="list-style-type: none"> a) One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the City of Moreno Valley Planning Division: <ul style="list-style-type: none"> i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place they were found with no development affecting the integrity of the resources.

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

No.	Mitigation Measure
	<p>ii. Onsite reburial of the discovered items as detailed in the treatment plan required pursuant to MM TCR-1. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments as defined in MM TCR-1.</p>
TCR-4	<p>The City shall verify that the following note is included on the Grading Plan:</p> <p>"If any suspected archaeological resources are discovered during ground-disturbing activities and the Project Archaeologist or Native American Tribal Representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the Project Archaeologist and the Tribal Representatives to the site to assess the significance of the find."</p>
TCR-5	<p>If potential historic or cultural resources are uncovered during excavation or construction activities at the project site, work in the affected area must cease immediately and a qualified person meeting the Secretary of the Interior's standards (36 CFR 61), Tribal Representatives, and all site monitors per the Mitigation Measures, shall be consulted by the City to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, or prehistoric resource. Determinations and recommendations by the consultant shall be immediately submitted to the Planning Division for consideration, and implemented as deemed appropriate by the Community Development Director, in consultation with the State Historic Preservation Officer (SHPO) and any and all Consulting Native American Tribes as defined in MM TCR-1 before any further work commences in the affected area.</p>
TCR-6	<p>If human remains are discovered, no further disturbance shall occur in the affected area until the County Coroner has made necessary findings as to origin. If the County Coroner determines that the remains are potentially Native American, the California Native American Heritage Commission shall be notified within 24 hours of the published finding to be given a reasonable opportunity to identify the "most likely descendant". The "most likely descendant" shall then make recommendations, and engage in consultations concerning the treatment of the remains (California Public Resources Code 5097.98).</p>

Attachments:

1. Initial Study
2. Mitigation Monitoring and Reporting Program



INITIAL STUDY (IS) FOR COMPASS DANBE CENTERPOINTE PROJECT

BACKGROUND INFORMATION AND PROJECT DESCRIPTION:

1. **Project Case Number(s):** General Plan Amendment (PEN20-0118); Change of Zone (PEN20-0119); Tentative Parcel Map No. 37944 (PEN20-0120); and Plot Plans (PEN20-0121 and PEN20-0124)
2. **Project Title:** Compass Danbe Centerpointe
3. **Public Comment Period:** July 26, 2021 to August 25, 2021
4. **Lead Agency:** City of Moreno Valley
Julia Descoteaux, Associate Planner
14177 Frederick Street
Moreno Valley, CA 92552
(951) 413-3209
juliad@moval.org
5. **Documents Posted At:**
 - a. City of Moreno Valley Planning Division Counter, 14177 Frederick Street, Moreno Valley, CA 92553
 - b. Moreno Valley Library, 25480 Alessandro Boulevard, Moreno Valley, CA 92553
 - c. City's website: <http://www.moreno-valley.ca.us/cdd/documents/about-projects.html>
6. **Prepared By:** T&B Planning, Inc.
David Ornelas
3200 El Camino Real, Suite 100
Irvine, CA, 92602
(714) 505-6360 x 102
dornelas@tbplanning.com
7. **Project Sponsor:**

Applicant/Developer Mark Bachli CDRE Holdings 17, LLC 523 Main Street El Segundo, CA 90245 (310) 428-3302 mbachli@danbe.com	Property Owner Vir Prabhu Dhalla Moreno Valley Centerpointe, LLC (c/o CDRE Holdings 17, LLC) 523 Main Street El Segundo, CA 90245 (310) 428-3302 mbachli@danbe.com
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8. **Project Location:** The Project site is located in the central-western portion of the City of Moreno Valley, Riverside County, California. The Project site is located south of Alessandro Boulevard, between Frederick Street and Graham Street (APNs: 297-170-002 and -003). Refer to Figure 1, *Regional Map*; Figure 2, *Vicinity Map*; and Figure 3, *USGS Topographic Map*.
9. **General Plan Designation:** Commercial. Refer to Figure 4, *Existing General Plan*.
10. **Specific Plan Name and Designation:** N/A

- 11. **Existing Zoning:** Community Commercial. Refer to Figure 5, *Existing Zoning*.
- 12. **Surrounding Land Uses and Setting** (Refer to Figure 6, *Aerial Photograph* and Figure 7, *Site Photographs*):

	Land Use	General Plan	Zoning
Project Site	Undeveloped	Commercial	Community Commercial
North	Residential	Residential: Max 5 du/ac; Residential: Max 20 du/ac	Residential 5; Residential 20
South	Industrial	Business Park/Light Industrial	Light Industrial
East	Commercial and Undeveloped	Business Park/Light Industrial; Commercial	Business Park-Mixed Use; Community Commercial
West	Undeveloped	Commercial	Community Commercial with Mixed-Use Institutional Anchor Overlay

- 13. **Project Description:** The Compass Danbe Centerpointe project (hereafter, “Project”) comprises a proposal for a General Plan Amendment (PEN20-0118); Change of Zone (PEN20-0119); Tentative Parcel Map No. 37944 (PEN20-0120); and Plot Plans (PEN20-0121 and PEN20-0124) that provides for the development of two light industrial buildings located south of Alessandro Boulevard, between Frederick Street and Graham Street. The components of the proposed Project are summarized on the following pages.

General Plan Amendment (PEN20-0118) would amend the City of Moreno Valley General Plan Land Use Map to change the land use designation for the entire Project site from “Commercial” to “Business Park/Light Industrial.” Refer to Figure 8, *General Plan Amendment (PEN20-0118)*.

Change of Zone (PEN20-0119) would amend the City of Moreno Valley Zoning Map to change the zoning designation for the entire Project site from “Community Commercial” to “Light Industrial.” Refer to Figure 9, *Change of Zone (PEN20-0119)*.

Tentative Parcel Map No. 37944 (PEN20-0120) would relocate the existing property line so that Building 1 and Building 2 would be placed upon separate parcels and, also, would grant various easements for public access (i.e., public sidewalks) and public utilities. Refer to Figure 10, *Tentative Parcel Map No. 37944 (PEN20-0120)*.

Plot Plans (PEN20-0121 and PEN20-0124) provide specific development plans for two industrial warehouse buildings (Buildings 1 and 2). Building 1, located on the western portion of the Project site, contains approximately 290,726 square feet (s.f.) of building floor area, including 280,726 s.f. of warehouse space, 5,000 s.f. of office space, and 5,000 s.f. of mezzanine. Building 2, located on the eastern portion of the Project site, contains approximately 98,877 s.f. of building floor area, including 93,77 s.f. of warehouse space, 2,500 s.f. of office space, and 2,500 s.f. of mezzanine. The total combined building floor area for Building 1 and Building 2 is approximately 389,603 s.f. Both buildings include outdoor employee break areas with tables and seating; provided along the eastern side of Building 1 and along the western side of Building 2. The site plan for the Project is illustrated on Figure 11, *Site Plan*.

Vehicular access to the Project site is provided by three proposed driveways onto Alessandro Boulevard. The middle driveway would be accessible to only passenger vehicles and the westernmost driveway and easternmost driveway would be accessible to both passenger vehicles and trucks. All driveways would be restricted to right turn movements when entering/exiting the site. Sight distance at each Project driveway will be reviewed by the City of Moreno Valley at the time of preparation of final grading, landscape and street improvement plans to ensure that standard Caltrans and City of Moreno Valley sight distance standards are met.

Parking and Loading

The Project provides a range of parking and loading options across the Project site. Buildings 1 and 2 both provide enclosed truck courts on the south sides of the respective buildings. The truck court for Building 1 includes 32 loading bays and 34 truck trailer parking stalls; the truck court for Building 2 includes 10 loading bays and 10 truck trailer parking stalls. Neither truck court would be visible from Alessandro Boulevard. Building 1 also provides 144 passenger vehicle parking spaces (distributed along the north and east side and southeast corner of the building) while Building 2 provides 73 passenger vehicle parking spaces along the north and west sides and southeast corner of the building). Bicycle parking spaces (“racks”) would be provided at the northeast corners of Building 1 (4 racks) and Building 2 (2 racks) in conformance with Moreno Valley Municipal Code Section 9.11.060(B)(1) which requires bicycle parking spaces be provided at a rate equal to five percent of the total required parking spaces.

Architecture

Figure 12, *Architectural Elevations*, depicts the Project’s architectural design. Building 1 would have a maximum height of approximately 46 feet (measured from finished floor to the top of the parapets) and Building 2 would have a maximum height of approximately 46 feet (measured from finished grade to the top of the parapets). Both buildings are proposed to be constructed with painted concrete tilt-up panels and low reflective, blue-glazed glass. Articulated building elements, include parapets with a varied roofline, wall recesses, awnings, and mullions are proposed as decorative elements. The exterior color palette for Buildings 1 and 2 are comprised of various neutral, earth-toned colors, including shades of white, beige, gray, and dark brown.

Prior to the issuance of building permits to construct the Project, the Project Applicant would be required to submit construction architecture documents/plans to the City of Moreno Valley for review and approval. The construction documents/plans would be required to comply with the City of Moreno Valley Building Code, which is based on the California Building Code and is included in Chapter 8.20 of the City of Moreno Valley Municipal Code.

Landscaping

Figure 13, *Conceptual Landscape Plan*, depicts the proposed landscape design for the Project. Proposed landscaping would be ornamental in nature and would feature trees, shrubs, and drought-tolerant accent plants in addition to a variety of groundcovers. Trees and groundcover would be concentrated along the Project site’s frontage with Alessandro Boulevard and along the Project site’s eastern and western boundaries. Landscaping also is massed at driveways, around the buildings, and in and around automobile parking areas.

Prior to the issuance of a building permit to construct the proposed building, the Project Applicant would be required to submit final planting and irrigation plans to the City of Moreno Valley for review and approval. The plans are required to comply with Chapter 9.17 of the Moreno Valley Municipal Code, which establishes requirements for landscape design, automatic irrigation system design, and water-use efficiency.

Project Improvements

Public Roadway Improvements

The Project includes the following public roadway improvements in conjunction with development of the Project site:

1. The Project Applicant would improve the south side of Alessandro Boulevard to its ultimate half-section width as a Divided Major Arterial along the Project site's frontage. With proposed improvements, the south side of the street would feature: a 55-foot-wide travel way (including the existing raised median), new curb and gutter, a 6-foot-wide sidewalk abutting the curb, and a bioretention swale.
2. The Project Applicant would construct three driveways along the northern Project site boundary onto Alessandro Boulevard (which would require striping for lane transitions).
3. The Project Applicant would remove an existing bus stop along the south side of Alessandro Boulevard at the approximate midpoint of the northern Project site boundary. The bus stop would not be replaced as the Project site does not meet City's design requirements for a bus stop (the City's standard for bus stops/turnouts is at the far side of an intersection near a controlled crosswalk, not mid-block which is where the Project site is located).

Water Infrastructure

Eastern Municipal Water District (EMWD) would provide water service to the Project site. As depicted on Figure 14, numerous connection points are proposed to the existing water line installed beneath Alessandro Boulevard for indoor, outdoor (i.e., landscape irrigation), and fire protection (i.e., fire hydrant) services. All proposed water facilities would be designed and constructed in accordance with EMWD standards.

Sanitary Sewer Service

EMWD would provide wastewater conveyance services to the Project site. As shown on Figure 14, the Project would connect to the existing sewer line beneath the southern Project site boundary. All proposed wastewater facilities would be designed and constructed in accordance with EMWD's standards.

Stormwater Drainage Infrastructure

As shown in Figure 14, *Conceptual Drainage Plan*, the Project's on-site stormwater drainage system would consist of catch basins, underground storm drain pipes, bioretention swales, two underground detention basins, two modular wetlands units, and two sump pumps. Runoff from the proposed Building 1 area would drain to a proposed underground detention system located in the southwest corner of the Project site, which would then be pumped to a proposed modular wetlands unit for water quality treatment purposes. Flows would then be conveyed westerly and then southerly via an existing 54-inch storm drain beneath the southwest corner of the Project site. Runoff from the proposed Building 2 area of the Project site would drain to a proposed underground detention system located in the southeast corner of the Project site, which would then be pumped to another proposed modular wetlands unit before being conveyed easterly to an existing 36-inch storm drain beneath the southeast corner of the Project site.

The Project also includes connections to the existing storm drain beneath Alessandro Boulevard to convey storm drain runoff from off-site tributary areas to the north through the Project site. Stormwater runoff from Alessandro Boulevard also would be conveyed through the Project site – after flowing through proposed bioretention swales abutting Alessandro

Boulevard. Off-site runoff flows conveyed through the Project site would discharge to existing storm drains at the southwest and southeast corners of the Project site.

Dry Utilities

Implementation of the Project would result in the installation of conduit for communications cabling along the Project site's frontage with Alessandro Boulevard. Existing wooden power poles along the Project site would be removed as part of Project construction and the overhead electric transmission lines suspended on these poles would be undergrounded. The removal of the power poles and the undergrounding of the transmission lines would be performed in coordination with Moreno Valley Utility.

Earthwork and Grading

Physical disturbances necessary to implement the Project include grading of the entire Project site. As shown on Figure 15, *Conceptual Grading Plan*, the proposed Project would result in approximately 30,500 cubic yards of cut and 26,000 cubic yards of fill. Based on the expected shrinkage and compaction of on-site soils, earthwork activities are expected to balance and no import or export of soil materials would be required. When grading is complete, the Project site would have a slight downward slope from north to southeast. No manufactured slopes and no retaining walls are needed to implement the Project.

Construction Characteristics

Based on information provided by the Project Applicant, the Project is expected to be constructed over a period of approximately 190 work days (8 months). Site preparation would occur first, followed by mass-grading and installation of underground infrastructure. Next, fine grading would occur, surface materials would be poured, and the proposed building would be erected, connected to the underground utility system, and painted. Lastly, landscaping, fencing, screen walls, lighting, signage, and other site improvements would be installed. For purposes of analysis in this MND, construction is assumed to commence in October 2021 and finish in June 2022. The estimated Project construction schedule, organized by construction stage, is summarized in Table 1, *Estimated Construction Schedule*.

Table 1: Estimated Construction Schedule

Phase Name	Start Date	End Date	Days
Site Preparation	10/04/2021	10/15/2021	10
Grading	10/16/2021	11/26/2021	30
Building Construction	11/27/2021	06/24/2022	150
Paving	05/28/2022	06/24/2022	20
Architectural Coating	05/01/2022	06/24/2022	40

Source: (Urban Crossroads, 2020a, Table 3-2)

Construction workers would travel to the site by passenger vehicle and materials deliveries would occur by medium- and heavy-duty trucks. Construction equipment is expected to operate on the Project site up to eight hours per day, six days per week. Even though construction activities are permitted to occur between 7:00 a.m. to 8:00 p.m. on Mondays through Saturdays pursuant to Moreno Valley Municipal Code Section 11.80.030(D)(7), construction equipment is not in continual use and some pieces of equipment are used only periodically throughout a typical day of construction. Thus, eight hours of daily use per piece of equipment is a reasonable assumption. Should construction activities need to occur at night (such as concrete pouring activities which benefit from air temperatures that are lower than daytime temperatures), the Project Applicant would be required to obtain authorization

for nighttime work from the City of Moreno Valley as specified in Moreno Valley Municipal Code Section 11.80.030(D)(7).

The composition of the construction equipment fleet that the Project Applicant intends to use to construct the warehouse building, which also is used for purposes of analysis is in this IS/MND, is summarized in Table 2, *Estimated Construction Equipment Fleet*.

Table 2: Estimated Construction Equipment Fleet

Phase Name	Equipment	Amount	Hours Per Day
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
	Water Trucks	1	4
Grading	Crawler Tractors	2	8
	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
	Water Trucks	1	4
Building Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
	Water Trucks	1	4
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
	Water Trucks	1	4
Architectural Coating	Air Compressors	1	8

Source: (Urban Crossroads, 2020a, Table 3-3)

Operational Characteristics

At this time, the future occupant(s) of the Project is unknown. The Project Applicant expects that the building primarily would be occupied by warehouse distribution operators. The proposed buildings are designed with the potential to utilize up to 30 percent of their floor area for cold storage or refrigerated uses. The Project is expected to be operational 24 hours per day, seven days per week, with exterior loading and parking areas illuminated at night. Lighting would be subject to compliance with Moreno Valley Municipal Code Section 9.08.100, which states that all outdoor lighting associated with nonresidential uses shall be fully shielded and directed away from surrounding residential uses to reduce glare and light trespass, and shall not exceed one-quarter-foot-candle minimum maintained lighting measured from within five (5) feet of any property line.

The proposed warehouse buildings are designed such that business operations would be conducted within the enclosed building, with the exception of traffic movement, parking, and

the loading and unloading of tractor trailers at designated loading bays. As a practical matter, dock doors on industrial buildings are not occupied by a truck at all times of the day. There are typically more dock door positions on industrial buildings than are needed for receiving and shipping volumes. The dock doors that are in use at any given time are usually selected based on interior building operation efficiencies. In other words, trucks ideally dock in the position closest to where the goods to be carried by the truck are inside the building. As a result, many dock door positions are frequently inactive throughout the day. The City of Moreno Valley will condition the Project to use outdoor cargo handling equipment (e.g., yard trucks, hostlers, yard goats, pallet jacks, forklifts) that is only powered by non-diesel engines (e.g., gasoline, natural gas, electric).

During operation, employees, visitors, and vehicles hauling goods will travel to and from the Project site on a daily basis. Project operations are calculated by a trip generation calculation study to generate approximately 742 vehicle trips per day, including 518 passenger vehicle trips and 224 truck trips. Pursuant to State law, on-road diesel-fueled trucks that would service the Project are required to comply with various air quality and greenhouse gas emission standards, including but not limited to the type of fuel used, engine model year stipulations, aerodynamic features, and idling time restrictions. Compliance with State law is mandatory and inspections of on-road diesel trucks subject to applicable State laws are conducted by the California Air Resources Board (CARB).

Project operations are expected to demand approximately 9,735 gallons of water per day and 30,090 gallons of wastewater per day (EMWD's standard demand rates for industrial warehouse/distribution land uses are 550 gallons of water per acre per day and 1,700 gallons of wastewater per acre per day, respectively); 5,261,115 kilowatt hours (kWh) of electricity per year; and 6,438,204 kilo-British thermal units (kBTU) of natural gas per year.

14. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

The City of Moreno Valley is required to consult with interested California Native American tribes regarding the Project pursuant to Assembly Bill 52 (AB 52). The City contacted California Native American Tribes with traditional use areas that encompass or are in the vicinity of the Project site. The Project received requests for consultation from Soboba Band of Luiseno Indians, Pechanga Band of Luiseno Indians, Rincon Band of Luiseno Indians, Agua Caliente Band of Cahuilla Indians, and San Manuel Band of Mission Indians. The City concluded consultation on June 16, 2021.

15. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

Riverside County Airport Land Use Commission (Airport Land Use Plan Consistency Determination); Santa Ana Regional Water Quality Control Board (NPDES Permit), Riverside County Flood Control and Water Conservation District (drainage infrastructure design); and Eastern Municipal Water District (domestic water and sewer system design/connections).

16. **Other Technical Studies Referenced in this Initial Study (Provided as Appendices):**

Technical Appendix A1: *Compass Danbe Centerpointe Air Quality Impact Analysis*

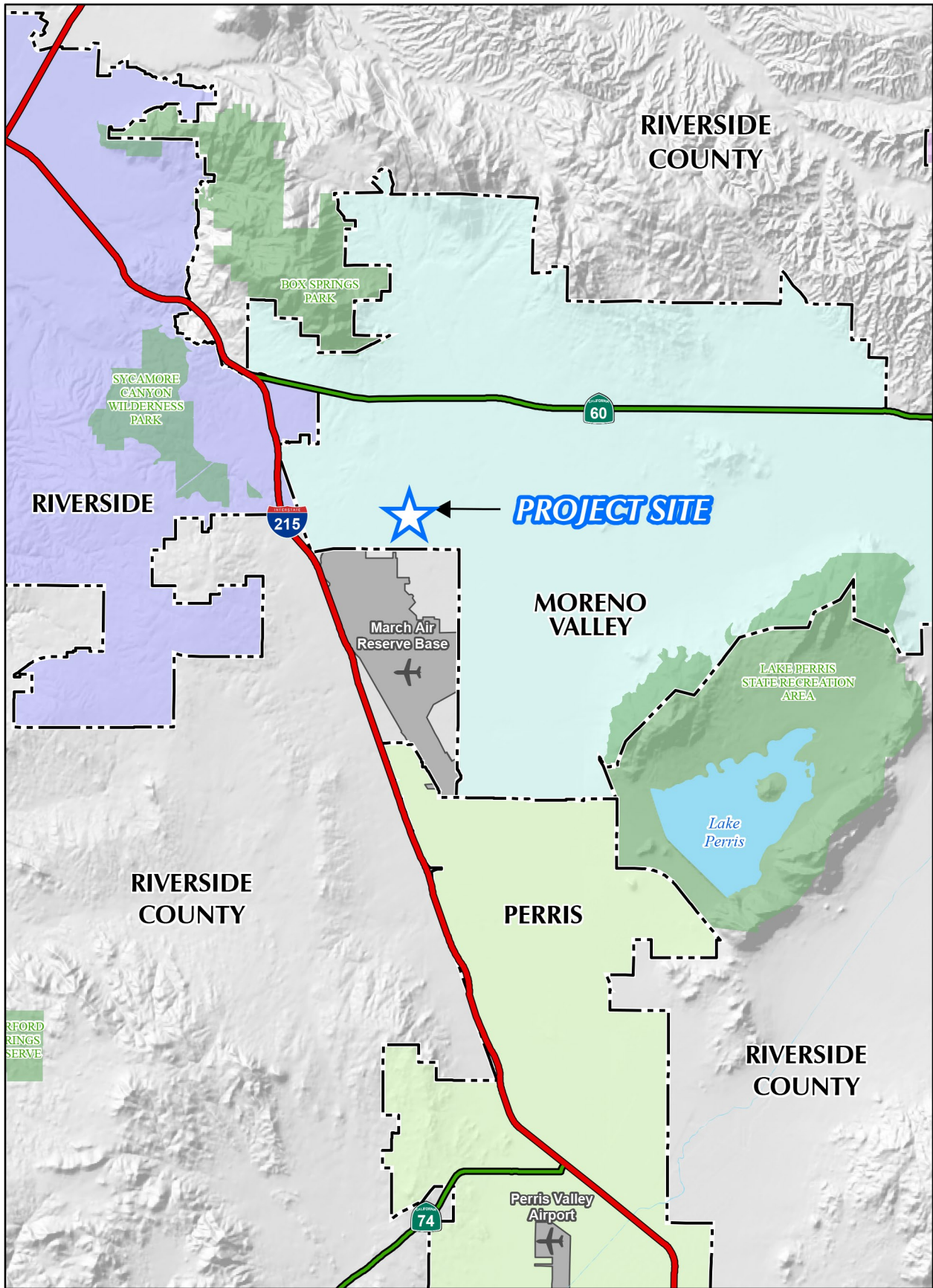
Technical Appendix A2: *Compass Danbe Centerpointe Mobile Source Health Risk Assessment*

Technical Appendix B1: *MSHCP General Biological Resources Assessment & Compliance Analysis Alessandro Project Site*
 Technical Appendix B2: *Jurisdictional Delineation Report and Impact Analysis Alessandro Project Site*
 Technical Appendix B3: *MSHCP Determination of Biologically Equivalent or Superior Preservation Alessandro Project Site*
 Technical Appendix B4: *Burrowing Owl Focused Survey Report*
 Technical Appendix B5: *Least Bell's Vireo Focused Survey Report*
 Technical Appendix C: *Phase I Cultural Resources Survey for the Compass Danbe Centerpointe Project*
 Technical Appendix D: *Compass Danbe Centerpointe Energy Analysis*
 Technical Appendix E: *Geotechnical Engineering Investigation – Proposed Industrial Warehouse Building Development*
 Technical Appendix F: *Compass Danbe Centerpointe Greenhouse Gas Analysis*
 Technical Appendix G: *Phase I Environmental Site Assessment Report 17.7 Acres Assessor's Parcel Numbers 297-170-002 and 297-170-003*
 Technical Appendix H: *Paleontological Assessment for Compass Danbe Centerpointe Project*
 Technical Appendix I1: *Project Specific Water Quality Management Plan Compass Danbe Centerpointe, Industrial Warehouse Facility, South side of Alessandro Blvd. between Frederick Street and Graham Street, City of Moreno Valley*
 Technical Appendix I2: *Preliminary Drainage Study Compass Danbe Centerpointe*
 Technical Appendix J: *Compass Danbe Centerpointe Noise Impact Analysis*
 Technical Appendix K1: *Alessandro Warehouse Traffic Analysis*
 Technical Appendix K2: *Alessandro Warehouse Vehicle Miles Travelled (VMT) Analysis*

17. Acronyms:

AB-#	Assembly Bill
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AQMP -	Air Quality Management Plan
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalFire	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAPSSA	Criteria Area Plant Special Survey Area
CARB	California Air Resources Board
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CIWMP	Countywide Integrated Waste Management Plan
CO	Carbon Monoxide
CWA	Clean Water Act
dBA	A-weighted decibel
DBESP	Determination of Biologically Equivalent or Superior Preservation
DIF	Development Impact Fee
DOD	Department of Defense
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substance Control
e.g.	exempli gratia meaning "for example"
EAP	Existing plus Ambient Growth plus Project
EDR	EnviroStar database
EIC	Eastern Information Center
EMWD	Eastern Municipal Water District

EPA	Environmental Protection Agency
et seq.	et sequentes, meaning “and the following”
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
GCC	Global Climate Change
GHG	Greenhouse Gas
gpd	Gallons per day
HCP	Habitat Conservation Plan
HMBEP	Hazardous Materials Business Emergency Plan
I-#	Interstate
i.e.	that is
IS/MND	Initial Study/Mitigated Negative Declaration
kBTU	kilo-British thermal units
kWh	Kilowatt-hour
L _{eq}	Equivalent sound level
lbs/day	pounds per day
MARB	March Air Reserve Base
MARB/IPA	March Air Reserve Base/Inland Port Airport
MBTA	Migratory Bird Treaty Act
MEIR	Maximally Exposed Individual Receptor
MEIW	Maximally Exposed Individual Worker
mgpd	Million gallons per day
MSHCP	Multiple Species Habitat Conservation Plan
MTCO _{2e}	Metric tons of carbon dioxide equivalent
MVFD	Moreno Valley Fire Department
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPSSA	Narrow Endemic Plant Special Survey Area
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
PM _{2.5}	Fine Particulate Matter (2.5 microns or smaller)
PM ₁₀	Fine Particulate Matter (10 microns or smaller)
RWQCB	Regional Water Quality Control Board
RTA	Riverside Transit Authority
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SARW-ILFP	Santa Ana River Watershed In-Lieu Fee Program
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SLF	Sacred Lands Files
SO _x	Sulfur Oxides
SR-#	State Route
SRA	State Responsibility Area
SWPPP	Storm Water Pollution Prevention Plan
USEPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
VdB	Vibration Decibel
VMT	Vehicle Miles Travelled
VOCs	Volatile Organic Compounds
WQMP	Water Quality Management Plan

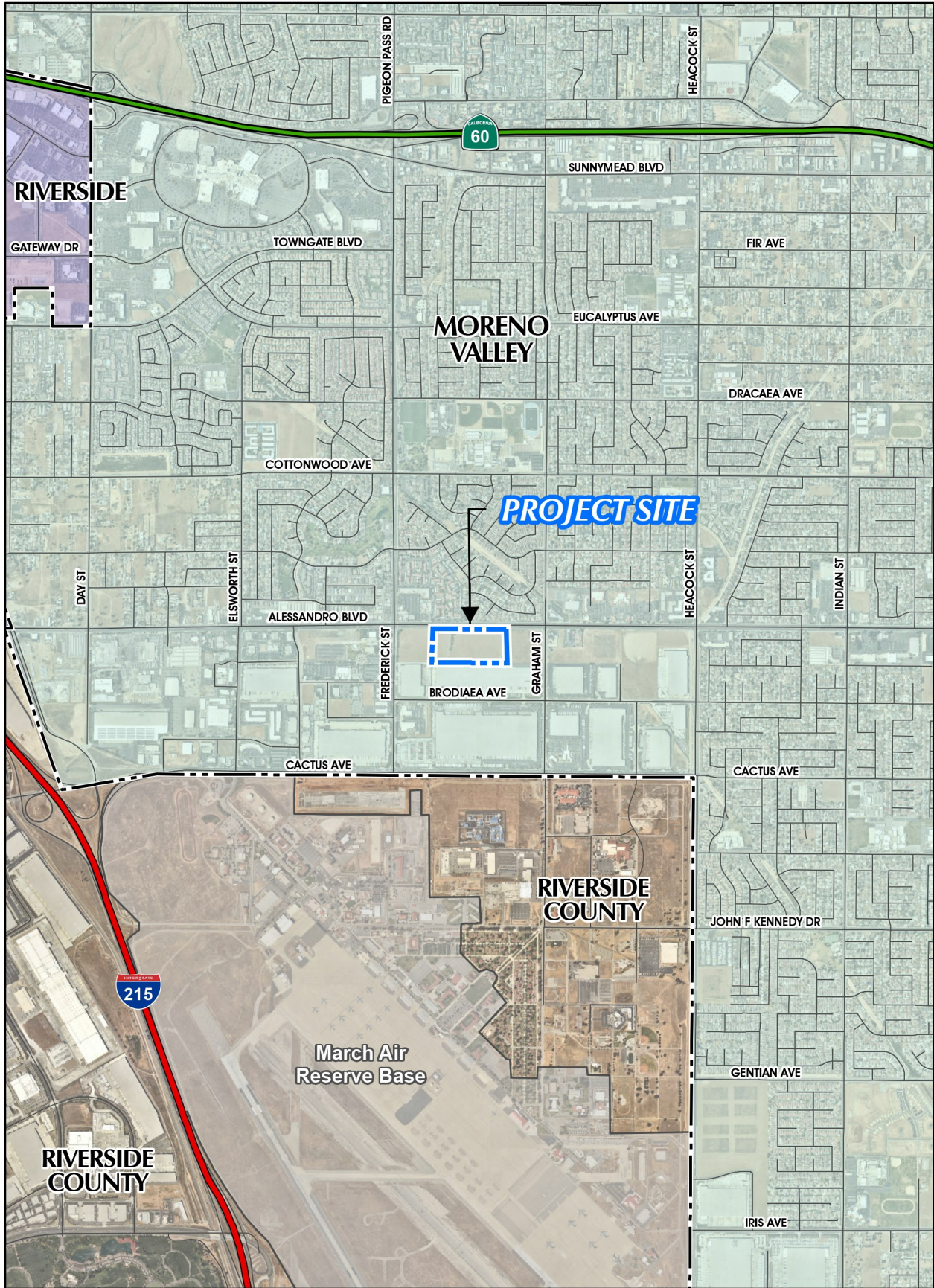


Source(s): ESRI, RCTLMA (2020)

Figure 1

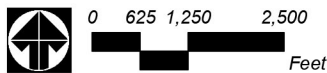


Regional Map

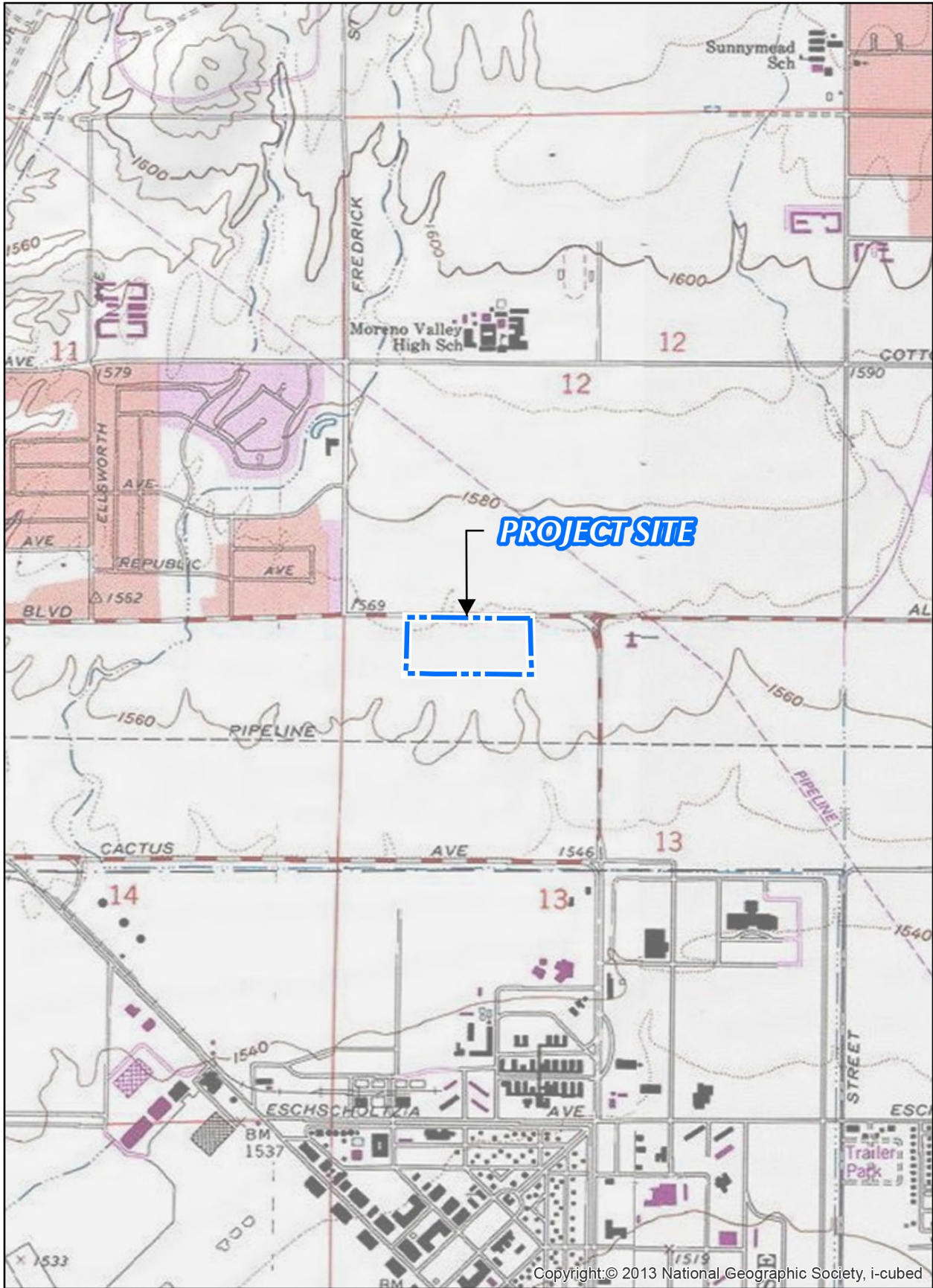


Source(s): ESRI, Nearmap Imagery (2020), RCTLMA (2020)

Figure 2

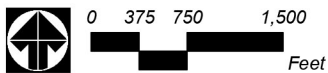


Vicinity Map

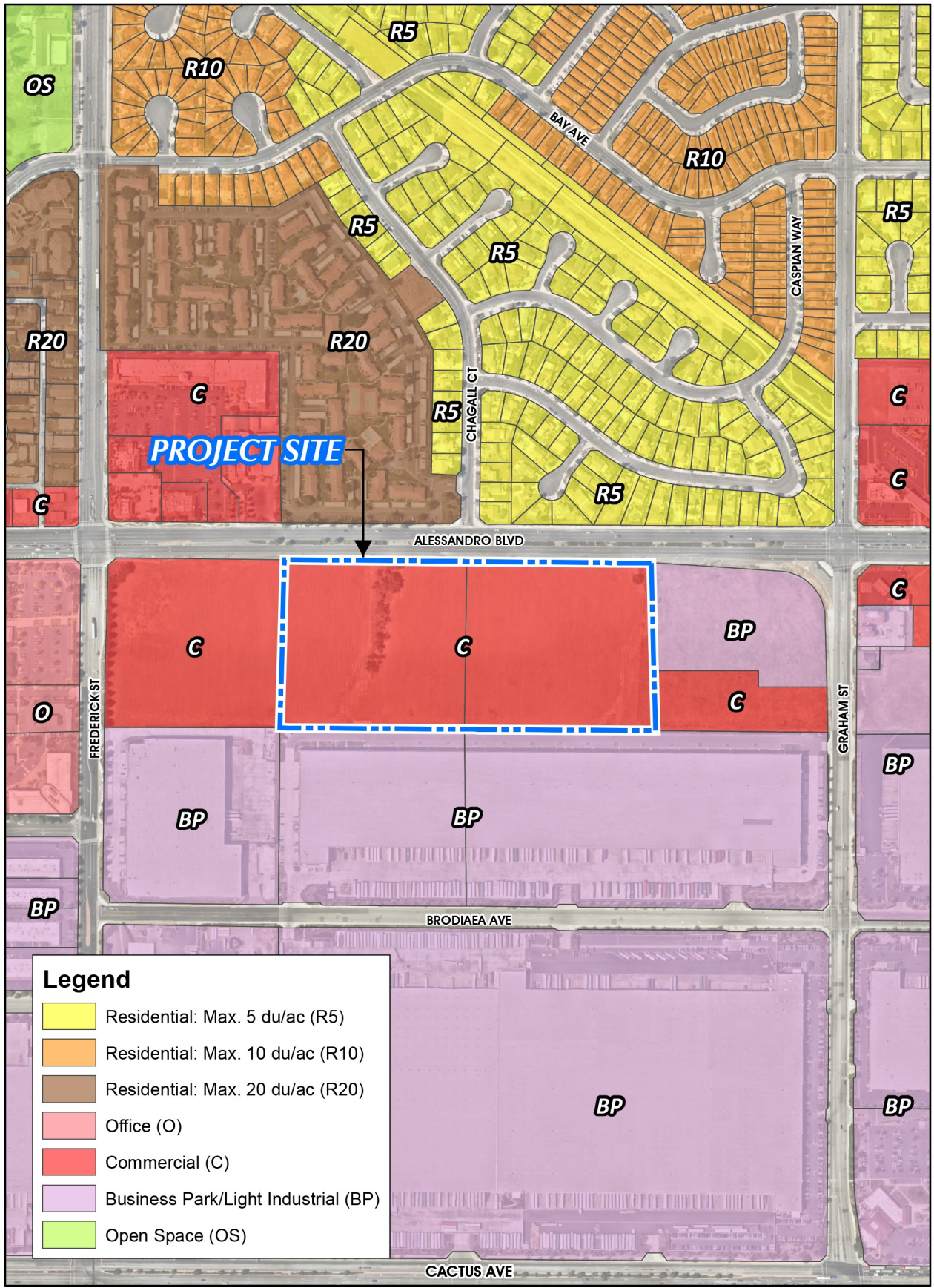


Source(s): USGS (2013)

Figure 3



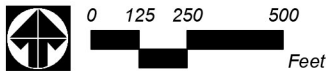
USGS Topographic Map



Legend	
	Residential: Max. 5 du/ac (R5)
	Residential: Max. 10 du/ac (R10)
	Residential: Max. 20 du/ac (R20)
	Office (O)
	Commercial (C)
	Business Park/Light Industrial (BP)
	Open Space (OS)

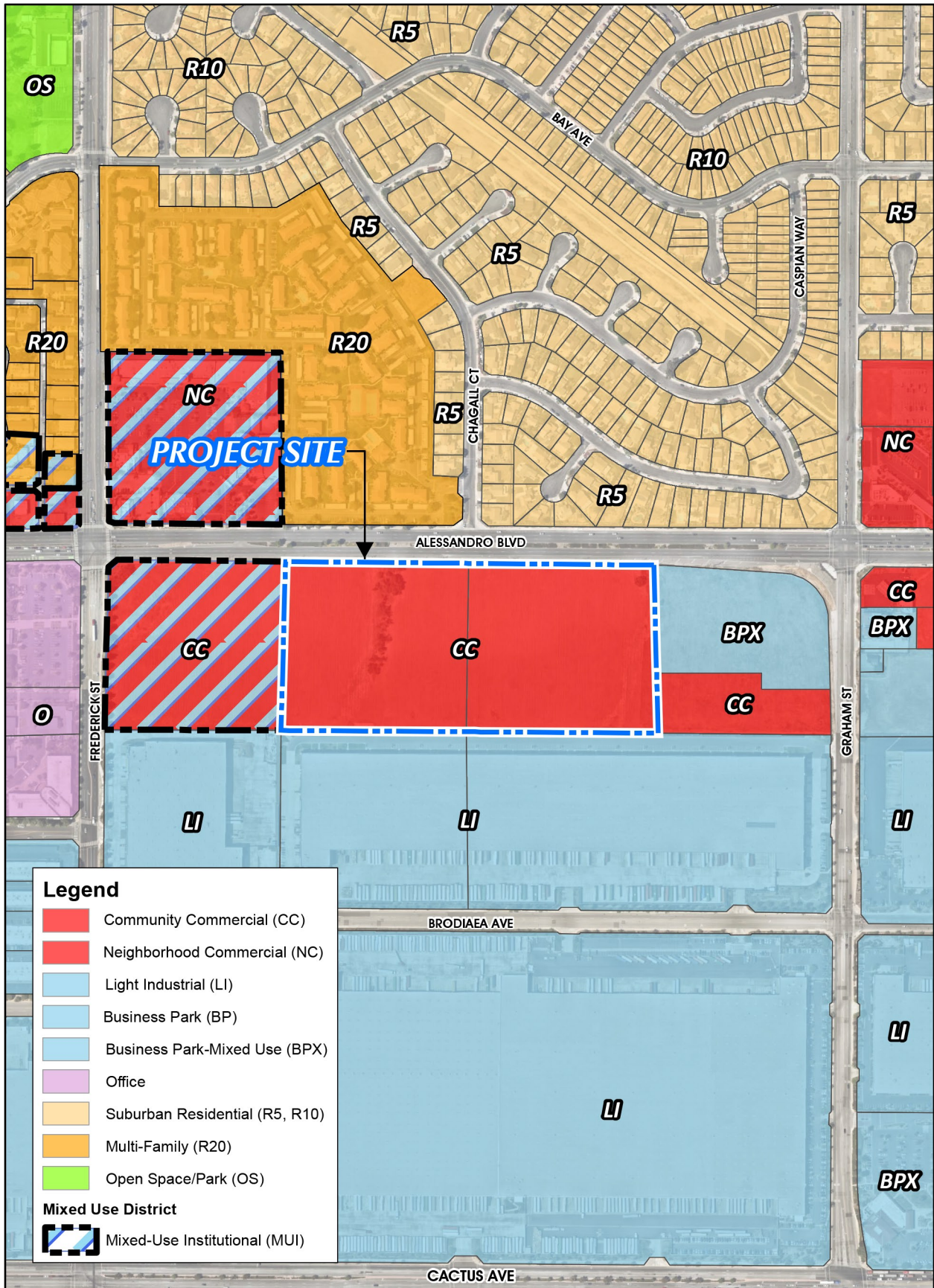
Source(s): City of Moreno Valley (2019), ESRI, Nearmap Imagery (2020), RCTLMA (2020)

Figure 4



Existing General Plan

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

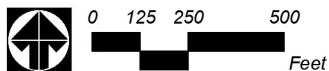


Legend

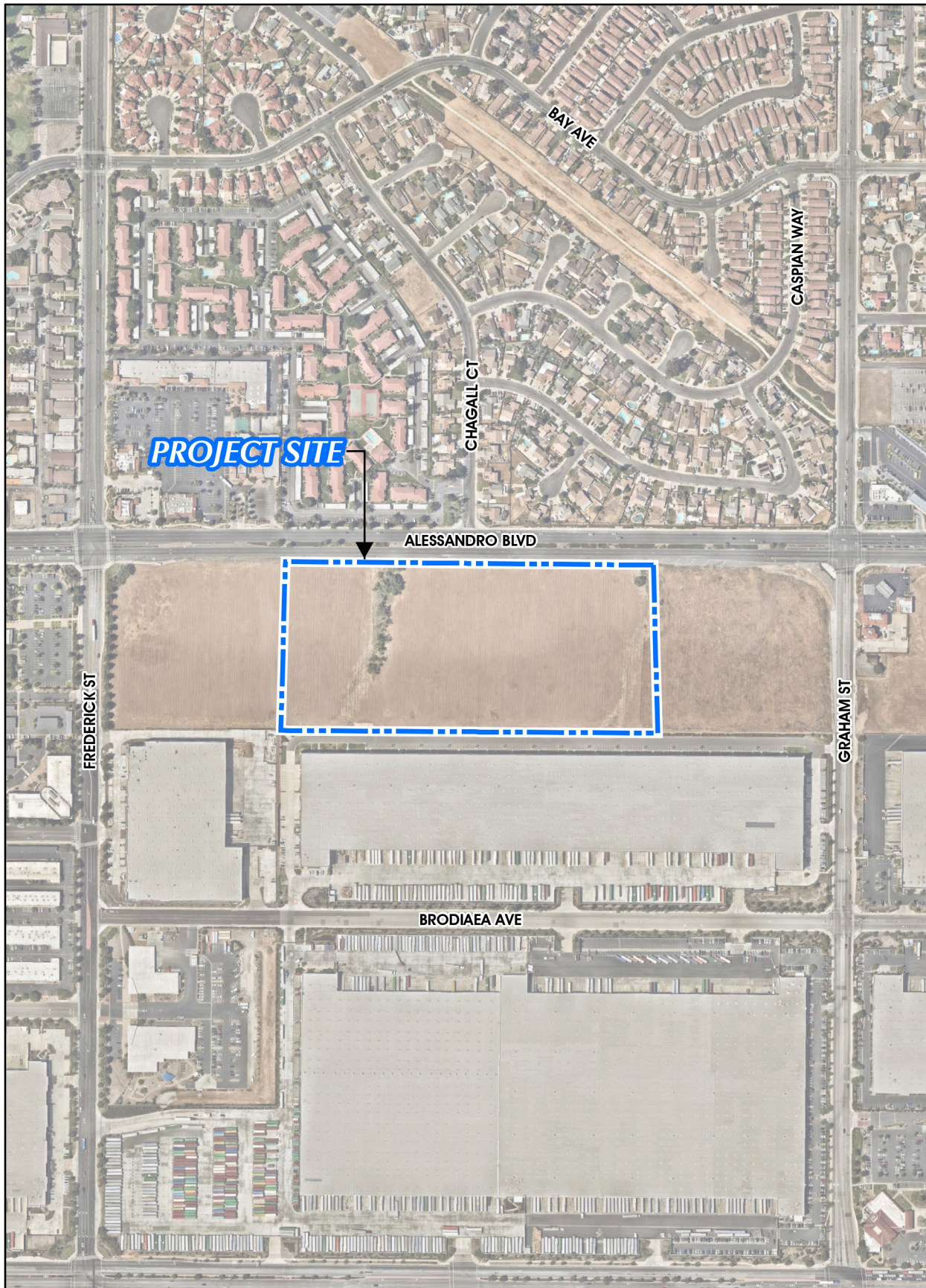
	Community Commercial (CC)
	Neighborhood Commercial (NC)
	Light Industrial (LI)
	Business Park (BP)
	Business Park-Mixed Use (BPX)
	Office
	Suburban Residential (R5, R10)
	Multi-Family (R20)
	Open Space/Park (OS)
Mixed Use District	
	Mixed-Use Institutional (MUI)

Source(s): City of Moreno Valley (2019), ESRI, Nearmap Imagery (2020), RCLMA (2020)

Figure 5

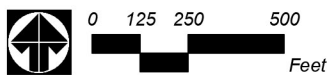


Existing Zoning



Source(s): ESRI, Nearmap Imagery (2020), RCLMA (2020)

Figure 6



Aerial Photograph



Site Photo 1: From Southeast Corner of the Project Site, looking West to North.



Site Photo 2: From Southern Edge of the Project Site, looking West to East.



Site Photo 4: From Northwest Corner of the Project Site, near Alessandro Blvd, looking East to South.



Site Photo 3: From Southwest Corner of the Project Site, looking North to East.

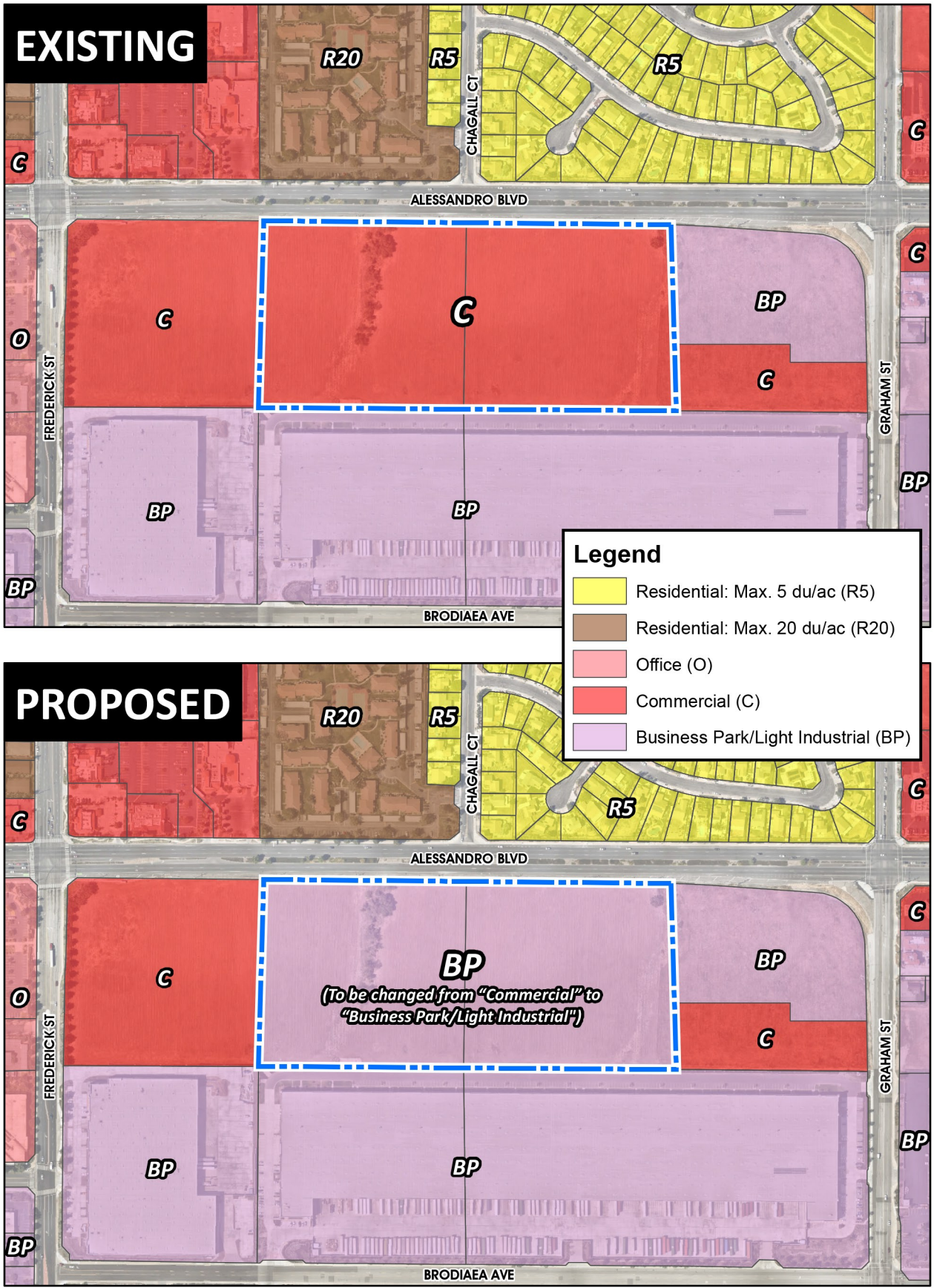


Site Photo 5: From Northeast Corner of the Project Site, near Alessandro Blvd, looking South to West.

Figure 7

Not to Scale

Site Photographs



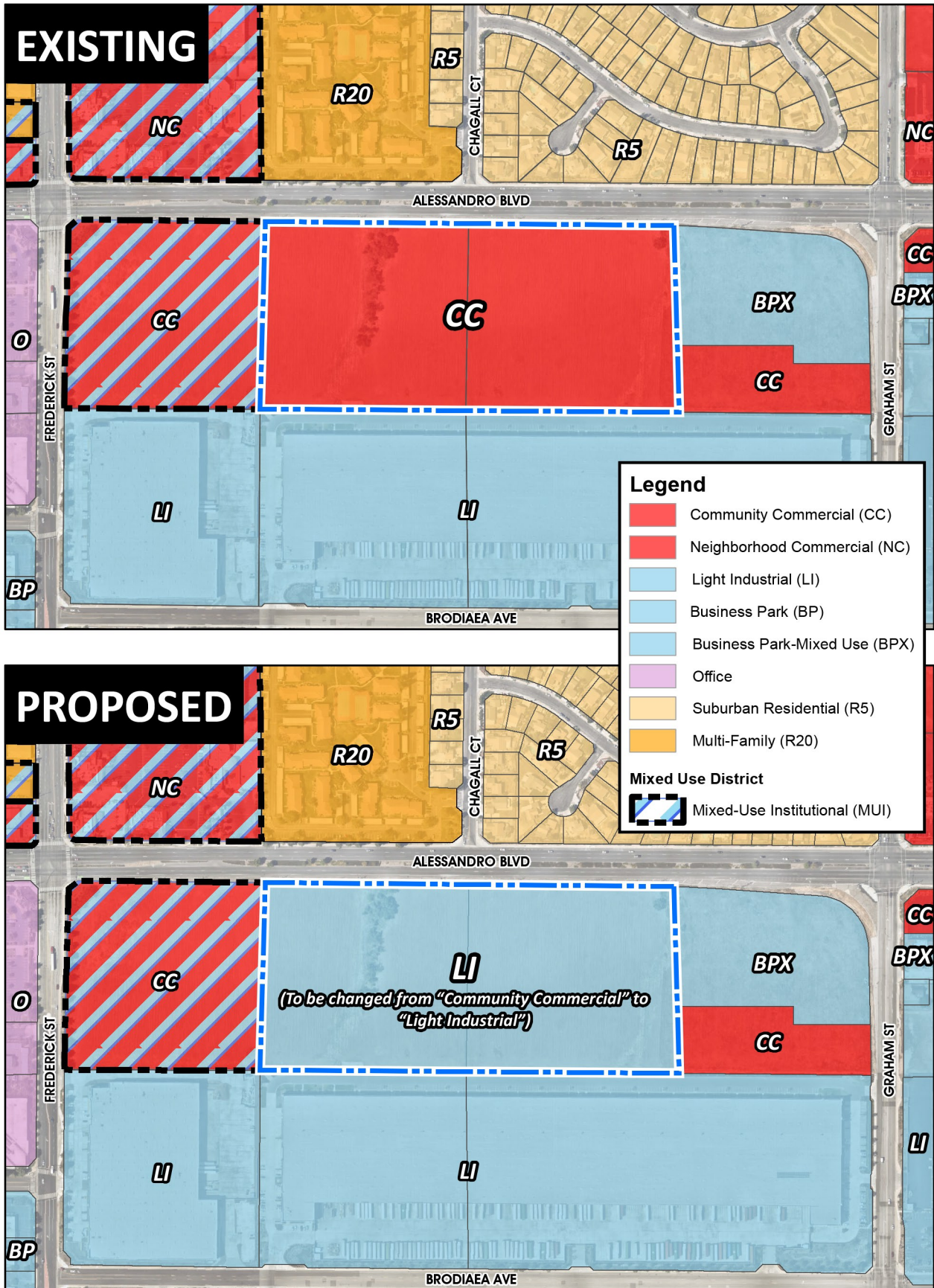
Source(s): City of Moreno Valley (2019), ESRI, Nearmap Imagery (2020), RCTLMA (2020)

Figure 8



General Plan Amendment (PEN20-0118)

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

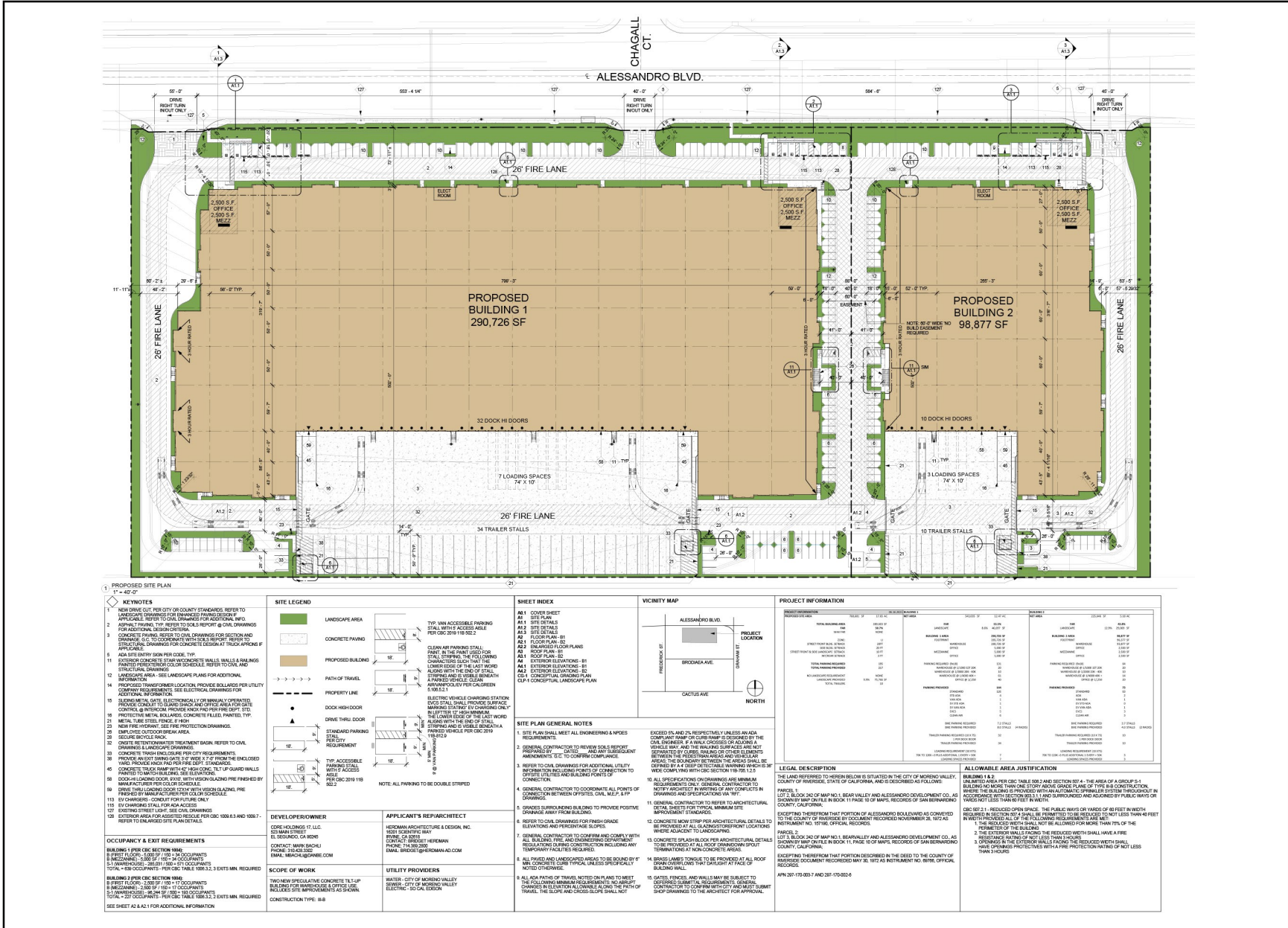


Source(s): City of Moreno Valley (2019), ESRI, Nearmap Imagery (2020), RCTLMA (2020)

Figure 9



Change of Zone (PEN20-0119)



Source(s): Herdman (07-21-2021)

Figure 11



Not to Scale

Site Plan



BUILDING 1 - NORTH ELEVATION



BUILDING 1 - WEST ELEVATION



BUILDING 1 - EAST ELEVATION









BUILDING 2 - NORTH ELEVATION



BUILDING 2 - WEST ELEVATION



BUILDING 2 - EAST ELEVATION

EXTERIOR COLOR SCHEDULE	
	(A) OFF WHITE EXTERIOR PAINT COLOR: SW6070 HERON PLUME
	(B) MEDIUM TAUPE EXTERIOR PAINT COLOR: SW6073 PERFECT GREIGE
	(C) WARM GRAY TILE
	(D) BOARD FORMED OFF WHITE PAINTED CONCRETE
	(E) STOREFRONT BLUE REFLECTIVE GLAZING & CHARCOAL ANODIZED MULLIONS
	(F) DARK BRONZE BROW/AWNING

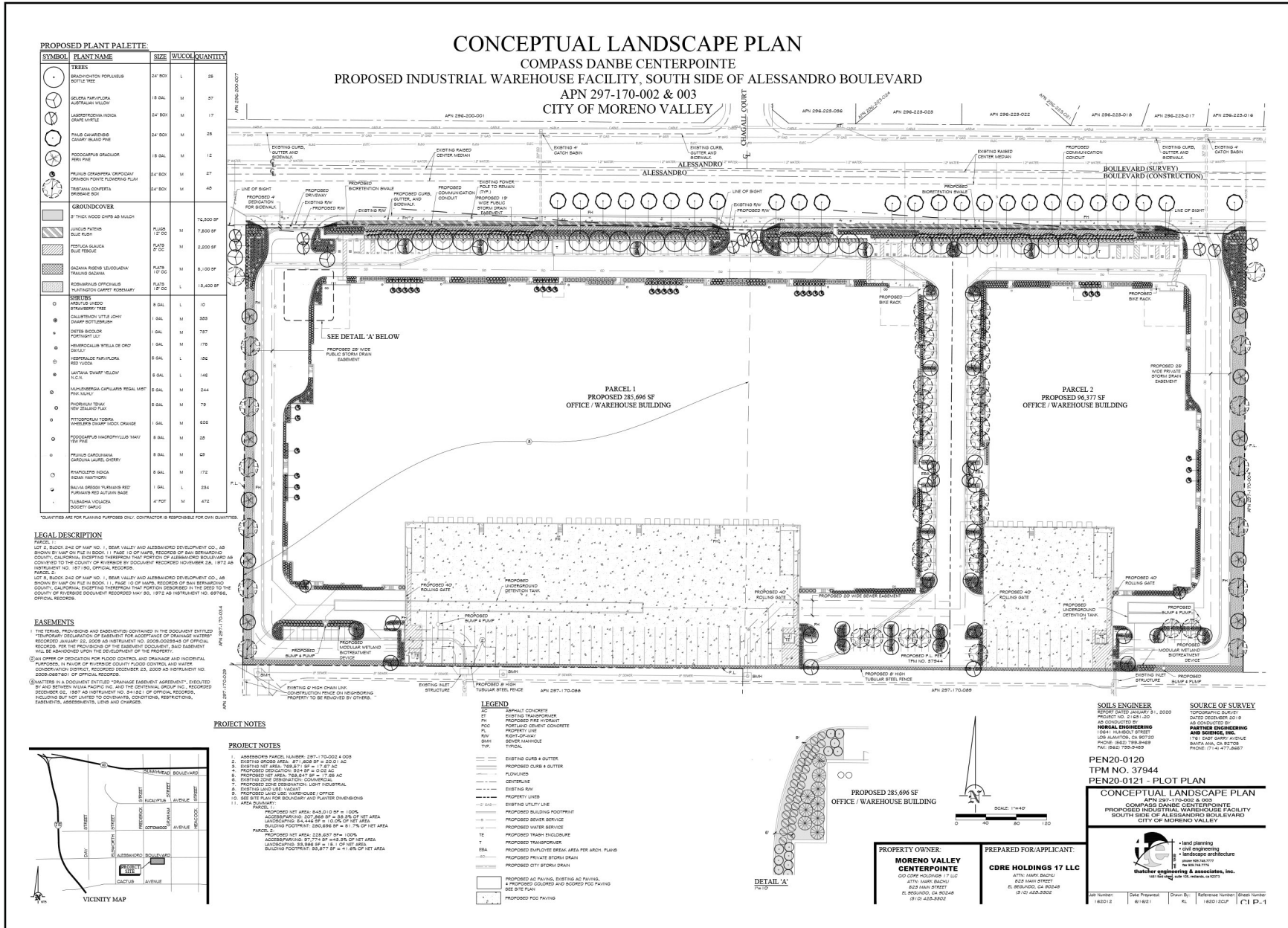
TYP PAINT NOTES:
PAINT MAN DOORS, GUARD WALLS, RAMP WALLS, STAIR WALLS, GUARD RAILS, ROOF DRAINS, AND LOUVERS TO MATCH ADJACENT BUILDING WALL U.N.O.
TRUCK DOORS TO BE PRE-FINISHED BY MANUFACTURER IN WHITE FINISH

Source(s): Herdman (10-08-2020)

Figure 12

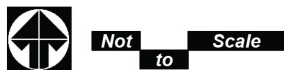
Not to Scale

Architectural Elevations



Source(s): Thatcher Engineering & Associates, Inc. (06-18-2021)

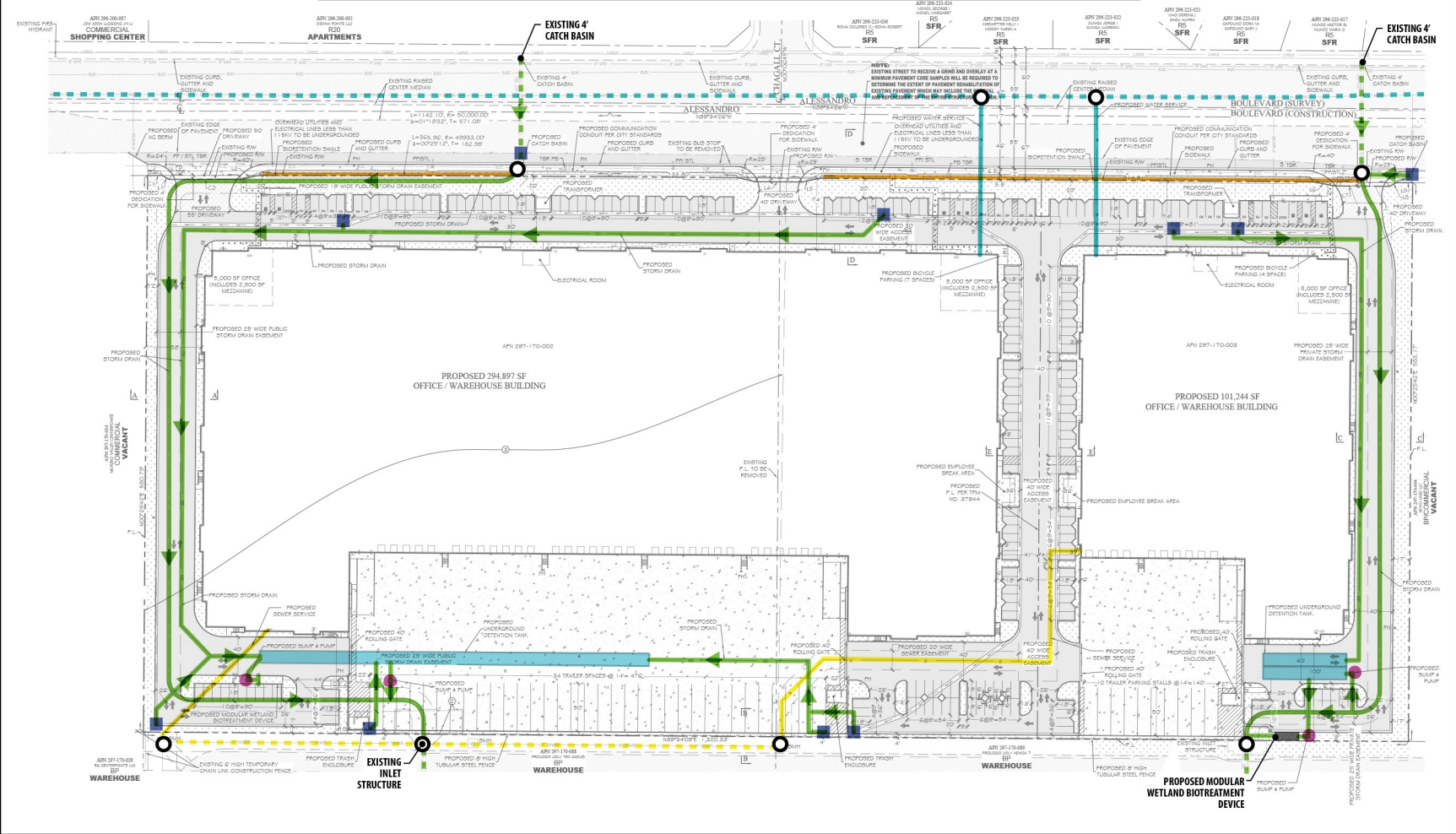
Figure 13



Conceptual Landscape Plan

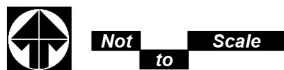
Legend

- - - - Existing 12" Water Line
- Proposed Water Line
- - - - Existing 8" Sewer Line
- Proposed Sewer Line
- - - - Existing 30"-54" Storm Drain Line (to be removed and replaced)
- Proposed Storm Drain Line
- Proposed Underground Detention Tank
- Proposed Bioretention Swale
- Proposed Catch Basin
- Proposed Sump Pump
- Point of Connection



Source(s): Thatcher Engineering & Associates, Inc. (02-24-2021)

Figure 14



Conceptual Utilities Plan

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology & Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology & Water Quality | <input type="checkbox"/> Land Use & Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population & Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities & Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.


Signature

July 21, 2021
Date

Julia Descoteaux
Printed Name

City of Moreno Valley
For

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a Lead Agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The Lead Agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or another CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analyses Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources. A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provided in Public Resources Code § 21099 – Modernization of Transportation Analysis for Transit-Oriented Infill Projects – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Scenic resources within the City of Moreno Valley are identified as Box Springs Mountains, the Foothills, the Badlands, and Mount Russell and its foothills. According to General Plan Figure 7-2, <i>Major Scenic Resources</i>, the Project site is not located within or adjacent to a designated scenic resource or within a view corridor for any of the designated scenic resources in the City (Moreno Valley, 2006a, Figure 7-2).</p> <p>Scenic resources visible (at least partially) from public viewpoints adjacent to the Project site include Mount Russell (approximately 4.0 miles to the southeast and partially visible from Alessandro Boulevard) (Google Earth Pro, 2020). Under existing conditions, views of Mount Russell are largely obscured from Alessandro Boulevard due to intervening development and landscaping, topography, and atmospheric haze that is common in the Inland Empire throughout the year. The Project would not substantially alter any existing views of Mount Russell from Alessandro Boulevard. As stated above, views of Mount Russell from Alessandro Boulevard are largely obscured from the Project site by the existing warehouse abutting the southern Project site boundary and on-site landscaping (and, for parts of the year, atmospheric haze). The Project would construct buildings up to 46-feet-tall and install new landscaping on the Project site. The proposed building and site improvements would partially obscure views of Mount Russell from Alessandro Boulevard – although not substantially more than views are obscured under existing conditions – and views of the Mountains would continue to be available above the building.</p> <p>Implementation of the Project would not result in any impacts to view corridors as identified in the City of Moreno Valley General Plan (Moreno Valley, 2006a, Figure 7-2). Additionally, implementation of the Project would not result in a substantial adverse impact to the general viewsheds of the scenic resources within the City. Therefore, the Project would result in a less-than-significant impact associated with an adverse effect on a scenic vista.</p>				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: The Project site is not located within or adjacent to a scenic highway corridor and there are no State-designated or eligible scenic highways within the vicinity of the Project site (Caltrans, 2019). Additionally, the City of Moreno General Plan does not identify any Scenic Route within proximity to the Project site (Moreno Valley, 2006a, Figure 7-2). The nearest State-designated scenic highway to the Project site is a segment of State Route (SR-) 74 located approximately 9.3 miles southeast of the Project site; the Project site would not be visible from this SR-74 segment due to distance and intervening development/topography (Caltrans, 2019; Google Earth Pro, 2020). It should be noted, also, that an area of Interstate (I-) 15 near the above-named segment of SR-74 is eligible for consideration as a State scenic highway; however, the Project site would not be visible from this portion of I-15 due to distance and intervening development/topography (Caltrans, 2019; Google Earth Pro, 2020). Accordingly, the Project site is not located within a State scenic highway corridor and implementation of the proposed Project would not have a substantial effect on scenic resources within a State scenic highway corridor. Thus, no impact to a State scenic highway would occur from implementation of the Project.</p>				
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project site is located within an urbanized area, as defined by U.S. Census Bureau, and determined as part of the 2010 Census (U.S. Census Bureau, 2012). Thus, pursuant to this threshold,</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>a potentially significant impact to visual character only would occur if the Project were to conflict with applicable zoning and/or other City of Moreno Valley regulations governing scenic quality. Implementation of the proposed Project would result in the visual conversion of the site from vacant, undeveloped land to two industrial warehouse buildings with associated improvements including parking lots, drive aisles, utility infrastructure, landscaping, exterior lighting, and signage. The Project would be compatible with the size, scale, and aesthetic/decorative architectural and landscaping features of other existing light industrial/warehouse buildings constructed to the south and southwest of the Project site. Furthermore, the Project would be required to comply with the applicable development standards and design guidelines contained in the Moreno Valley Zoning Ordinance, which regulates the visual quality of new development and ensure that new development does not detract from any scenic attributes/qualities in the surrounding area. Because the Project site is located in an urbanized area and because the Project would not conflict with applicable regulations governing scenic quality, a less-than-significant impact would occur from implementation of the Project.</p>				
<p>d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Under existing conditions, the Project site contains no sources of artificial lighting; however, street lights are present along the Project site's frontage with Alessandro Boulevard. The Project Applicant proposes to develop the site with two industrial warehouse buildings and would introduce new lighting elements on-site to illuminate the parking areas, truck docking areas, and building entrances.</p> <p>The Project Applicant would be required to comply with lighting requirements as set forth in the City of Moreno Valley Municipal Code Sections 9.10.110 and 9.16.280. The Municipal Code lighting standards govern the placement and design of outdoor lighting fixtures to ensure adequate lighting for public safety while also minimizing light pollution and glare and precluding public nuisances (e.g., blinking/flashing lights, unusually high intensity, or needlessly bright lighting). The City would confirm compliance with applicable lighting requirements during future review of building permit applications/plans. Mandatory compliance with the Municipal Code would ensure that the Project would not introduce any permanent design features that would adversely affect day or nighttime views in the area. This impact would be less than significant.</p> <p>With respect to glare, a majority of Project building materials would consist of concrete panels, which are non-reflective. While window glazing has a potential to result in minor glare effects, such effects would not adversely affect daytime views of surrounding properties, including motorists along adjacent roadways, because the glass proposed for the Project would be low-reflective, proposed buildings would be set back from adjacent roadways at a distance, and proposed landscaping would provide a buffer between all proposed glass surfaces and the public right of way. Thus, glare impacts from proposed building elements would be less than significant.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> • Chapter 7 – Conservation Element <ul style="list-style-type: none"> - Figure 7-2 – Major Scenic Resources 2. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code <ul style="list-style-type: none"> • Section 9.10.110 – Performance Standards, Light and Glare • Chapter 9.16 – Design Guidelines 3. Google Earth Pro, https://earth.google.com/web/ 4. California Department of Transportation (Caltrans) Scenic Highway Program, https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways 5. U.S. Census Bureau Urbanized Area Reference Maps, https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua75340_riverside--san_bernardino_ca/DC10UA75340.pdf 				

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>II. AGRICULTURE AND FOREST RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board. Would the project:</p>				
<p>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: The Project site is not utilized for agricultural purposes under existing conditions. According to mapping information available from the California Department of Conservation’s (CDC) Farmland Mapping and Monitoring Program (FMMP), the Project site is classified as “Farmland of Local Importance” (CDC, 2016). Accordingly, the Project site does not contain any lands mapped by the FMMP as “Prime Farmland,” “Unique Farmland,” or “Farmland of Statewide Importance” and, thus, implementation of the Project would not convert such Farmland to a non-agricultural use. No impact would occur.</p>				
<p>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: The Project site is zoned for “Community Commercial” under existing conditions and would be re-zoned to “Light Industrial” as part of the Project; therefore, implementation of the Project would not conflict with zoning for agricultural use. Additionally, as disclosed in the City of Moreno Valley General Plan Final EIR, no land within the City – including the Project site – is under a Williamson Act Contract (Moreno Valley, 2006b, p. 5.8-6). Accordingly, implementation of the Project would not conflict with existing (or proposed) zoning for agricultural use or a Williamson Act contract. No impact would occur.</p>				
<p>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: The Project site is not zoned as forest land, timberland, or Timberland Production, nor is it surrounded by forest land, timberland, or Timberland Production land. According to the City of Moreno Valley Zoning Map, there are no lands located within the City of Moreno Valley that are zoned for forest land, timberland, or timberland zoned Timberland Production. Therefore, the Project has no potential to conflict with any areas currently zoned as forest, timberland, or Timberland Production and would not result in the rezoning of any such lands. As such, no impact would occur.</p>				
<p>d) Result in the loss of forest land or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: The Project site does not contain a forest and is not designated as forest land; therefore, the Project would not result in the loss of forest land or the conversion of forest land to non-forest use. As such, no impact would occur.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: “Farmland” is defined in Section II (a) of Appendix G of the State CEQA Guidelines as “Prime Farmland,” “Unique Farmland” or “Farmland of Statewide Importance” (“Farmland”). As disclosed above under Response II(a), the Project would not result in the conversion of Farmland to non-agricultural use.</p> <p>As discussed under Responses II(c) and II(d), the Project would not convert forest land to non-forest use. No impact would occur.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> • Section 5.8 – Agricultural Resources 2. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code <ul style="list-style-type: none"> • Chapter 9.03 – Residential District 3. Moreno Valley Zoning Map, http://www.moreno-valley.ca.us/cdd/pdfs/ZoningMap.pdf 4. California Department of Conservation – California Important Farmland Finder, https://maps.conservation.ca.gov/DLRP/CIFF/ 				
<p>III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:</p>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project site is located within the South Coast Air Basin (SCAB or “Basin”). The SCAB encompasses approximately 6,745 square miles and includes Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The SCAB is bound by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, respectively; and the San Diego County line to the south. In these areas, the South Coast Air Quality Management District (SCAQMD) is principally responsible for air pollution control, and works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.</p> <p>Historically and presently, State and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the State and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. The current AQMP, the <i>2016 AQMP</i>, was adopted by SCAQMD in March 2017. Criteria for determining consistency with the AQMP are defined in Chapter 12 of the SCAQMD’s <i>CEQA Air Quality Handbook (1993)</i>. The Project’s consistency with these criteria is discussed below.</p> <p><i>Consistency Criterion No. 1: The Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.</i></p> <p>Consistency Criterion No. 1 refers to violations of the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). As evaluated under Response III(c), below, the Project would not exceed the SCAQMD localized emissions threshold for any criteria pollutant during any construction phase of the Project. Accordingly, localized criteria pollutant emissions from Project construction would not increase the frequency or severity of existing air quality violations, cause or contribute to new violations, and/or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>The Project's operational emissions would not exceed SCAQMD localized emissions thresholds (refer to Response III(c), below); thus, long-term operation of the Project would not increase the frequency or severity of existing NAAQS and/or CAAQS violations, cause or contribute to new violations, and/or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.</p> <p>Therefore, construction and operation of the Project is determined to be consistent with the first criterion and the impact would be less than significant.</p> <p><u>Consistency Criterion No. 2:</u> <i>The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.</i></p> <p>The growth forecasts used in the AQMP to project future emissions levels are based in part on land use data provided by lead agency general plan documentation. Projects that propose to increase the intensity of use on a subject property may result in increased stationary area source emissions and/or vehicle source emissions when compared to the AQMP assumptions. If a project does not exceed the growth projections in the applicable local general plan, then the project is considered to be consistent with the growth assumptions in the AQMP. The prevailing planning documents for the Project site is the City of Moreno Valley General Plan. The City of Moreno Valley General Plan Land Use Map designates the Project site for Commercial land use. The Project includes a request to change the existing General Plan land use designation for the Project site from Commercial to Business Park/Light Industrial, which, if approved, would result in a land use and development intensity that was not anticipated by the General Plan, and, by extension, the growth models that were used in the AQMP. Although the Project would not be consistent with the land use assumptions used in the AQMP, Project construction and operation would not exceed applicable SCAQMD regional or localized air quality significance thresholds. As such, the Project's inconsistency with Consistency Criterion No. 2 would not result in a substantial adverse environmental impact.</p> <p>For the reasons stated above, the Project would not result in a substantial adverse environmental impact due to an increase in the frequency or severity of existing air quality violations, the creation of new violations, the delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP, or the exceedance of growth assumptions in the AQMP. As such, impacts would be less-than-significant.</p>				
<p>b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The proposed Project has the potential to generate substantial pollutant concentrations during both construction activities and long-term operation. An <i>Air Quality Impact Analysis</i> (Urban Crossroads, 2020a) and a <i>Mobile Source Health Risk Assessment</i> (Urban Crossroads, 2020b) were prepared for the Project by Urban Crossroads, Inc. to evaluate potential criteria and hazardous air pollutant emissions that could result from the Project's construction and operation. These reports are included as <i>Technical Appendices A1 and A2</i> to this IS/MND and their findings are incorporated into the analysis presented herein.</p> <p>The following analysis is based on the applicable significance thresholds established by the SCAQMD for regional criteria pollutant emissions (as summarized in Table 3-1 of <i>Technical Appendix A1</i>). This analysis assumes that the Project would comply with applicable, mandatory regional air quality standards, including: SCAQMD Rule 403, "Fugitive Dust;" SCAQMD Rule 431.2, "Sulfur Content of Liquid Fuels;" SCAQMD Rule 1113, "Architectural Coatings;" SCAQMD Rule 1186, "PM₁₀ Emissions from Paved and Unpaved Roads, and Livestock Operations;" SCAQMD Rule 1186.1, "Less-Polluting Street Sweepers," and Title 13, Chapter 10, Section 2485, Division 3 of the California Code of Regulations "Airborne Toxic Control Measure."</p> <p>For a detailed description of the health effects of air pollutants refer to Section 2.4 of the Project's Air Quality Impact Analysis (<i>Technical Appendix A1</i>). In general, air pollutants have adverse effects to human health including, but not limited to, respiratory illness and carcinogenic effects; however, based</p>				

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

on available modeling it is not feasible to correlate regional criteria pollutant emissions from development projects of the scale of the proposed Project to adverse health effects on a SCAB-wide level (Urban Crossroads, 2020a, pp. 10-16, 56-58). The potential for the Project to result in substantial adverse health effects from toxic air contaminant emissions is addressed under Response III(c), below.

Impact Analysis for Construction Emissions

For purposes of the construction emissions analysis, construction was conservatively expected to occur between October 2021 and June 2022. The California Emissions Estimator Model (CalEEMod) accounts for the implementation and enforcement of California’s progressively more restrictive regulatory requirements for construction equipment and the ongoing replacement of older construction fleet equipment with newer, less-polluting equipment. Thus, according to the CalEEMod, construction activities that occur in the near future are expected to generate more air pollutant emissions than the same activities that may occur farther into the future. Accordingly, in the event that the Project’s construction occurs at a later date than assumed in this air quality analysis, Project-related construction emissions are not expected to exceed the values presented herein (Urban Crossroads, 2020a, p. 38).

The calculated maximum daily emissions associated with Project construction are presented in Table 3, *Summary of Construction-Related Emissions*. The Project’s construction characteristics and construction equipment fleet assumptions used in the analysis were previously described above in the Project Description (see Tables 1 and 2).

Table 3: Summary of Construction-Related Emissions

Year	Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer						
2021	5.43	61.02	32.00	0.10	14.04	6.81
2022	54.69	42.10	50.18	0.13	6.92	2.92
Winter						
2021	5.43	61.02	31.86	0.09	14.04	6.81
2022	54.68	42.02	47.88	0.13	6.39	2.92
Maximum Daily Emissions	54.69	61.02	50.18	0.13	14.04	6.81
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: (Urban Crossroads, 2020a, Table 3-4)

As shown in Table 3, the Project’s daily construction emissions of volatile organic compounds (VOCs), nitrogen oxides (NO_x) carbon monoxide (CO), sulfur oxides (SO_x), and particulate matter (PM₁₀ and PM_{2.5}) would not exceed SCAQMD regional criteria thresholds and, thus, would be less than significant. The SCAQMD considers any project-specific criteria pollutant emissions that exceed applicable SCAQMD significance thresholds also to be cumulatively-considerable. To put it another way, if a project does not exceed the SCAQMD regional thresholds, then SCAQMD considers that project’s air pollutant emissions to not be cumulatively-considerable. Thus, because Project construction would not exceed the SCAQMD regional criteria significance thresholds, implementation of the Project would not result in a cumulatively-considerable net increase of any criteria pollutant, including any pollutants for which the SCAB does not attain applicable federal or State ambient air quality standards during construction.

Impact Analysis for Operational Emissions

Operational activities associated with the Project are expected to generate air pollutant emissions from the operation of motor vehicles (including trucks), landscape maintenance activities, application of architectural coatings, and the use of electricity and natural gas. Long term operational emissions associated with the Project are presented in Table 4, *Summary of Peak Operational Emissions*.

As summarized in Table 4, Project operational emissions of VOCs, NO_x, CO, SO_x, PM₁₀ and PM_{2.5} would not exceed SCAQMD regional criteria thresholds. Accordingly, the Project would not emit substantial concentrations of these pollutants during long-term operation and would not contribute to an existing or projected air quality violation. The Project’s long-term emissions of VOCs, NO_x, CO, SO_x, PM₁₀ and PM_{2.5} would be less than significant.

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

Table 4: Summary of Peak Operational Emissions

Source	Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer						
Area Source	9.02	7.20E-04	0.08	0.00	2.80E-04	2.80E-04
Energy Source	0.19	1.73	1.45	0.01	0.13	0.13
Mobile Source (Passenger Cars)	1.27	1.18	18.96	0.06	6.56	1.76
Mobile Source (Trucks)	1.26	45.31	9.68	0.21	8.51	2.79
On-Site Equipment Source	0.24	2.54	1.52	0.01	0.09	0.08
Total Maximum Daily Emissions	11.99	50.76	31.68	0.28	15.30	4.76
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Winter						
Area Source	9.02	7.20E-04	0.08	0.00	2.80E-04	2.80E-04
Energy Source	0.19	1.73	1.45	0.01	0.13	0.13
Mobile Source (Passenger Cars)	1.21	1.25	16.16	0.05	6.56	1.76
Mobile Source (Trucks)	1.23	47.16	8.83	0.21	8.51	2.78
On-Site Equipment Source	0.24	2.54	1.52	0.01	0.09	0.08
Total Maximum Daily Emissions	11.90	52.68	28.05	0.28	15.29	0.00
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: (Urban Crossroads, 2020a, Table 3-7)

c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: The following analysis addresses the Project’s potential to expose sensitive receptors in the immediate vicinity of the Project site to substantial pollutant concentrations during Project construction and long-term operation. The following analysis is based on the applicable significance thresholds established by the SCAQMD (as summarized in Tables 3-9 and 3-11 of *Technical Appendix A1*).

Impact Analysis for Construction Localized Emissions

As summarized in Table 5, *Summary of Construction Localized Emissions*, localized emissions of NO_x, CO, and particulate matter (PM₁₀ and PM_{2.5}) would not exceed applicable SCAQMD thresholds during peak Project construction activities. Accordingly, Project construction would not expose any sensitive receptors to substantial concentrations of criteria pollutants. Impacts would be less than significant.

Impact Analysis for Operational Localized Emissions

The Project’s operational localized emissions are presented in Table 6, *Summary of Operational Localized Emissions*. As shown, the Project’s peak operational emissions would not exceed the localized thresholds established by the SCAQMD. Accordingly, long-term operation of the Project would not result in the exposure of any sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

Impact Analysis for CO “Hot Spots”

Localized areas where ambient CO concentrations exceed the CAAQS and/or NAAQS are termed CO “hot spots.” Emissions of CO are produced in greatest quantities from motor vehicle combustion and are usually concentrated at or near ground level because they do not readily disperse into the atmosphere, particularly under cool, stable (i.e., low or no wind) atmospheric conditions. Consequently, the highest CO concentrations are generally found within close proximity to congested intersection locations.

For purposes of providing a conservative, worst-case impact analysis, the Project’s potential to cause or contribute to CO hotspots was evaluated by comparing study area intersections that would receive Project traffic (both intersection geometry and traffic volumes) with prior studies conducted by the SCAQMD in support of their AQMPs. In the 2003 AQMP, the SCAQMD evaluated CO concentrations at

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

Table 5: Summary of Construction Localized Emissions

On-Site Emissions	Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Site Preparation				
Maximum Daily Emissions	60.79	21.85	13.83	6.75
SCAQMD Localized Threshold	297	2,082	36	10
Threshold Exceeded?	NO	NO	NO	NO
Grading				
Maximum Daily Emissions	56.54	31.23	8.77	3.84
SCAQMD Localized Threshold	297	2,082	36	10
Threshold Exceeded?	NO	NO	NO	NO
Building Construction				
Maximum Daily Emissions	18.75	17.67	1.03	0.96
SCAQMD Localized Threshold	297	2,082	36	10
Threshold Exceeded?	NO	NO	NO	NO
Paving				
Maximum Daily Emissions	11.12	14.58	0.57	0.52
SCAQMD Localized Threshold	297	2,082	36	10
Threshold Exceeded?	NO	NO	NO	NO
Architectural Coating				
Maximum Daily Emissions	1.88	2.42	0.11	0.11
SCAQMD Localized Threshold	297	2,082	36	10
Threshold Exceeded?	NO	NO	NO	NO

Source: (Urban Crossroads, 2020a, Table 3-9)

Table 6: Summary of Operational Localized Emissions

Operational Activity	Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	6.69	4.48	0.97	0.44
SCAQMD Localized Threshold	297	2,082	9	3
Threshold Exceeded?	NO	NO	NO	NO

Source: (Urban Crossroads, 2020a, Table 3-11)

four (4) busy intersections in the City of Los Angeles that were determined to be the most congested intersections in the SCAB. Each of the evaluated intersections were primary thoroughfares, some of which were located near major freeway on/off ramps, and experienced traffic volumes of approximately 100,000 vehicles per day. The SCAQMD’s analysis at these busy intersections did not identify any CO hotspots. Based on an analysis of the intersections in the Project’s study area, Urban Crossroads determined that none of the intersections in the Project’s study area would be subject to the extreme traffic volumes and vehicle congestion of the intersections modeled by the SCAQMD in the 2003 AQMP (Urban Crossroads, 2020a, pp. 52-53). Therefore, Project-related vehicular emissions would not create a CO hot spot and would not substantially contribute to an existing or projected CO hot spot. Impacts would be less than significant.

Impact Analysis for Diesel Particulate Emissions

Diesel-fueled trucks would travel to/from the Project site during operation of the Project. Diesel trucks produce diesel particulate matter (DPM), which is known to be associated with health hazards, including cancer. To evaluate the Project’s potential to expose sensitive receptors within ¼-mile of the Project site and the Project’s primary truck travel routes to substantial amounts of DPM during long-term operation, a *Mobile Source Health Risk Assessment* was prepared for the proposed Project (*Technical Appendix A2*). Project-related DPM health risks are summarized below. Detailed air dispersion model outputs and risk calculations are presented in Appendices 2.1 and 2.2, respectively, of *Technical Appendix A2*.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>At the maximally exposed individual receptor (MEIR) – the existing residential home located approximately 152 feet north of the Project site – the maximum cancer risk attributable to the Project’s DPM emissions is calculated to be 4.48 in one million. The cancer risk attributable to the Project at the MEIR would not exceed the SCAQMD cancer risk threshold of 10 in one million. At the MEIR, the non-cancer health risk index attributable to the Project would be 0.002, which would not exceed the SCAQMD non-cancer health risk index of 1.0 (Urban Crossroads, 2020b, p. 1). Accordingly, long-term operations at the Project site would not directly cause or contribute in a cumulatively-considerable manner to the exposure of residential receptors to substantial DPM emissions. Therefore, implementation of the Project would result in a less-than-significant impact.</p> <p>At the maximally exposed individual worker (MEIW) – the office building located approximately 744 feet west of the Project site – the maximum cancer risk attributable to the Project’s DPM emissions is calculated to be 0.18 in one million. The cancer risk attributable to the Project at the MEIW would not exceed the SCAQMD cancer risk threshold of 10 in one million. At the MEIW, the non-cancer health risk index attributable to the proposed Project would be 0.0006, which would not exceed the SCAQMD non-cancer health risk index of 1.0 (Urban Crossroads, 2020b, p. 1). Therefore, the Project would result in a less-than-significant impact.</p> <p>There are no schools located within a ¼ mile of the Project site, which is the distance from the Project site with the highest concentration of Project-related DPM emissions. Proximity to sources of toxics is critical to determining the impact. Based on California Air Resources Board and SCAQMD emissions and modeling analyses, particulate matter pollutant concentrations drop by 70 percent at approximately 500 feet from the emissions source and by 80 percent at approximately 1,000 feet from the emissions source (Urban Crossroads, 2020b, p. 2). Because there are no schools located within at least 1,320 feet of the Project site, implementation of the Project would not expose any school child receptors to substantial concentrations of diesel particulate matter emissions. Project-related truck traffic would travel off-site along public streets (traffic to/from I-215 is expected to travel along Alessandro Boulevard and Cactus Avenue). There are no schools located within ¼ mile of Alessandro Boulevard and Cactus Avenue between the Project site and I-215; therefore, the Project-related traffic traveling to/from I-215 would not expose school children receptors to substantial DPM concentrations. Based on the foregoing analysis, implementation of the Project would not expose school child receptors to substantial DPM concentrations. This impact is less than significant.</p>				
<p>d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?)</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project could produce odors during proposed construction activities resulting from construction equipment exhaust, application of asphalt, and/or the application of architectural coatings; however, standard construction practices would minimize the odor emissions and their associated impacts. Furthermore, any odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of the respective phase of construction. In addition, construction activities on the Project site would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance (Urban Crossroads, 2020a, pp. 58-59). Accordingly, the proposed Project would not create objectionable odors affecting a substantial number of people during construction, and short-term impacts would be less than significant.</p> <p>During long-term operation, the Project would include a warehouse land use, which is not typically associated with objectionable odors. The temporary storage of refuse associated with the proposed Project’s long-term operational use could be a potential source of odor; however, Project-generated refuse is required to be stored in covered containers and removed at regular intervals in compliance with the City’s solid waste regulations, thereby precluding any significant odor impact. Furthermore, the proposed Project would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance, during long-term operation (Urban Crossroads, 2020b, pp. 58-59) As such, long-term operation of the proposed Project would not create objectionable odors affecting a substantial number of people and impacts would be less than significant.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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- Sources:**
1. Urban Crossroads, 2020a, Air Quality Impact Analysis, *Technical Appendix A1*
 2. Urban Crossroads, 2020b, Mobile Source Health Risk Assessment, *Technical Appendix A2*

IV. BIOLOGICAL RESOURCES – Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Response: A *Multiple Species Habitat Conservation Plan (MSHCP) Compliance Analysis* was prepared for the Project by MIG. The MSHCP compliance analysis addresses potential impacts to candidate, sensitive, or special status species due to implementation of the Project and is included as *Technical Appendix B1* to this IS/MND (MIG, 2020a). Focused burrowing owl and least Bell’s vireo survey reports address the potential for the respective species to occur on the Project site and are included as *Technical Appendices B4* and *B5* (MIG, 2020b; MIG, 2020c). The analysis presented below is based on the findings of the abovementioned reports.

Special-Status Plant Species

All special-status plant species that have potential to occur within the Project survey area are adequately covered by the Western Riverside County MSHCP (MIG, 2020a, p. 15). Furthermore, the Project survey area is not located within a Narrow Endemic Plant Special Survey Area (NEPSSA) or Criteria Area Plant Special Survey Area (CAPSSA) and, thus, is not considered to be in an area with a high likelihood of supporting populations of sensitive native plant species (MIG, 2020a, p. 15). Implementation of the Project would not result in substantial adverse impacts to special-status plants and mitigation is not required.

Special-Status Wildlife Species

The Project site supports suitable habitat for the burrowing owl and least Bell’s vireo; however, neither species was observed on the Project site during focused species surveys (MIG, 2020a, pp. 15-16; MIG 2020b, p. 4; MIG 2020c, p. 5). All other special-status wildlife species that have the potential to occur within the Project survey area are adequately covered by the Western Riverside County MSHCP (MIG, 2020a, pp. 15-16). The Project’s consistency with the MSHCP is addressed under Response IV(f).

Notwithstanding the information presented above, the burrowing owl is a nomadic species and there is the potential that the species could migrate onto the Project site prior to construction. If burrowing owls are present on the Project site during grading activities, the Project’s impact to the species would be significant and mitigation would be required, as discussed below.

Additionally, implementation of Project would result in removal of vegetation across the Project site that has the potential to support nesting and/or migratory birds that are granted special status by federal and State regulations. The Project’s potential to impact nesting birds and migratory birds is a significant direct impact for which mitigation is required, as discussed below.

MM BR-1 and MM BR-2 would reduce potential impacts to the burrowing owl and nesting/migratory birds to less-than-significant levels by ensuring that pre-construction surveys are conducted to determine the presence or absence on the Project site of the burrowing owl and/or protected nesting bird species prior to the commencement of construction activities. If the burrowing owl or protected nesting bird species are present, the mitigation measures provide performance criteria that require avoidance and/or relocation of the species in accordance with accepted protocols.

Based on the foregoing analysis, the proposed Project would result in less-than-significant impacts to candidate, sensitive, or special status species with the implementation of mitigation.

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>Mitigation</u>				
MM BR-1	<p>Within 30 days prior to grading, a qualified biologist shall conduct a survey of suitable habitat on site and make a determination regarding the presence or absence of the burrowing owl. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Moreno Valley prior to the issuance of a grading permit and subject to the following provisions:</p> <ol style="list-style-type: none"> a) In the event that the pre-construction survey identifies no burrowing owls on the property a grading permit may be issued without restriction. b) In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit. c) In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that Objectives 1-4 have been met. A grading permit shall be issued, either: <ol style="list-style-type: none"> i) Upon approval and implementation of a property-specific Determination of Biologically Superior Preservation (DBESP) report for the burrowing owl by the CDFW; or ii) A determination by the biologist that the site is part of an area supporting less than 35 acres of suitable Habitat, and upon passive or active relocation of the species following accepted CDFW protocols. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit. 			
MM BR-2	<p>All vegetation clearing and ground disturbance shall be prohibited during the bird nesting season (February 1 through September 15), unless a nesting bird survey is completed in accordance with the following requirements:</p> <ol style="list-style-type: none"> a) A bird nesting survey of the Project Site, including suitable habitat within a 100-foot radius, shall be conducted by a qualified biologist within five (5) days prior to initiating 			

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ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>vegetation clearing or ground disturbance at the respective property. A copy of the nesting bird survey results report shall be provided to the City of Moreno Valley.</p> <p>b) If the survey does not identify the presence of any active nests, then construction activities can proceed without restriction.</p> <p>c) If the survey identifies the presence of active nests, then the qualified biologist shall provide the City with a copy of maps showing the location of all nests and a species-appropriate buffer zone around each nest sufficient to protect the nest from substantial adverse direct and/or indirect impacts. The size and location of all buffer zones, if required, shall be subject to review and approval by the City but shall be no less than a 100-foot radius around the nest for non-raptor species and no more than a 500-foot radius around the nest for raptor species and any endangered, threatened, or candidate species.</p> <p>i) The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing. No construction vehicles shall be permitted within restricted areas (i.e., bird protection zones), unless directly related to the management or protection of the legally protected species, until after the nest becomes inactive (or the nest has failed), the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by the activities.</p> <p>ii) In the event that a nest is abandoned despite efforts to minimize disturbance and, if the nestlings are still alive, the Project Applicant/Developer shall contact the California Department of Fish and Wildlife (CDFW) and, subject to CDFW approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s).</p>				
<p>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Response: A jurisdictional delineation report was prepared for the Project. The jurisdictional delineation identifies potential jurisdictional waters and wetlands located on and abutting the Project site and is included as <i>Technical Appendix B2</i> to this IS/MND (MIG, 2021a). Additionally, a DBESP report was prepared to address potential MSHCP riparian/riverine areas located on and abutting the Project site. The DBESP report is included as <i>Technical Appendix B3</i> (MIG, 2021b).</p> <p>The Project would permanently impact approximately 0.61-acre of riparian and riverine habitats subject to CDFW jurisdiction, which are located within the black willow riparian woodland habitat (0.39-acre), disturbed wetland-cattail (0.02-acre), and wetland meadow along two ephemeral drainage courses (Drainages A and B, totaling 0.81-acre) on the Project site (MIG, 2021a, pp. 25-26). Accordingly, the Project would have a direct significant impact on riparian/riverine habitat and sensitive natural community for which mitigation is required.</p> <p>MM BR-3 would reduce potential impacts to less-than-significant impacts by ensuring that the Project Applicant obtains all applicable permits for impacts to jurisdictional features and fully compensates for the permanent impacts to riparian/riverine habitat through the purchase of habitat mitigation credits at an approved mitigation bank. With implementation of MM BR-3, the proposed Project would result in less-than-significant impacts to riparian/riverine habitats and sensitive natural communities (MIG, 2021b, pp. 10-11).</p>				

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>MM BR-3 Prior to the issuance of grading permits, the Project Applicant shall obtain all applicable permits for impacts to jurisdictional features, which may include a 1602 Streambed Alteration Agreement from CDFW and a 401 Certification issued by the RWQCB pursuant to the California Water Code Section 13260. In addition, the Project Applicant shall purchase a minimum of 0.81-acre of re-establishment credits (a 1:1 mitigation-to-impact ratio for impacts to wetland meadow habitat) and 0.82-acre of rehabilitation credits (a 2:1 mitigation-to-impact ratio for impacts to black willow riparian woodland and disturbed wetland-cattail habitats). Habitat mitigation credits can be purchased either at an approved Habitat Mitigation Bank (e.g., Riverpark Mitigation Bank) or via an In-Lieu Fee Program (e.g., Riverside-Corona Resource Conservation District and the Southwest Resource Management Association Santa Ana River Watershed In-Lieu Fee Program). Approval to purchase the mitigation credits must be granted in advance by the resource agencies. The Project Applicant shall provide evidence to the City of Moreno Valley that the applicable permits have been obtained and that the required habitat mitigation credits have been purchased prior to issuance of grading permits.</p>				
<p>c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Response: Implementation of the Project would permanently impact 0.02-acre of Wetland Waters of the State, associated with the on-site disturbed wetland-cattail habitat) (MIG, 2021a, pp. 25, 27). No other federal or State-protected wetland waters, including vernal pools, are present on the Project site (MIG, 2021a, p. 22). Accordingly, the Project would have a direct significant impact on State-protected wetlands for which mitigation is required.</p>				
<p>MM BR-3 would reduce Project impacts to State-protected wetlands to a less-than-significant level by ensuring that the Project Applicant obtains all applicable permits for impacts to jurisdictional features and fully compensates for the permanent impacts to State wetlands through the purchase of habitat mitigation credits at an approved mitigation bank. With implementation of MM BR-3, the proposed Project would result in less-than-significant impacts to State-protected wetlands (MIG, 2021b, pp. 10-11).</p>				
<p>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Response: Wildlife movement corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbances. The Project site was evaluated for its function as a wildlife corridor that species would use to move between wildlife habitat zones as part of the MSHCP Compliance Analysis. Generally, mountain canyons and/or riparian corridors are used by wildlife as corridors; the Project site does not contain either of these features. Furthermore, the Project site is substantially surrounded by human activity in the form of industrial land uses and roadways. Lastly, the Project site is not identified for conservation or designated as a wildlife movement corridor as part of the MSHCP and the Project would be consistent with the MSHCP and, thus, would not interfere with or affect any MSHCP-designated wildlife movement corridor. (MIG, 2020a, p. 17) Therefore, no impact to a wildlife corridor would occur from implementation of the Project.</p>				
<p>Wildlife nurseries are sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies. Although no nesting birds or remnant nests were observed on the Project site by MIG, implementation of the Project could potentially result in significant impacts to biological resources (i.e., avian species and their nests) that are protected by the MBTA and CFGC if active nests are present within or adjacent to the site during construction. Implementation of MM BR-2 would reduce potential impacts to nesting birds to less-than-significant levels by ensuring that pre-construction surveys are conducted to determine the presence or absence of nesting birds on or adjacent to the Project site prior to the commencement of construction activities. If active nests are discovered,</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>this mitigation measure establishes performance criteria that requires avoidance of the nests until it can be determined the nest is no longer active or that the juveniles from the occupied nests are capable of surviving independently of the nest.</p>				
<p>e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Implementation of the Project would result in the removal of trees on the Project site. The removal of trees is regulated by City of Moreno Valley Municipal Code Chapter 9.17.030, which requires development projects to conduct a tree survey prior to construction and, if any mature significant trees are to be removed, to replace each removed tree at defined ratios (as specified in Municipal Code Chapter 9.17.030). Prior to removal of any mature significant trees from the Project survey area, the Project Applicant would be required to comply with the provisions of Chapter 9.17.030 of the City of Moreno Valley Municipal Code. Mandatory compliance with the requirements of the Municipal Code would ensure the Project would not conflict with the City of Moreno Valley's ordinance regulating tree removal.</p>				
<p>In addition, the City of Moreno Valley Municipal Code contains provisions for the protection of the Stephens' Kangaroo Rat (refer to Title 8, Chapter 8.60 of the Municipal Code). The Project site is not located within an identified reserve area for the Stephens' Kangaroo Rat and the species was not observed during biological surveys of the Project site (MIG, 2020a, p. 16). Accordingly, the Project is exempt from the focused survey requirements for the Stephens' Kangaroo Rat established by the City's Municipal Code. The Project Applicant is required by the Municipal Code to contribute a local development impact and mitigation fee, which requires a fee payment to assist the City in implementing the habitat conservation plan for the Stephens' Kangaroo Rat. With mandatory compliance with standard regulatory requirements (i.e., development impact and mitigation fee payment), the proposed Project would not conflict with any City policies or ordinances related to the protection of the Stephens' Kangaroo Rat. (The Project's consistency with applicable provisions of the Stephens' Kangaroo Rat HCP are addressed in Response IV(f).)</p>				
<p>The City of Moreno Valley Municipal Code also contains provisions for the collection of mitigation fees to further the implementation of the Western Riverside County MSHCP (refer to Title 3, Chapter 3.48 of the Municipal Code). The Project Applicant is required by the Municipal Code to contribute a local mitigation fee, which requires a fee payment to assist the City in implementing the Western Riverside County MSHCP reserve system (including the acquisition, management, and long-term maintenance of sensitive habitat areas). With mandatory compliance with standard regulatory requirements (i.e., mitigation fee payment), the proposed Project would not conflict with any City policies or ordinances related to the mitigation fee program associated with Western Riverside County MSHCP. (The Project's consistency with applicable provisions of the MSHCP are addressed in Response IV(f).)</p>				
<p>The City of Moreno Valley does not have any additional policies or ordinances in place to protect biological resources that are applicable to the Project. Mandatory compliance with the above referenced Moreno Valley Municipal Code Chapters would ensure that implementation of the Project would result in a less than significant impact associated with local policies and ordinances.</p>				
<p>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved local, regional, or state habitat conservation plan?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project site is subject to the provisions of the Western Riverside County MSHCP; however, the Project site is not located in a criteria cell or area plan subunit. The following analysis evaluates the Project's compliance with the Western Riverside County MSHCP requirements pursuant to the following sections of the MSHCP that are applicable to the Project site: Section 6.1.2, <i>Protection of Species Associated with Riparian/Riverine areas and Vernal Pools</i>; Section 6.1.3, <i>Protection of Narrow Endemic Plant Species</i>; Section 6.1.4, <i>Guidelines Pertaining to the Urban/Wildland Interface</i>; and Section 6.3.2, <i>Additional Survey Needs and Procedures</i>.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p><u><i>Section 6.1.2 Species Associated with Riparian/Riverine Habitat and Vernal Pools</i></u> The Project survey area does not contain any MSHCP vernal pools or seasonal pools. The Project site does contain 0.59-acre of MSHCP riparian/riverine habitat, all of which would be removed by the Project (MIG, 2021b, p. 1). As required by the MSHCP, a Determination of Biologically Equivalent or Superior Preservation (DBESP) report is required in all instances where MSHCP riparian/riverine areas would be impacted by a development project. The goal of the DBESP report is to demonstrate that the development project provides mitigation that is biologically equivalent or superior to the existing conditions on a development site if left undisturbed. The Project’s DBESP report is provided as <i>Technical Appendix B3</i>.</p> <p>According to the Project’s DBESP report, the purchase of habitat re-establishment and rehabilitation mitigation credits would be considered superior mitigation as compared to the preservation of the 0.59-acre of on-site MSHCP riparian/riverine habitat because the mitigation bank where the habitat credits would be purchased provide high quality habitat areas with habitat functions that are superior to the existing conditions at the Project site (MIG, 2021b, pp. 10-11). As such, with implementation of MM BR-3, the Project’s significant impacts to MSHCP riverine and riparian areas would be reduced to less than significant and the Project would not conflict with Section 6.1.2 of the Western Riverside County MSHCP.</p> <p><u><i>Section 6.1.3 Protection of Narrow Endemic Plants</i></u> The Project site is not located within the Western Riverside County MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA); therefore, the NEPSSA requirements are not applicable to the Project and the Project is consistent with the Western Riverside County MSHCP narrow endemic plant species policies (MIG, 2020a, pp. 17-18).</p> <p><u><i>Section 6.1.4 Urban/Wildlands Interface Guidelines</i></u> The Project site is not located within or adjacent to a Western Riverside County MSHCP Conservation Area; therefore, the Project site is not required to address Section 6.1.4 of the Western Riverside County MSHCP (MIG, 2020a, pp. 18-19).</p> <p><u><i>Section 6.3.2 Additional Surveys and Procedures</i></u> The Project site is not located within the Western Riverside County MSHCP Criteria Area Plant Species Survey Area (CAPSSA); therefore, the CAPSSA requirements are not applicable to the Project. Additionally, the Project site is not located within the Western Riverside County MSHCP additional survey areas for amphibians, survey areas for mammals, or any special linkage areas; however, the Project site is located within the Western Riverside County MSHCP burrowing owl survey area (MIG, 2020a, pp. 17-18).</p> <p>No evidence of use of the site by burrowing mammals was present and no burrows suitable for use by the owl was observed. The species is considered absent from the Project site and potential occurrence is low; however, a preconstruction burrowing owl survey in accordance with the Western Riverside County MSHCP Burrowing Owl Survey Requirements is required to ensure compliance with the Plan’s provisions for protecting the burrowing owl (see MM BR-1). With implementation of MM BR-1, implementation of the Project would result in a less-than-significant impact to the burrowing owl. (MIG, 2020a, p. 18)</p> <p>Additionally, the Project site is located within the Stephens’ Kangaroo Rat Habitat Conservation Plan Fee Area, which is administered by the Riverside County Habitat Conservation Agency. The Project Applicant would be required to pay the Stephens’ Kangaroo Rat, which is established at \$500 per acre (MIG, 2020a, pp. 19-20; Riverside County, 1996, p. 53). Payment of the Stephens’ Kangaroo Rat HCP fee is required – as noted in the analysis under Response IV(e) – and would ensure the Project is consistent with the Stephens’ Kangaroo Rat HCP and the Western Riverside County MSHCP.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. MIG, 2020a, MSHCP General Biological Resources Assessment & Compliance Analysis, <i>Technical Appendix B1</i> 2. MIG, 2021a, Jurisdictional Delineation Report and Impact Analysis, <i>Technical Appendix B2</i> 				

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. MIG, 2021b, MSHCP Determination of Biologically Equivalent or Superior Preservation, <i>Technical Appendix B3</i> 4. MIG, 2020b, Burrowing Owl Focused Survey Report, <i>Technical Appendix B4</i> 5. MIG, 2020c, Least Bell's Vireo Focused Survey Report, <i>Technical Appendix B5</i> 6. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 • Section 5.9 – Biological Resources - Figure 5.9-2 – Planning Area Vegetation Community 7. Moreno Valley Municipal Code Chapter 3.48 – Western Riverside County Multiple Species Habitat Conservation Plan Fee Program 8. Moreno Valley Municipal Code Chapter 8.60 – Threatened and Endangered Species 9. Moreno Valley Municipal Code Section 14.40.040 – Public Tree Care 10. Moreno Valley Municipal Code Section 9.17.030 – Landscape Ordinance 11. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), http://www.wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/ 12. Riverside County Information Technology – Map My County, https://gis.countyofriverside.us/Html5Viewer/?viewer=MMC_Public 13. Regional Conservation Agency – MSHCP Information Map, http://wrcrca.maps.arcgis.com/apps/webappviewer/index.html?id=a73e69d2a64d41c29ebd3acd67467abd 14. Riverside County Ordinance No. 633.10, https://www.rivcocob.org/ords/600/663.10.pdf				

V. CULTURAL RESOURCES – Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Response: A cultural resources survey conducted for the Project site by Brian F. Smith and Associates (BFSA), which included a comprehensive site survey and archival records search, identified no historic resources on the Project site (BFSA, 2020a, p. 1.0-1). Additionally, the Project site is not identified as containing a historic resource by the City of Moreno Valley General Plan FEIR, Exhibit 5.10-1, *Locations of Listed Historic Resource Inventory Structures* (Moreno Valley, 2006b). Accordingly, the Project has no potential to impact a historical resource as defined by California Code of Regulations Section 15064.5.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: According to the cultural resources survey conducted by BFSA, no prehistoric archaeological resources were observed on the Project site during a comprehensive field survey and no prehistoric archaeological resources are known to exist within a one-mile radius of the Project site based on an archival records search conducted with the Eastern Information Center at the University of California, Riverside (BFSA, 2020a, pp. 5.0-1 to 5.0-5). Based on the findings of the field survey and archival research and due to historic disturbances on the Project site, BFSA concluded the Project site had a low likelihood for containing prehistoric archaeological resources (BFSA, 2020a, pp. 1.0-1 and 6.0-1). Based on the foregoing, the Project would result in less-than-significant impact to prehistoric archaeological resources defined by California Code of Regulations Section 15064.5.

c) Disturb any human remains, including those interred outside of formally dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: The Project site does not contain a cemetery, and no known formal cemeteries are located within the immediate site vicinity (Moreno Valley, 2006b, p. 1.0-1). Nevertheless, the remote potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction. If human remains are unearthed during Project construction, the construction contractor would be required by law to comply with California Health and Safety Code, Section 7050.5 "Disturbance of Human Remains." According to Subsections 7050.5(b) and (c), if human remains are discovered, the County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner is required to contact, by telephone within 24 hours, the Native American Heritage Commission

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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(NAHC). Pursuant to California Public Resources Code Section 5097.98, whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.

With mandatory compliance to California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, any potential impacts to human remains, including human remains of Native American descent, would be reduced to less than significant and mitigation is not required.

Sources:

1. California Health Code Section 7050.5 – Dead Bodies
2. Public Resources Code Section 5097.94(k) – Powers and Duties
3. Public Resources Code Section 5097.98 – Native American Historical, Cultural, and Sacred Sites
4. Moreno Valley General Plan, approved July 11, 2006
5. BFS, 2020a, Phase I Cultural Resources Survey for the Compass Danbe Centerpointe Project, *Technical Appendix C*

VI. ENERGY – Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: The analysis below is based on the *Energy Analysis* (included as *Technical Appendix D* to this IS/MND) prepared for the proposed Project by Urban Crossroads and demonstrates that implementation of the Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Energy Use During Construction

The Project’s construction process would consume electricity and fuel. Project-related construction activities would represent a “single-event” demand and would not require on-going or permanent commitment of energy resources. Project construction is estimated to consume approximately 85,609 kWh of electricity, approximately 36,736 gallons of diesel fuel from operation of construction equipment, 15,941 gallons of diesel fuel from construction vendor trips, and 26,278 gallons of fuel from construction worker trips (Urban Crossroads, 2020c, p. 36). The amount of energy and fuel use anticipated by the Project’s construction activities are typical for the type of scale of construction proposed by the Project and there are no aspects of the Project’s proposed construction process that are unusual or energy-intensive. Furthermore, construction equipment would be required to conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies. For example, CCR Title 13, Motor Vehicles, Section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. As supported by the preceding discussion, the Project’s construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary. (Urban Crossroads, 2020c, p. 31) Impacts during Project construction would be less than significant.

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<p><u>Energy Use Project Operations</u></p> <p>Energy that would be consumed by Project-related traffic is a function of total vehicle miles traveled and the estimated vehicle fuel economies of vehicles accessing the Project site. The Project would result in 5,292,177 annual vehicle miles traveled and an estimated annual fuel consumption of 405,743 gallons of fuel (Urban Crossroads, 2020c, p. 34). The number of daily trips and miles traveled by Project traffic are consistent with other industrial uses of similar scale and configuration in the Inland Empire. That is, the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and/or vehicle miles traveled, nor associated excess and wasteful vehicle energy consumption (Urban Crossroads, 2020c, p. 37). Enhanced fuel economies realized pursuant to federal and State regulatory actions, and related transition of passenger vehicles to alternative energy sources (e.g., electricity, natural gas, bio fuels, hydrogen cells) would likely decrease future gasoline fuel demands per mile traveled. The location of the Project site proximate to regional and local arterial roadways (e.g., I-215 and SR-60) is expected to minimize the Project vehicle miles traveled within the region. Based on the foregoing, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary (Urban Crossroads, 2020c, p. 38).</p> <p>Building operations and site maintenance activities associated with the Project would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by Southern California Gas Company; electricity would be supplied to the Project by Moreno Valley Utility (MVU). Energy demands resulting from Project operations are estimated at 6,438,204 kilo-British thermal units (kBtu) per year of natural gas and 5,261,115 Kilowatt-hour (kWh) per year of electricity (Urban Crossroads, 2020c, p. 35). The Project provides conventional industrial buildings uses reflecting contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project are not inherently energy intensive, and the Project energy demands in total would be comparable to, or less than, other industrial projects of similar scale and configuration (Urban Crossroads, 2020c, pp. 37-38). Additionally, the Project would be required to comply with Title 24 standards, which would ensure that the Project's energy demand would not be considered inefficient, wasteful, or otherwise unnecessary (ibid.).</p> <p>Based on the foregoing analysis, Project operations would result in a less-than-significant impact to energy resources.</p>				
<p>b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The following section analyzes the Project's consistency with the applicable federal and State regulations. As supported by the proceeding analysis, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and a less-than-significant impact would occur.</p>				
<p><u>Consistency with Federal Energy Regulations</u></p> <p><i>Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)</i></p> <p>Transportation and access to the Project site is provided primarily by the local and regional roadway systems, which includes I-215, SR-60, and Alessandro Boulevard. Implementation of the Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because SCAG is not planning for intermodal facilities on or through the Project site (Urban Crossroads, 2020c, p. 39).</p> <p><i>The Transportation Act for the 21st Century (TEA-21)</i></p> <p>The Project site is located along major transportation corridors with proximate access to the interstate freeway system (i.e., I-215). The site selected for the Project facilitates access, acts to reduce vehicle miles traveled (VMT), takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21 (Urban Crossroads, 2020c, p. 39).</p>				

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Consistency with State Energy Regulations

Integrated Energy Policy Report (IEPR)

Electricity would be provided to the Project by MVU and natural gas would be provided by SoCalGas. The MVU and SoCal Gas energy supplies comply with and build off existing State programs and policies. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the IEPR (Urban Crossroads, 2020c, p. 39).

State of California Energy Plan

The Project site is located along Alessandro Boulevard, east of Frederick Street, with proximate access to Interstate 215. The location of the Project site facilitates access, acts to reduce VMT, takes advantage of existing infrastructure systems, and promotes land use compatibilities through the introduction of industrial uses on a site surrounded by industrial and commercial uses. Therefore, the Project supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan (Urban Crossroads, 2020c, p. 39).

California Code Title 24, Part 6, Energy Efficiency Standards

The Project would design building shells and building components, such as windows; roof systems: electrical and lighting systems: and heating, ventilating, and air conditioning systems to meet 2019 Title 24 Standards. The Project also is required by State law to be designed, constructed, and operated to meet or exceed Title 24 Energy Efficiency Standards. On this basis, the Project is determined to be consistent with, and would not interfere with, nor otherwise obstruct implementation of Title 24 Energy Efficiency Standards

Pavley Fuel Efficiency Standards (AB 1493)

AB 1493 is applicable to the Project because model year 2009-2016 passenger cars and light duty truck vehicles traveling to and from the Project site are required by law to comply with the legislation’s fuel efficiency requirements. On this basis, the Project is determined to be consistent, with, and would not interfere with, nor otherwise obstruct implementation of AB 1493.

Advanced Clean Cars Program

The Advanced Clean Cars Program is applicable to the Project because model year 2017-2025 passenger car vehicles traveling to and from the Project site are required by law to comply with the legislation’s fuel efficiency requirements. On this basis, the Project is determined to be consistent, with, and would not interfere with, nor otherwise obstruct implementation of California’s Advanced Clean Cars Program.

California Renewable Portfolio Standards (SB 1078)

Energy directly or indirectly supplied to the Project site by electric corporations is required by law to comply with SB 1078.

Sources:

1. Urban Crossroads, 2020c, Compass Danbe Centerpointe Energy Analysis, *Technical Appendix D*

VII. GEOLOGY AND SOILS – Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to https://www.conservation.ca.gov/cgs/Documents/SP_042.pdf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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<p>Response: There are no Alquist-Priolo Earthquake Fault Zones affecting the Project site (NorCal Engineering, 2020, p. 4). The nearest Earthquake Fault Zone is the San Jacinto Fault, which occurs approximately 3.7 miles southeast of the Project site (Google Earth Pro, 2020; Moreno Valley, 2006a, Figure 6-3). Because there are no known faults located on the Project site, there is no potential for the Project to expose people or structures to adverse effects related to ground rupture. No impact would occur.</p>				
<p>ii) Strong seismic ground shaking?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project site is located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. This risk is not considered substantially different than that of other similar properties in the southern California area. As a mandatory condition of Project approval, the Project would be required to construct the proposed warehouse buildings in accordance with the California Building Standards Code (CBSC), also known as California Code of Regulations (CCR), Title 24 (Part 2), and the City of Moreno Valley Building Code, which is based on the CBSC with local amendments. The CBSC and City of Moreno Valley Building Code (Moreno Valley Municipal Code, Chapter 8.20) provide standards that must be met to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures, and have been specifically tailored for California earthquake conditions. In addition, the CBSC (Chapter 18) and the City of Moreno Valley Building Code (Chapter 8.21) require development projects to prepare geologic engineering reports to identify site-specific geologic and seismic conditions and implement the site-specific recommendations contained therein to preclude adverse effects involving unstable soils and strong seismic ground-shaking, including, but not limited to, recommendations related to ground stabilization, selection of appropriate foundation type and depths, selection of appropriate structural systems. The Project Applicant has commissioned such a report titled, <i>Geotechnical Investigation – Proposed Warehouse Building Development</i> (NorCal Engineering, 2020), which is included as <i>Technical Appendix E</i> to this IS/MND, and the City would condition the Project to comply with the site-specific ground preparation and construction recommendations contained in the report. With mandatory compliance with these standards and site-specific design and construction measures set forth in the Project’s geotechnical report, potential impacts related to seismic ground shaking would be less than significant. As such, implementation of the Project would not expose people or structures to substantial adverse effects, including loss, injury, or death, involving seismic ground shaking. Impacts would be less-than-significant.</p>				
<p>iii) Seismic-related ground failure, including liquefaction?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: According to General Plan FEIR Figure 5.6-2, <i>Seismic Hazards</i>, the Project site is not located in an area with the potential for liquefaction. The geotechnical investigation prepared for the Project site concludes that based on observed subsurface conditions, the potential for liquefaction at the Project site is low due to the characteristics of on-site soils and the depth of the groundwater table beneath the site (greater than 50 feet below the surface) (NorCal Engineering, 2020, pp. 5-6). Regardless, the City of Moreno Valley will require that the property be developed in accordance with the latest applicable seismic safety guidelines, including the standard requirements of the CBSC and the City of Moreno Valley Municipal Code Building Code, to minimize potential liquefaction hazards. Therefore, implementation of the Project would not directly or indirectly expose people or structures to substantial hazards associated with seismic-related ground failure and/or liquefaction hazards. Impacts would be less than significant.</p>				
<p>iv) Landslides?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project site is generally flat and contains no substantial natural or man-made slopes under existing conditions. There are no substantial natural or man-made slopes in the Project site vicinity, either. Accordingly, development on the subject property would not be exposed to landslide risks, and the Project would not pose a landslide risk to surrounding properties; a less-than-significant impact would occur.</p>				
<p>b) Result in substantial soil erosion or the loss of topsoil?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The analysis below summarizes the likelihood of the Project to result in substantial soil erosion during temporary construction activities and/or long-term operation.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Construction-Related Impacts

Construction of the Project would involve grading, paving, utility installation, building construction, and landscaping installation, which has the potential to temporarily expose on-site soils that would be subject to erosion during rainfall events or high winds. Pursuant to State Water Resources Control Board requirements, the Project Applicant is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities, including proposed grading. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one (1) acre of total land area. In addition, the Project would be required to comply with the Santa Ana RWQCB's *Santa Ana River Basin Water Quality Control Program*. Compliance with the NPDES permit and the Santa Ana River Basin Water Quality Control Program involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP will specify the Best Management Practices (BMPs) that would be required to be implemented during construction activities to ensure that waterborne pollution – including erosion/sedimentation – is prevented, minimized, and/or otherwise appropriately treated prior to surface runoff being discharged from the subject property. Examples of BMPs that may be utilized during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydro-seeding. In addition, the Project would be required to comply with SCAQMD Rule 403, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion (SCAQMD, 2005). With mandatory compliance to the requirements noted in the Project's SWPPP, as well as applicable regulatory requirements, the potential for water and/or wind erosion impacts during Project construction would be less than significant and mitigation is not required.

Long-Term Operational Activities

Following construction, wind and water erosion on the Project site would be minimized, because the areas disturbed during construction would be landscaped or covered with impervious surfaces and drainage would be controlled through a storm drain system. Implementation of the Project would result in less long-term erosion and loss of topsoil than occurs under the site's existing conditions.

The City's MS4 NPDES Permit requires the Project Applicant to prepare and submit to the City for approval a Water Quality Management Plan (WQMP) (refer to Moreno Valley Municipal Code Section 8.21.170). The WQMP is required to identify an effective combination of erosion control and sediment control measures (i.e., BMPs) to reduce or eliminate sediment discharge to surface water from storm water and non-storm water discharges. The WQMP also is required to establish a post-construction implementation and maintenance plan to ensure on-going, long-term erosion protection. Compliance with the WQMP will be required as a condition of approval for the Project, as would the long-term maintenance of erosion and sediment control features. The preliminary WQMP for the Project prepared by Thatcher Engineering and Associates, Inc. (Thatcher) (attached hereto as *Technical Appendix 11*) incorporates design features would be effective at removing silt and sediment from storm water runoff. Because the Project would be required to utilize erosion and sediment control measures to preclude substantial, long-term soil erosion and loss of topsoil, the Project would result in less-than-significant impacts related to soil erosion.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: The Project's geotechnical report (*Technical Appendix E*) indicates that the settlement potential would be attenuated through the proposed removal of near surface soils down to competent materials and replacement with properly compacted fill, which is included as a recommendation in the Project's geotechnical report. Additionally, only minor ground subsidence (± 0.2 feet) is expected to occur in the soils below the zone of removal, due to earthwork operations (NorCal Engineering, 2020, p. 9). Through standard conditions of approval in accordance with Moreno Valley Municipal Code Section 8.21.050, the proposed Project would be required by the City to incorporate the recommendations contained within the Project geotechnical report into the grading plan for the Project (Moreno Valley, n.d.). As such, implementation of the Project would result in less-than-significant impacts associated with soil shrinkage/subsidence and collapse.

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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As discussed in Responses VII (a), (iii) and (iv), development of the property as proposed by the Project would result in a less than significant impact involving ground failure, including liquefaction and landslide, and a less-than-significant impact involving landslides.				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Response: According to USDA’s Web Soil Survey, the Project site is underlain with Monserate sandy loam 0 to 5 percent slopes, and expansion potential is “very low” to “medium” (USDA, n.d.; NorCal Engineering, 2020, Table II). The expansive characteristics of on-site soils would be attenuated by implementation of the foundation and floor slab design recommendations included in the Project’s geotechnical report, which the City will require as a condition of approval pursuant to Section 9.08.080 of the Moreno Valley Municipal Code (NorCal Engineering, 2020, pp. 7-14). According to the above, implementation of the Project would result in less-than-significant impacts associated with expansive soils and would not create substantial risks to life or property.				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Response: The Project does not propose the use of septic tanks or alternative waste water disposal systems. Accordingly, no impact would occur.				
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Response: The Project site does not contain any known unique geologic features (BFSA, 2020b, p. 6). However, the Project site is underlain by lower Pleistocene (approximately 1.8 million to 200,000 years old), very old, sandy alluvial fan deposits that have a high paleontological sensitivity for fossils of large, terrestrial Ice Age vertebrates (BFSA, 2020b, p. 6). In the event that Project grading and excavation activities encroach into previously undisturbed Pleistocene-age alluvial deposits, the Project could result in impacts to important paleontological resources that may exist below the ground surface if they are unearthed and not properly protected. Therefore, the Project’s potential to directly or indirectly destroy a unique paleontological resource buried beneath the ground surface is determined to be a significant impact and mitigation is required.				
Implementation of MM GEO-1 through MM GEO-4 would ensure the proper identification and subsequent treatment of any paleontological resources that may be encountered during ground-disturbing activities associated with implementation of the proposed Project. Therefore, with implementation of MM GEO-1 through MM GEO-4, the Project’s potential impacts related to paleontological resources would be reduced to a less-than-significant level.				
Mitigation				
MM GEO-1	Prior to the issuance of a grading permit, the Project Applicant shall provide evidence to the City of Moreno Valley that a qualified paleontologist has been retained by the Project Applicant to conduct monitoring of excavation activities and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.			
MM GEO-2	The paleontological monitor shall conduct full-time monitoring during grading and excavation operations in undisturbed, very old alluvial fan sediments at depths exceeding five feet below the existing ground surface and shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontological monitor shall be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be			

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<p>reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have a low potential to contain or yield fossil resources.</p> <p>MM GEO-3 Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the Western Science Museum in Hemet, California, is required for significant discoveries.</p> <p>MM GEO-4 A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the City of Moreno Valley prior to building final.</p>				

- Sources:**
1. NorCal Engineering, 2020, Geotechnical Investigation, *Technical Appendix E*
 2. BFSa, 2020b, Paleontological Assessment, *Technical Appendix H*
 3. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006
 - Section 5.6 – Geology and Soils
 - Figure 5.6-2 – Seismic Hazards
 - Section 5.10 – Cultural Resources
 - Figure 5.10-3 – Paleontological Resource Sensitive Areas
 4. Moreno Valley Municipal Code Section 8.20 – Moreno Valley Building Code
 5. Moreno Valley Municipal Code Section 9.08.160 – Seismic Hazards
 6. Moreno Valley Municipal Code Section 8.21.050 – Grading Permit Requirements
 7. Moreno Valley Municipal Code Section 9.08.080 – Grading

VIII. GREENHOUSE GAS EMISSIONS – Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: A *Greenhouse Gas Analysis* (Urban Crossroads, 2020d) was prepared for the Project by Urban Crossroads to quantify the greenhouse gas (GHG) emissions that would result from Project-related construction and operational activities. This report is included as *Technical Appendix F* to this IS/MND and its findings are incorporated into the analysis presented herein.

While estimated Project-related GHG emissions can be calculated, the direct impacts of such emissions on Global Climate Change (GCC) and global warming cannot be determined on the basis of available science because global climate change is a global phenomenon and not limited to a specific locale such as the Project site and its immediate vicinity. Furthermore, there is no evidence that would indicate that the emissions from a project the size of the proposed Project could directly or indirectly affect the global climate. Because global climate change is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, the proposed Project would not result in a direct impact to global climate change; rather, Project-related impacts to global climate change only could be potentially significant on a cumulative basis. (Urban Crossroads, 2020d, p. 8) Therefore, the analysis below focuses on the Project’s potential to contribute to global climate change in a cumulatively-considerable way.

The City of Moreno Valley has not adopted a numerical threshold for determining the significance of GHG emissions; however, the City has discretion to select an appropriate significance criterion used by other agencies, based on substantial evidence (Urban Crossroads, 2020d, p. 39). Specifically, the City has selected to compare Project-related GHG emissions against the draft 10,000 metric tons of carbon dioxide equivalent (MTCO_{2e}) per year threshold recommended by SCAQMD staff for industrial projects against where SCAQMD is the lead agency. The industrial threshold utilized by SCAQMD is a widely accepted threshold used by numerous lead agencies in the South Coast Air Basin (SCAB) and was established based on the recommendations from California Air Pollution Control Officers Association

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Less Than Significant Impact

No Impact

(CAPCOA) contained in a report titled “CEQA and Climate Change” (dated January 2008), which serves as a resource for public agencies as they establish agency procedures for reviewing GHG emissions from projects under CEQA. The CAPCOA report provides three recommendations for evaluating a development project’s GHG emissions. When establishing their significance threshold, SCAQMD selected the CAPCOA non-zero approach which establishes a numerical threshold based on capture of approximately 90 percent of emissions from future development (Approach 2, Threshold 2.5). A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified projects would be subject to evaluation under CEQA. Based on SCAQMD’s research of 1,297 major, industrial source point (i.e., stationary) emission sources in the SCAB, SCAQMD found that source point industrial facilities that generate at least 10,000 MTCO_{2e} per year produce approximately 90 percent of the carbon dioxide equivalent emissions in the SCAB per year. As such, SCAQMD established their significance criterion at 10,000 MTCO_{2e} as that threshold would capture 90 percent of total emissions from future industrial development in accordance with CAPCOA recommendations. (CAPCOA, 2008, pp. 46-47) If Project-related GHG emissions do not exceed the 10,000 MTCO_{2e} per year threshold, then Project-related GHG emissions would clearly have a less-than-significant impact. On the other hand, if Project-related GHG emissions exceed 10,000 MTCO_{2e} per year, the Project would be considered a substantial source of GHG emissions.

The Project’s annual GHG emissions are summarized in Table 7, *Total Annual Project Greenhouse Gas Emissions*. The methodology used to calculate the Project’s GHG emissions is described in detail in *Technical Appendix F*.

Table 7: Total Annual Project Greenhouse Gas Emissions

Emission Source	Emissions (MT/yr)			
	CO ₂	CH ₄	N ₂ O	Total CO _{2e}
Annual construction-related emissions amortized over 30 years	26.37	0.00	0.00	26.46
Area Source	0.02	5.00E-05	0.00	0.02
Energy Source	2,019.87	0.08	0.02	2,027.91
Mobile Source (Passenger Cars)	758.61	0.02	0.00	759.02
Mobile Source (Trucks)	3,038.11	0.05	0.00	3,039.35
On-Site Equipment Source	101.58	0.03	0.00	102.41
Waste	75.66	4.47	0.00	187.44
Water Usage	409.48	3.00	0.07	506.56
Total CO_{2e} (All Sources)	6,649.16			

Source: (Urban Crossroads, 2020d, Table 3-6)

As shown in Table 7, the Project is estimated to generate approximately 6,649.16 MTCO_{2e} annually, which is less than the significance threshold of 10,000 MTCO_{2e} (Urban Crossroads, 2020d, p. 48). Because the Project’s total annual GHG emissions would not exceed 10,000 MTCO_{2e}, the Project would not generate substantial GHG emissions – either directly or indirectly – that would have a significant impact on the environment. Impacts would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: The Project would comply with a number of regulations, policies, plans, and policy goals that would reduce GHG emissions, including the Assembly Bill 32 (AB 32), and Senate Bill 32 (SB 32), which are regulations applicable to the Project. For more information on these regulations as well as other state-wide plans, policies, and regulations associated with GHG emissions that are not applicable to the Project, refer to *Technical Appendix F* of this IS/MND.

On October 9, 2012, the Moreno Valley City Council approved an Energy Efficiency and Climate Action Strategy and related GHG analysis. The Energy Efficiency and Climate Action Strategy document identifies potential programs and policies to reduce overall City energy consumption and increase the use of renewable energy. The majority of the policies are directed at municipal operations of the City,

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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but the document also contains recommended policies for the community at large (including private development projects). These recommended policies include but are not limited to: energy efficiency, water use reduction, trip reduction, solid waste diversion, and educational policies. The overall goal of the Energy Efficiency and Climate Action Strategy is to ensure that the City is consistent with and would not otherwise conflict with the provisions of AB 32. As demonstrated by the analysis below, the Project would not conflict with the provisions of AB 32 and, therefore, would not obstruct implementation of the components of the City's Energy Efficiency and Climate Action Strategy that are applicable to the Project.

CARB identified measures in their 2017 Scoping Plan Update to identify the measures that would achieve the emissions reductions goals of SB 32. As explained in point-by-point detail in Section 3.8 of *Technical Appendix F* (refer to Table 3-7), the Project would not conflict with applicable measures of the 2017 Scoping Plan Update and would not preclude/obstruct implementation of the Scoping Plan Update (Urban Crossroads, 2020d, Table 3-8).

In April 2015, Governor Edmund Brown Jr. signed Executive Order B-30-15, which advocated for a statewide GHG-reduction target of 40 percent below year 1990 levels by 2030 and 80 percent below 1990 levels by 2050. In September 2016, Governor Brown signed the Senate Bill (SB) 32. SB 32 formally established a statewide goal to reduce GHG emissions to 40 percent below year 1990 levels by 2030. To date, no statutes or regulations have been adopted to translate the year 2050 GHG reduction goal into comparable, scientifically-based statewide emission reduction targets.

According to research conducted by the Lawrence Berkeley National Laboratory and supported by the CARB, California, under its existing and proposed GHG reduction policies (i.e., CARB Scoping Plan), is on track to meet the years 2020 and 2030 reduction targets established by AB 32 and SB 32, respectively (Urban Crossroads, 2020d, p. 27). As described above, the Project would not conflict with or obstruct implementation of the CARB Scoping Plan; therefore, the Project would not interfere with the State's ability to achieve the year 2030 GHG-reduction target established by SB 32.

Rendering a significance determination for year 2050 GHG emissions relative to EO B-30-15 would be speculative because EO B-30-15 establishes a goal more than three decades into the future; no agency with GHG subject matter expertise has adopted regulations to achieve these statewide goals at the project-level; and, available analytical models cannot presently quantify all project-related emissions in those future years. Further, due to the technological shifts anticipated and the unknown parameters of the regulatory framework in 2050, available GHG models and the corresponding technical analyses are subject to limitations for purposes of quantitatively estimating the Project's emissions in 2050.

As described above, the Project would not conflict with the State's ability to achieve the State-wide GHG reduction mandates and would be consistent with applicable policies and plans related to GHG emissions reductions. Impacts would be less than significant.

Sources:

1. Urban Crossroads, 2020d, Greenhouse Gas Analysis, *Technical Appendix F*

IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: A Phase I Environmental Site Assessment (ESA) was prepared for the Project site by Partner Engineering and Science, Inc. (Partner) and is included as *Technical Appendix G* to this IS/MND. As part of the Phase I ESA efforts, Partner conducted a visual inspection of the Project site, researched regulatory hazardous materials databases, reviewed historical reference materials (including aerial photographs, topographic maps, and City of Moreno Valley directories), and interviewed people with historical links to the Project site; the findings of this research are incorporated into the analysis presented herein.

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<p><u>Existing Site Conditions Impacts</u></p> <p>There were no underground or aboveground storage tanks, drain lines, sumps, ponds, pits, lagoons, stressed vegetation, wells, transformers, or mold found on the Project site (Partner, 2019, pp. 17-18). Based on a review of historic regulatory agency hazardous materials databases, historic site aerial photographs, interviews with current property owners, and a reconnaissance of the Project site, Partner determined that the Project site does not contain any recognized environmental conditions (RECs), historic recognized environmental conditions, or other environmental issues (Partner, 2019, p. 21). A REC is defined as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment” (ibid.). A HREC is defined as “past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the application regulatory authority” (ibid).</p> <p>Based on the foregoing analysis, the Project would not create significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials from the Project site under existing conditions. A less-than-significant impact would occur.</p> <p><u>Construction-Related Impacts</u></p> <p>Heavy equipment (e.g., dozers, excavators, tractors) would be operated on the subject property during construction of the Project. Heavy equipment is typically fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which is considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be located on the Project site during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the proposed Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, state, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the Environmental Protection Agency (EPA), California Department of Toxic Substances Control (DTSC), South Coast Air Quality Management District (SCAQMD), and Santa Ana RWQCB. With mandatory compliance with applicable hazardous materials regulations, the Project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. Impacts would be less than significant.</p> <p><u>Long-Term Operational Impacts</u></p> <p>The future building occupant(s) for the Project site are not yet identified; however, the Project is designed to house warehouse distribution occupants and it is possible that hazardous materials could be used during the course of a future building user’s daily operations. State and federal Community-Right-to-Know laws allow the public access to information about the amounts and types of chemicals in use at local businesses. Laws also are in place that requires businesses to plan and prepare for possible chemical emergencies. Any business that occupies a building on the Project site and that handles hazardous materials (as defined in Section 25500 of California Health and Safety Code, Division 20, Chapter 6.95) will require a permit from the Moreno Valley County Fire Department Hazardous Materials Division in order to register the business as a hazardous materials handler. Such businesses also are required to comply with California’s Hazardous Materials Release Response Plans and Inventory Law, which requires immediate reporting to the County of Riverside Fire Department and the State Office of Emergency Services regarding any release or threatened release of a hazardous material, regardless of the amount handled by the business. In addition, any business handling at any one time, greater than 500 pounds of solid, 55 gallons of liquid, or 200 cubic feet of gaseous hazardous material, is required, under Assembly Bill 2185 (AB 2185), to file a Hazardous Materials Business Emergency Plan (HMBEP). A HMBEP is a written set of procedures and information created to help minimize the effects and extent of a release or threatened release of a hazardous material. The intent of the HMBEP is to satisfy federal and State Community Right-To-Know laws and to provide detailed information for use by emergency responders.</p>				

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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<p>If businesses that use or store hazardous materials occupy the Project, the business owners and operators would be required to comply with all applicable federal, state, and local regulations to ensure proper use, storage, use, emission, and disposal of hazardous substances (as described above). With mandatory regulatory compliance, the Project is not expected to pose a significant hazard to the public or the environment through the routine transport, use, storage, emission, or disposal of hazardous materials, nor would the Project increase the potential for accident conditions which could result in the release of hazardous materials into the environment.</p> <p>With mandatory regulatory compliance, potential hazardous materials impacts associated with long-term operation of the Project are determined to be less than significant and mitigation is not required.</p>				
<p>b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Accidents involving hazardous materials that could pose a significant hazard to the public or the environment would be highly unlikely during the construction and long-term operation of the Project and are not reasonably foreseeable. As discussed above under Response IX(a), the transport, use, and handling of hazardous materials on the Project site during construction is a standard risk on all construction sites, and there would be no greater risk for upset and accidents than would occur on any other similar construction site. Upon buildout, the Project site would operate as a warehouse distribution center. Based on the operational characteristics of warehouse distribution centers, it is possible that hazardous materials could be used during the course of a future occupant's daily operations; however, as discussed above under Response IX(a), the Project Applicant would be required to comply with all applicable local, State, and federal regulations related to the transport, handling, and usage of hazardous material. Accordingly, impacts associated with the accidental release of hazardous materials would be less than significant during both construction and long-term operation of the Project and mitigation would not be required.</p>				
<p>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: There are no schools located within 0.25-mile of the Project site (Google Earth Pro, 2020). Thus, the Project would not have a significant effect in emitting hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impact would occur.</p>				
<p>d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Phase I ESA (<i>Technical Appendix G</i> to this IS/MND) prepared for the Project site included a search of regulatory databases, including the California EPA's Regulated Site Portal, the Santa Ana RWQCB's Geotracker database, and DTSC's EnviroStor database (EDR). The Project site is identified on the EDR database as situated within the former Department of Defense (DOD) boundary of March Air Force Base; however, the Project site is not mapped within a national priority list (NPL) or area of concern associated with the Base (Partner, 2019, p. 13). Accordingly, this listing is not expected to represent a significant environmental concern to the Project site and would not create a significant hazard to the public or the environment. The Project site is not included on any other list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Impacts would be less than significant.</p>				

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<p>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project site is located approximately 1.1 miles southwest of the March Air Reserve Base/Inland Port Airport (MARB/IPA). Pursuant to the March Air Reserve Base Compatible Use Zone Study commissioned by the United States Air Force and as depicted on Figure 6-5, <i>Air Crash Hazards</i>, of the Moreno Valley General Plan, the Project site is not located within a zone subject to hazards related to air crashes (Moreno Valley, 2006a). According to the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, the western portion of the Project site is located in Compatibility Zone E and the eastern portion of the Project site is located within Compatibility Zone D (RCALUC, 2014, Map MA-1). Properties located in Zone D and E are subject to safety risks associated with aircraft operations, but the potential hazards are sufficiently minimal that land use restrictions are generally unnecessary (RCALUC, 2014, Table MA-1). Thus, the light industrial land uses proposed by the Project are permitted in Zone D and E by the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (ALUCP) and were determined by the ALUC to be consistent with the ALUCP during their January 14, 2021 public meeting. The industrial warehouse buildings proposed by the Project would be no greater than 50 feet tall and does not include an air travel component (e.g., runway, helipad); therefore, would not interfere with flight operations at the March Air Reserve Base. The Project would not result in safety hazards for people residing or working in the Project area. Impacts would be less than significant, and mitigation is not required.</p>				
<p>f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: The Project site does not contain any emergency facilities under existing conditions nor does it serve as an emergency evacuation route, so there is no potential for the Project to adversely affect an existing emergency response or evacuation plan. During construction and at Project buildout, the proposed Project would be required to maintain adequate emergency access for emergency vehicles as required by the City. As part of the City's discretionary review process, the City of Moreno Valley reviewed the Project to ensure that appropriate emergency ingress and egress would be available to-and-from the proposed warehouse buildings for public safety, and determined that the Project would not substantially impede emergency response times in the local area. Accordingly, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and no impact would occur.</p>				
<p>g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: According to City of Moreno Valley General Plan FEIR Figure 5.5-2, <i>Floodplains and High Fire Hazard Areas</i>, the Project site is not located in an area of substantial or high fire risk (Moreno Valley, 2006b). Additionally, the California Department of Forestry and Fire Protection (CalFire) identifies the Project site location as within a Non-Very High Fire Hazard Severity Zone (CalFire, 2009). The Project site is located in an area that has been largely developed. No wildlands are located on or adjacent to the Project site and the Project site is largely disturbed or devoid of vegetation and surrounded on all sides by developed or maintained properties and a paved road. Thus, implementation of the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Impacts would be less than significant.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> Partner Engineering and Science, Inc., 2019, Phase I Environmental Site Assessment, <i>Technical Appendix G</i> Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 				

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul style="list-style-type: none"> • Section 5.5 – Hazards and Hazardous Materials <ul style="list-style-type: none"> - Figure 5.5-3 – City Areas Affected by Aircraft Hazard Zones 3. Google Earth Pro 4. Moreno Valley General Plan, approved July 11, 2006 5. Riverside County Airport Land Use Commission, March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, http://www.rcaluc.org/Portals/13/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700 6. California Department of Forestry and Fire Protection (CalFire), https://osfm.fire.ca.gov/media/5917/moreno_valley.pdf 				

X. HYDROLOGY AND WATER QUALITY – Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: The Project would be required to comply with Section 402 of the Clean Water Act, which authorizes the National Pollution Discharge Elimination System (NPDES) permit program that covers point sources of pollution discharging to a water body. The NPDES program also requires operators of construction sites one-acre or larger to prepare a Storm Water Pollution Prevention Plan (SWPPP) and obtain authorization to discharge stormwater under an NPDES construction stormwater permit. The Project Applicant also would be required to comply with the California Porter-Cologne Water Quality Control Act (Section 13000 et seq., of the California Water Code), which requires that comprehensive water quality control plans be developed for all waters within the State of California. The Project site is located within the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB).

Construction-Related Impacts

Construction of the proposed Project would involve clearing, grading, paving, utility installation, building construction, and landscaping activities. Construction activities would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and solvents, and other chemicals with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of any protective or avoidance measures.

Pursuant to the requirements of the Santa Ana RWQCB and the City Moreno Valley (Municipal Code Chapter 8.10 et seq. and Section 8.21.170), the Project would be required to obtain coverage under the State’s General Construction Storm Water Permit (NPDES Permit). The NPDES permit is required for all projects that include construction activities, such as clearing, soil stockpiling, grading, and/or excavation that disturb at least one (1) acre of total land area. In addition, the Project would be required to comply with the Santa Ana RWQCB’s *Santa Ana River Basin Water Quality Control Program*. Compliance with the NPDES permit and the *Santa Ana River Basin Water Quality Control Program* involves the preparation and implementation of a SWPPP for construction-related activities, including grading. The SWPPP will specify the Best Management Practices (BMPs) that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Examples of BMPs that may be utilized during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydro-seeding. Mandatory compliance with the SWPPP would ensure that the Project’s construction does not violate any water quality standards or waste discharge requirements. Therefore, water quality impacts associated with construction activities would be less than significant and no mitigation measures would be required.

Post-Development Water Quality Impacts

Stormwater pollutants commonly associated with the land uses proposed by the Project include bacterial indicators, metals, nutrients, pesticides, toxic organic compounds, sediments, trash and debris, and oil and grease. Based on current receiving water impairments (pursuant to the Clean Water Act’s (CWA)

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Section 303(d) list), the Project’s pollutants of concern are bacterial indicators, nutrients, pesticides, and sediments (Thatcher, 2020, Table E.1).

Pursuant to the Moreno Valley Municipal Code (Chapter 8.10 *et seq.* and Section 8.21.170), the Project Applicant would be required to implement a Water Quality Management Plan (WQMP) to demonstrate compliance with the City’s NPDES municipal stormwater permit, and to minimize the release of potential waterborne pollutants, including pollutants of concern for downstream receiving waters. The WQMP is a site-specific post-construction water quality management program designed to address the pollutants of concern of a development project via BMPs, implementation of which ensures the on-going protection of the watershed basin. The Project’s Preliminary WQMP, prepared by Thatcher, is included as *Technical Appendix 11* appended to this IS/MND. As identified in the Project’s Preliminary WQMP, the proposed Project is designed to include structural source control BMPs (including bioretention swales, two underground detention systems and two modular wetlands units) as well as operational source controls (including but not limited to: drainage system maintenance, storm drain system stenciling and signage, and implementation of minimal pesticide use) to minimize, prevent, and/or otherwise appropriately treat stormwater runoff flows before they are discharged from the site. Compliance with the WQMP would be required as a condition of Project approval pursuant to Municipal Code Chapter 8.10 and Municipal Code Section 8.21.170, and long-term maintenance of on-site BMPs would be required to ensure their long-term effectiveness. Therefore, water quality impacts associated with long-term operational activities would be less than significant.

In addition to the WQMP, the NDPES program also requires certain land uses, including industrial land uses as proposed by the Project, to prepare a SWPPP for operational activities and to implement a long-term water quality sampling and monitoring program, unless an exemption has been granted. On April 1, 2014, the California State Water Resources Control Board adopted an updated new NPDES permit for stormwater discharge associated with industrial activities (referred to as the “Industrial General Permit”). The new Industrial General Permit, which is more stringent than the existing Industrial General Permit, became effective on July 1, 2015. Under the effective NPDES Industrial General Permit, the Project would be required to prepare a SWPPP for operational activities and implement a long-term water quality sampling and monitoring program or receive an exemption. Because the permit is dependent upon the operational activities of the buildings, and the Project’s future building occupants and their operations are not known at this time, details of the SWPPP (including BMPs) or potential exemption to the SWPPP operational activities requirement cannot be determined at this time. However, based on the requirements of the NPDES Industrial General Permit, it is anticipated that the Project’s mandatory compliance with all applicable regulations would further reduce potential water quality impacts during long-term operation.

Based on the foregoing analysis, the Project would not violate any water quality standards or waste discharge requirements during long-term operation. Impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: No potable groundwater wells are proposed by the Project. The proposed Project would be served with potable water by the Eastern Municipal Water District (EMWD). The EMWD relies on local potable groundwater as a source of its water supply (in addition to imported water from the Metropolitan Water District of Southern California, desalted ground water, and recycled water). The EMWD has indicated it has sufficient available water resources, including groundwater resources, to adequately serve the Project in addition to past, present, and future commitments to supply water (EMWD, 2016a, pp. XIV-XVI). Therefore, the proposed Project would not substantially deplete groundwater supplies and the Project’s impact to groundwater supplies would be less than significant.

Development of the Project would increase impervious surface coverage on the property, which would reduce the amount of water percolating down into the underground aquifer that underlies the Project site and a majority of the City. However, and as noted in the City’s General Plan EIR, “the impact of an incremental reduction in groundwater would not be significant as domestic water supplies are not reliant

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<p>on groundwater as a primary source” (Moreno Valley, 2006b, p. 5.7-12). Additionally, water captured by the proposed Project’s underground detention systems and landscaped areas would have the opportunity to percolate into the ground. With buildout of the Project, the local groundwater levels would not be substantially adversely affected. Accordingly, buildout of the Project would not interfere substantially with groundwater recharge.</p> <p>For the reasons stated above, the Project would neither substantially deplete groundwater supplies nor interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Impacts would be less than significant.</p>				
<p>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:</p>				
<p>i) Result in substantial erosion or siltation on- or off-site?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Under existing conditions, the Project site primarily drains in southerly direction, ultimately discharging to two existing storm drains at the southwest and southeast corners of the Project site (Thatcher, 2021, p. 6).</p> <p>The Project would mass grade the entire property and construct two industrial warehouse buildings and associated improvements, which would change the site’s existing ground contours and alter the existing drainage patterns interior to the Project site. However, upon buildout of the Project, stormwater flow generated on the Project site would continue to be conveyed to the two existing storm drains adjacent south of the southern Project site boundary.</p> <p>Although the Project would alter the subject property’s internal drainage patterns, such changes would not result in substantial erosion or siltation on- or off-site. Under post-development conditions, a majority of the site would be covered with impervious surfaces and, therefore, the amount of exposed soils on the Project site would be minimal. Also, as discussed under Response X(a), the Project would construct an integrated storm drain system on-site with BMPs to minimize the amount of water-borne pollutants carried from the Project site. The BMPs proposed by the Project, including bioretention swales, two underground detention systems, and two modular wetlands units are highly effective at removing sediment from stormwater runoff flows. Therefore, stormwater runoff flows leaving the Project site would not carry substantial amounts of sediment. Once stormwater runoff leaves the Project site, it would be discharged into two existing storm drains located immediately southeast and southwest of the site. Because there are no exposed soils at the Project’s discharge points, there is no potential for the Project’s stormwater runoff to result in erosion as it leaves the Project site. Accordingly, the Project would not result in substantial erosion or siltation on- site or off-site, and a less-than-significant impact would occur.</p>				
<p>ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: As described above under Response X(c(i)), proposed grading and earthwork activities on the Project site would alter the site’s existing drainage patterns but would not substantially alter the drainage pattern of the local area. Under long-term development conditions, and with on-site detention, the peak storm water runoff flows discharged from the Project site would be equal to or less than under existing conditions (Thatcher, 2021, pp. 8-9). Accordingly, implementation of the Project would not substantially increase the rate or amount of surface water runoff discharged from the site in a manner that would result in flooding on- or off-site. Impacts would be less than significant.</p>				
<p>iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: As discussed above under Response X(c(ii)), the amount of runoff discharged to the two existing storm drains adjacent south of the southern Project site boundary would be either reduced or equal to existing conditions. Furthermore, the Project’s storm drain system would be sized and designed</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>in accordance with the area’s master drainage plan to ensure that off-site flows that are conveyed through the Project site and flows originating off-site are discharged from the site at a volume and rate that can be accommodated by existing and planned downstream storm drain facilities (Thatcher, 2021, pp. 2-3, 8-9). Accordingly, the Project would not create or contribute runoff which would exceed the capacity of any existing or planned storm water drainage system, and impacts would be less than significant.</p> <p>As discussed under Response X(a), the proposed Project would be required to comply with a future SWPPP and the Project’s WQMP (<i>Technical Appendix I1</i>), which identify required BMPs to be incorporated into the Project to ensure that near-term construction activities and long-term post-development activities of the proposed Project would not result in substantial amounts of polluted runoff. Therefore, with mandatory compliance with the Project’s SWPPP and WQMP, the proposed Project would not create or contribute substantial additional sources of polluted runoff, and impacts would be less than significant.</p>				
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: According to FEMA Flood Insurance Rate Map (FIRM) No. 06065C0745G, the Project site is located within “Zone X (unshaded)”, which are areas determined to be an area with a 0.2% chance of annual flood (FEMA, 2008). The Zone X (unshaded) designation is considered to be an area of minimal flood hazard and is not considered a special flood hazard area. Accordingly, the Project site is not expected to be inundated by flood flows during the lifetime of the Project and the Project would not impede flood flows. No impact would occur.</p>				
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Pacific Ocean is located over 40 miles southwest of the Project site (Google Earth Pro, 2020); consequently, there is no potential for the Project site to be impacted by a tsunami as tsunamis typically only reach up to a few miles inland. The nearest large body of water to the Project site is Lake Perris, with the dam located approximately 5.3 miles southeast of the Project site. According to City of Moreno Valley General Plan FEIR Figure 5.5-2, <i>Floodplains, and High Fire Hazard Areas</i>, the Project site is not located in an identified inundation area (Moreno Valley, 2006b); therefore, risk of inundation by dam failure or seiche is low. Additionally, there are no levees in the vicinity of the Project site. Impacts would be less than significant.</p>				
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: As discussed under Response X(a) above, the Project site is located within the Santa Ana River Basin and Project-related construction and operational activities would be required to comply with the Santa Ana RWQCB’s <i>Santa Ana River Basin Water Quality Control Plan</i> by preparing and adhering to a SWPPP and WQMP. Implementation of the Project would not conflict with or obstruct the <i>Santa Ana River Basin Water Quality Control Plan</i> and impacts would be less than significant.</p> <p>Additionally, as discussed under Response X(a) above, the Project would not substantially decrease groundwater supplies nor interfere substantially with groundwater recharge and, therefore, is not expected to conflict with or obstruct a sustainable groundwater management plan. Further, EMWD produces potable groundwater from the San Jacinto Groundwater Basin, which is an adjudicated basin (DWR, n.d.). Adjudicated basins are exempt from the 2014 Sustainable Groundwater Management Act (SGMA) requirement to develop Groundwater Sustainability Plan because such basins already operate under a court-ordered water management plan to ensure their long-term sustainability. No component of the Project would obstruct with or prevent implementation of the management plan for the San Jacinto Groundwater Basin. As such, the Project’s construction and operation would not conflict with any sustainable groundwater management plan. Impacts would be less than significant.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. Thatcher, 2020, Project Specific Water Quality Management Plan, <i>Technical Appendix I1</i> 2. Thatcher, 2021, Preliminary Drainage Study, <i>Technical Appendix I2</i>. 				

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ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<ol style="list-style-type: none"> 3. Federal Emergency Management Agency (FEMA) – Flood Map Service Center: Flood Insurance Rate Map No. 06065C0745G https://msc.fema.gov/portal/home 4. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> • Section 5.5 – Hazards and Hazardous Materials <ul style="list-style-type: none"> - Figure 5.5-2 – Floodplains and High Fire Hazard Areas • Section 5.7 – Hydrology and Water Quality 5. Google Earth Pro 6. Eastern Municipal Water District, 2015 Urban Water Management Plan, https://www.emwd.org/sites/main/files/file-attachments/urbanwatermanagementplan_0.pdf?1537303453 7. Department of Water Resources, Adjudicated Basins Annual Reporting, https://sgma.water.ca.gov/webgis/index.jsp?appid=adjbasin 				
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: Development of the Project would not physically disrupt or divide the arrangement of an established community. Under existing conditions, the Project site is bordered by Alessandro Boulevard to the north and bordered by vacant, undeveloped land to the east and west. The properties to the immediate south and southwest of the Project site are developed with warehouses; therefore, the Project would serve as an extension of the existing development patterns in the area. No impact would occur.</p>				
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project includes an amendment to the City of Moreno Valley General Plan Land Use Map that would change the Project site’s land use designation from “Commercial” to “Business Park/Light Industrial.” Approval of the requested General Plan Amendment would eliminate any potential inconsistency between proposed land use and the site’s existing land use designation. Impacts to the environment associated with the Project’s proposed General Plan Amendment are evaluated throughout this IS/MND, and where significant impacts are identified, mitigation measures are imposed to reduce impacts to less than significant levels. There are no environmental impacts that would result as a specific consequence of the proposed changes to the site’s General Plan land use designation, beyond what is already evaluated and disclosed by this IS/MND.</p> <p>The Project would not conflict with any applicable goals, objectives, and policies of the SCAQMD’s AQMP, SCAG’s Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (including the tentatively approved <i>Connect SoCal 2020-2045 RTP/SCS</i>), and SCAG’s <i>Regional Comprehensive Plan</i>. Impacts would be less than significant.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. Moreno Valley Zoning Map, http://www.moreno-valley.ca.us/cdd/pdfs/ZoningMap.pdf 2. Moreno Valley Adopted Land Use Map, http://www.moreno-valley.ca.us/city_hall/general-plan/landuse-map.pdf 3. Google Earth Pro 				
XII. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: The Project site is not located within an area known to be underlain by regionally- or locally-important mineral resources (Moreno Valley, 2006b, p. 5.14-2). Implementation of the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California. In addition, the City’s General Plan EIR does not identify any locally-important mineral resource recovery sites on-site or within proximity to the Project site (Moreno Valley, 2006b, p. 5.14-2). Accordingly, no impact would occur.</p>				

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Response: Refer to Response XII(a), above. Implementation of the proposed Project would not result in the loss of a locally-important mineral resource recovery site. No impact would occur.				
Sources: 1. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 • Section 5.14 – Mineral Resources				

XIII. NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: A <i>Noise Impact Analysis</i> (Urban Crossroads, 2020e) was prepared for the Project by Urban Crossroads to evaluate Project-related long-term operational and short-term construction noise impacts. This report is included as <i>Technical Appendix J</i> to this IS/MND and its findings are incorporated into the analysis presented herein.</p> <p>The analysis presented below summarizes the Project’s potential construction noise levels and operational noise levels. The detailed noise calculations for the analysis presented here are provided in Appendices 7.1, 9.1, and 10.1 of <i>Technical Appendix J</i>.</p> <p><u>Construction Noise Impact Analysis</u> Construction activities on the Project site would create temporary periods of noise when heavy construction equipment is in operation and would cause a short-term increase in ambient noise levels. Maximum daytime construction noise levels at representative sensitive receptor locations near the Project site are summarized in Table 8, <i>Daytime Construction Equipment Noise Level Summary</i>.</p>				

Table 8: Daytime Construction Equipment Noise Level Summary

Receiver Location ¹	Construction Noise Levels (dBA L _{eq})					
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels ²
R1	61.0	61.9	60.0	56.5	53.6	61.9
R2	55.4	56.3	54.4	50.9	48.0	56.3
R3	57.0	57.9	56.0	52.5	49.6	57.9
R4	56.4	57.3	55.4	52.3	49.0	57.3
R5	59.0	59.9	58.0	54.7	51.6	59.9
at 200'	62.8	63.7	61.8	57.6	55.4	63.7

¹Noise receiver locations are shown on Exhibit 10-A of *Technical Appendix J*.
²Construction noise level calculations based on distance from the project site boundaries (construction activity area) to the nearest receiver locations. CadnaA construction noise model inputs are included in Appendix 10.1 of *Technical Appendix J*.
Source: (Urban Crossroads, 2020e, Table 10-2)

As shown on Table 8, the Project’s daytime construction noise levels are expected to range from 48.0 to 61.9 A-weighted decibels (dBA) equivalent sound level (L_{eq}) at the nearby receiver locations and range from 55.4 to 63.7 dBA L_{eq} at 200 feet from the Project site. Project construction noise levels are considered exempt from the noise limits specified in the City of Moreno Valley’s Municipal Code if

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Less Than Significant Impact

No Impact

activities occur within the hours of 7:00 a.m. to 8:00 p.m. (Municipal Code Section 11.80.030(D)(7)). Because Project-related construction activities are expected to occur during daylight hours, Project construction would not exceed the standards established by the City of Moreno Valley Municipal Code and impacts would be less than significant.

Notwithstanding, there is the potential that specific Project construction activities could occur outside of the construction hours permitted by right in the Municipal Code. Pursuant to Municipal Code Section 11.80.030(D)(7), the City of Moreno Valley would be required to approve any nighttime construction activities. If nighttime construction activities were to occur, noise levels above 60 dBA L_{eq} during the nighttime hours would exceed the standards established in the City's Municipal Code Section 11.80.030(C). The only Project construction activities that have a reasonable potential to occur during nighttime hours are concrete pouring. As shown in Table 9, nighttime concrete pouring activities would not exceed 56.5 dBA L_{eq} at the nearby sensitive receiver locations or 57.6 dBA L_{eq} at a distance of 200 feet from the Project site; neither noise level would exceed the standard established by the City of Moreno Valley Municipal Code. Impacts during potential nighttime concrete pouring activities would be less than significant.

Table 9: Nighttime Construction Equipment Noise Level Summary

Receiver Location ¹	Construction Noise Levels (dBA L_{eq})		
	Paving Construction ²	Nighttime Construction Standard ³	Threshold Exceeded? ⁴
R1	56.5	60	No
R2	50.9	60	No
R3	52.5	60	No
R4	52.3	60	No
R5	54.7	60	No
at 200'	57.6	60	No

¹Noise receiver locations are shown on Exhibit 10-A of *Technical Appendix J*.

²Construction noise level calculations based on distance from the project site boundaries (construction activity area) to the nearest receiver locations.

CadnaA construction noise model inputs are included in Appendix 10.1 of *Technical Appendix J*.

³Per Moreno Valley Municipal Code Section 11.80.030(C).

⁴Is the applicable standard exceeded?

Source: (Urban Crossroads, 2020e, Table 10-4)

Operational Noise Impact Analysis

Stationary (on-site) noise sources associated with long-term Project operation are expected to include idling trucks, delivery truck and automobile parking, delivery truck backup alarms, roof-mounted equipment (e.g., heating/ventilation equipment), as well as noise associated with the loading and unloading of dry goods. The daytime and nighttime stationary maximum noise levels associated with Project operation at nearby sensitive receptor locations (the same receptor locations used for the construction analysis, above) and at a distance of 200 feet from the Project site are summarized in Table 10, *Operational Noise Level Compliance*.

As shown in Table 10, Project operations would not expose any nearby receptor to noise levels during daytime or nighttime hours in excess of City standards. The Project's operational noise would contribute a maximum of 0.6 dBA L_{eq} and 0.8 dBA L_{eq} to the existing daytime and nighttime ambient noise environment, respectively in the Project area (Urban Crossroads, 2020e, pp. 48-49). Accordingly, implementation of the Project would not result in the exposure of receivers near the Project site to stationary noise levels that exceed the standards established in the City of Moreno Valley Municipal Code. Impacts would be less than significant.

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

Table 10: Operational Noise Level Compliance

Receiver Location ¹	Project Operational Noise Levels (dBA Leq) ²		Noise Level Standards (dBA Leq) ³		Noise Level Standards Exceeded? ⁴	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	39.5	38.0	65	60	No	No
R2	43.6	43.4	65	60	No	No
R3	48.9	48.8	65	60	No	No
R4	35.1	32.8	65	60	No	No
R5	38.8	36.7	65	60	No	No
at 200'	55.6	55.4	65	60	No	No

¹See Exhibit 8-A of *Technical Appendix J* for the receiver locations.

²Proposed Project operational noise levels as shown on Tables 9-3 and 9-4 of *Technical Appendix J*.

³Exterior noise level standards for source (commercial) land use, as shown on Table 4-1 of *Technical Appendix J*.

⁴Do the estimated Project operational noise source activities exceed the noise level standards?

"Daytime" = 8:00 a.m. - 10:00 p.m.; "Nighttime" = 10:01 p.m. - 7:59 a.m.

Source: (Urban Crossroads, 2020e, Table 9-5)

Operational Noise Impact Analysis – Traffic Noise

To evaluate permanent, off-site noise increases that could result from Project-related traffic, noise levels were modeled for the following traffic scenarios:

- Existing: This scenario refers to the existing traffic noise conditions without and with the proposed Project.
- Existing plus Ambient Growth plus Project (EAP): This scenario refers to the existing traffic noise conditions plus ambient growth without and with the proposed Project.

Traffic noise contours and noise levels were established based on existing and projected future traffic conditions on off-site roadway segments within the Project's study area, and do not take into account the effect of any existing noise barriers or topography that may affect ambient noise levels. Refer to *Technical Appendix J* for a detailed description of the methodology used to evaluate the Project's traffic-related noise effects.

Table 11, *Existing plus Project Traffic Noise Impacts*, presents a comparison of the existing noise conditions along Project study area roadway segments and the noise levels that would result with addition of Project-related traffic. Under Existing plus Project conditions, noise levels along roadway segments within the Project study area would increase between 0.0 and 2.0 dBA CNEL, which would not exceed the applicable significance thresholds. Therefore, the Project's contribution to off-site traffic noise would not result in a substantial permanent increase in ambient noise levels and Project-related impacts would be less than significant.

Table 12, *Existing plus Ambient Growth plus Project Traffic Noise Impacts*, presents a comparison of the existing noise conditions along Project study area roadway segments and the noise levels that would result with addition of ambient growth and Project-related traffic. Under Existing plus Ambient Growth plus Project, noise levels along roadway segments within the Project study area would increase between 0.0 and 1.9 dBA CNEL, which would not exceed the applicable significance thresholds. Therefore, the Project's contribution to off-site traffic noise would not result in a substantial permanent increase in ambient noise levels and Project-related impacts would be less than significant.

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

Table 11: Existing plus Project Traffic Noise Impacts

ID	Road	Segment	Receiving Existing Land Use ¹	CNEL at Receiving Land Use (dBA) ²			Incremental Noise Level Increase Threshold ³	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Graham St.	s/o Alessandro Bl.	Non-Sensitive	66.9	68.9	2.0	n/a	No
2	Alessandro Bl.	w/o Frederick St.	Sensitive	72.7	72.7	0.0	1.5	No
3	Alessandro Bl.	w/o Graham St.	Sensitive	72.8	73.3	0.6	1.5	No
4	Alessandro Bl.	e/o Graham St.	Non-Sensitive	73.1	73.1	0.0	3.0	No

¹Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

²The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

³Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1 of *Technical Appendix J*)?

Source: (Urban Crossroads, 2020e, Table 7-5)

Table 12: Existing plus Ambient Growth plus Project Traffic Noise Impacts

ID	Road	Segment	Receiving Existing Land Use ¹	CNEL at Receiving Land Use (dBA) ²			Incremental Noise Level Increase Threshold ³	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Graham St.	s/o Alessandro Bl.	Non-Sensitive	67.1	69.0	1.9	n/a	No
2	Alessandro Bl.	w/o Frederick St.	Sensitive	72.9	72.9	0.0	1.5	No
3	Alessandro Bl.	w/o Graham St.	Sensitive	72.9	73.5	0.5	1.5	No
4	Alessandro Bl.	e/o Graham St.	Non-Sensitive	73.2	73.2	0.0	3.0	No

¹Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

²The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

³Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1 of *Technical Appendix J*)?

Source: (Urban Crossroads, 2020e, Table 7-6)

b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: The analysis presented below demonstrates that implementation of the Project would not generate excessive groundborne vibration or groundborne noise levels.

Construction Analysis

Construction activities on the Project site would utilize construction equipment that has the potential to generate vibration. Table 13, *Construction Equipment Vibration Levels*, below, summarizes Project construction vibration levels at receiver locations near the Project site. As shown in Table 12, all receiver locations in the vicinity of the Project site would be exposed to vibration levels that fall below the City of Moreno Valley's significance threshold (i.e., 78 vibration decibels (VdB) for daytime residential uses, 84 VdB for daytime office use at all receiver locations and at 200 feet from the property line of the source). Accordingly, Project construction would not generate temporary, excessive groundborne vibration or noise levels and a less than significant impact would occur.

Operational Analysis

Under long-term conditions, the proposed Project would not include nor require equipment, facilities, or activities that would result in substantial or perceptible groundborne vibration. Trucks would travel to-and-from the Project site during long-term operation; however, vibration levels for heavy trucks operating

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Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

Table 13: Construction Equipment Vibration Levels

Receiver Location ¹	Distance to Construction Activity (Feet)	Receiver Vibration Levels (VdB) ²					Highest Vibration Levels	Threshold VdB ³	Threshold Exceeded? ⁴
		Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer				
R1	152'	34.5	55.5	62.5	63.5	63.5	78	No	
R2	1,023'	9.6	30.6	37.6	38.6	38.6	78	No	
R3	744'	13.8	34.8	41.8	42.8	42.8	84	No	
R4	784'	13.1	34.1	41.1	42.1	42.1	78	No	
R5	217'	29.8	50.8	57.8	58.8	58.8	78	No	
at 200'	200'	30.9	51.9	58.9	59.9	59.9	78	No	

¹Noise receiver locations are shown on Exhibit 10-A of *Technical Appendix J*.

²Based on the Vibration Source Levels of Construction Equipment included on Table 10-5 of *Technical Appendix J*.

³FTA Transit Noise and Vibration Impact Assessment maximum acceptable vibration criteria as shown in Section 3.5 of *Technical Appendix J*.

⁴Does the vibration level exceed the maximum acceptable vibration threshold?

Source: (Urban Crossroads, 2020e, Table 10-6)

at low-to-normal speeds on smooth, paved surfaces – as is expected on the Project site and along surrounding roadways – typically do not exceed 65 VdB. Truck deliveries transiting on-site would travel at very low speeds, so it is expected long-term operations at the Project site would not exceed the City’s allowable levels. Accordingly, long-term operation of the Project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels, and a less-than-significant impact would occur.

<p>c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: The Project site is located approximately 1.0-mile northeast of the March Air Reserve Base/Inland Port Airport (MARB/IPA). Based on the Airport Land Use Compatibility Plan (ALUCP) for the MARB/IPA, the Project is located outside of the Airport’s 60 dBA CNEL noise level contours (RCALUC, 2014, Map MA-4), and therefore, represents a moderate to low risk with regard to airport noise. Additionally, the proposed use for the site would not conflict with the allowable uses described in the ALUCP (RCALUC, 2014, Table MA-2). Accordingly, the proposed Project would not expose people residing or working the Project area to excessive noise levels from a public airport; therefore, impacts would be less than significant.

Sources:

1. Moreno Valley General Plan, adopted July 11, 2006
 - Chapter 6 – Safety Element – Section 6.4 – Noise
 - Figure 6-2 – Buildout Noise Contours
2. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006
 - Section 5.4 – Noise
 - Figure 5.4-1 – March Air Reserve Base Noise Impact Area
3. Moreno Valley Municipal Code Chapter 11.80 Noise Regulations
4. March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, adopted November 13, 2014
5. Urban Crossroads, 2020e, Compass Danbe Centerpointe Noise Impact Analysis, *Technical Appendix J*

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The proposed Project would result in development of the subject property with industrial land uses that would add employment opportunities to the area. It is anticipated that the employment base for both the construction and operational phases of the Project would come from the existing population in the Inland Empire, which comprises western Riverside County and southwestern San Bernardino County. According to the Bureau of Labor Statistics, the Riverside-San Bernardino-Ontario region's civilian labor force contains approximately 2,032,794 persons with approximately 1,809,690 people employed and an unemployment rate of approximately 11.0% (approximately 223,607 persons) (USBLS, 2020). Accordingly, the Project region already contains an ample supply of potential employees under existing conditions and the Project's labor demand is not expected to draw substantial numbers of new residents to the area. Furthermore, approximately 86% of City of Moreno Valley residents commute outside of the City for work (SCAG, 2019, p. 21); therefore, the Project would provide job opportunities closer to home for existing and future Moreno Valley residents.</p> <p>There are no components of the Project that would reasonably result in indirect or unplanned population growth because the surrounding area is mostly developed under existing conditions or approved for development. The Project would install new/expanded infrastructure; however, this infrastructure would either be master-planned facilities (meaning the facilities would be installed with or without the Project) or would be private facilities for the sole use of the Project (meaning they would not be available for general public use). Accordingly, no significant indirect impacts associated with population growth would result from any Project-related improvements because the Project and its required improvements would not induce substantial growth on surrounding properties.</p> <p>Based on the foregoing analysis, neither the Project nor any Project-related component would result in substantial, direct, or indirect population growth that would cause a significant direct or indirect impact to the environment. This impact is less than significant.</p>				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: The Project site does not contain any residential structures and no people live on the site under existing conditions. Accordingly, implementation of the Project would not displace substantial numbers of existing housing or people and would not necessitate the construction of replacement housing elsewhere. No impact would occur.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. Google Earth Pro 2. Southern California Association of Governments (SCAG) – Profile of the City of Moreno Valley, https://www.scag.ca.gov/Documents/MorenoValley.pdf 3. United States Bureau of Labor Statistics – Riverside-San Bernardino-Ontario, CA Economy at a Glance on August 2020, https://data.bls.gov/timeseries/LAUMT064014000000006?amp%253bdata_tool=XGtable&output_view=data&include_graphs=true 				
XV. PUBLIC SERVICES – Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Fire protection services to the Project site are provided by the Moreno Valley Fire Department (MVFD). The Project site is served by the Kennedy Park Fire Station (Station No. 65) located</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>at 15111 Indian Avenue, approximately 2.0 roadway miles to the southeast of the Project site, and the Towngate Fire Station (Station No. 6) located at 22250 Eucalyptus Avenue, approximately 2.5 roadway miles to the northwest of the Project site. Based on the Project site's proximity to the two existing fire stations, the Project would be adequately served by fire protection services, and no new or expanded unplanned facilities would be required. The Project Applicant is required to comply with the provisions of the City of Moreno Valley's Development Impact Fee (DIF) Ordinance (Ordinance No. 695), which requires a fee payment that the City applies to the funding of public facilities, including fire protection facilities. Mandatory compliance with the DIF Ordinance would be required prior to the issuance of a building permit.</p> <p>The Project would feature a minimum of fire safety and fire suppression activities, including type of building construction, fire sprinklers, a fire hydrant system, and paved access. The proposed buildings would be of concrete tilt-up construction that contain a low fire hazard risk rating. In addition, a fire alarm system is proposed to be installed, as well as ceiling-mounted sprinklers that are designed to suppress a fire. To suppress a fire does not necessarily mean it will extinguish the fire but rather it is meant to "knock" the fire back down to its source, making it more manageable for the MVFD to extinguish.</p> <p>Based on the foregoing, the proposed Project would receive adequate fire protection service and would not result in the need for new or physically altered fire protection facilities. Impacts to fire protection facilities would be less than significant.</p>				
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project would introduce two new building structures and employees to the Project site, which would result in an incremental increase in demand for police protection services, but is not anticipated to require or result in the construction of new or physically altered police facilities. Furthermore, the Project Applicant would be required to comply with the provisions of Moreno Valley's Development Impact Fee (DIF) Ordinance (Ordinance No. 695), which requires a fee payment that the City applies to the funding of public facilities, including police protection facilities. Mandatory compliance with the DIF Ordinance would be required prior to the issuance of a building permit. Based on the foregoing, the proposed Project would receive adequate police protection service, and would not result in the need for new or physically altered fire protection facilities. Impacts to police protection facilities would therefore be less than significant.</p>				
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Implementation of the Project would not create a direct demand for public school services, as the subject property would contain non-residential uses and would not generate any school-aged children requiring public education. The addition of employment-generating uses on the Project site would assist the City in achieving its goal to provide a better jobs/housing balance within the City and the larger western Riverside County region (Moreno Valley, 2006b, pp. 5.12-1). The proposed Project is not expected to draw a substantial number of new residents to the region and would therefore not indirectly generate school-aged students requiring public education. Because the proposed Project would not directly generate students and is not expected to indirectly draw students to the area, the proposed Project would not cause or contribute to a need to construct new or physically altered public school facilities. Although the Project would not create a demand for additional public school services, the Project Applicant would be required to contribute development impact fees to the Moreno Valley Unified School District in compliance with California Senate Bill 50 (Greene), which allows school districts to collect fees from new developments to offset the costs associated with increasing school capacity needs. Mandatory payment of school fees would be required prior to the issuance of building permits. Impacts to public schools would be less than significant.</p>				
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: As discussed under Responses XVI(a) and XV(b) below, the Project would not create a demand for public park facilities and would not result in the need to modify existing or construct new park facilities. Accordingly, implementation of the Project would not adversely affect any park facility. Thus, no impact would occur.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: The Project is not expected to result in a demand for other public facilities/services, including libraries, community recreation centers, post offices, and/or animal shelters. As such, implementation of the Project would not adversely affect other public facilities or require the construction of new or modified public facilities and no impact would occur.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. Final Environmental Impact Report City of Moreno Valley General Plan <ul style="list-style-type: none"> • City of Moreno Valley Land Use Map <ul style="list-style-type: none"> - Figure 5.4-1 – March Air Reserve Base Noise Impact Area 2. Moreno Valley Fire Department – Strategic Plan 2012-2022 3. California Legislative Information – Senate Bill 50 (Greene), Approved August 27, 1998, http://www.leginfo.ca.gov/pub/97-98/bill/sen/sb_0001-0050/sb_50_bill_19980827_chaptered.html 4. Google Earth Pro 5. City of Moreno Valley Municipal Code <ul style="list-style-type: none"> • Chapter 3.42 “Commercial and Industrial Development Impact Fees” – Ordinance 695 				
<p>XVI. RECREATION – Would the project:</p>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: The Project would develop the subject property with industrial land uses. The Project does not propose any type of residential use or other land use that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities. Accordingly, implementation of the proposed Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park, thus, no impact would occur.</p>				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: The Project does not propose to construct any new on- or off-site recreation facilities. Additionally, the Project would not expand any existing off-site recreational facilities. Therefore, environmental effects related to the construction or expansion of recreational facilities would not occur.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. Project Application Materials – Site Plan 				
<p>XVII. TRANSPORTATION – Would the project:</p>				
a) Conflict with program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project would not conflict with applicable objectives from the Moreno Valley General Plan Circulation Element, including Objective 5.1, 5.2, 5.3 (discussed in more detail below), 5.4, 5.5, 5.8, 5.9, 5.10, and 5.11. In addition, Project would not conflict with the City’s Bicycle Master Plan nor with the vehicular and non-vehicular goals from SCAG’s 2016-2040 RTP/SCS, including goals to: 1) maximize mobility and accessibility for all people and goods in the region; 2) ensure travel safety and reliability for all people and goods in the region; 3) preserve and ensure a sustainable regional transportation system; 4) protect the environment and health of residents by improving air quality and encouraging active transportation; and 5) encouraging land use and growth patterns that facilitate transit and active transportation.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

In accordance with Senate Bill (SB) 743, the California Natural Resources Agency (CNRA) adopted changes to the CEQA Guidelines in December 2018, which identify that starting on July 1, 2020, vehicle miles traveled (VMT) is the appropriate metric to evaluate a project’s transportation impacts. As of December 2018, when the revised CEQA Guidelines were adopted, automobile delay, as measured by “level of service” (LOS) and other similar metrics, no longer constitutes a significant environmental effect under CEQA. Lead agencies in California are required to use VMT to evaluate project-related transportation impacts. The VMT analysis for the Project is provided in Response XVII(b) below.

Notwithstanding, the City of Moreno Valley traffic study guidelines requires a traffic analysis based on LOS, which the City uses in part to demonstrate compliance with General Plan Circulation Element Objective 5.3, which states that the City shall maintain LOS C on roadway links wherever possible and LOS D in the vicinity of SR-60 and employment centers, and to determine transportation improvement obligations of development projects. For this reason, although LOS cannot be used to make a conclusion of a significant environmental effect, the Project’s impact to transportation facilities based on LOS is provided herein for informational purposes. The LOS analysis provided on the following pages is based on a traffic impact analysis report prepared by the consulting firm Urban Crossroads and included as *Technical Appendix K1* to this IS/MND (Urban Crossroads, 2021a). The traffic impact analysis was prepared in conformance with the City of Moreno Valley’s *Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment* (June 2020).

Project Study Area

The Project’s traffic study area (hereafter “Project study area” or “study area”) was devised based on the City of Moreno Valley traffic impact analysis guidelines and consultation with City of Moreno Valley staff via the City’s standard scoping process. The study area includes the intersections listed in Table 14, *Intersection Analysis Locations*.

Table 14: Intersection Analysis Locations

ID	Intersection Location	Jurisdiction	CMP?
1	Frederick St. & Alessandro Bl.	City of Moreno Valley	No
2	Driveway 1 & Alessandro Bl. – Future Intersection	City of Moreno Valley	No
3	Driveway 2 & Alessandro Bl. – Future Intersection	City of Moreno Valley	No
4	Driveway 3 & Alessandro Bl. – Future Intersection	City of Moreno Valley	No
5	Graham St. & Alessandro Bl.	City of Moreno Valley	No

Source: (Urban Crossroads, 2021a, Table 1-1)

Due to the ongoing COVID-19 pandemic, historic traffic counts from 2018 were used in conjunction with a 4.04 percent growth factor to reflect expected “normal” 2020 traffic conditions (Urban Crossroads, 2021a, p. 22). Based on the collected data, all existing intersections in the Project study area operate at a level of service (LOS) of “C” or better during the AM and PM peak hours (7:00-9:00am and 4:00-6:00pm, respectively) (Urban Crossroads, 2021a, p. 22). Refer to *Technical Appendix K1* for more information about existing traffic conditions in the Project study area.

Thresholds of Significance

The Project would result in a conflict with General Plan Circulation Element Objective 5.3 if, under Opening Year traffic conditions, Project traffic would:

- Cause a signalized intersection to degrade from either LOS C or better or LOS D or better to LOS D/E/F or LOS E/F, respectively; or increase the delay by 5.0 or more seconds at a signalized intersection that operates at an unacceptable level of service (i.e., LOS D or LOS E/F) without the Project (Urban Crossroads, 2021a, p. 14).
- Cause an unsignalized intersection to degrade from either LOS C or better or LOS D or better to LOS D/E/F or LOS E/F, respectively; or increase the delay by 5.0 or more seconds at an unsignalized intersection that operates at an unacceptable level of service (i.e., LOS D or LOS E/F) without the Project and the intersection meets the peak hour traffic signal warrant after the addition of Project traffic (Urban Crossroads, 2021a, p. 14).

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

Project Trip Generation and Distribution

Trip generation represents the amount of traffic that is attracted to and produced by a development project. Buildings 1 and 2 are evaluated as 70 percent warehouse use and 30 percent high-cube cold storage warehouse use each. The Institute of Transportation Engineers (ITE) Trip Generation Manual (2017) includes a trip generation rate for warehouse uses (ITE land use code 150) and high-cube cold storage warehouse uses (ITE land use code 157). The assumptions for the mix of trucks, by axle type, relies on recommendations from the SCAQMD Warehouse Truck Trip Study Data Results and Usage (2014). Based on the guidance from the SCAQMD, the following truck fleet mix under ITE land use code 150 was utilized for the purposes of estimating the truck trip generation for Buildings 1 and 2: 16.7% of the total trucks as 2-axle trucks, 20.7% of the total trucks as 3-axle trucks, and 62.6% of the total trucks as 4+-axle trucks (Urban Crossroads, 2021a, p. 29). The following truck fleet mix under ITE land use code 157 was utilized for the purposes of estimating the truck trip generation for Buildings 1 and 2: 34.7% of the total trucks as 2-axle trucks, 11.0% of the total trucks as 3-axle trucks, and 54.3% of the total trucks as 4+-axle trucks (Urban Crossroads, 2021a, p. 29).

Based on the assumptions described above, the Project is calculated to generate approximately 742 total vehicle trips per day, including 59 vehicle trips during the AM peak hour (7:00-9:00am) and 64 vehicle trips during the PM peak hour (4:00-6:00pm) (Urban Crossroads, 2021a, p. 31). Of the Project's 742 daily vehicle trips, 224 would be from trucks with two or more axles (ibid.). In conformance with standard traffic engineering practices in Southern California, the Project's daily vehicle trips were converted to a passenger car equivalent (PCE). PCE factors allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit (i.e., the passenger car). A PCE factor of 1.5 was applied to two-axle truck trips, a factor of 2.0 was applied to three-axle truck trips, and a factor of 3.0 was applied to four plus-axle truck trips (Urban Crossroads, 2021a, pp. 31, 33). The Project is anticipated to generate approximately 1,062 daily PCE trips, including 21 PCE trips during the AM peak hour and 81 PCE trips during the PM peak hour (ibid.). The Project's PCE vehicle trips were used for purposes of the LOS analysis. For more information about the Project's trip generation, refer to *Technical Appendix K1*.

Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that would be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered to identify the routes where Project traffic would distribute. The trip distribution for the Project was developed based on anticipated passenger car and truck travel patterns to-and-from the Project site. The total volume on each roadway was divided by the Project's total traffic generation to indicate the percentage of Project traffic that would use each component of the roadway system in each relevant direction.

The assignment of traffic from the Project area to the adjoining roadway system is based on the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, PCE factored Project average daily traffic (ADT) volumes for the weekday are shown on Exhibit 4-3 in *Technical Appendix K1*.

Analysis Scenarios

The Project contribution of traffic to the local circulation network were assessed for each of the following conditions:

- Near-term Construction; and
- Opening Year (2022)

The Near-Term Construction conditions analysis determines the potential for the Project's construction-related traffic to result in an adverse effect to the local roadway system. Types of traffic anticipated during construction include construction workers traveling to/from the Project site as well as deliveries of construction materials to the Project site.

The Opening Year (2022) analysis includes an evaluation of traffic conditions at the Project's "opening year." The Opening Year (2022) analysis considers existing traffic + ambient growth + Project traffic.

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

Near-term Construction Traffic Conditions

During the Project’s construction phase, traffic to-and-from the subject property would be generated by construction employee trips, delivery of construction materials, and delivery/use of heavy equipment.

Vehicular traffic from construction employees would be substantially less than daily and peak hour traffic volumes generated during Project operational activities because construction activities typically begin/end outside of the peak hour; therefore, a most – if not all – construction employees would not be driving to/from the Project site during hours of peak congestion. Because Project operations would not conflict with the LOS standards from Circulation Element Objective 5.3 under Opening Year (2022) traffic conditions (see “Opening Year (2022) Traffic Conditions,” below) and because construction worker peak hour trips would be substantially less than the peak hour trips generated by Project operations, traffic from construction workers is not expected to conflict with the LOS performance standards of Circulation Element Objective 5.3.

Deliveries of construction materials to the Project site also would make nominal traffic contributions to the local roadway network because most trips would occur during non-peak hours and the total volume of trips would be less than the Project’s operational trips, which are shown below to not conflict with Circulation Element Objective 5.3. Furthermore, construction materials would be delivered to the site throughout the construction phase based on need and would not occur on an everyday basis. Heavy equipment would be utilized on the Project site during the construction phase. As most heavy equipment is not authorized to be driven on public roadways, most equipment would be delivered and removed from the site via flatbed trucks. As with the delivery of construction materials, the delivery of heavy equipment to the Project site would not occur on a daily basis, but would occur periodically throughout the construction phase based on need.

Based on the foregoing analysis, traffic generated by the Project’s construction phase would not result in a conflict with the LOS performance standards contained in Circulation Element Objective 5.3.

Opening Year (2022) Traffic Conditions

As shown in Table 15, all Project study area intersections would operate at acceptable LOS under Opening Year (2022) traffic conditions. Therefore, the Project would not cause or contribute to an exceedance of the LOS performance standards contained in Circulation Element Objective 5.3.

Table 15: Intersection Analysis for Opening Year (2022) Traffic Conditions

#	Intersection	Traffic Control ²	Existing (2020)				EAP (2022)			
			Delay ¹ (secs.)		Level of Service		Delay ¹ (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Frederick St. & Alessandro Bl.	TS	22.4	30.7	C	C	23.4	33.8	C	C
2	Driveway 1 & Alessandro Bl.	CSS	Future Intersection				11.8	21.0	B	C
3	Driveway 2 & Alessandro Bl.	CSS	Future Intersection				11.8	22.3	B	C
4	Driveway 3 & Alessandro Bl.	CSS	Future Intersection				11.7	21.8	B	C
5	Graham St. & Alessandro Bl.	TS	20.4	32.6	C	C	22.0	34.0	C	C

¹Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

²CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement
Source: (Urban Crossroads, 2021a, Table 5-1)

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: As previously discussed, SB 743, which approved in 2013, was intended to change the way transportation impacts are determined according to CEQA. Updates to the CEQA Guidelines that were adopted in December 2018 included the addition of CEQA Guidelines Section 15064.3, of which

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Subdivision “b” establishes criteria for evaluating a project’s transportation impacts based on project type and using automobile VMT as the metric. As a component of OPR’s revisions to the CEQA Guidelines, lead agencies were required to adopt VMT thresholds of significance by July 1, 2020. The City of Moreno Valley adopted its <i>Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment</i> in June 2020, which is used in this analysis to determine the significance of Project-related VMT.</p>				
<p>According to the VMT analysis prepared by Urban Crossroads (<i>Technical Appendix K2</i>), the Project’s VMT per employee would exceed the City’s VMT per employee threshold by approximately 11.7% under baseline (Year 2020) traffic conditions when the Project’s location and Project design features are not considered (Urban Crossroads, 2021b, p. 5). With consideration of the Project’s location and Project design features, including: 1) the Project’s geographic location as an employment use in proximity to existing residential and commercial service land uses – which would reduce Project-related employee VMT from employee commutes, errands during break periods, etc.; and 2) sidewalks along the Project site frontage with Alessandro Boulevard which would facilitate pedestrian and bicycle travel to the site, the Project-related VMT would be reduced by approximately 15% and would fall below the City’s significance threshold (Urban Crossroads, 2021b, p. 8). Therefore, based on the City’s VMT significance guidelines, the Project would have a less-than-significant direct VMT impact and, therefore, would not conflict with or be inconsistent with CEQA Guidelines section 15064.3(b).</p>				
<p>c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The types of traffic generated during operation of the Project (i.e., passenger cars and trucks) would be compatible with the type of traffic observed along Project study area roadways under existing conditions. In addition, all proposed improvements within the public right-of-way would be installed in conformance with City of Moreno Valley design standards. The City reviewed the Project’s application materials and determined that no hazardous transportation design features would be introduced through implementation of the Project. Accordingly, the Project’s construction and operation would not create or substantially increase safety hazards due to a design feature or incompatible use. Implementation of the Project would result in a less-than-significant impact.</p>				
<p>d) Result in inadequate emergency access?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project would result in the construction of two warehouse buildings on the Project site, which would require the need for emergency access to-and-from the site. During the course of the City of Moreno Valley’s review of the proposed Project, the Project’s design was reviewed to ensure that adequate access to-and-from the site is provided for emergency vehicles. The City of Moreno Valley also will require the Project to provide adequate paved access to-and-from the site as a condition of Project approval. The Project’s proposed driveways would connect directly to Alessandro Boulevard, and the Project does not propose any changes to public roads other than frontage improvements along Alessandro Boulevard that would improve local circulation/access. Furthermore, the City of Moreno Valley will review all future Project construction drawings to ensure that adequate emergency access is maintained along abutting public streets during temporary construction activities. With required adherence to City requirements for emergency vehicle access, impacts would be less than significant.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. Urban Crossroads, 2021a, Traffic Analysis, <i>Technical Appendix K1</i> 2. Urban Crossroads, 2021b, Vehicle Miles Travelled Analysis, <i>Technical Appendix K2</i> 3. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 				
<p>XVIII. TRIBAL CULTURAL RESOURCES – Would the project:</p>				
<p>a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Response: A Phase I Cultural Resources Study (*Technical Appendix C*) was prepared for the Project site by BFSa. The Phase I Cultural Resources Study included a records search with the Eastern Information Center (EIC) at University of California Riverside in order to assess previous archaeological studies and identify any previously recorded tribal cultural resources within the Project site. Additionally, as part of preparation of the Phase I Cultural Resources Study, BFSa also requested a records search of the Native American Heritage Commission (NAHC) Sacred Lands Files (SLF). According to BFSa's search of EIC records and NAHC SLFs, no tribal cultural resources listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources are present on the Project site or previously recorded on the Project site. In addition, the Project site is highly disturbed and no tribal cultural resources were observed on the Project site or in the Project site's immediate vicinity. (BFSa, 2020a, p. 1.0-1)

As part of the SB 18/AB 52 consultation process required by State law, the City of Moreno Valley sent notification of the Project to Native American tribes with possible traditional or cultural affiliation to the Project area. In response to the AB 52 consultation invitation, five tribes contacted the City to request formal consultation. The City met with each tribe and concluded tribal consultation on June 16, 2021. During the course of the tribal consultation process, no Native American tribe provided the City with substantial evidence indicating that tribal cultural resources, as defined in Public Resources Code section 21074, are present on the Project site or have been found previously on the Project site. Notwithstanding, due to the Project site's location in an area where multiple Native American tribes are known to have a cultural affiliation, there is the possibility that prehistoric archaeological resources, including tribal cultural resources, could be encountered during ground-disturbing construction activities – although this is considered unlikely due to the pervasive, historic and on-going disturbances that have occurred on the Project site. Were a tribal cultural resource, as defined in Public Resources Code Section 21074, to be found on the Project site during construction – and not protected – a significant impact would occur.

Implementation of MMs TCR-1 through TCR-6, would ensure the proper identification and subsequent treatment of any significant tribal cultural resources that may be encountered during ground-disturbing activities associated with Project development. With implementation of the required mitigation, the Project's potential impact to significant tribal cultural resources would be reduced to less-than-significant.

Mitigation

MM TCR-1 Prior to the issuance of a grading permit, the Developer shall retain a professional archaeologist to conduct monitoring of all mass grading and trenching activities. The Project Archaeologist shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction. The Project Archaeologist, in consultation with the Consulting Tribe(s), the contractor, and the City, shall develop a Cultural Resources Management Plan (CRMP) in consultation pursuant to the definition in AB52 to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the project site. A consulting tribe is defined as a tribe that initiated the AB 52 tribal consultation process

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<p>for the Project, has not opted out of the AB52 consultation process, and has completed AB 52 consultation with the City as provided for in Cal Pub Res Code Section 21080.3.2(b)(1) of AB52. Details in the Plan shall include:</p> <ul style="list-style-type: none"> a) Project grading and development scheduling; b) The Project archeologist and the Consulting Tribes(s) as defined in MM TCR-1 shall attend the pre-grading meeting with the City, the construction manager and any contractors and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project archaeologist and Consulting Tribe(s) shall make themselves available to provide the training on an as-needed basis; c) The protocols and stipulations that the contractor, City, Consulting Tribe(s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation. 				
<p>MM TCR-2 Prior to the issuance of a grading permit, the Developer shall secure agreements with the Pechanga Band of Luiseño Indians and Soboba Band of Luiseño Indians for tribal monitoring. The Developer is also required to provide a minimum of 30 days advance notice to the tribes of all mass grading and trenching activities. The Native American Tribal Representatives shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed. If the Native American Tribal Representatives suspect that an archaeological resource may have been unearthed, the Project Archaeologist or the Tribal Representatives shall immediately redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. In consultation with the Native American Tribal Representatives, the Project Archaeologist shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2.</p>				
<p>MM TCR-3 In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:</p> <ul style="list-style-type: none"> a) One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the City of Moreno Valley Planning Division: <ul style="list-style-type: none"> i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place they were found with no development affecting the integrity of the resources. ii. Onsite reburial of the discovered items as detailed in the treatment plan required pursuant to MM TCR-1. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments as defined in MM TCR-1. 				

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<p>MM TCR-4 The City shall verify that the following note is included on the Grading Plan:</p> <p>"If any suspected archaeological resources are discovered during ground-disturbing activities and the Project Archaeologist or Native American Tribal Representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the Project Archaeologist and the Tribal Representatives to the site to assess the significance of the find."</p>				
<p>MM TCR-5 If potential historic or cultural resources are uncovered during excavation or construction activities at the project site, work in the affected area must cease immediately and a qualified person meeting the Secretary of the Interior's standards (36 CFR 61), Tribal Representatives, and all site monitors per the Mitigation Measures, shall be consulted by the City to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, or prehistoric resource. Determinations and recommendations by the consultant shall be immediately submitted to the Planning Division for consideration, and implemented as deemed appropriate by the Community Development Director, in consultation with the State Historic Preservation Officer (SHPO) and any and all Consulting Native American Tribes as defined in MM TCR-1 before any further work commences in the affected area.</p>				
<p>MM TCR-6 If human remains are discovered, no further disturbance shall occur in the affected area until the County Coroner has made necessary findings as to origin. If the County Coroner determines that the remains are potentially Native American, the California Native American Heritage Commission shall be notified within 24 hours of the published finding to be given a reasonable opportunity to identify the "most likely descendant". The "most likely descendant" shall then make recommendations, and engage in consultations concerning the treatment of the remains (California Public Resources Code 5097.98).</p>				

Sources:

1. Brian F. Smith and Associates, 2020a, Phase I Cultural Resources Survey for the Compass Danbe Centerpointe Project, *Technical Appendix C*

XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:

<p>a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response: The Project would construct an on-site network of water and sewer pipes and stormwater facilities that would connect to existing water, sewer, and storm drain lines beneath Alessandro Boulevard and along the southern Project site boundary. The Project also would remove existing wooden power poles and underground existing overhead power lines (less than 115kV) along the south side of Alessandro Boulevard abutting the Project site and install connections to existing electricity, natural gas, and communications infrastructure that already exist in the area, and all such connections would be accomplished in conformance with the rules and standards enforced by the applicable service provider. The installation of water and sewer line connections, stormwater drainage facilities, electricity, natural gas, and communications infrastructure as proposed by the Project would result in physical impacts to the environment; however, these impacts are considered to be part of the Project's construction phase and are evaluated throughout this IS/MND accordingly. In instances where significant environmental impacts have been identified for the Project's construction phase, mitigation measures are recommended in each applicable subsection of this IS/MND to reduce impacts to less-than-significant levels. The construction of utility infrastructure necessary to serve the proposed Project would not result in any significant physical effects on the environment that are not already identified and disclosed as part of this IS/MND. Accordingly, additional mitigation measures beyond those identified throughout this IS/MND would not be required.

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b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: EMWD is responsible for supplying potable water to the Project site and its region. As discussed in the <i>2015 EMWD Urban Water Management Plan</i>, herein incorporated by reference as the “UWMP,” which applies to and was adopted by the EMWD, adequate water supplies are projected to be available to meet EMWD’s estimated water demand through 2040 under normal, historic single-dry and historic multiple-dry year conditions (EMWD, 2016a, p. XV). EMWD forecasts for projected water demand are based on the population projections of SCAG, which rely on the adopted land use designations contained within the general plans that cover the geographic area within EMWD’s service. The water use projections utilized in the <i>2015 EMWD UWMP</i> were based on the site’s existing “Commercial” land use designation on the City of Moreno Valley Land Use Map. The Project would change the site’s land use designation to “Business Park/Light Industrial” and would operate the site as a light industrial land use (i.e., warehousing). According to EMWD’s Water System Planning & Design manual, commercial and industrial development have the same average daily water demand rate (2,000 gpd per acre) (EMWD, 2007, p. 4). Because the Project’s water demand would be identical to the projection for the site’s existing land use designation (as mentioned above), the determination of the <i>2015 EMWD UWMP</i> remains valid and EMWD would have sufficient water supplies available to serve the Project from existing entitlements/resources and no new or expanded entitlements are needed. The Project’s impact would be less than significant.</p>				
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Wastewater generated by the Project would be treated by the EMWD, which operates the Moreno Valley Regional Water Reclamation Facility. Based upon EMWD’s wastewater generation rate of 1,700 gallons per day (gpd) per acre for industrial light land uses, the proposed Project would generate approximately 30,090 gallons of wastewater per day (1,700 gpd per acre × 17.7 Project acres = 30,090 gpd). Under existing conditions, the Moreno Valley Regional Water Reclamation Facility has an excess treatment capacity of approximately 5.4 million gallons per day (mgpd). Implementation of the Project would utilize approximately 0.6% of the Moreno Valley Regional Water Reclamation Facility daily excess treatment capacity (EMWD, 2016b). Accordingly, the Moreno Valley Regional Water Reclamation Facility has sufficient capacity to treat wastewater generated by the Project in addition to existing commitments. The Project would not create the need for any new or expanded wastewater facility (such as conveyance lines, treatment facilities, or lift stations). Because there is adequate capacity at existing treatment facilities to serve the Project’s projected sewer demand, impacts would be less than significant.</p>				
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Implementation of the Project would generate an incremental increase in solid waste volumes requiring off-site disposal during short-term construction and long-term operational activities. Solid waste generated by the Project would be disposed at the El Sobrante Landfill and/or the Badlands Sanitary Landfill.</p> <p>The El Sobrante Landfill is permitted to receive 16,054 tons of refuse per day and has a total capacity of 209,910,000 cubic yards. According the CalRecycle, the El Sobrante Landfill has a total remaining capacity of 143,977,170 cubic yards. The El Sobrante Landfill is estimated to reach capacity, at the earliest time, in the year 2051 (CalRecycle, 2019a). In July 2020 (the most recent period for which disposal volumes are available), the average daily disposal at the El Sobrante Landfill was approximately 11,003 tons, which correlates to an excess daily disposal capacity of approximately 5,051 tons (CalRecycle, 2020a).</p>				

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<p>The Badlands Sanitary landfill is permitted to accept a maximum of 4,800 tons of solid waste per day. In July 2020, the most recent time period for which disposal data was publicly available, the Badlands Sanitary Landfill was receiving an average of 2,709 tons of waste per day, which correlates to an excess daily disposal capacity of approximately 2,091 tons (CalRecycle, 2020b). The Badlands Sanitary Landfill has available capacity until at least the year 2021; however, future landfill expansion opportunities may exist at this site. (CalRecycle, 2019b)</p> <p>The analysis below summarizes the Project’s potential to generate solid waste during construction and/or operation that would exceed the disposal capacity of local landfill facilities. As demonstrated in the analysis below, the Project would generate less-than-significant volumes of solid waste.</p> <p><u>Construction Impact Analysis</u> Based on the United States Environmental Protection Agency’s (U.S. EPA) construction waste generation factor of 4.34 pounds of solid waste generated for the construction of every 1 s.f. for non-residential uses, Project construction is estimated to generate approximately 860.4 tons of solid waste. $([396,275 \text{ s.f.} \times 4.34 \text{ pounds per s.f.}] \div 2,000 \text{ pounds per ton} = 860 \text{ tons})$ (EPA, 2009, Table A-2). CalGreen requires a minimum of 65% of all construction waste be diverted from landfills (by recycling, reusing, and other waste reduction strategies); therefore, the Project is estimated to generate approximately 301.1 tons of construction waste requiring landfill disposal $(860 \text{ tons} \times 0.35 = 301 \text{ tons})$. The Project’s construction phase is estimated to last for up to 190 working days; therefore, the Project is estimated to generate approximately 1.58 tons of solid waste per day $(301 \text{ tons} \div 190 \text{ days} = 1.58 \text{ tons per day})$ requiring landfill during construction.</p> <p>Non-recyclable construction waste generated by the Project would be disposed at the El Sobrante Landfill or Badlands Sanitary Landfill. As described above, these landfills receive well below their maximum permitted daily disposal volume; thus, the relatively minimal construction waste generated by the Project is not anticipated to cause the landfills to exceed their maximum permitted daily disposal volume. (Project construction waste would represent approximately 0.03% of the excess disposal capacity at the El Sobrante Landfill and approximately 0.08% of the excess disposal capacity at the Badlands Sanitary Landfill.) Furthermore, the El Sobrante Landfill and Badlands Sanitary Landfill are not expected to reach its total maximum permitted disposal capacities during the Project’s construction period. The El Sobrante Landfill and Badlands Sanitary Landfill have sufficient daily capacity to accept solid waste generated by the Project’s construction phase; therefore, impacts to landfill capacity associated with the Project’s near-term construction activities would be less than significant.</p> <p><u>Operational Impact Analysis</u> Based on a daily waste generation factor of 1.42 pounds of waste per 100 square feet of industrial building area obtained from CalRecycle, long-term, on-going operation of the Project would generate approximately 2.81 tons of solid waste per day $([1.42 \text{ pounds} \div 100 \text{ s.f.}] \times 396,275 \text{ s.f.}] \div 2,000 \text{ pounds} = 2.81 \text{ tons per day})$ (CalRecycle, 2019c). Pursuant to AB 939, at least 50 percent of the Project’s solid waste is required to be diverted from landfills; therefore, the Project would generate approximately 1.41 tons of solid waste per day requiring landfilling $(2.81 \text{ tons per day} \times 50\% = 1.41 \text{ tons per day})$.</p> <p>Non-recyclable solid waste generated during long-term operation of the Project would be disposed at the El Sobrante Landfill and the Badlands Sanitary Landfill. As described above, these landfills receive well below their maximum permitted daily disposal volume; thus, waste generated by the Project’s operation is not anticipated to cause the landfills to exceed their maximum permitted daily disposal volume. (Project operational rate would represent approximately 0.03% of the daily excess disposal capacity at the El Sobrante Landfill and approximately 0.07% of the daily excess disposal capacity at the Badlands Sanitary Landfill.) Because the Project would generate a relatively small amount of solid waste per day as compared to the permitted daily capacities at the receiving landfills, impacts to the El Sobrante Landfill and Badlands Sanitary Landfill facilities during the Project’s long-term operational activities would be less than significant.</p>				
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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<p>Response: The California Integrated Waste Management Act (AB 939), signed into law in 1989, established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the bill established a 50 percent waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted. Per the requirements of the Integrated Waste Management Act, the Riverside County Board of Supervisors adopted the County of Riverside Countywide Integrated Waste Management Plan (CIWMP), which outlines the goals, policies, and programs the County and its cities implement to create an integrated and cost-effective waste management system that complies with the provisions of AB 939 and its diversion mandates. (RCDWR, 2020)</p> <p>In order to assist the City of Moreno Valley and the County of Riverside in achieving the mandated goals of the Integrated Waste Management Act, the Project's building user(s) would be required to work with future refuse haulers to develop and implement feasible waste reduction programs, including source reduction, recycling, and composting. Additionally, in accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code § 42911), the Project is required to provide adequate areas for collecting and loading recyclable materials where solid waste is collected. The collection areas are required to be shown on construction drawings and be in place before occupancy permits are issued. (CA Legislative Information, 2005) Additionally, in compliance with AB 341 (Mandatory Commercial Recycling Program), the future occupant(s) of the proposed Project would be required to arrange for recycling services, if the occupant generates four (4) or more cubic yards of solid waste per week (CA Legislative Information, 2011). The implementation of these mandatory requirements would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn will aid in the extension of the life of affected disposal sites. The Project Applicant would be required to comply with all applicable solid waste statutes and regulations; as such, impacts related to solid waste statutes and regulations would be less than significant.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. California Legislative Information – Assembly Bill 341 Solid Waste: Diversion, Approved October 5, 2011, https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB341 2. California Legislative Information – Public Resources Code § 42911 – California Solid Waste Reuse and Recycling Access Act of 1991, Effective January 1, 2005, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=42911 3. Eastern Municipal Water District – Sanitary Sewer System Planning & Design, Revised September 1, 2006, https://www.emwd.org/sites/main/files/file-attachments/emwdsewer_system_design.pdf?1542760914 4. Eastern Municipal Water District – Water System Planning & Design, Revised July 2, 2007, https://www.emwd.org/sites/main/files/file-attachments/emwdwater_system_design.pdf?1542760903 5. Eastern Municipal Water District – Moreno Valley Regional Water Reclamation Facility, October 2016, https://www.emwd.org/sites/main/files/file-attachments/mvwrffactsheet.pdf?1537294991 6. Riverside County Department of Waste Resources – Countywide Integrated Waste Management Plan, 2020, https://www.rcwaste.org/business/planning/ciwmp 7. CalRecycle – SWIS Site/Facility Details: El Sobrante Landfill. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2280?siteID=2402. Accessed October 1, 2020 8. CalRecycle – Daily Landfilled Tonnage & Total Traffic By Site: El Sobrante, July 2020. (CalRecycle, 2020a) 9. CalRecycle – SWIS Site/Facility Details: Badlands Sanitary Landfill. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2245?siteID=2367. Accessed October 1, 2020 10. CalRecycle – Daily Landfilled Tonnage & Total Traffic By Site: Badlands, July 2020. 				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Response: The Project site is not located in or near state responsibility areas (SRA) or lands within a very high fire hazard severity zone (CalFire, 2007); therefore, the Project would not exacerbate wildfire hazard risks or expose people or the environment to adverse environmental effects related to wildfires. As such, no impact would occur.				
Sources: 1. California Department of Forestry and Fire Protection – Western Riverside County Fire Hazard Severity Zones in SRA, Adopted on November 7, 2007, https://osfm.fire.ca.gov/media/6752/fhszs_map60.pdf				
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Response: All impacts to the environment, including impacts to habitat for fish and wildlife species, fish and wildlife populations, plant and animal communities, rare and endangered plants and animals, and historical and pre-historical resources were evaluated as part of this IS/MND. Throughout this IS/MND, where impacts were determined to be potentially significant, mitigation measures have been imposed to reduce those impacts to less-than-significant levels. Accordingly, with incorporation of the mitigation measures imposed throughout this IS/MND, the Project would not substantially degrade the quality of the environment and impacts would be less than significant.				
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Response: As discussed throughout this IS/MND, implementation of the proposed Project has the potential to result in effects to the environment that are individually limited, but cumulatively considerable. In all instances where the Project has the potential to contribute to a cumulatively considerable impact to the environment, mitigation measures have been imposed to reduce potential effects to less-than-significant levels.</p>				
<p><u><i>Aesthetics</i></u></p>				
<p>New development on the Project site and in the surrounding area would change the existing character of the Project’s viewshed; however, all development in the immediate vicinity of the Project would be required to comply with the development regulations and design standards contained in the City’s Development Code, which would ensure that minimum standards related to visual character and quality are met to preclude adverse aesthetic effects (e.g., size, scale, building materials, lighting). Accordingly, the Project’s aesthetic impacts would not be cumulatively considerable.</p>				
<p><u><i>Agriculture and Forestry Resources</i></u></p>				
<p>The Project would have no impact on agricultural resources. Therefore, there is no potential for the Project to contribute to a cumulatively considerable impact under this topic.</p>				
<p><u><i>Air Quality</i></u></p>				
<p>Based on SCAQMD guidance, any direct exceedance of a regional or localized threshold also is considered to be a cumulatively-considerable effect, while air pollutant emissions below applicable regional and/or localized thresholds are not considered cumulatively considerable. As discussed in the preceding analysis, the Project would not exceed SCAQMD’s regional threshold for criteria pollutants during construction or operation of the Project. Therefore, Project-related construction and operation emissions are not considered cumulatively-considerable.</p>				
<p><u><i>Biological Resources</i></u></p>				
<p>The Project site does not support any sensitive plant or wildlife species; therefore, there is no potential for the Project to contribute to a cumulatively-considerable impact under these resources. Although the Project site is highly disturbed and fragmented from other open space areas under existing conditions, the site does contain quality habitat for nesting birds and contains habitat that could be used by the burrowing owl. Therefore, there is the potential that nesting birds and/or the burrowing owl could be present on the Project site prior to construction and there also is the potential that other development projects in the Riverside area could support bird nests and/or the burrowing owl. The Project’s potential impacts to nesting birds and the burrowing owl would be cumulatively considerable. MMs BR-1 and BR-2 would reduce the Project’s cumulative effects to less-than-significant levels by ensuring that no direct take of nesting birds occurs during construction.</p>				
<p>The Project would permanently impact habitat that is classified as: sensitive natural community, riparian/riverine habitat, and a State-protected wetland. Accordingly, the Project would contribute to a cumulatively-considerable impact under these resources. MM BR-3 would reduce the Project’s cumulative effects to less-than-significant levels by ensuring that these impacts would be fully compensated through the purchasing of habitat mitigation credits.</p>				
<p><u><i>Cultural Resources</i></u></p>				
<p>The Project site does not contain historic or prehistoric archaeological resources and mandatory compliance with State law would preclude impacts to human remains; therefore, there is no potential for the Project to contribute to a cumulatively considerable impact to these resources.</p>				
<p><u><i>Energy</i></u></p>				
<p>The Project’s construction and operation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary and would not obstruct a state or local plan for renewable energy or energy efficiency. In addition, all cumulative projects would also be required to comply with the California Building Standards Code, which establishes standards for energy efficiency and “green” construction. Therefore, implementation of the Project would result in a less-than-significant cumulative impact to energy.</p>				

Attachment: Exhibit A to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p><u><i>Geology and Soils</i></u> Potential effects related to geology and soils are inherently site-specific; therefore, there is no potential for the Project to contribute to a cumulatively considerable impact under this topic. Furthermore, all development proposals would be required to comply with applicable federal, State, and local regulations that are in place to preclude adverse geology and soils effects, including effects related to strong seismic ground shaking, fault rupture, soil erosion, and hazardous soil conditions (e.g., liquefaction, expansive soils, landslides).</p> <p>Notwithstanding, there is remote potential that paleontological resources are buried beneath the surface of the Project site and could be impacted during construction. Other projects within region would similarly have the potential to impact unknown, subsurface paleontological resources during ground-disturbing activities. Therefore, the potential for development on the Project site to impact subsurface paleontological resource deposits is a cumulatively considerable impact. Application of MMs GEO-1 through GEO-4 would reduce the Project’s cumulative impacts to less-than-significant levels.</p> <p><u><i>Greenhouse Gas Emissions</i></u> As described in the preceding analysis, global climate change (GCC) occurs as the result of global emissions of GHGs. An individual development project does not have the potential to result in direct and significant GCC-related effects in the absence of cumulative sources of GHGs. The CEQA Guidelines also emphasize that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA’s requirements for cumulative impacts analysis (See CEQA Guidelines § 15130[f]). Accordingly, the preceding analysis reflects a cumulative impact analysis of the GHG emissions related to the Project. As concluded under Response VIII(a) and (b), the Project would not result in a cumulatively considerable impact related to GHG emissions.</p> <p><u><i>Hazards and Hazardous Materials</i></u> Potential effects related to hazards and hazardous materials are inherently site-specific; therefore, there is no potential for the Project to contribute to a cumulatively considerable impact under this topic.</p> <p><u><i>Hydrology and Water Quality</i></u> Construction and operation of the Project and other projects in the Santa Ana River watershed would have the potential to result in a cumulative water quality impact, including erosion and sedimentation. However, in accordance with applicable federal, State, and local regulations, all development projects would be required to implement plans during construction and operation (e.g., SWPPP and WQMP) to minimize adverse effects to water quality, which would avoid a cumulatively considerable impact.</p> <p>The Project and other projects in the Santa Ana River Basin would be required to comply with federal, State, and local regulations in order to preclude flood hazards both on- and off-site. Compliance with federal, State, and local regulations would require on-site areas to be protected, at a minimum, from flooding during peak storm events (i.e., 100-year storm) and that proposed development would not expose downstream properties to increased flooding risks during peak storm events. Accordingly, a cumulatively considerable effect related to flooding would not occur.</p> <p><u><i>Land Use and Planning</i></u> The Project would not physically divide an established community, or conflict with applicable land use/planning documents; therefore, there is no potential for the Project to contribute to a cumulatively-considerable impact related to land use and planning.</p> <p><u><i>Mineral Resources</i></u> The Project would have no impact on mineral resources. Therefore, there is no potential for the Project to contribute to a cumulatively considerable impact under this topic.</p> <p><u><i>Noise</i></u> Noise levels diminish rapidly with distance; therefore, for a development project to contribute to a noise-related cumulative impact it must be located in close proximity to another development project or source of substantial noise. There are no construction projects in the immediate vicinity of the Project site that would overlap with Project-related construction activities. Accordingly, cumulatively-considerable impacts related to periodic noise and construction-related vibration would not occur. Under long-term</p>				

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ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>operating conditions the Project would comply with the City of Moreno Valley noise ordinance and would not produce noticeable levels of vibration; therefore, cumulatively considerable impacts related to these issue areas would not occur. The analysis provided under Response XIII(a) demonstrates that the Project would not result in a cumulatively-considerable impact related to transportation noise under long-term conditions.</p> <p><u>Population and Housing</u> The Project would not implement land uses that generate new residents and would not require the construction of replacement housing. Accordingly, the City has anticipated – and planned for – the growth that would occur on the Project site and there is no potential for the Project to result in an adverse, cumulatively considerable environmental effect related to population and housing.</p> <p><u>Public Services</u> All development projects in the City of Moreno Valley, including the Project, would be required to pay development impact fees, a portion of which would be used by the City for the provision of public services, to offset the incremental increase in demand for fire protection and police protection services. Furthermore, future development would generate an on-going stream of property tax revenue and sales tax revenue, which would provide funds that could be used by the City of Moreno Valley for the provision of fire and police protection services. The Project would not directly result in the introduction of new residents to the City and, therefore, would have no potential to result in cumulatively considerable impacts to resident-serving public facilities such as schools, parks, libraries, and other public facilities or services.</p> <p><u>Recreation</u> The Project would have no impact to recreation facilities. Therefore, there is no potential for the Project to contribute to a cumulatively considerable impact under this topic.</p> <p><u>Transportation</u> The Project would not conflict with any City policies addressing the circulation network and would not generate substantial VMT. Therefore, the Project would not contribute to any cumulatively-considerable adverse transportation effects.</p> <p><u>Tribal Cultural Resource</u> Development activities on the Project site would not impact any known tribal cultural resources. However, there is the remote potential that such resources are buried beneath the surface of the Project site and could be impacted during construction. Other projects within region would similarly have the potential to impact unknown, subsurface tribal cultural resources during ground-disturbing activities. Therefore, the potential for development on the Project site to impact subsurface tribal cultural resource deposits is a cumulatively considerable impact. Application of MMs TCR-1 though TCR-6 would reduce the Project’s cumulative impacts to less-than-significant levels.</p> <p><u>Utilities and Service Systems</u> The Project would require water and wastewater infrastructure, as well as solid waste disposal for building operation. Development of public utility infrastructure is part of an extensive planning process involving utility providers and jurisdictions with discretionary review authority. The coordination process associated with the preparation of infrastructure plans is intended to ensure that adequate public utility services and resources are available to serve both individual development projects and cumulative growth in the region. Each individual development project is subject to review for utility capacity to avoid unanticipated interruptions in service or inadequate supplies. Coordination with the utility providers would allow for the provision of utility services to the Project and other developments. The Project and other planned projects are subject to connection and service fees to offset increased demand and assist in facility expansion and service improvements (at the time of need). Because of the utility planning and coordination activities described above, cumulatively considerable impacts to utilities and service systems would not occur.</p> <p><u>Wildfire</u> The Project site is not located in a SRA or very high fire hazard area. Therefore, implementation of the Project would result in no adverse impacts associated with wildfire.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: The Project's potential to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this IS/MND. As demonstrated by this analysis, construction and operation of the Project would not involve any activities that would result in environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly.</p>				



Compass Danbe Centerpointe

AIR QUALITY IMPACT ANALYSIS

CITY OF MORENO VALLEY

PREPARED BY:

Haseeb Qureshi
hqureshi@urbanxroads.com

Alyssa Tamase
atamase@urbanxroads.com

NOVEMBER 12, 2020

13661-02 AQ Report

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE OF CONTENTS

TABLE OF CONTENTS	I
APPENDICES	II
LIST OF EXHIBITS	II
LIST OF TABLES	II
LIST OF ABBREVIATED TERMS	IV
EXECUTIVE SUMMARY	1
ES.1 Summary of Findings.....	1
ES.2 Standard Regulatory Requirements.....	1
ES.3 Construction and Operational-Source Mitigation Measures.....	2
1 INTRODUCTION	4
1.1 Site Location.....	4
1.2 Project Description.....	4
2 AIR QUALITY SETTING	8
2.1 South Coast Air Basin	8
2.2 Regional Climate	8
2.3 Wind Patterns and Project Location	9
2.4 Criteria Pollutants	10
2.5 Existing Air Quality	17
2.6 Regional Air Quality	20
2.7 Local Air Quality	20
2.8 Regulatory Background.....	21
2.9 Regional Air Quality Improvement	25
3 PROJECT AIR QUALITY IMPACT	36
3.1 Introduction	36
3.2 Standards of Significance	36
3.3 Models Employed To Analyze Air Quality.....	37
3.4 Construction Emissions.....	37
3.5 Operational Emissions	40
3.6 Localized Significance.....	45
3.7 Construction-Source Emissions LST Analysis	49
3.8 Localized Significance – Long-Term Operational Activity	50
3.9 CO “Hot Spot” Analysis	52
3.10 Air Quality Management Planning.....	54
3.11 Potential Impacts to Sensitive Receptors	56
3.12 Odors.....	58
3.13 Cumulative Impacts	59
4 REFERENCES	62
5 CERTIFICATIONS	66

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDICES

APPENDIX 2.1: STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS	
APPENDIX 3.1: CALEEMOD PROJECT CONSTRUCTION (UNMITIGATED) EMISSIONS MODEL OUTPUTS	
APPENDIX 3.2: CALEEMOD PROJECT OPERATIONAL (PASSENGER CARS) EMISSIONS MODEL OUTPUTS	
APPENDIX 3.3: CALEEMOD PROJECT OPERATIONAL (TRUCKS) EMISSIONS MODEL OUTPUTS	
APPENDIX 3.4: EMFAC2017 EMISSION RATES	
APPENDIX 3.5: SCAQMD BRIEF OF AMICUS CURIAE	

LIST OF EXHIBITS

EXHIBIT 1-A: LOCATION MAP.....	5
EXHIBIT 1-B: SITE PLAN.....	6
EXHIBIT 2-A: DPM AND DIESEL VEHICLE MILES TREND.....	33
EXHIBIT 3-A: SENSITIVE RECEPTOR LOCATIONS	48

LIST OF TABLES

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS	1
TABLE 2-1: CRITERIA POLLUTANTS	10
TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (1 OF 2).....	18
TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (2 OF 2).....	19
TABLE 2-3: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SCAB	20
TABLE 2-4: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2017-2019.....	21
TABLE 2-5: SCAB O ₃ TREND	26
TABLE 2-6: SCAB AVERAGE 24-HOUR CONCENTRATION PM ₁₀ TREND (BASED ON FEDERAL STANDARD) ¹ 27	27
TABLE 2-7: SCAB ANNUAL AVERAGE CONCENTRATION PM ₁₀ TREND (BASED ON STATE STANDARD) ¹ ..	28
TABLE 2-8: SCAB 24-HOUR AVERAGE CONCENTRATION PM _{2.5} TREND (BASED ON FEDERAL STANDARD) ¹ 28	28
TABLE 2-9: SCAB ANNUAL AVERAGE CONCENTRATION PM _{2.5} TREND (BASED ON STATE STANDARD) ¹ ..	29
TABLE 2-10: SCAB 8-HOUR AVERAGE CONCENTRATION CO TREND ¹	30
TABLE 2-11: SCAB 1-HOUR AVERAGE CONCENTRATION NO ₂ TREND (BASED ON FEDERAL STANDARD)	31
TABLE 2-12: SCAB 1-HOUR AVERAGE CONCENTRATION NO ₂ TREND (BASED ON STATE STANDARD) ...	31
TABLE 3-1: MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS	36
TABLE 3-2: CONSTRUCTION DURATION.....	38
TABLE 3-3: CONSTRUCTION EQUIPMENT ASSUMPTIONS	39
TABLE 3-4: PROJECT CONSTRUCTION EMISSIONS SUMMARY – WITHOUT MITIGATION	40
TABLE 3-5: PASSENGER CAR FLEET MIX	42
TABLE 3-6: TRUCK FLEET MIX	43
TABLE 3-7: SUMMARY OF PEAK OPERATIONAL EMISSIONS– WITHOUT MITIGATION.....	44
TABLE 3-8: MAXIMUM DAILY LOCALIZED EMISSIONS THRESHOLDS	49
TABLE 3-9: PROJECT LOCALIZED CONSTRUCTION EMISSIONS – WITHOUT MITIGATION	50
TABLE 3-10: MAXIMUM DAILY LOCALIZED OPERATIONAL EMISSIONS THRESHOLDS.....	51
TABLE 3-11: LOCALIZED SIGNIFICANCE SUMMARY OF OPERATIONS – WITHOUT MITIGATION	52
TABLE 3-12: CO MODEL RESULTS	52

TABLE 3-13: TRAFFIC VOLUMES 54
TABLE 3-14: EAP TRAFFIC VOLUMES 54

LIST OF ABBREVIATED TERMS

%	Percent
°F	Degrees Fahrenheit
(1)	Reference
µg/m ³	Microgram per Cubic Meter
AB 2595	California Clean Air Act
AQ	Air Quality
AQIA	Air Quality Impact Analysis
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
BAAQMD	Bay Area Air Quality Management District
BC	Black Carbon
Brief	Brief of Amicus Curiae by the SCAQMD in the Friant Ranch Case
C ₂ Cl ₄	Perchloroethylene
C ₂ H ₄	Acetaldehyde
C ₄ H ₆	1,3-butadiene
C ₆ H ₆	Benzene
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
<i>CEQA Guidelines</i>	<i>2019 California Environmental Quality Act Guidelines</i>
CH ₂ O	Formaldehyde
City	City of Moreno Valley
CO	Carbon Monoxide
COH	Coefficient of Haze
COHb	carboxyhemoglobin
Cr(VI)	Chromium

CTP	Clean Truck Program
DPM	Diesel Particulate Matter
DRRP	Diesel Risk Reduction Plan
EAP	Existing Plus Ambient Growth Plus Project
EC	Elemental Carbon
EIR	Environmental Impact Reports
EMFAC	EMissions FACtor Model
EPA	Environmental Protection Agency
ETW	Equivalent Test Weight
g/L	Grams Per Liter
GHG	Greenhouse Gas
GPA	General Plan Amendment
GVWR	Gross Vehicle Weight Rating
H ₂ S	Hydrogen Sulfide
HDT	Heavy Duty Trucks
HI	Hazard Index
HHDT	Heavy-Heavy-Duty Trucks
hp	Horsepower
HRA	Health Risk Assessment
ITE	Institute of Transportation Engineers
lbs	Pounds
lbs/day	Pounds Per Day
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LST	Localized Significance Threshold
LST Methodology	Final Localized Significance Threshold Methodology
MARB/IPA	March Air Reserve Base and Inland Port Airport
MATES	Multiple Air Toxics Exposure Study
MDV	Medium-Duty Vehicles
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measures
N ₂	Nitrogen
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NO	Nitric Oxide
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
O ₂	Oxygen

O ₃	Ozone
OBD-II	On-Board Diagnostic
OPR	Office of Planning and Research
Pb	Lead
PCE	Passenger Car Equivalents
PM ₁₀	Particulate Matter 10 microns in diameter or less
PM _{2.5}	Particulate Matter 2.5 microns in diameter or less
POLA	Port of Los Angeles
POLB	Port of Long Beach
ppm	Parts Per Million
Project	Compass Danbe Centerpointe
RECLAIM	Regional Clean Air Incentives Market
RFG-2	Reformulated Gasoline Regulation
ROG	Reactive Organic Gases
RTP/SCS	Regional Transportation Plan/ Sustainable Communities Strategy
Rule 403	Fugitive Dust
Rule 1113	Architectural Coating
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
sf	Square Feet
SIPs	State Implementation Plans
SO ₂	Sulfur Dioxide
SO ₄	Sulfates
SO _x	Sulfur Oxides
SRA	Source Receptor Area
TAC	Toxic Air Contaminant
TDM	Transportation Demand Management
TA	<i>Alessandro Warehouse Traffic Impact Analysis</i>
TITLE I	Non-Attainment Provisions
TITLE II	Mobile Sources Provisions
TRU	Transport Refrigeration Unit
UFP	Ultra Fine Particles
UTRs	Utility Tractors
C ₂ H ₃ Cl	Vinyl Chloride
VMT	Vehicle Miles Traveled

VOC Volatile Organic Compounds
VPH Vehicles Per Hour
ZC Zone Change

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Compass Danbe Centerpointe Air Quality Impact Analysis* are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the *2019 California Environmental Quality Act (CEQA) Guidelines (CEQA Guidelines)* (1). Table ES-1 shows the findings of significance for each potential air quality impact under CEQA before and after any required mitigation measures described below.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Regional Construction Emissions	3.4	<i>Less Than Significant</i>	<i>n/a</i>
Localized Construction Emissions	3.6	<i>Less Than Significant</i>	<i>n/a</i>
Regional Operational Emissions	3.5	<i>Less Than Significant</i>	<i>n/a</i>
Localized Operational Emissions	3.7	<i>Less Than Significant</i>	<i>n/a</i>
CO "Hot Spot" Analysis	3.8	<i>Less Than Significant</i>	<i>n/a</i>
Air Quality Management Plan	3.9	<i>Less Than Significant</i>	<i>n/a</i>
Sensitive Receptors	3.10	<i>Less Than Significant</i>	<i>n/a</i>
Odors	3.11	<i>Less Than Significant</i>	<i>n/a</i>
Cumulative Impacts	3.12	<i>Less Than Significant</i>	<i>n/a</i>

ES.2 STANDARD REGULATORY REQUIREMENTS

There are numerous requirements that development projects must comply with by law, and that were put in place by federal, State, and local regulatory agencies for the improvement of air quality. The two most pertinent regulatory requirements that apply to the proposed Project and which are required by South Coast Air Quality Management District (SCAQMD) Rules that are currently applicable during construction activity for this Project are Rule 403 (Fugitive Dust) (2)

and Rule 1113 (Architectural Coatings) (3). Because they are required by law, credit for Rule 403 and Rule 1113 have been taken in the analysis.

SCAQMD RULE 403

This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities.

SCAQMD RULE 1113

This rule serves to limit the Volatile Organic Compound (VOC) content of architectural coatings used on projects in the SCAQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects in the SCAQMD must comply with the current VOC standards set in this rule.

ES.3 CONSTRUCTION AND OPERATIONAL-SOURCE MITIGATION MEASURES

The Project would not result in an exceedance of any regional or localized construction or operational-source emissions thresholds. As such, the Project would not result in any significant impacts and no MMs are required.

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

1 INTRODUCTION

This report presents the results of the air quality impact analysis (AQIA) prepared by Urban Crossroads, Inc., for the proposed Compass Danbe Centerpointe (Project). The purpose of this AQIA is to evaluate the potential impacts to air quality associated with construction and operation of the proposed Project and recommend measures to mitigate impacts considered potentially significant in comparison to thresholds established by the SCAQMD.

1.1 SITE LOCATION

The proposed project is located south of Alessandro Boulevard on either side of Chagall Court in the City of Moreno Valley as shown on Exhibit 1-A. The March Air Reserve Base/Inland Port Airport (MARB/IPA) is located approximately 0.9 miles south of the Project site. The Project site is bordered to the west by vacant land, to the east by vacant land, to the north by commercial and residential uses, and to the south are existing industrial buildings.

This proposed Project includes a General Plan Amendment (GPA) and a Zone Change (ZC). The site is currently designated as Commercial in the City's General Plan, which would require a land use and zoning change to Light Industrial use. The proposed changes are consistent with the zones to the west, south and east of the subject site and adjacent properties. The amendment is in keeping with the uses surrounding the project site.

1.2 PROJECT DESCRIPTION

Exhibit 1-B illustrates a preliminary site plan for the Project. The Project is anticipated to be developed within a single phase with an anticipated opening year of 2022. The proposed Project consists of the following uses:

- Building 1: 206,665 square feet (sf) of warehousing (70% of total building sf) and 88,571 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 295,236 sf for Building 1
- Building 2: 70,876 sf of warehousing (70% of total building sf) and 30,376 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 101,252 sf for Building 2

This analysis includes a conservative assumption of on-site Project-related emission sources for potential future tenants, including architectural coatings, consumer products, landscape maintenance equipment, emissions associated with natural gas and electricity, and mobile source emissions. This analysis is intended to describe air impacts associated with the expected operational activities at the Project site. This report assumes the Project will operate 24-hours daily for seven days per week. At the time this air quality impact analysis was prepared, the future tenants of the proposed Project were unknown however any tenant would operate consistent with a high-cube warehouse.

EXHIBIT 1-A: LOCATION MAP



Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

2 AIR QUALITY SETTING

This section provides an overview of the existing air quality conditions in the Project area and region.

2.1 SOUTH COAST AIR BASIN

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD (4). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As previously stated, the Project site is located within the SCAB, a 6,745-square mile subregion of the SCAQMD, which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County.

The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bounded by the San Gabriel Mountains to the south and west, the Los Angeles/Kern County border to the north, and the Los Angeles/San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley.

2.2 REGIONAL CLIMATE

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality.

The annual average temperatures throughout the SCAB vary from the low to middle 60s degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO₂) to sulfates (SO₄) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los

Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed “Santa Anas” each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the “Catalina Eddy,” a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as Nitrogen Oxides (NO_x) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

2.3 WIND PATTERNS AND PROJECT LOCATION

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and

low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter.

Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

2.4 CRITERIA POLLUTANTS

Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below (5):

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
CO	CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone (O ₃), motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen (O ₂) supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with O ₂ transport and competing with O ₂ to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for O ₂ supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (O ₂ deficiency) as seen at high altitudes.

Criteria Pollutant	Description	Sources	Health Effects
SO ₂	SO ₂ is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO ₂ oxidizes in the atmosphere, it forms SO ₄ . Collectively, these pollutants are referred to as sulfur oxides (SO _x).	Coal or oil burning power plants and industries, refineries, diesel engines	<p>A few minutes of exposure to low levels of SO₂ can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO₂. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO₂.</p> <p>Animal studies suggest that despite SO₂ being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.</p> <p>Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO₂ levels. In these studies, efforts to separate the effects of SO₂ from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.</p>

Criteria Pollutant	Description	Sources	Health Effects
NO _x	NO _x consist of nitric oxide (NO), nitrogen dioxide (NO ₂) and nitrous oxide (N ₂ O) and are formed when nitrogen (N ₂) combines with O ₂ . Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. NO _x is typically created during combustion processes and are major contributors to smog formation and acid deposition. NO ₂ is a criteria air pollutant and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of nitrogen oxide compounds, NO ₂ is the most abundant in the atmosphere. As ambient concentrations of NO ₂ are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO ₂ than those indicated by regional monitoring station.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	<p>Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO₂ at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO₂ in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.</p> <p>In animals, exposure to levels of NO₂ considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of O₃ exposure increases when animals are exposed to a combination of O₃ and NO₂.</p>
O ₃	O ₃ is a highly reactive and unstable gas that is formed when VOCs and NO _x , both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O ₃ concentrations are generally highest during the summer	Formed when reactive organic gases (ROG) and NO _x react in the presence of sunlight. ROG sources include any source	Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for O ₃ effects. Short-term exposure (lasting for a

Criteria Pollutant	Description	Sources	Health Effects
	months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.	that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and storage and pesticides.	<p>few hours) to O₃ at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated O₃ levels are associated with increased school absences. In recent years, a correlation between elevated ambient O₃ levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live in communities with high O₃ levels.</p> <p>O₃ exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes O₃ may be more toxic than exposure to O₃ alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.</p>
Particulate Matter	PM ₁₀ : A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Particulate matter pollution is a major cause of reduce visibility (haze) which is caused by the scattering of light	Sources of PM ₁₀ include road dust, windblown dust and construction. Also formed from other pollutants (acid rain, NO _x , SO _x ,	A consistent correlation between elevated ambient fine particulate matter (PM ₁₀ and PM _{2.5}) levels and an increase in mortality rates, respiratory infections, number and severity of

Criteria Pollutant	Description	Sources	Health Effects
	<p>and consequently the significant reduction air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. Additionally, it should be noted that PM₁₀ is considered a criteria air pollutant.</p> <p>PM_{2.5}: A similar air pollutant to PM₁₀ consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include SO₄ formed from SO₂ release from power plants and industrial facilities and nitrates that are formed from NO_x release from power plants, automobiles and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. PM_{2.5} is a criteria air pollutant.</p>	<p>organics). Incomplete combustion of any fuel.</p> <p>PM_{2.5} comes from fuel combustion in motor vehicles, equipment and industrial sources, residential and agricultural burning. Also formed from reaction of other pollutants (acid rain, NO_x, SO_x, organics).</p>	<p>asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in lifespan, and an increased mortality from lung cancer.</p> <p>Daily fluctuations in PM_{2.5} concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long term exposure to particulate matter.</p> <p>The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM₁₀ and PM_{2.5}.</p>
VOC	<p>VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not</p>	<p>Organic chemicals are widely used as ingredients in household products. Paints, varnishes and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing and hobby products.</p>	<p>Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several.</p>

Criteria Pollutant	Description	Sources	Health Effects
	form O ₃ to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O ₃ , which is a criteria pollutant. The terms VOC and ROG (see below) interchangeably.	Fuels are made up of organic chemicals. All of these products can release organic compounds while you are using them, and, to some degree, when they are stored.	
ROG	Similar to VOC, ROGs are also precursors in forming O ₃ and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO _x react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O ₃ , which is a criteria pollutant. The terms ROG and VOC (see previous) interchangeably.	Sources similar to VOCs.	Health effects similar to VOCs.
Lead (Pb)	Pb is a heavy metal that is highly persistent in the environment and is considered a criteria pollutant. In the past, the primary source of Pb in the air was emissions from vehicles burning leaded gasoline. The major sources of Pb emissions are ore and metals processing, particularly Pb smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. It should be noted that the Project does not include	Metal smelters, resource recovery, leaded gasoline, deterioration of Pb paint.	Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure.

Criteria Pollutant	Description	Sources	Health Effects
	operational activities such as metal processing or Pb acid battery manufacturing. As such, the Project is not anticipated to generate a quantifiable amount of Pb emissions.		Pb poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of Pb on the respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers.
Odor	Odor means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves (6).	Odors can come from many sources including animals, human activities, industry, natures, and vehicles.	Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

2.5 EXISTING AIR QUALITY

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 2-2 (7).

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. At the time of this AQIA, the most recent state and federal standards were updated by CARB on May 4, 2016 and are presented in Table 2-2. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O₃, CO, SO₂ (1 and 24 hour), NO₂, PM₁₀, and PM_{2.5} do not exceed standards. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the State assigns attainment status. Attainment status for a pollutant means that the SCAQMD meets the standards set by the Environmental Protection Agency (EPA) or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, CARB has implemented a State Implementation Plan (SIP). The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area (8).

TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (1 OF 2)

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,8}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM10) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM2.5) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³			15 µg/m^{3}
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

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California Air Resources Board (5/4/16)

TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (2 OF 2)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr: ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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California Air Resources Board (5/4/16)

2.6 REGIONAL AIR QUALITY

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for six of the most common air pollutants: CO, Pb, O₃, particulate matter (PM₁₀ and PM_{2.5}), NO₂, and SO₂ which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 37 permanent monitoring stations and 5 single-pollutant source Pb air monitoring sites throughout the air district (9). On February 21, 2019, CARB posted the 2018 amendments to the state and national area designations. See Table 2-3 for attainment designations for the SCAB (10). Appendix 2.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB.

TABLE 2-3: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SCAB

Criteria Pollutant	State Designation	Federal Designation
O ₃ – 1-hour standard	Nonattainment	--
O ₃ – 8-hour standard	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Unclassifiable/Attainment
NO ₂	Attainment	Unclassifiable/Attainment
SO ₂	Unclassifiable/Attainment	Unclassifiable/Attainment
Pb ¹	Attainment	Unclassifiable/Attainment

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the SCAB
 "--" = The national 1-hour O₃ standard was revoked effective June 15, 2005.

2.7 LOCAL AIR QUALITY

The SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to provide Southern California residents about the air quality conditions. The Project site is located within the Perris Valley area (SRA 24). The Perris Valley monitoring station is located approximately 8.5 miles southeast of the Project site and reports air quality statistics for O₃ and PM₁₀. As the Perris Valley monitoring station does not include statistics for CO, NO₂, and PM_{2.5}, the next nearest station will be used. The Metropolitan Riverside County (SRA 23) monitoring station, located approximately 10.7 miles northwest of the Project, is the next nearest monitoring stations that reports air quality statistics for CO, NO₂, and PM_{2.5}. It should be noted that the Metropolitan Riverside County monitoring station was utilized in lieu of the Perris Valley monitoring station only in instances where data was not available.

The most recent three (3) years of data available is shown on Table 2-4 and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5}

¹ The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

for 2017 through 2019 was obtained from the SCAQMD Air Quality Data Tables (11). Additionally, data for SO₂ has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO₂ concentrations.

TABLE 2-4: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2017-2019

Pollutant	Standard	Year		
		2017	2018	2019
O ₃				
Maximum Federal 1-Hour Concentration (ppm)		0.120	0.117	0.118
Maximum Federal 8-Hour Concentration (ppm)		0.105	0.103	0.095
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	33	31	26
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	80	67	64
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.9	2.2	1.5
Maximum Federal 8-Hour Concentration	> 20 ppm	1.7	2.0	1.2
NO ₂				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.063	0.055	0.056
Annual Federal Standard Design Value		0.015	0.014	0.014
PM ₁₀				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 150 µg/m ³	75	64	97
Annual Federal Arithmetic Mean (µg/m ³)		32.2	29.7	25.3
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m ³	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m ³	11	3	4
PM _{2.5}				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 35 µg/m ³	50.30	50.70	46.70
Annual Federal Arithmetic Mean (µg/m ³)	> 12 µg/m ³	12.18	12.41	11.13
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m ³	6	2	4

ppm= Parts Per Million

Source: Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5} was obtained from SCAQMD Air Quality Data Tables.

2.8 REGULATORY BACKGROUND

2.8.1 FEDERAL REGULATIONS

The EPA is responsible for setting and enforcing the NAAQS for O₃, CO, NO_x, SO₂, PM₁₀, and Pb (12). The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (13). The CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions) (14) (15). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O₃, NO₂, SO₂, PM₁₀, CO, PM_{2.5}, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O₃ and to adopt a NAAQS for PM_{2.5}. Table 2-3 (previously presented) provides the NAAQS within the SCAB.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_x. NO_x is a collective term that includes all forms of NO_x which are emitted as byproducts of the combustion process.

2.8.2 CALIFORNIA REGULATIONS

CARB

CARB, which became part of the CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO₄, visibility, hydrogen sulfide (H₂S), and vinyl chloride (C₂H₃Cl). However, at this time, H₂S and C₂H₃Cl are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (16) (12).

Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;

- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROG_s, NO_x, CO and PM₁₀. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

TITLE 24 ENERGY EFFICIENCY STANDARDS AND CALIFORNIA GREEN BUILDING STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2019 California Green Building Code Standards that became effective January 1, 2020.

Local jurisdictions are permitted to adopt more stringent requirements, as state law provides methods for local enhancements. CALGreen recognizes that many jurisdictions have developed existing construction waste and demolition ordinances and defers to them as the ruling guidance provided they establish a minimum 65% diversion requirement.

The code also provides exemptions for areas not served by construction waste and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings must meet in order to be certified for occupancy, which is generally enforced by the local building official.

Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas (GHG) emissions. The 2019 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on January 1, 2020.

The 2019 Title 24 standards will result in less energy use, thereby reducing air pollutant emissions associated with energy consumption in the SCAB and across the State of California. For example, the 2019 Title 24 standards require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, and update indoor and outdoor lighting requirements for nonresidential buildings.

The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar photovoltaic systems, homes built under the 2019 standards will use about 53% less energy than homes built under the 2016 standards. Nonresidential buildings (such as the Project) will use approximately 30% less energy due to lighting upgrade requirements (18).

Because the Project will be constructed after January 1, 2020, the 2019 CALGreen standards are applicable to the Project and require, among other items (19):

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- Electric vehicle (EV) charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3 (5.106.5.3).
- Outdoor light pollution reduction. Outdoor lighting systems shall be designed to meet the backlight, upright and glare ratings per Table 5.106.8 (5.106.8)
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section
- 5.408.1.1. 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
 - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
 - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).

- Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).
- Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
- Outdoor portable water use in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient (MWELO), whichever is more stringent (5.304.1).
- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 sf or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gallons per day (5.303.1.1 and 5.303.1.2).
- Outdoor water use in rehabilitated landscape projects equal or greater than 2,500 sf. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 sf requiring a building or landscape permit (5.304.3).
- Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

2.8.3 AQMP

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMP to meet the state and federal ambient air quality standards (17). AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. A detailed discussion on the AQMP and Project consistency with the AQMP is provided in Section 3.10.

2.9 REGIONAL AIR QUALITY IMPROVEMENT

The Project is within the jurisdiction of the SCAQMD. In 1976, California adopted the Lewis Air Quality Management Act which created SCAQMD from a voluntary association of air pollution control districts in Los Angeles, Orange, Riverside, and San Bernardino counties. The geographic area of which SCAQMD consists is known as the SCAB. SCAQMD develops comprehensive plans and regulatory programs for the region to attain federal standards by dates specified in federal law. The agency is also responsible for meeting state standards by the earliest date achievable, using reasonably available control measures.

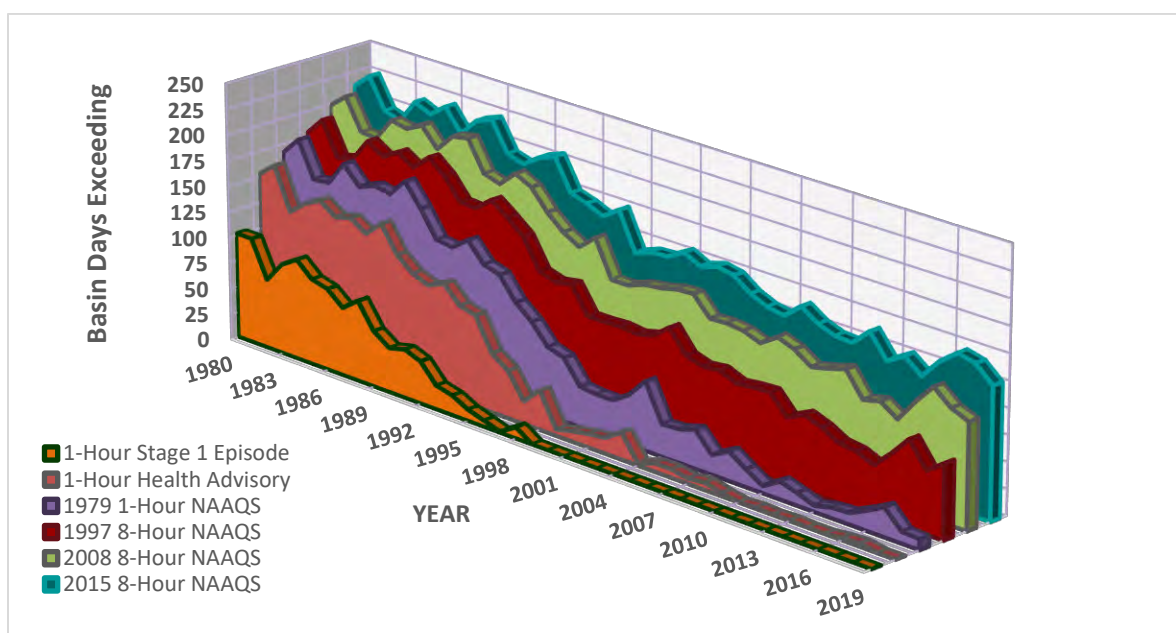
SCAQMD rule development through the 1970s and 1980s resulted in dramatic improvement in SCAB air quality. Nearly all control programs developed through the early 1990s relied on (i) the

development and application of cleaner technology; (ii) add-on emission controls, and (iii) uniform CEQA review throughout the SCAB. Industrial emission sources have been significantly reduced by this approach and vehicular emissions have been reduced by technologies implemented at the state level by CARB.

As discussed above, the SCAQMD is the lead agency charged with regulating air quality emission reductions for the entire SCAB. SCAQMD created AQMPs which represent a regional blueprint for achieving healthful air on behalf of the 16 million residents of the SCAB. The 2012 AQMP states, “the remarkable historical improvement in air quality since the 1970’s is the direct result of Southern California’s comprehensive, multiyear strategy of reducing air pollution from all sources as outlined in its AQMPs,” (18).

Emissions of O₃, NO_x, VOC, and CO have been decreasing in the SCAB since 1975 and are projected to continue to decrease through 2020 (19). These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although vehicle miles traveled (VMT) in the SCAB continue to increase, NO_x and VOC levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_x emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy. O₃ contour maps show that the number of days exceeding the 8-hour NAAQS has generally decreased between 1980 and 2019. For 2019, there was an overall decrease in exceedance days compared with the 1980 period. However, as shown on Table 2-5, O₃ levels have increased in the past three years due to higher temperatures and stagnant weather conditions. Notwithstanding, O₃ levels in the SCAB have decreased substantially over the last 30 years with the current maximum measured concentrations being approximately one-third of concentrations within the late 70’s (20).

TABLE 2-5: SCAB O₃ TREND



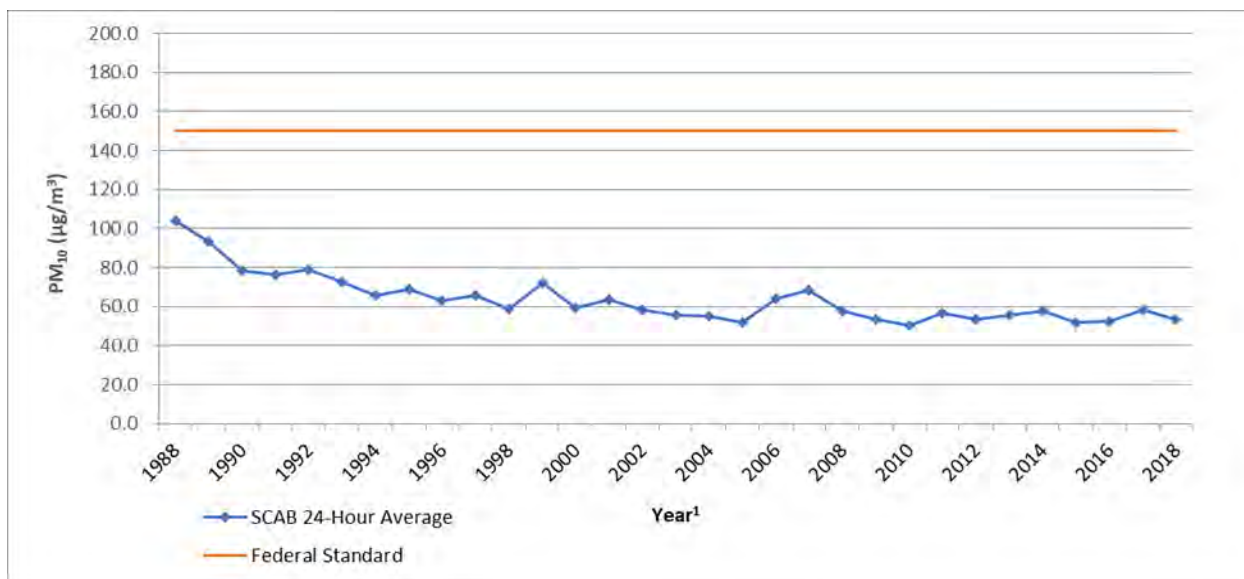
Source: 2020 SCAQMD, Historical O₃ Air Quality Trends (1976-2018)

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The overall trends of PM₁₀ and PM_{2.5} levels in the air (not emissions) show an overall improvement since 1975. Direct emissions of PM₁₀ have remained somewhat constant in the SCAB and direct emissions of PM_{2.5} have decreased slightly since 1975. Area wide sources (fugitive dust from roads, dust from construction and demolition, and other sources) contribute the greatest amount of direct particulate matter emissions.

As with other pollutants, the most recent PM₁₀ statistics show an overall improvement as illustrated in Tables 2-6 and 2-7. During the period for which data are available, the 24-hour national annual average concentration for PM₁₀ decreased by approximately 48%, from 103.7 microgram per cubic meter ($\mu\text{g}/\text{m}^3$) in 1988 to 53.5 $\mu\text{g}/\text{m}^3$ in 2018 (21). Although the values are below the federal standard, it should be noted that there are days within the year where the concentrations will exceed the threshold. The 24-hour state annual average for emissions for PM₁₀, have decreased by approximately 53% since 1988 (21). Although data in the late 1990's show some variability, this is probably due to the advances in meteorological science rather than a change in emissions. Similar to the ambient concentrations, the calculated number of days above the 24-hour PM₁₀ standards has also shown an overall drop.

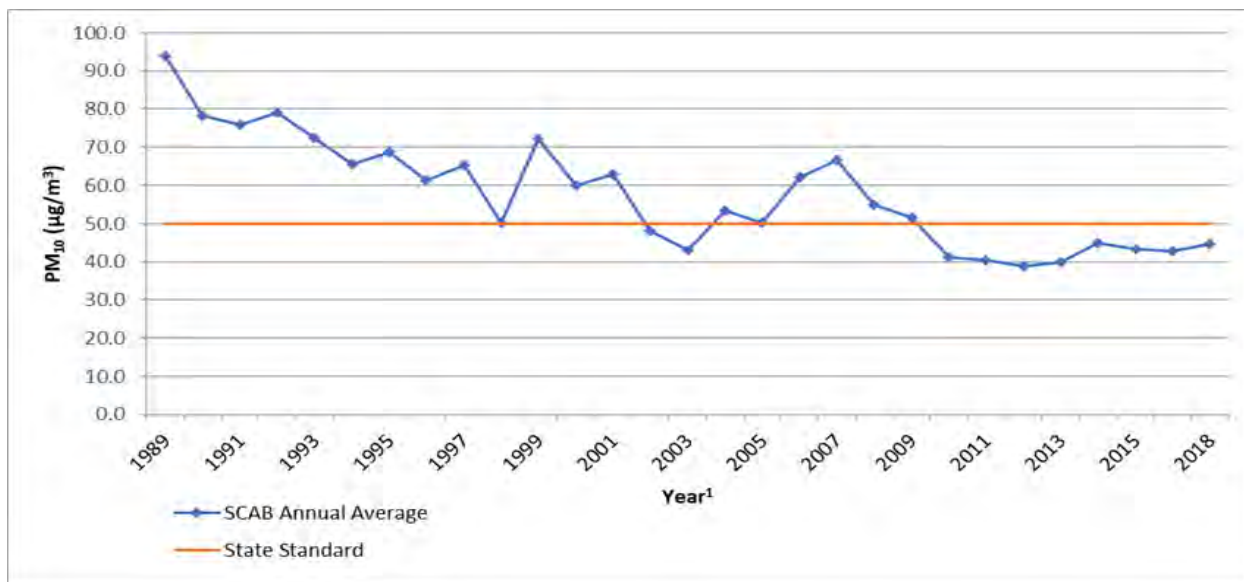
TABLE 2-6: SCAB AVERAGE 24-HOUR CONCENTRATION PM₁₀ TREND (BASED ON FEDERAL STANDARD)¹



Source: 2020 CARB, iADAM: Top Four Summary: PM₁₀ 24-Hour Averages (1988-2018)

¹ Some year have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

TABLE 2-7: SCAB ANNUAL AVERAGE CONCENTRATION PM₁₀ TREND (BASED ON STATE STANDARD)¹

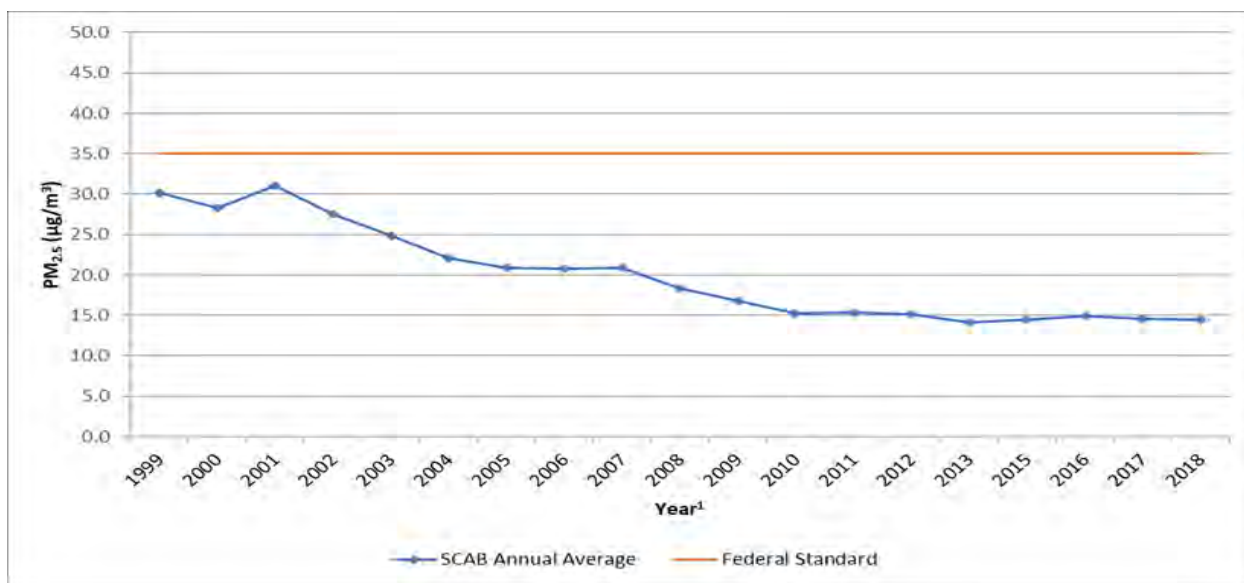


Source: 2020 CARB, iADAM: Top Four Summary: PM₁₀ 24-Hour Averages (1988-2018)

¹ Some year have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

Tables 2-8 and 2-9 shows the most recent 24-hour average PM_{2.5} concentrations in the SCAB from 1999 through 2018. Overall, the national and state annual average concentrations have decreased by almost 52% and 33% respectively (21). It should be noted that the SCAB is currently designated as nonattainment for the state and federal PM_{2.5} standards.

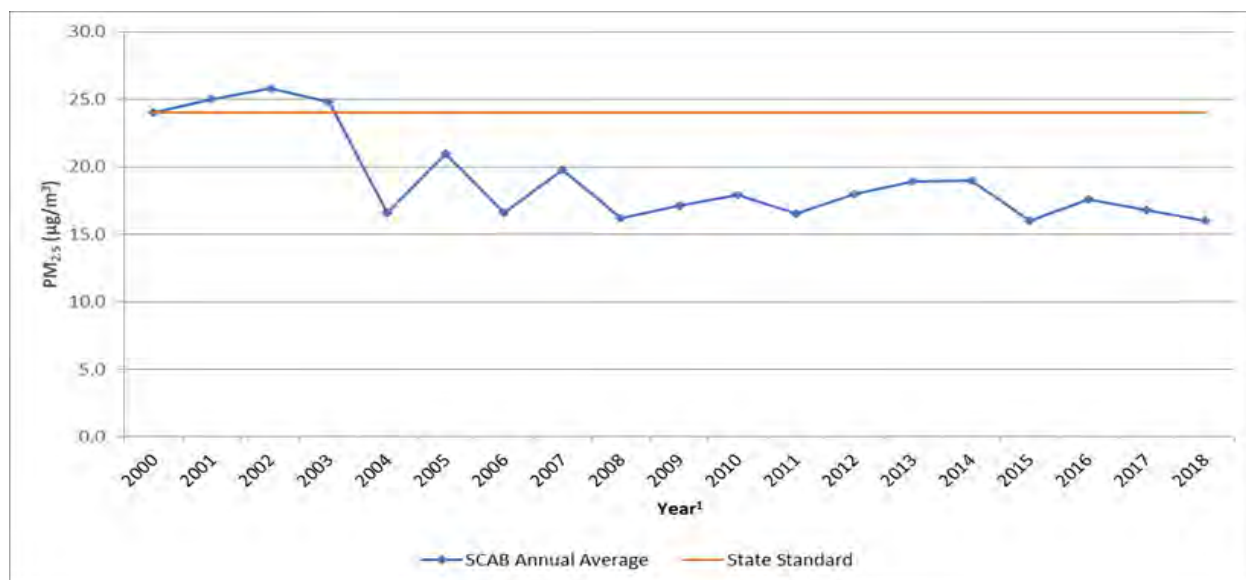
TABLE 2-8: SCAB 24-HOUR AVERAGE CONCENTRATION PM_{2.5} TREND (BASED ON FEDERAL STANDARD)¹



Source: 2020 CARB, iADAM: Top Four Summary: PM_{2.5} 24-Hour Averages (1999-2018)

¹ Some year have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

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TABLE 2-9: SCAB ANNUAL AVERAGE CONCENTRATION PM_{2.5} TREND (BASED ON STATE STANDARD)¹

Source: 2020 CARB, iADAM: Top Four Summary: PM_{2.5} 24-Hour Averages (1999-2018)

¹ Some year have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

While the 2012 AQMP PM₁₀ attainment demonstration and the 2015 associated supplemental SIP submission indicated that attainment of the 24-hour standard was predicted to occur by the end of 2015, it could not anticipate the effect of the ongoing drought on the measured PM_{2.5}.

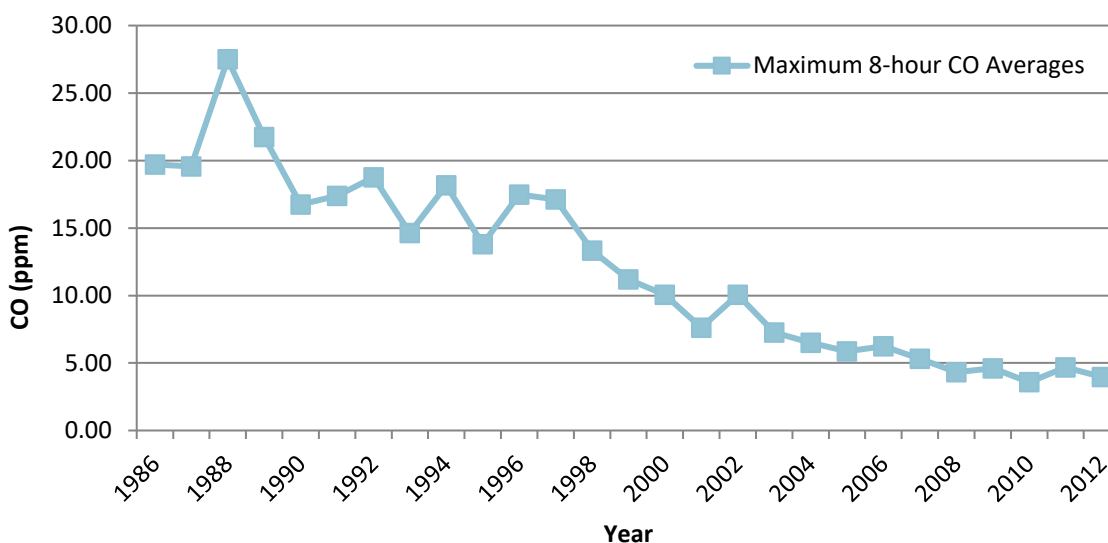
The 2006 to 2010 base period used for the 2012 attainment demonstration had near-normal rainfall. While the trend of PM_{2.5}-equivalent emission reductions continued through 2015, the severe drought conditions contributed to the PM_{2.5} increases observed after 2012. As a result of the disrupted progress toward attainment of the federal 24-hour PM_{2.5} standard, SCAQMD submitted a request and the EPA approved, in January 2016, a "bump up" to the nonattainment classification from "moderate" to "serious," with a new attainment deadline as soon as practicable, but not beyond December 31, 2019. As of March 14, 2019, the EPA approved portions of a SIP revision submitted by California to address CAA requirements for the 2006 24-hour PM_{2.5} NAAQS in the Los Angeles-SCAB Serious PM_{2.5} nonattainment area. The EPA also approved 2017 and 2019 motor vehicle emissions budgets for transportation conformity purposes and inter-pollutant trading ratios for use in transportation conformity analyses (22).

In March 2017, the SCAQMD released the Final 2016 AQMP. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as, explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (23). Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS) and updated emission inventory methodologies for various source categories (17).

The 2022 AQMP is currently being developed by SCAQMD to address the EPA’s strengthened ozone standard. Development of the 2022 AQMP is in its early stages and no formal timeline for completion and adoption is currently known.

The most recent CO concentrations in the SCAB are shown in Table 2-10 (21). CO concentrations in the SCAB have decreased markedly — a total decrease of more about 80% in the peak 8-hour concentration from 1986 to 2012. It should be noted 2012 is the most recent year where 8-hour CO averages and related statistics are available in the SCAB. The number of exceedance days has also declined. The entire SCAB is now designated as attainment for both the state and national CO standards. Ongoing reductions from motor vehicle control programs should continue the downward trend in ambient CO concentrations.

TABLE 2-10: SCAB 8-HOUR AVERAGE CONCENTRATION CO TREND¹



Source: 2020 CARB, iADAM: Top Four Summary: CO 8-Hour Averages (1999-2018)

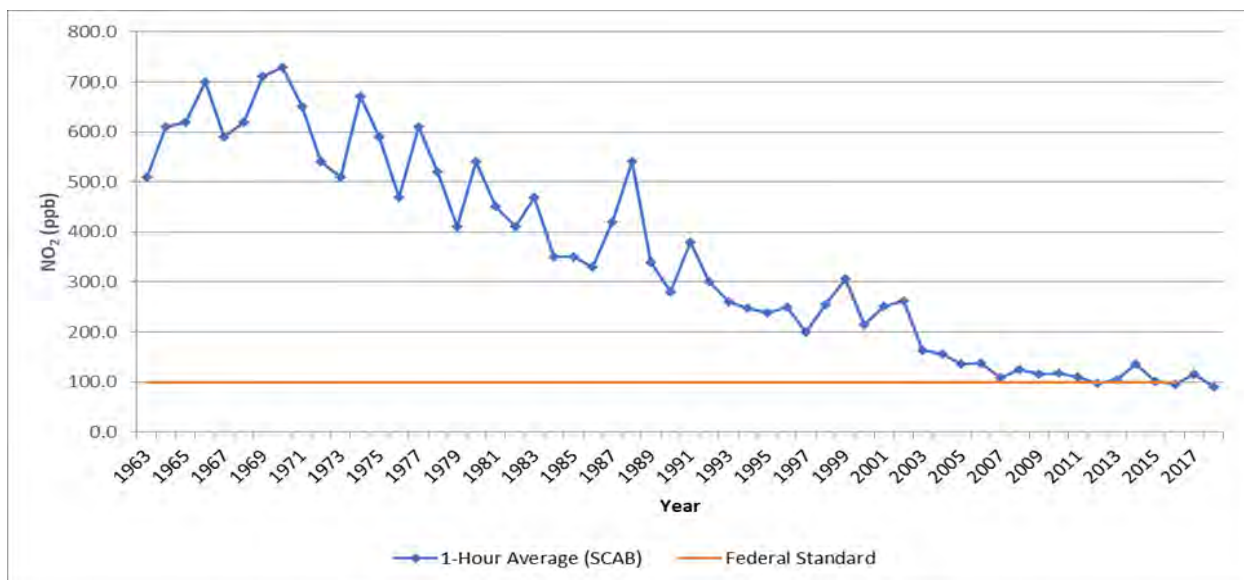
¹ The most recent year where 8-hour concentration data is available is 2012.

Part of the control process of the SCAQMD’s duty to greatly improve the air quality in the SCAB is the uniform CEQA review procedures required by SCAQMD’s *CEQA Air Quality Handbook (1993) (1993 CEQA Handbook)* (24). The single threshold of significance used to assess Project direct and cumulative impacts has in fact “worked” as evidenced by the track record of the air quality in the SCAB dramatically improving over the course of the past decades. As stated by the SCAQMD, the District’s thresholds of significance are based on factual and scientific data and are therefore appropriate thresholds of significance to use for this Project.

The most recent NO₂ data for the SCAB is shown in Tables 2-11 and 2-12 (21). Over the last 50 years, NO₂ values have decreased significantly; the peak 1-hour national and state averages for 2018 is approximately 82% lower than what it was during 1963. The SCAB attained the State 1-hour NO₂ standard in 1994, bringing the entire state into attainment. A new state annual average standard of 0.030 ppm was adopted by the ARB in February 2007 (25). The new standard is just barely exceeded in the SCAQMD. NO₂ is formed from NO_x emissions, which also contribute to O₃.

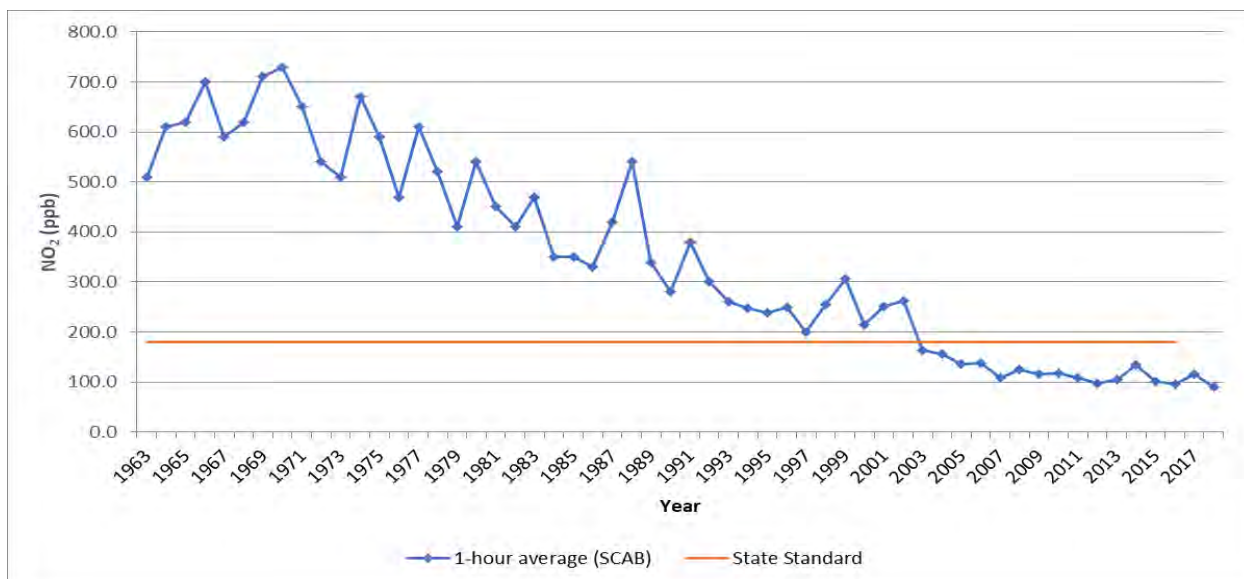
As a result, the majority of the future emission control measures will be implemented as part of the overall O₃ control strategy. Many of these control measures will target mobile sources, which account for more than three-quarters of California’s NO_x emissions. These measures are expected to bring the SCAQMD into attainment of the state annual average standard.

TABLE 2-11: SCAB 1-HOUR AVERAGE CONCENTRATION NO₂ TREND (BASED ON FEDERAL STANDARD)



Source: 2020 CARB, iADAM: Top Four Summary: CO 1-Hour Averages (1963-2018)

TABLE 2-12: SCAB 1-HOUR AVERAGE CONCENTRATION NO₂ TREND (BASED ON STATE STANDARD)



Source: 2020 CARB, iADAM: Top Four Summary: CO 1-Hour Averages (1963-2018)

2.9.1 TOXIC AIR CONTAMINANTS (TAC) TRENDS

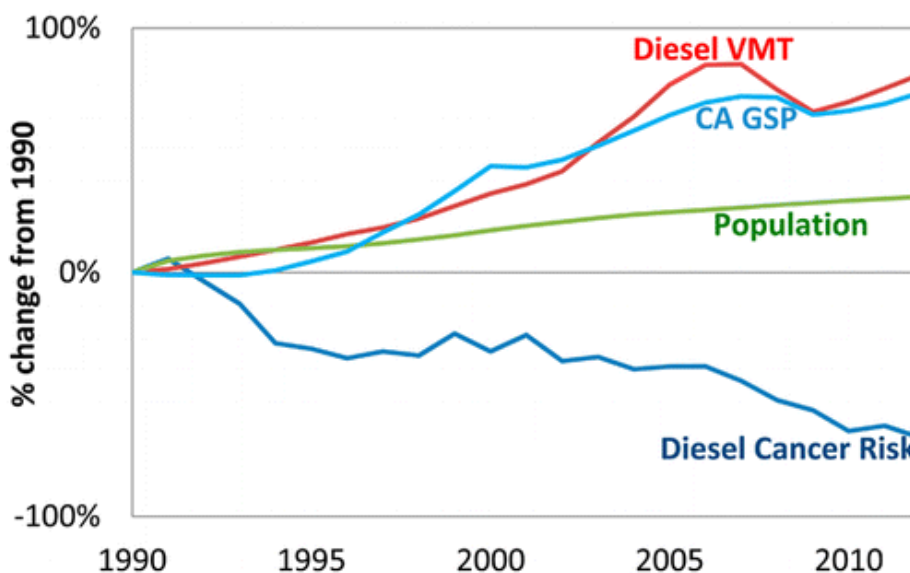
In 1984, as a result of public concern for exposure to airborne carcinogens, CARB adopted regulations to reduce the amount of TAC emissions resulting from mobile and area sources, such as cars, trucks, stationary products, and consumer products. According to the *Ambient and Emission Trends of Toxic Air Contaminants in California* journal article (26) which was prepared for CARB, results show that between 1990-2012, ambient concentration and emission trends for the seven TACs responsible for most of the known cancer risk associated with airborne exposure in California have declined significantly (between 1990 and 2012). The seven TACs studied include those that are derived from mobile sources: diesel particulate matter (DPM), benzene (C₆H₆), and 1,3-butadiene (C₄H₆); those that are derived from stationary sources: perchloroethylene (C₂Cl₄) and hexavalent chromium (Cr(VI)); and those derived from photochemical reactions of emitted VOCs: formaldehyde (CH₂O) and acetaldehyde (C₂H₄O)². The decline in ambient concentration and emission trends of these TACs are a result of various regulations CARB has implemented to address cancer risk.

MOBILE SOURCE TACS

CARB introduced two programs that aimed at reducing mobile emissions for light and medium duty vehicles through vehicle emissions controls and cleaner fuel. In California, light-duty vehicles sold after 1996 are equipped with California's second-generation On-Board Diagnostic (OBD-II) system. The OBD-II system monitors virtually every component that can affect the emission performance of the vehicle to ensure that the vehicle remains as clean as possible over its entire life and assists repair technicians in diagnosing and fixing problems with the computerized engine controls. If a problem is detected, the OBD-II system illuminates a warning lamp on the vehicle instrument panel to alert the driver. This warning lamp typically contains the phrase "Check Engine" or "Service Engine Soon". The system will also store important information about the detected malfunction so that a repair technician can accurately find and fix the problem. CARB has recently developed similar OBD requirements for heavy-duty vehicles over 14,000 pounds (lbs). CARB's phase II Reformulated Gasoline Regulation (RFG-2), adopted in 1996, also led to a reduction of mobile source emissions. Through such regulations, benzene levels declined 88% from 1990-2012. 1,3-Butadiene concentrations also declined 85% from 1990-2012 as a result of the use of reformulated gasoline and motor vehicle regulations (26).

In 2000, CARB's Diesel Risk Reduction Plan (DRRP) recommended the replacement and retrofit of diesel-fueled engines and the use of ultra-low-sulfur (<15 ppm) diesel fuel. As a result of these measures, DPM concentrations have declined 68% since 2000, even though the state's population increased 31% and the amount of diesel vehicles miles traveled increased 81%, as shown on Exhibit 2-B. With the implementation of these diesel-related control regulations, CARB expects a DPM decline of 71% for 2000-2020.

² It should be noted that ambient DPM concentrations are not measured directly. Rather, a surrogate method using the coefficient of haze (COH) and elemental carbon (EC) is used to estimate DPM concentrations.

EXHIBIT 2-A: DPM AND DIESEL VEHICLE MILES TREND**California Population, Gross State Product (GSP),
Diesel Cancer Risk, Diesel Vehicle-Miles-Traveled (VMT)**

Source: 2020 CARB

DIESEL REGULATIONS

CARB and the Ports of Los Angeles and Long Beach (POLA and POLB) have adopted several iterations of regulations for diesel trucks that are aimed at reducing DPM. More specifically, CARB Drayage Truck Regulation (27), CARB statewide On-road Truck and Bus Regulation (28), and the Ports of Los Angeles and Long Beach Clean Truck Program (CTP) require accelerated implementation of “clean trucks” into the statewide truck fleet (29). In other words, older more polluting trucks will be replaced with newer, cleaner trucks as a function of these regulatory requirements.

Moreover, the average statewide DPM emissions for Heavy Duty Trucks (HDT), in terms of grams of DPM generated per mile traveled, will dramatically be reduced due to the aforementioned regulatory requirements.

Diesel emissions identified in this analysis would therefore overstate future DPM emissions since not all the regulatory requirements are reflected in the modeling.

CANCER RISK TRENDS

Based on information available from CARB, overall cancer risk throughout the SCAB has had a declining trend since 1990. In 1998, following an exhaustive 10-year scientific assessment process, CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant. The SCAQMD initiated a comprehensive urban toxic air pollution study called the Multiple Air Toxics Exposure Study (MATES). DPM accounts for more than 70% of the cancer risk.

In 2008 the SCAQMD prepared an update to the MATES-II study, referred to as MATES-III. MATES-III estimates the average excess cancer risk level from exposure to TACs is an approximately 17% decrease in comparison to the MATES-II study.

In 2015, the SCAQMD published an in-depth analysis of the toxic air contaminants and the resulting health risks for all of Southern California. The *Multiple Air Toxics Exposure Study in the SCAB, MATES IV* shows that cancer risk decreased less than 50% between 2005 and 2015 (30).

MATES-IV study represents the baseline health risk for a cumulative analysis. MATES-IV calculated cancer risks based on monitoring data collected at ten fixed sites within the SCAB. None of the fixed monitoring sites are within the local area of the Project site. However, MATES-IV has extrapolated the excess cancer risk levels throughout the SCAB by modeling the specific grids. MATES-IV modeling predicted an excess cancer risk of 587.29 in one million for the geographic grid containing the Project site. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 68% of the total risk shown in MATES-IV. Cumulative Project generated TACs are limited to DPM.

In January 2018, as part of the overall effort to reduce air toxics exposure in the SCAB, SCAQMD began conducting the MATES V Program. MATES V field measurements were conducted at ten fixed sites (the same sites selected for MATES III and IV) to assess trends in air toxics levels. MATES V also included measurements of ultrafine particles (UFP) and black carbon (BC) concentrations, which can be compared to the UFP levels measured in MATES IV (31). The final report for the MATES V study was expected to be available in Fall 2019, however it is not yet available and no definitive date for its release has been provided by SCAQMD.

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

3 PROJECT AIR QUALITY IMPACT

3.1 INTRODUCTION

This study quantifies air quality emissions generated by construction and operation of the Project and addresses whether the Project conflicts with implementation of the SCAQMD's AQMP. The analysis of Project-generated air emissions determines whether the Project would result in a cumulatively considerable net increase of any criteria pollutant for which the SCAB is in non-attainment under an applicable NAAQS and CAAQS. Additionally, the Project has been evaluated to determine whether the Project would expose sensitive receptors to substantial pollutant concentrations and the impacts of odors. The significance of these potential impacts is described in the following section.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the *CEQA Guidelines* (14 CCR §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (1):

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SCAQMD has also developed regional significance thresholds for other regulated pollutants, as summarized at Table 3-1 (32). The SCAQMD's *CEQA Air Quality Significance Thresholds* (April 2019) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

TABLE 3-1: MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS

Pollutant	Regional Construction Threshold	Regional Operational Thresholds
NO _x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
SO _x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

lbs/day = Pounds Per Day

3.3 MODELS EMPLOYED TO ANALYZE AIR QUALITY

3.3.1 CALIFORNIA EMISSIONS ESTIMATOR MODEL (CALEEMOD)

Land uses such as the Project affect air quality through construction-source and operational-source emissions.

On October 17, 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod Version 2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from MMs (33). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendices 3.1 through 3.3.

3.3.2 EMISSION FACTORS MODEL

On August 19, 2019, the EPA approved the 2017 version of the EMISSIONS FACTOR model (EMFAC) web database for use in SIP and transportation conformity analyses. EMFAC2017 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (34). This AQIA utilizes summer, winter, and annual EMFAC2017 emission factors in order to derive vehicle emissions associated with Project operational activities, which vary by season.

Because the EMFAC2017 emission rates are associated with vehicle fuel types while CalEEMod vehicle emission factors are aggregated to include all fuel types for each individual vehicle class, the EMFAC2017 emission rates for different fuel types of a vehicle class are averaged by activity or by population and activity to derive CalEEMod emission factors. The equations applied to obtain CalEEMod vehicle emission factors for each emission type are detailed in CalEEMod User's Guide *Appendix A: Calculation Details for CalEEMod* (35).

3.4 CONSTRUCTION EMISSIONS

3.4.1 CONSTRUCTION ACTIVITIES

Construction activities associated with the Project will result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Construction related emissions are expected from the following construction activities:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

GRADING ACTIVITIES

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions”. Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. This analysis assumes that earthwork activities are expected to balance on site and no import or export of soils would be required.

CONSTRUCTION WORKER VEHICLE TRIPS

Construction emissions for construction worker vehicles traveling to and from the Project site, as well as vendor trips (construction materials delivered to the Project site) were estimated based on information from CalEEMod model defaults.

3.4.2 CONSTRUCTION DURATION

Construction is expected to commence in October 2021 and will last through June 2022. The construction schedule utilized in the analysis, shown in Table 3-2, represents a “worst-case” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.³ The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (1). The duration of construction activity was based on the 2022 opening year.

TABLE 3-2: CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Site Preparation	10/04/2021	10/15/2021	10
Grading	10/16/2021	11/26/2021	30
Building Construction	11/27/2021	06/24/2022	150
Paving	05/28/2022	06/24/2022	20
Architectural Coating	05/01/2022	06/24/2022	40

Source: Construction activity based the 2022 opening year.

3.4.3 CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-3 will operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the code. It should be

³ As shown in the CalEEMod User’s Guide Version 2016.3.2, Section 4.3 “OFFROAD Equipment” as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

noted that most pieces of equipment would likely operate for fewer hours per day. A summary of construction equipment assumptions by phase is provided at Table 3-3.

TABLE 3-3: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Phase Name	Equipment ^{A,B}	Amount	Hours Per Day
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
	Water Trucks	1	4
Grading	Crawler Tractors	2	8
	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
	Water Trucks	1	4
Building Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
	Water Trucks	1	4
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
	Water Trucks	1	4
Architectural Coating	Air Compressors	1	8

^A In order to account for fugitive dust emissions associated with Site Preparation and Grading activities, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes.

^B As Water Trucks are driven on-road, emissions associated with the operations of Water Trucks have been modeled as additional trips (two 2-way trips per Water Truck).

3.4.4 CONSTRUCTION EMISSIONS SUMMARY

IMPACTS WITHOUT MITIGATION

CalEEMod calculates maximum daily emissions for summer and winter periods. As such, the estimated maximum daily construction emissions without mitigation for both summer and winter periods are summarized on Table 3-4. Detailed construction model outputs are presented in Appendix 3.1. Under the assumed scenarios, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the SCAQMD for emissions of any criteria pollutant.

TABLE 3-4: PROJECT CONSTRUCTION EMISSIONS SUMMARY – WITHOUT MITIGATION

Year	Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer						
2021	5.43	61.02	32.00	0.10	14.04	6.81
2022	54.69	42.10	50.18	0.13	6.92	2.92
Winter						
2021	5.43	61.02	31.86	0.09	14.04	6.81
2022	54.68	42.02	47.88	0.13	6.39	2.92
Maximum Daily Emissions	54.69	61.02	50.18	0.13	14.04	6.81
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: CalEEMod unmitigated regional construction-source emissions are presented in Appendix 3.1.

3.5 OPERATIONAL EMISSIONS

Operational activities associated with the Project will result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Operational emissions would be expected from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- On-Site Cargo Handling Equipment Emissions

3.5.1 AREA SOURCE EMISSIONS

ARCHITECTURAL COATINGS

Over a period of time the buildings that are part of this Project will require maintenance and will therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod.

CONSUMER PRODUCTS

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

LANDSCAPE MAINTENANCE EQUIPMENT

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

3.5.2 ENERGY SOURCE EMISSIONS

COMBUSTION EMISSIONS ASSOCIATED WITH NATURAL GAS AND ELECTRICITY

Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas.

When combustion of natural gas occurs within a building, the building is considered a direct emission source and CalEEMod will calculate emissions of all criteria pollutants (35). For purposes of analysis, the emissions associated with natural gas use were calculated using CalEEMod.

CalEEMod also calculates criteria pollutants from generation of electricity associated with a building. It should be noted that when electricity is used in buildings, the electricity generation typically takes place offsite (i.e. power plants). Because power plants are existing stationary sources, criteria pollutant emissions are generally associated with the power plants and not the individual buildings or electricity users (35). Since electricity will be provided to the Project by Southern California Edison, Project-related electricity generation is considered to take place offsite and therefore criteria pollutant emissions are not accounted for.

TITLE 24 ENERGY EFFICIENCY STANDARDS

California's Energy Efficiency Standards for Residential and Nonresidential Buildings was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity. The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020. The CEC anticipates that nonresidential buildings will use approximately 30% less energy compared to the prior code (36). The CalEEMod defaults for Title 24 – Electricity and Lighting Energy were reduced by 30% in order to reflect consistency with the 2019 Title 24 standard.

3.5.3 MOBILE SOURCE EMISSIONS

The Project related operational air quality emissions derive primarily from vehicle trips generated by the Project, including employee and driver trips to and from the site and truck trips associated with the proposed uses. Trip characteristics available from the *Alessandro Warehouse Traffic Analysis* (TA) report were utilized in this analysis. Per the TA, the Project would generate a total of approximately 742 two-way vehicular trips per day (371 inbound and 371 outbound), including 224 two-way truck trips per day (112 inbound and 112 outbound) (37).

3.5.3.1 APPROACH FOR ESTIMATE OF MOBILE SOURCE EMISSIONS

Two separate model runs were utilized to accurately analyze emissions resulting from passenger car and truck operations.

PASSENGER CAR

For purposes of analysis, the CalEEMod default trip length of 16.6 miles was utilized along with an assumption of 100% primary trips. It is important to note that although the TA does not breakdown passenger cars by type, this analysis assumes that passenger cars include Light-Duty-Auto vehicles (LDA), Light-Duty-Trucks (LDT1⁴ & LDT2⁵), and Medium-Duty-Vehicles (MDV) vehicle types. In order to account for emissions generated by employees, the fleet mix presented in Table 3-5 was utilized in this analysis. Additional details on the use of the applicable fleet mix can be found in the footnote to Table 3-5.

TABLE 3-5: PASSENGER CAR FLEET MIX⁶

Land Use	Vehicle Type	%
Building 1		
Warehouse/ High-Cube Cold Storage Warehouse	LDA	61.73
	LDT1	4.17
	LDT2	21.05
	MDV	13.05
Building 2		
Warehouse/ High-Cube Cold Storage Warehouse	LDA	61.73
	LDT1	4.17
	LDT2	21.05
	MDV	13.05

TRUCKS

The second run analyzed truck emissions, incorporated the SCAQMD recommended truck trip length of 40 miles⁷ and an assumption of 100% primary trips. In order to be consistent with the TA, trucks are broken down by truck type. The trucks are comprised of 2-axle/Light-Heavy-Duty Trucks (LHDT), 3-axle/Medium-Heavy-Duty Trucks (MHDT), and 4+-axle/Heavy-Heavy-Duty Trucks (HHDT). In order to account for emissions generated by trucks, the fleet mix presented in

⁴ Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

⁵ Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

⁶ The Project-specific employee and driver fleet mix used in this analysis is based on a proportional split utilizing the CalEEMod default percentage assigned to LDA, LDT1, LDT2, and MDV vehicle types.

⁷ The average trip length for heavy trucks were based on the SCAQMD documents for the implementation of the Facility Based Mobile Source Measures (FBMSMs) adopted in the 2016 AQMP. SCAQMD's "Preliminary Warehouse Emission Calculations" cites 39.9-mile trip length for heavy-heavy trucks (41). As a conservative measure, a trip length of 40 miles has been utilized for all trucks for the purpose of this analysis.

Table 3-6 was utilized in this analysis. Additional details on the use of the applicable fleet mix can be found in the footnote to Table 3-6.

TABLE 3-6: TRUCK FLEET MIX⁸

Land Use	Vehicle Type	%
Building 1		
Warehouse	LHDT	16.32
	MHDT	20.41
	HHDT	63.27
High-Cube Cold Storage Warehouse	LHDT	35.30
	MHDT	11.76
	HHDT	52.94
Building 2		
Warehouse	LHDT	16.67
	MHDT	22.22
	HHDT	61.11
High-Cube Cold Storage Warehouse	LHDT	36.36
	MHDT	9.09
	HHDT	54.55

FUGITIVE DUST RELATED TO VEHICULAR TRAVEL

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of break and tire wear particulates. The emissions estimates for travel on paved roads were calculated using CalEEMod.

3.5.4 ON-SITE CARGO HANDLING EQUIPMENT EMISSIONS

It is common for industrial warehouse buildings to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. The cargo handling equipment is assumed to have a horsepower (hp) range of approximately 175 hp to 200 hp. Based on the latest available information from SCAQMD (38); for example, high-cube warehouse projects typically have 3.6 yard trucks per million sf of building space. For this particular Project, based on the maximum square footage of each building space, on-site modeled operational equipment includes up to two (2) 200 hp, compressed natural gas or gasoline-powered yard tractors operating at 4 hours a day for 365 days of the year.

⁸ Project-specific truck fleet mix is based on the number of trips generated by each truck type (LHDT, MHDT, HHDT) relative to the total number of truck trips generated by the Project.

3.5.5 OPERATIONAL EMISSIONS SUMMARY

IMPACTS WITHOUT MITIGATION

As previously stated, CalEEMod utilizes summer and winter EMFAC2017 emission factors in order to derive vehicle emissions associated with Project operational activities, which vary by season. The estimated operational-source emissions are summarized on Tables 3-7. Detailed operation model outputs for the Project are presented in Appendices 3.2 through 3.3. As shown on Table 3-7, the Project's daily regional emissions from on-going operations will not exceed any of the thresholds of significance.

TABLE 3-7: SUMMARY OF PEAK OPERATIONAL EMISSIONS– WITHOUT MITIGATION

Source	Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer						
Area Source	9.02	7.20E-04	0.08	0.00	2.80E-04	2.80E-04
Energy Source	0.19	1.73	1.45	0.01	0.13	0.13
Mobile Source (Passenger Cars)	1.27	1.18	18.96	0.06	6.56	1.76
Mobile Source (Trucks)	1.26	45.31	9.68	0.21	8.51	2.79
On-Site Equipment Source	0.24	2.54	1.52	0.01	0.09	0.08
Total Maximum Daily Emissions	11.99	50.76	31.68	0.28	15.30	4.76
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Winter						
Area Source	9.02	7.20E-04	0.08	0.00	2.80E-04	2.80E-04
Energy Source	0.19	1.73	1.45	0.01	0.13	0.13
Mobile Source (Passenger Cars)	1.21	1.25	16.16	0.05	6.56	1.76
Mobile Source (Trucks)	1.23	47.16	8.83	0.21	8.51	2.78
On-Site Equipment Source	0.24	2.54	1.52	0.01	0.09	0.08
Total Maximum Daily Emissions	11.90	52.68	28.05	0.28	15.29	0.00
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: CalEEMod regional operational-source emissions are presented in Appendices 3.2 through 3.3.

3.6 LOCALIZED SIGNIFICANCE

BACKGROUND ON LOCALIZED SIGNIFICANCE THRESHOLD (LST) DEVELOPMENT

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology) (39). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs).

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4⁹. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the LST Methodology (40).

APPLICABILITY OF LSTs FOR THE PROJECT

For this Project, the appropriate SRA for the LST analysis is the SCAQMD Perris Valley (SRA 24). LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size.

In order to determine the appropriate methodology for determining localized impacts that could occur as a result of Project-related construction, the following process is undertaken:

- Identify the maximum daily on-site emissions that will occur during construction activity:
 - The maximum daily on-site emissions could be based on information provided by the Project Applicant; or
 - The SCAQMD's *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds* and *CalEEMod User's Guide Appendix A: Calculation Details for CalEEMod* can be used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod (41) (35).
- If the total acreage disturbed is less than or equal to 5 acres per day, then the SCAQMD's screening look-up tables are utilized to determine if a Project has the potential to result in a significant impact. The look-up tables establish a maximum daily emissions threshold in lbs/day that can be compared to CalEEMod outputs.

⁹ The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "...equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

- If the total acreage disturbed is greater than 5 acres per day, then LST impacts may still be conservatively evaluated using the LST look-up tables for a 5-acre disturbance area. Use of the 5-acre disturbance area thresholds can be used to show that even if the daily emissions from all construction activity were emitted within a 5-acre area, and therefore concentrated over a smaller area which would result in greater site adjacent concentrations, the impacts would still be less than significant if the applicable 5-acre thresholds are utilized.
- The LST Methodology presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds.

EMISSIONS CONSIDERED

SCAQMD's LST Methodology clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs (39)." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

MAXIMUM DAILY DISTURBED-ACREAGE

As a conservative measure, it is assumed that a maximum of 10 acres per day can be actively disturbed. As such, the "Total Acres Graded" field in CalEEMod has been revised to 100 acres for site preparation (10 acres disturbed per day x 10 working days) and 300 acres for grading activities (10 acres disturbed per day x 30 working days)¹⁰.

SENSITIVE RECEPTORS

As previously stated, LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable NAAQS and CAAQS at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from Project activities.

RESIDENTIAL RECEPTORS

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as "sensitive receptors". These structures typically include residences, hotels, hospitals, etc. as they are also known to be locations where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use where an individual could remain for 24 hours to the Project site (in this case the nearest residential land use) has been used to determine construction and operational air quality impacts for emissions of PM₁₀ and PM_{2.5}, since PM₁₀ and PM_{2.5} thresholds are based on a 24 hour averaging time.

¹⁰ CalEEMod does not provide a "Total Acres Graded" field for Building Construction, Paving, or Architectural Coating activities.

NON-RESIDENTIAL RECEPTORS

As per the LST Methodology, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain onsite for a full 24 hours but are typically onsite for 8 hours or less. The LST Methodology explicitly states that “LSTs based on shorter averaging periods, such as the NO₂ and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours (39).” For purposes of analysis, if an industrial/commercial use is located at a closer distance to the Project site than the nearest residential use, the nearest industrial/commercial use will be utilized to determine construction and operational LST air impacts for emissions of NO₂ and CO an individual could be present at these sites for periods of 1 to 8 hours.

PROJECT-RELATED SENSITIVE RECEPTORS

Receptors in the Project study area are described below and shown on Exhibit 3-A. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. Consistent with the *Compass Danbe Centerpointe Noise Impact Analysis*, prepared by Urban Crossroads, Inc., all distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site.

- R1: Location R1 represents the existing residence at 13994 Chagall Court, approximately 152 feet north of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R1 is placed at the residential building façade.
- R2: Location R2 represents the Motel 6 at 23581 Alessandro Blvd, approximately 1,023 feet east of the Project site. Receptor R2 is placed at the building façade.
- R3: Location R3 represents the Moreno Valley City Hall at 14177 Frederick Street, approximately 744 feet west of the Project site. Receptor R3 is placed at the building façade.
- R4: Location R4 represents the existing residence at 13979 Frederick Street, approximately 784 feet northwest of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R4 is placed at the residential building façade.
- R5: Location R5 represents the existing residences at 13933 Chagall Court, approximately 217 feet north of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R5 is placed at the residential building façade.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Project’s potential to cause an individual a cumulatively significant impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM₁₀ and PM_{2.5} (since PM₁₀ and PM_{2.5} thresholds are based on a 24 hour averaging time). The nearest receptor used for evaluation of localized impacts of PM₁₀ and PM_{2.5} is represented by location R1 which represents the existing residence at 13994 Chagall Court, approximately 152 feet/ 46 meters north of the Project site.

EXHIBIT 3-A: SENSITIVE RECEPTOR LOCATIONS



- LEGEND:**
- N
 - Receptor Locations
 - Distance from receptor to Project site boundary (in feet)
 - Existing Barrier Height (in feet)
 - Existing Barrier

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

As previously stated, and consistent with *LST Methodology*, the nearest industrial/commercial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_x and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assumed that an individual could be present at these sites for periods of one to 8 hours. It should be noted that the existing residence (R1) is located at a closer distance than the nearest industrial/commercial use. As such, same receptor will be used for evaluation of localized NO_x and CO.

3.7 CONSTRUCTION-SOURCE EMISSIONS LST ANALYSIS

3.7.1 LOCALIZED THRESHOLDS FOR CONSTRUCTION ACTIVITY

As previously stated, approximately 10 acres can be disturbed per day. For the purposes of this analysis, and as a conservative measure, the SCAQMD look-up tables of 5 acres are used to determine localized significance thresholds. The LST lookup tables can be used as a conservative measure to show that even if the daily emissions from all project construction were emitted on a 5-acre site (and therefore concentrated over a smaller area which would result in greater site adjacent concentrations), if the impacts are less than significant, then a more detailed evaluation is not necessary. The thresholds presented in Table 3-8 were calculated by interpolating the threshold values for a 5-acre site and a 46-meter distance for localized PM₁₀, PM_{2.5}, NO_x, and CO evaluation.

TABLE 3-8: MAXIMUM DAILY LOCALIZED EMISSIONS THRESHOLDS

Pollutant	Construction Localized Thresholds
NO _x	297 lbs/day
CO	2,082 lbs/day
PM ₁₀	36 lbs/day
PM _{2.5}	10 lbs/day

Source: Localized Thresholds presented in this table are based on the SCAQMD Final LST Methodology, July 2008

3.7.2 LOCALIZED CONSTRUCTION-SOURCE EMISSIONS

IMPACTS WITHOUT MITIGATION

In order to estimate on-site emissions from each building area, the total on-site construction emissions were weighed based on the ratio of each building area relative to the entire Project site. Table 3-9 identifies the localized impacts at the nearest receptor location in the vicinity of the Project. Without mitigation, localized construction emissions would not exceed the applicable SCAQMD LSTs for emissions of any criteria pollutant.

TABLE 3-9: PROJECT LOCALIZED CONSTRUCTION EMISSIONS – WITHOUT MITIGATION

On-Site Emissions	Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Site Preparation				
Maximum Daily Emissions	60.79	21.85	13.83	6.75
SCAQMD Localized Threshold	297	2,082	36	10
Threshold Exceeded?	NO	NO	NO	NO
Grading				
Maximum Daily Emissions	56.54	31.23	8.77	3.84
SCAQMD Localized Threshold	297	2,082	36	10
Threshold Exceeded?	NO	NO	NO	NO
Building Construction				
Maximum Daily Emissions	18.75	17.67	1.03	0.96
SCAQMD Localized Threshold	297	2,082	36	10
Threshold Exceeded?	NO	NO	NO	NO
Paving				
Maximum Daily Emissions	11.12	14.58	0.57	0.52
SCAQMD Localized Threshold	297	2,082	36	10
Threshold Exceeded?	NO	NO	NO	NO
Architectural Coating				
Maximum Daily Emissions	1.88	2.42	0.11	0.11
SCAQMD Localized Threshold	297	2,082	36	10
Threshold Exceeded?	NO	NO	NO	NO

Source: CalEEMod unmitigated localized construction-source emissions are presented in Appendix 3.1.

3.8 LOCALIZED SIGNIFICANCE – LONG-TERM OPERATIONAL ACTIVITY

The Project is located on an approximately 17.65-net acre parcel. As noted previously, the LST Methodology provides look-up tables for sites with an area with daily disturbance of 5 acres or less. For projects that exceed 5 acres, the 5-acre LST look-up tables can be used as a screening tool to determine whether pollutants require additional detailed analysis. This approach is conservative as it assumes that all on-site emissions associated with the project would occur within a concentrated 5-acre area. This screening method would therefore over-predict potential localized impacts, because by assuming that on-site operational activities are occurring over a smaller area, the resulting concentrations of air pollutants are more highly concentrated once they reach the smaller site boundary than they would be for activities if they were spread out

over a larger surface area. On a larger site, the same amount of air pollutants generated would disperse over a larger surface area and would result in a lower concentration once emissions reach the project-site boundary. As such, LSTs for a 5-acre site during operations are used as a screening tool to determine if further detailed analysis is required.

The LST analysis generally includes on-site sources (area, energy, mobile, and on-site cargo handling equipment are previously discussed in Section 3.5 of this report). However, it should be noted that the CalEEMod outputs do not separate on-site and off-site emissions from mobile sources. In an effort to establish a maximum potential impact scenario for analytic purposes, the emissions shown on Table 3-11 represent all on-site Project-related stationary (area) sources and 5% of the Project-related mobile sources. Considering that the trip length used in CalEEMod for the Project is approximately 16.60 miles for passenger cars and 40.00 miles for all trucks, 5% of this total would represent an on-site travel distance of approximately 0.83 miles/4,382.40 feet for passenger cars and 2.00 miles/10,560.00 feet for trucks.

It should be noted that the longest on-site distance, is less than 0.5 mile for both trucks and passenger cars (entry into Driveway 1 and exit out of Driveway 3). As such, the 5% assumption is conservative and would tend to overstate the actual impact because it is not likely that a passenger car would drive 0.83 miles on the site or that a truck would drive 2.00 miles on the site. Modeling based on these assumptions demonstrates that even within broad encompassing parameters, Project operational-source emissions would not exceed applicable LSTs.

3.8.1 LOCALIZED THRESHOLDS FOR OPERATIONAL ACTIVITY

As previously stated, LSTs for a 5-acre site during operations are used as a screening tool to determine if further detailed analysis is required. As such, the threshold values presented in Table 3-10, were calculated by interpolating the threshold values for a 5-acre site and a 46-meter distance for localized PM₁₀, PM_{2.5}, NO_x, and CO evaluation.

TABLE 3-10: MAXIMUM DAILY LOCALIZED OPERATIONAL EMISSIONS THRESHOLDS

Pollutant	Operational Localized Thresholds
NO _x	297 lbs/day
CO	2,082 lbs/day
PM ₁₀	9 lbs/day
PM _{2.5}	3 lbs/day

Source: Localized Thresholds presented in this table are based on the SCAQMD Final LST Methodology, July 2008

3.8.2 OPERATIONAL-SOURCE LOCALIZED EMISSIONS

IMPACTS WITHOUT MITIGATION

As shown on Table 3-11 operational emissions will not exceed the LST thresholds for the nearest sensitive receptor. Therefore, the Project will have a less than significant localized impact during operational activity.

TABLE 3-11: LOCALIZED SIGNIFICANCE SUMMARY OF OPERATIONS – WITHOUT MITIGATION

Operational Activity	Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	6.69	4.48	0.97	0.44
SCAQMD Localized Threshold	297	2,082	9	3
Threshold Exceeded?	NO	NO	NO	NO

Source: CalEEMod localized operational-source emissions are presented in Appendices 3.2 through 3.3.

3.9 CO “HOT SPOT” ANALYSIS

As discussed below, the Project would not result in potentially adverse CO concentrations or “hot spots.” Further, detailed modeling of Project-specific carbon monoxide (CO) “hot spots” is not needed to reach this conclusion.

An adverse CO concentration, known as a “hot spot”, would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. At the time of the 1993 Handbook, the SCAB was designated nonattainment under the California AAQS and National AAQS for CO (42).

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment, as previously noted in Table 2-3.

To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO “hot spot” analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This “hot spot” analysis did not predict any violation of CO standards, as shown on Table 3-12.

TABLE 3-12: CO MODEL RESULTS

Intersection Location	CO Concentrations (ppm)		
	Morning 1-hour	Afternoon 1-hour	8-hour
Wilshire Boulevard/Veteran Avenue	4.6	3.5	4.2
Sunset Boulevard/Highland Avenue	4	4.5	3.9
La Cienega Boulevard/Century Boulevard	3.7	3.1	5.8
Long Beach Boulevard/Imperial Highway	3	3.1	9.3

Source: 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations

Notes: Federal 1-hour standard is 35 ppm and the deferral 8-hour standard is 9.0 ppm.

Based on the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak CO concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 9.3 ppm 8-hour CO concentration measured at the Long Beach Boulevard and Imperial Highway intersection (highest CO generating intersection within the “hot spot” analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 8.6 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared (43). In contrast, the ambient 8-hour CO concentration within the Project study area is estimated at 1.4 ppm—1.6 ppm. Therefore, even if the traffic volumes for the Project were double or even triple of the traffic volumes generated at the Long Beach Boulevard and Imperial Highway intersection, coupled with the on-going improvements in ambient air quality, the Project would not be capable of resulting in a CO “hot spot” at any study area intersections. Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour (vph) —or 24,000 vph where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (44).

The 2003 AQMP, and as previously shown in Table 3-12, estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations ($4.6 \text{ ppm} \times 4 = 18.4 \text{ ppm}$) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm)¹¹. As shown in TA on Exhibit 5-1, EAP¹² (2022) Traffic Volumes (In PCE¹³), the highest trips on a segment of is 43,500 vph on east Graham Street and Alessandro Boulevard (37).

Traffic volumes generating the CO concentrations for the “hot spot” analysis is shown on Table 3-13. The busiest intersection evaluated for traffic volumes was at La Cienega Boulevard and Century Boulevard, which has an traffic volume of approximately 8,674 vph (45). As shown on Table 3-14, the highest trips on a segment of road for the proposed Project is 4,070 vph on Frederick Street and Alessandro Boulevard. As such, Project-related traffic volumes are less than the traffic volumes identified in the 2003 AQMP. The Project considered herein would not produce the volume of traffic required to generate a CO “hot spot” either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Therefore, CO “hot spots” are not an environmental impact of concern for the Project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

¹¹ Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

¹² EAP = Existing Plus Ambient Growth Plus Project

¹³ PCE = Passenger Car Equivalent

TABLE 3-13: TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Eastbound (AM/PM)	Westbound (AM/PM)	Southbound (AM/PM)	Northbound (AM/PM)	Total (AM/PM)
Wilshire Boulevard/Veteran Avenue	4,954/2,069	1,830/3,317	721/1,400	560/933	8,062/7,719
Sunset Boulevard/Highland Avenue	1,417/1,764	1,342/1,540	2,304/1,832	1,551/2,238	6,614/5,374
La Cienega Boulevard/Century Boulevard	2,540/2,243	1,890/2,728	1,384/2,029	821/1,674	6,634/8,674
Long Beach Boulevard/Imperial Highway	1,217/2,020	1,760/1,400	479/944	756/1,150	4,212/5,514

Source: 2003 AQMP

TABLE 3-14: EAP TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
Frederick Street/Alessandro Boulevard	412/481	589/711	759/1,728	1,861/1,150	3,621/4,070
Driveway 2/Alessandro Boulevard	7/24	0/0	689/1,713	1,861/1,150	2,557/2,886
Driveway 3/Alessandro Boulevard	3/15	0/0	674/1,728	1,861/1,150	2,538/2,892
Graham Street/Alessandro Boulevard	254/351	383/376	668/1,739	1,916/1,346	3,221/3,812

Source: Alessandro Warehouse Traffic Analysis (Urban Crossroads, 2020)

3.10 AIR QUALITY MANAGEMENT PLANNING

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In March 2017, the AQMD released the Final 2016 AQMP. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS and explores new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (46). Similar to the 2012 AQMP,

the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016-2040 RTP/SCS, a planning document that supports the integration of land use and transportation to help the region meet the federal Clean Air Act requirements (17). The Project's consistency with the AQMP will be determined using the 2016 AQMP as discussed below.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook (1993) (47). These indicators are discussed below:

3.10.1 CONSISTENCY CRITERION No. 1

The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if LSTs or regional significance thresholds were exceeded. As evaluated, the Project's regional and localized construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

As evaluated, and when taking into consideration existing emissions, the Project's operational emissions would not exceed the applicable regional significance thresholds and LST thresholds for operational activity. Therefore, the Project would not conflict with the AQMP according to this criterion.

On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

3.10.2 CONSISTENCY CRITERION No. 2

The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Moreno Valley General Plan is considered to be consistent with the AQMP.

Construction Impacts – Consistency Criterion 2

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities.

Operational Impacts – Consistency Criterion 2

Per the City's General Plan, the Project site is designated for Commercial uses. The primary purpose of areas designated Commercial is to provide property for business purposes, including, but not limited to, retail stores, restaurants, banks, hotels, professional offices, personal services and repair services. The zoning regulations shall identify the particular uses permitted on each parcel of land, which could include compatible noncommercial uses (48).

The proposed Project will consist of 206,665 sf of warehousing (70% of total building sf) and 88,571 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 295,236 sf for Building 1 and 70,876 sf of warehousing (70% of total building sf) and 30,376 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 101,252 sf for Building 2. As such, even though the Project involves a GPA and ZC to change the land use designation to Light Industrial use. The proposed changes are consistent with the zones to the west, south and east of the subject site and adjacent properties. The amendment is in keeping with the uses surrounding the Project site. Furthermore, the Project, as evaluated herein would not exceed the regional or localized air quality significance thresholds.

On the basis of the preceding discussion, the Project is determined to be consistent with the second criterion

AQMP CONSISTENCY CONCLUSION

The Project would not have the potential to result in or cause NAAQS or CAAQS violations. Additionally, Project construction and operational-source emissions would not exceed the regional or localized significance thresholds. The Project is therefore considered to be consistent with the AQMP.

3.11 POTENTIAL IMPACTS TO SENSITIVE RECEPTORS

The potential impact of Project-generated air pollutant emissions at sensitive receptors has also been considered. Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, childcare centers, and athletic facilities can also be considered as sensitive receptors.

Results of the LST analysis indicate that the Project will not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction.

Additionally, the Project will not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO "hotspot."

Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

3.11.1 FRIANT RANCH CASE

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, the California Supreme Court held that an Environmental Impact Report's (EIR) air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided.

As discussed in briefs filed in the Friant Ranch case, correlating a project's criteria air pollutant emissions to specific health impacts is challenging. Health effects caused by criteria pollutant emissions are dependent on a variety of interrelated variables. In particular, ozone precursors (VOCs and NO_x) affect air quality on a regional scale. The SCAQMD, which has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes noted that it may be "difficult to quantify health impacts for criteria pollutants." (49).

As noted in the *Brief*, the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) ties the difficulty of correlating the emission of criteria pollutants to health impacts to how ozone and particulate matter are formed, stating that "[b]ecause of the complexity of ozone formation, a specific tonnage amount of NO_x or VOCs emitted in a particular area does not equate to a particular concentration of ozone in that area." (50). Similarly, the tonnage of PM "emitted does not always equate to the local PM concentration because it can be transported long distances by wind," and "[s]econdary PM, like ozone, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as sulfur dioxides (SO_x) and NO_x," meaning that "the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area." (50). The disconnect between the amount of precursor pollutants and the concentration of ozone or PM formed makes it difficult to determine potential health impacts, which are related to the concentration of ozone and PM experienced by the receptor rather than levels of NO_x, SO_x, and VOCs produced by a source.

Health effects related to ozone are therefore the product of emissions generated by numerous sources throughout a region. SCAQMD's *Brief of Amicus Curiae (Brief)* goes on to state that "it takes a large amount of additional precursor emissions (NO_x and VOCs) to cause a modeled increase in ambient ozone levels over an entire region,". The SCAQMD states that based on their own modeling in the SCAQMD's 2012 AQMP, a reduction of "NO_x by 432 tons per day (157,680 tons/year) and reducing VOC by 187 tons per day (68,255 tons/year) would reduce ozone levels at the SCAQMD's monitor site with the highest levels by only 9 parts per billion." As such, the SCAQMD concludes that it is not currently possible "to accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from relatively small projects." (51).

Most local agencies, including the City of Moreno Valley, lack the data to do their own assessment of potential health impacts from criteria air pollutant emissions, as would be required to establish customized, locally-specific thresholds of significance based on potential health impacts from an

individual development project. The use of national or “generic” data to fill the gap of missing local data would not yield accurate results because such data does not capture local air patterns, local background conditions, or local population characteristics, all of which play a role in how a population experiences air pollution. Because it is impracticable to accurately isolate the exact cause of a human disease (for example, the role a particular air pollutant plays compared to the role of other allergens and genetics in cause asthma), the City has determined that existing scientific tools cannot accurately estimate health impacts of the Project’s air emissions without undue speculation. Instead, readers are directed to the Project’s air quality impact analysis above, which provides extensive information concerning the quantifiable and non-quantifiable health risks related to the Project’s construction and long-term operation.

Notwithstanding, this AQIA does evaluate the proposed Project’s localized impact to air quality for emissions of CO, NO_x, PM₁₀, and PM_{2.5} by comparing the proposed project’s on-site emissions to the SCAQMD’s applicable LST thresholds. The LST analysis above determined that the project would not result in emissions exceeding SCAQMD’s LSTs. Therefore, the proposed Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NO_x, PM₁₀, and PM_{2.5}.

As the Project’s emissions will comply with federal, state, and local air quality standards, the proposed Project’s emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level, and would not provide a reliable indicator of health effects if modeled.

3.11.2 HEALTH RISK ASSESSMENT

A Health Risk Assessment (HRA) has been prepared by Urban Crossroads, Inc. under a separate cover. The results of the *Compass Danbe Centerpointe Mobile Source Health Risk Assessment* (Urban Crossroads, Inc. 2020) indicate that the proposed Project would not result in any significant health risk impacts from exposure to TACs resulting from the proposed Project.

3.12 ODORS

The potential for the proposed Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The proposed Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required (52).

3.13 CUMULATIVE IMPACTS

The proposed Project site area is designated as an extreme non-attainment area for ozone, and a non-attainment area for PM₁₀, PM_{2.5}, and lead.

The AQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (53). In this report the AQMD clearly states (Page D-3):

"...the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related

construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable.

CONSTRUCTION IMPACTS

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project construction-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed Project construction-source emissions would be considered less than significant on a project-specific and cumulative basis.

OPERATIONAL IMPACTS

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project operational-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed Project operational-source emissions would be considered less than significant on a project-specific and cumulative basis.

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

5 CERTIFICATIONS

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Compass Danbe Centerpointe. The information contained in this air quality impact assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

Haseeb Qureshi
Associate Principal
Urban Crossroads, Inc.
hqureshi@urbanxroads.com

EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 2.1:

STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS

APPENDIX C

***MAPS AND TABLES OF AREA DESIGNATIONS FOR
STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS***

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APPENDIX C

MAPS AND TABLES OF AREA DESIGNATIONS FOR STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS

This attachment fulfills the requirement of Health and Safety Code section 40718 for CARB to publish maps that identify areas where one or more violations of any State ambient air quality standard (State standard) or national ambient air quality standard (national standard) have been measured. The national standards are those promulgated under section 109 of the federal Clean Air Act (42 U.S.C. 7409).

This attachment is divided into three parts. The first part comprises a table showing the levels, averaging times, and measurement methods for each of the State and national standards. This is followed by a section containing maps and tables showing the area designations for each pollutant for which there is a State standard in the California Code of Regulations, title 17, section 70200. The last section contains maps and tables showing the most current area designations for the national standards.

<h2 style="text-align: center;">Ambient Air Quality Standards</h2> <p style="text-align: center;">(Updated 5/4/16)</p>						
Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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Area Designations for the State Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a State standard set forth in the California Code of Regulations, title 17, section 60200. Each area is identified as attainment, nonattainment, nonattainment-transitional, or unclassified for each pollutant, as shown below:

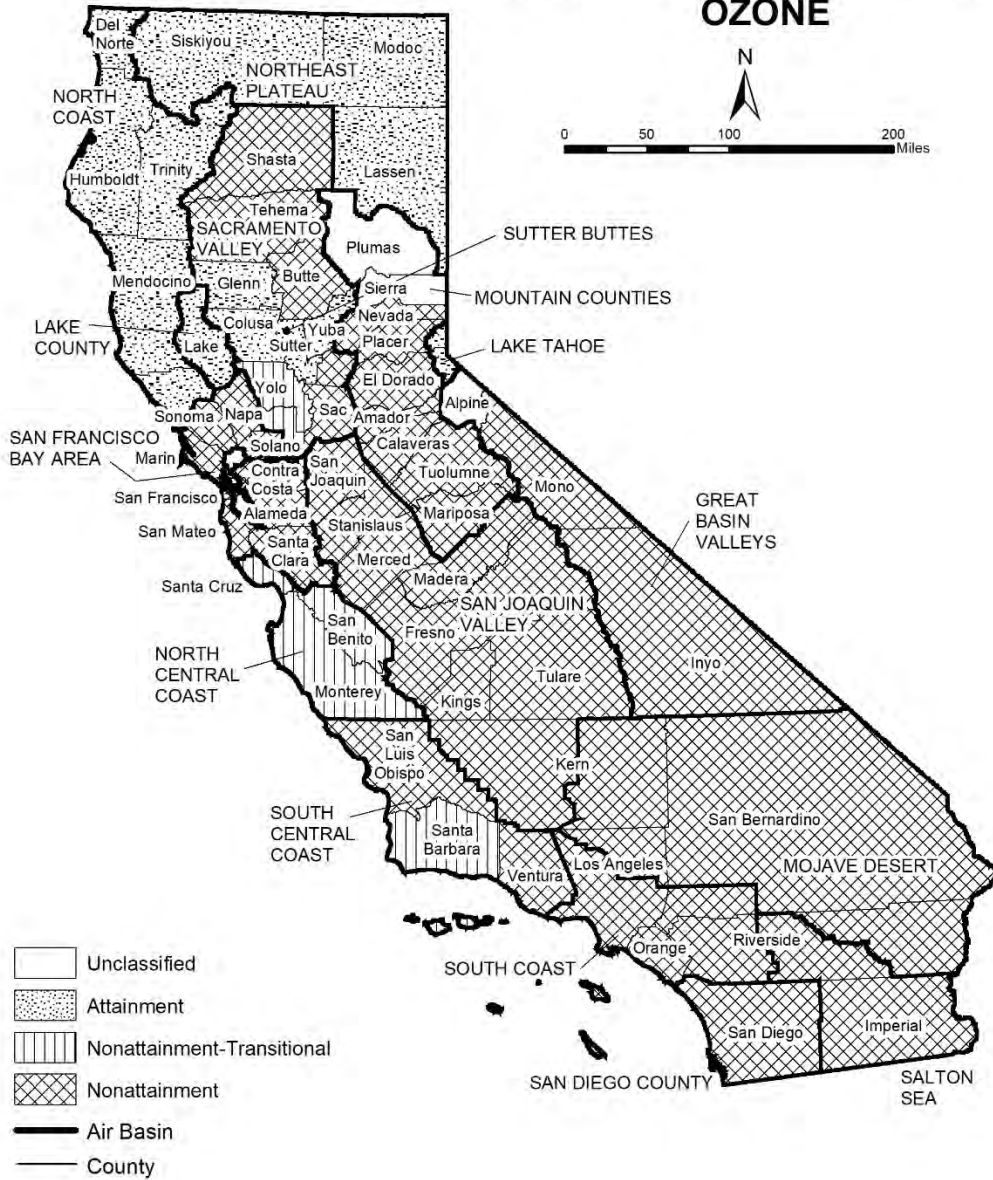
Attainment	A
Nonattainment	N
Nonattainment-Transitional	NA-T
Unclassified	U

In general, CARB designates areas by air basin for pollutants with a regional impact and by county for pollutants with a more local impact. However, when there are areas within an air basin or county with distinctly different air quality deriving from sources and conditions not affecting the entire air basin or county, CARB may designate a smaller area. Generally, when boundaries of the designated area differ from the air basin or county boundaries, the description of the specific area is referenced at the bottom of the summary table.

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

FIGURE 1

2018 Area Designations for State Ambient Air Quality Standards OZONE



Source Date:
October 2018
Air Quality Planning and Science Division

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 1

**California Ambient Air Quality Standards
Area Designations for Ozone ⁽¹⁾**

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN					NORTHEAST PLATEAU AIR BASIN				X
Alpine County			X		SACRAMENTO VALLEY AIR BASIN				
Inyo County	X				Colusa and Glenn Counties				X
Mono County	X				Sutter/Yuba Counties				
LAKE COUNTY AIR BASIN				X	Sutter Buttes	X			
LAKE TAHOE AIR BASIN				X	Remainder of Sutter County				X
MOJAVE DESERT AIR BASIN	X				Yuba County				X
MOUNTAIN COUNTIES AIR BASIN					Yolo/Solano Counties		X		
Amador County	X				Remainder of Air Basin	X			
Calaveras County	X				SALTON SEA AIR BASIN	X			
El Dorado County (portion)	X				SAN DIEGO AIR BASIN	X			
Mariposa County	X				SAN FRANCISCO BAY AREA AIR BASIN	X			
Nevada County	X				SAN JOAQUIN VALLEY AIR BASIN	X			
Placer County (portion)	X				SOUTH CENTRAL COAST AIR BASIN				
Plumas County			X		San Luis Obispo County	X			
Sierra County			X		Santa Barbara County		X		
Tuolumne County	X				Ventura County	X			
NORTH CENTRAL COAST AIR BASIN		X			SOUTH COAST AIR BASIN	X			
NORTH COAST AIR BASIN				X					

(1) AB 3048 (Olberg) and AB 2525 (Miller) signed into law in 1996, made changes to Health and Safety Code, section 40925.5. One of the changes allows nonattainment districts to become nonattainment-transitional for ozone by operation of law.

FIGURE 2

2018
Area Designations for State
Ambient Air Quality Standards
PM10



Source Date:
October 2018
Air Quality Planning and Science Division

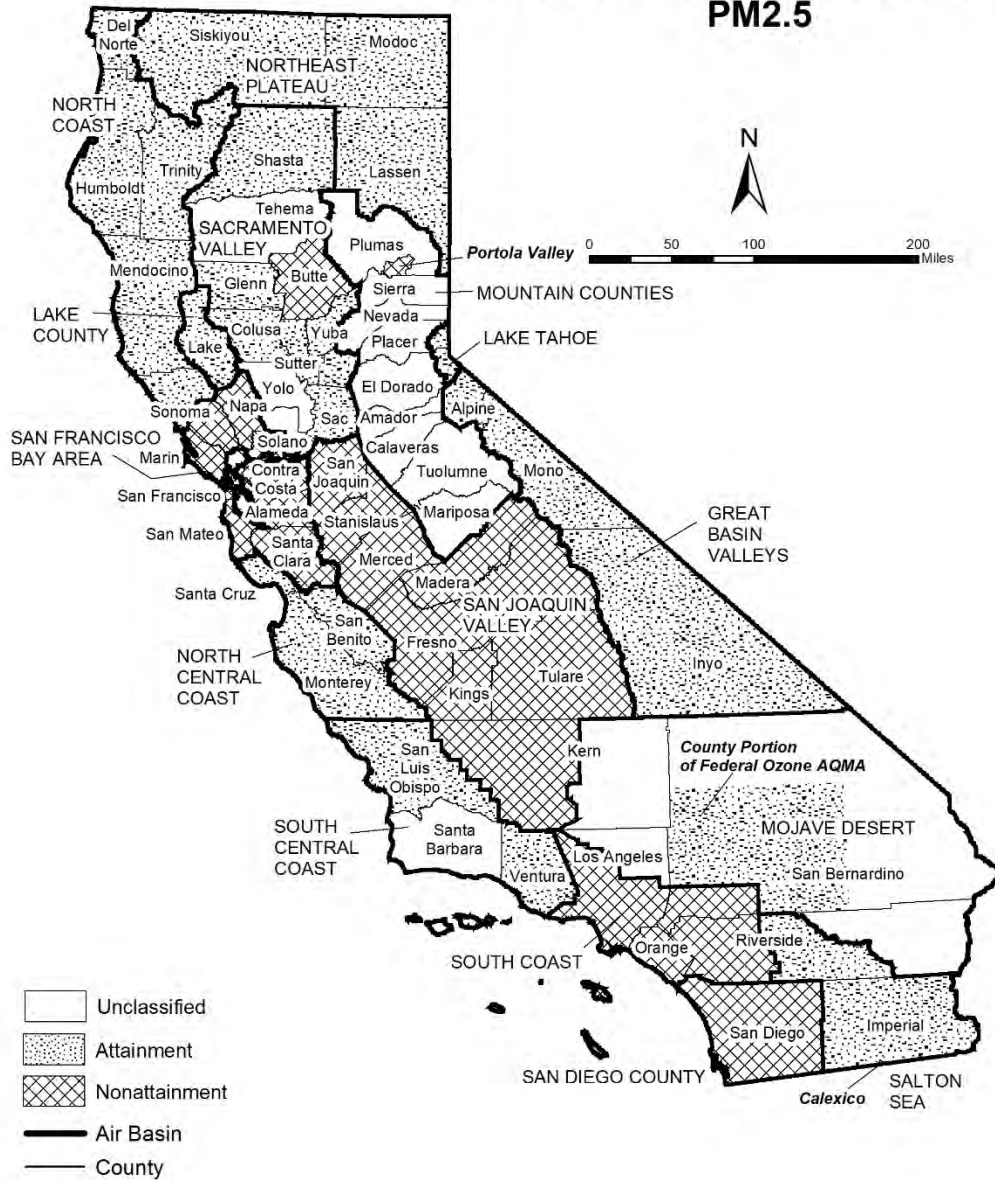
Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 2
California Ambient Air Quality Standards
Area Designation for Suspended Particulate Matter (PM10)

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN	X			NORTH CENTRAL COAST AIR BASIN	X		
LAKE COUNTY AIR BASIN			X	NORTH COAST AIR BASIN			
LAKE TAHOE AIR BASIN	X			Del Norte, Sonoma (portion) and Trinity Counties			X
MOJAVE DESERT AIR BASIN	X			Remainder of Air Basin	X		
MOUNTAIN COUNTIES AIR BASIN				NORTHEAST PLATEAU AIR BASIN			
Amador County		X		Siskiyou County			X
Calaveras County	X			Remainder of Air Basin		X	
El Dorado County (portion)	X			SACRAMENTO VALLEY AIR BASIN			
Mariposa County				Shasta County			X
- Yosemite National Park	X			Remainder of Air Basin	X		
- Remainder of County		X		SALTON SEA AIR BASIN	X		
Nevada County	X			SAN DIEGO AIR BASIN	X		
Placer County (portion)	X			SAN FRANCISCO BAY AREA AIR BASIN	X		
Plumas County	X			SAN JOAQUIN VALLEY AIR BASIN	X		
Sierra County	X			SOUTH CENTRAL COAST AIR BASIN	X		
Tuolumne County		X		SOUTH COAST AIR BASIN	X		

FIGURE 3

2018 Area Designations for State Ambient Air Quality Standards PM_{2.5}



Source Date:
October 2018
Air Quality Planning and Science Division

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 3

**California Ambient Air Quality Standards
Area Designations for Fine Particulate Matter (PM2.5)**

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SALTON SEA AIR BASIN			
LAKE COUNTY AIR BASIN			X	Imperial County			
LAKE TAHOE AIR BASIN			X	- City of Calexico (3)	X		
MOJAVE DESERT AIR BASIN				Remainder of Air Basin			X
San Bernardino County				SAN DIEGO AIR BASIN	X		
- County portion of federal Southeast Desert Modified AQMA for Ozone (1)			X	SAN FRANCISCO BAY AREA AIR BASIN	X		
				SAN JOAQUIN VALLEY AIR BASIN	X		
Remainder of Air Basin		X		SOUTH CENTRAL COAST AIR BASIN			
MOUNTAIN COUNTIES AIR BASIN				San Luis Obispo County			X
Plumas County				Santa Barbara County		X	
- Portola Valley (2)	X			Ventura County			X
Remainder of Air Basin		X		SOUTH COAST AIR BASIN	X		
NORTH CENTRAL COAST AIR BASIN			X				
NORTH COAST AIR BASIN			X				
NORTHEAST PLATEAU AIR BASIN			X				
SACRAMENTO VALLEY AIR BASIN							
Butte County	X						
Colusa County			X				
Glenn County			X				
Placer County (portion)			X				
Sacramento County			X				
Shasta County			X				
Sutter and Yuba Counties			X				
Remainder of Air Basin		X					

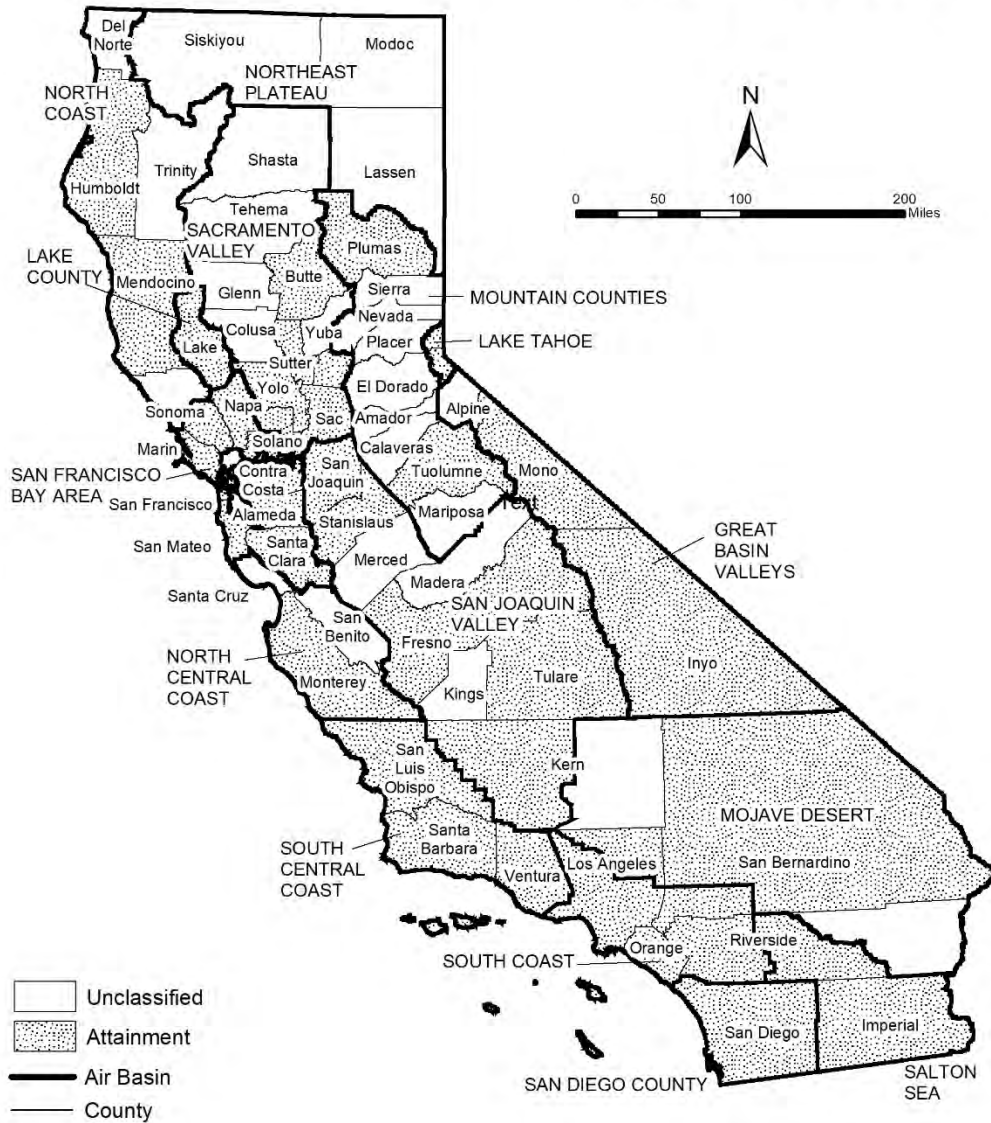
(1) California Code of Regulations, title 17, section 60200(b)

(2) California Code of Regulations, title 17, section 60200(c)

(3) California Code of Regulations, title 17, section 60200(a)

FIGURE 4

2018
Area Designations for State
Ambient Air Quality Standards
CARBON MONOXIDE



Source Date:
October 2018
Air Quality Planning and Science Division

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 4

**California Ambient Air Quality Standards
Area Designation for Carbon Monoxide***

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN					SACRAMENTO VALLEY AIR BASIN				
Alpine County			X		Butte County				X
Inyo County				X	Colusa County			X	
Mono County				X	Glenn County			X	
LAKE COUNTY AIR BASIN				X	Placer County (portion)				X
LAKE TAHOE AIR BASIN				X	Sacramento County				X
MOJAVE DESERT AIR BASIN					Shasta County			X	
Kern County (portion)			X		Solano County (portion)				X
Los Angeles County (portion)				X	Sutter County				X
Riverside County (portion)			X		Tehama County			X	
San Bernardino County (portion)				X	Yolo County				X
MOUNTAIN COUNTIES AIR BASIN					Yuba County			X	
Amador County			X		SALTON SEA AIR BASIN				X
Calaveras County			X		SAN DIEGO AIR BASIN				X
El Dorado County (portion)			X		SAN FRANCISCO BAY AREA AIR BASIN				X
Mariposa County			X		SAN JOAQUIN VALLEY AIR BASIN				
Nevada County			X		Fresno County				X
Placer County (portion)			X		Kern County (portion)				X
Plumas County				X	Kings County			X	
Sierra County			X		Madera County			X	
Tuolumne County				X	Merced County			X	
NORTH CENTRAL COAST AIR BASIN					San Joaquin County				X
Monterey County				X	Stanislaus County				X
San Benito County			X		Tulare County				X
Santa Cruz County			X		SOUTH CENTRAL COAST AIR BASIN				X
NORTH COAST AIR BASIN					SOUTH COAST AIR BASIN				X
Del Norte County			X						
Humboldt County				X					
Mendocino County				X					
Sonoma County (portion)			X						
Trinity County			X						
NORTHEAST PLATEAU AIR BASIN			X						

* The area designated for carbon monoxide is a county or portion of a county

FIGURE 5

2018 Area Designations for State Ambient Air Quality Standards NITROGEN DIOXIDE



Source Date:
October 2018
Air Quality Planning and Science Division

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 5

**California Ambient Air Quality Standards
Area Designation for Nitrogen Dioxide**

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SACRAMENTO VALLEY AIR BASIN			X
LAKE COUNTY AIR BASIN			X	SALTON SEA AIR BASIN			X
LAKE TAHOE AIR BASIN			X	SAN DIEGO AIR BASIN			X
MOJAVE DESERT AIR BASIN			X	SAN FRANCISCO BAY AREA AIR BASIN			X
MOUNTAIN COUNTIES AIR BASIN			X	SAN JOAQUIN VALLEY AIR BASIN			X
NORTH CENTRAL COAST AIR BASIN			X	SOUTH CENTRAL COAST AIR BASIN			X
NORTH COAST AIR BASIN			X	SOUTH COAST AIR BASIN			
NORTHEAST PLATEAU AIR BASIN			X	CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties	X		
				Remainder of Air Basin			X

FIGURE 6

2018 Area Designations for State Ambient Air Quality Standards SULFUR DIOXIDE



Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 6

**California Ambient Air Quality Standards
Area Designation for Sulfur Dioxide***

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN		X
LAKE COUNTY AIR BASIN		X	SALTON SEA AIR BASIN		X
LAKE TAHOE AIR BASIN		X	SAN DIEGO AIR BASIN		X
MOJAVE DESERT AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X			

* The area designated for sulfur dioxide is a county or portion of a county

FIGURE 7

2018 Area Designations for State Ambient Air Quality Standards SULFATES



Source Date:
October 2018
Air Quality Planning and Science Division

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 7

**California Ambient Air Quality Standards
Area Designation for Sulfates**

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SACRAMENTO VALLEY AIR BASIN			X
LAKE COUNTY AIR BASIN			X	SALTON SEA AIR BASIN			X
LAKE TAHOE AIR BASIN			X	SAN DIEGO AIR BASIN			X
MOJAVE DESERT AIR BASIN			X	SAN FRANCISCO BAY AREA AIR BASIN			X
MOUNTAIN COUNTIES AIR BASIN			X	SAN JOAQUIN VALLEY AIR BASIN			X
NORTH CENTRAL COAST AIR BASIN			X	SOUTH CENTRAL COAST AIR BASIN			X
NORTH COAST AIR BASIN			X	SOUTH COAST AIR BASIN			X
NORTHEAST PLATEAU AIR BASIN			X				

FIGURE 8

2018 Area Designations for State Ambient Air Quality Standards LEAD



Source Date:
October 2018
Air Quality Planning and Science Division

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 8

**California Ambient Air Quality Standards
Area Designations for Lead (particulate)***

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SALTON SEA AIR BASIN			X
LAKE COUNTY AIR BASIN			X	SAN DIEGO AIR BASIN			X
LAKE TAHOE AIR BASIN			X	SAN FRANCISCO BAY AREA AIR BASIN			X
MOJAVE DESERT AIR BASIN			X	SAN JOAQUIN VALLEY AIR BASIN			X
MOUNTAIN COUNTIES AIR BASIN			X	SOUTH CENTRAL COAST AIR BASIN			X
NORTH CENTRAL COAST AIR BASIN			X	SOUTH COAST AIR BASIN			X
NORTH COAST AIR BASIN			X				
NORTHEAST PLATEAU AIR BASIN			X				
SACRAMENTO VALLEY AIR BASIN			X				

* The area designated for lead is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

FIGURE 9

2018 Area Designations for State Ambient Air Quality Standards HYDROGEN SULFIDE



Source Date:
October 2018
Air Quality Planning and Science Division

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 9

**California Ambient Air Quality Standards
Area Designation for Hydrogen Sulfide***

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN					NORTH CENTRAL COAST AIR BASIN			X	
Alpine County			X		NORTH COAST AIR BASIN				
Inyo County				X	Del Norte County			X	
Mono County				X	Humboldt County				X
LAKE COUNTY AIR BASIN				X	Mendocino County			X	
LAKE TAHOE AIR BASIN			X		Sonoma County (portion)				
MOJAVE DESERT AIR BASIN					- Geyser Geothermal Area (2)				X
Kern County (portion)			X		- Remainder of County			X	
Los Angeles County (portion)			X		Trinity County			X	
Riverside County (portion)			X		NORTHEAST PLATEAU AIR BASIN			X	
San Bernardino County (portion)					SACRAMENTO VALLEY AIR BASIN			X	
- Searles Valley Planning Area (1)	X				SALTON SEA AIR BASIN			X	
- Remainder of County			X		SAN DIEGO AIR BASIN			X	
MOUNTAIN COUNTIES AIR BASIN					SAN FRANCISCO BAY AREA AIR BASIN			X	
Amador County					SAN JOAQUIN VALLEY AIR BASIN			X	
- City of Sutter Creek	X				SOUTH CENTRAL COAST AIR BASIN				
- Remainder of County			X		San Luis Obispo County				X
Calaveras County			X		Santa Barbara County				X
El Dorado County (portion)			X		Ventura County			X	
Mariposa County			X		SOUTH COAST AIR BASIN			X	
Nevada County			X						
Placer County (portion)			X						
Plumas County			X						
Sierra County			X						
Tuolumne County			X						

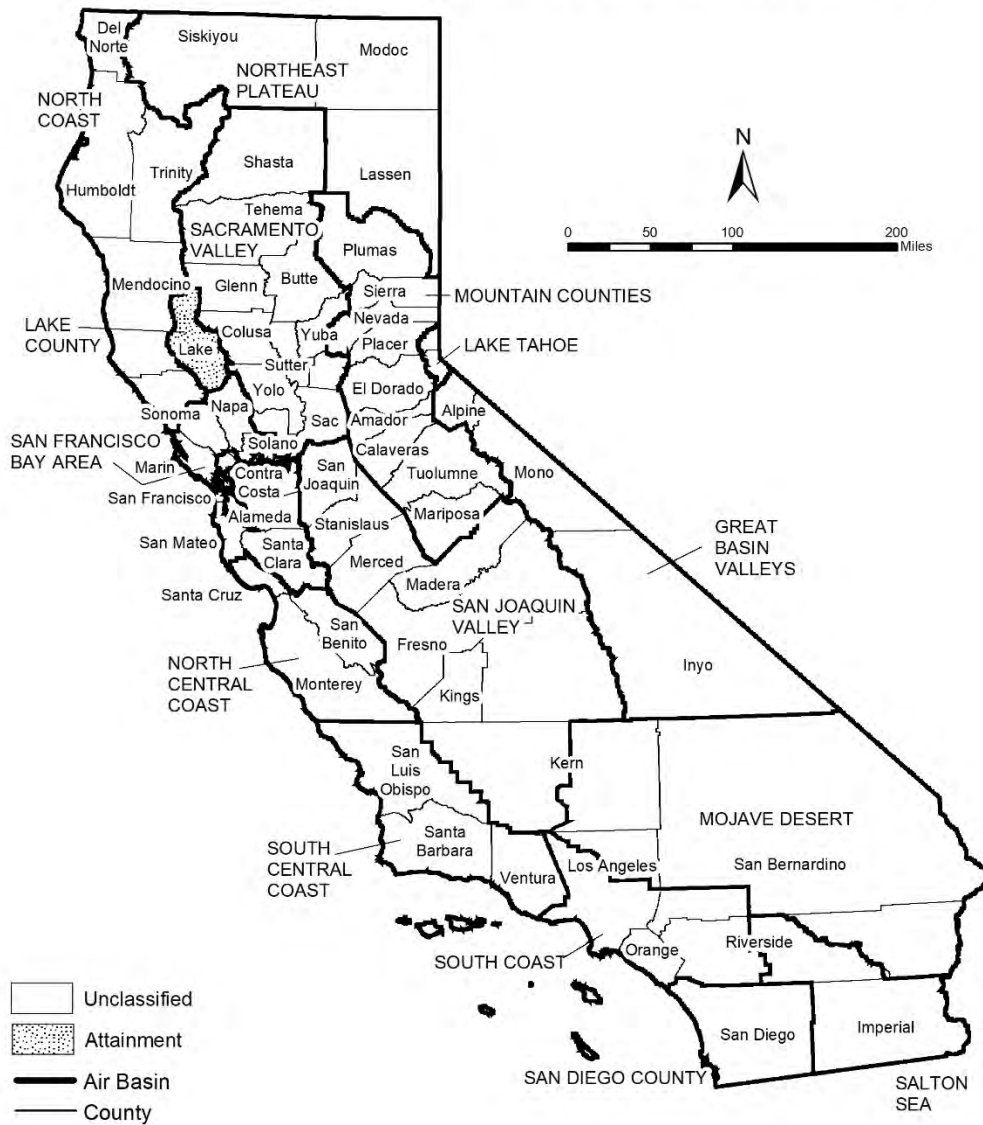
* The area designated for hydrogen sulfide is a county or portion of a county

(1) 52 Federal Register 29384 (August 7, 1987)

(2) California Code of Regulations, title 17, section 60200(d)

FIGURE 10

2018 Area Designations for State Ambient Air Quality Standards VISIBILITY REDUCING PARTICLES



Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 10
California Ambient Air Quality Standards
Area Designation for Visibility Reducing Particles

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN			X		SACRAMENTO VALLEY AIR BASIN			X	
LAKE COUNTY AIR BASIN				X	SALTON SEA AIR BASIN			X	
LAKE TAHOE AIR BASIN			X		SAN DIEGO AIR BASIN			X	
MOJAVE DESERT AIR BASIN			X		SAN FRANCISCO BAY AREA AIR BASIN			X	
MOUNTAIN COUNTIES AIR BASIN			X		SAN JOAQUIN VALLEY AIR BASIN			X	
NORTH CENTRAL COAST AIR BASIN			X		SOUTH CENTRAL COAST AIR BASIN			X	
NORTH COAST AIR BASIN			X		SOUTH COAST AIR BASIN			X	
NORTHEAST PLATEAU AIR BASIN			X						

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Area Designations for the National Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a national ambient air quality standard. Additional information about the federal area designations is available on the U.S. EPA website:

<https://www.epa.gov/green-book>

Over the last several years, U.S. EPA has been reviewing the levels of the various national standards. The agency has already promulgated new standard levels for some pollutants and is considering revising the levels for others. Information about the status of these reviews is available on the U.S. EPA website:

<https://www.epa.gov/criteria-air-pollutants>

Designation Categories

Suspended Particulate Matter (PM₁₀). The U.S. EPA uses three categories to designate areas with respect to PM₁₀:

- Attainment
- Nonattainment
- Unclassifiable

Ozone, Fine Suspended Particulate Matter (PM_{2.5}), Carbon Monoxide (CO), and Nitrogen Dioxide (NO₂). The U.S. EPA uses two categories to designate areas with respect to these standards:

- Nonattainment
- Unclassifiable/Attainment

The national 1-hour ozone standard was revoked effective June 15, 2005, and the area designations map reflects the 2015 national 8-hour ozone standard of 0.070 ppm. Original designations were finalized on August 3, 2018.

On December 14, 2012, the U.S. EPA established a new national annual primary PM_{2.5} standard of 12.0 µg/m³. New area designations reflecting this revised standard became final in December 2014. The current designation map reflects the most recently revised (2012) annual average standard of 12.0 µg/m³ as well as the 24-hour standard of 35 µg/m³, revised in 2006.

On January 22, 2010, the U.S. EPA established a new national 1-hour NO₂ standard of 100 parts per billion (ppb) and retained the annual average standard of 53 ppb. Designations for the primary NO₂ standard became effective on February 29, 2012. All areas of California meet this standard.

Sulfur Dioxide (SO₂). The U.S. EPA uses three categories to designate areas with respect to the 24-hour and annual average sulfur dioxide standards. These designation categories are:

- Nonattainment,
- Unclassifiable, and
- Attainment/Unclassifiable.

On June 2, 2010, the U.S. EPA established a new primary 1-hour SO₂ standard of 75 parts per billion (ppb). At the same time, U.S. EPA revoked the 24-hour and annual

average standards. Area designations for the 1-hour SO₂ standard were finalized on December 21, 2017 and are reflected in the area designations map.

Lead (particulate). The U.S. EPA promulgated a new rolling 3-month average lead standard in October 2008 of 0.15 µg/m³. Designations were made for this standard in November 2010.

Designation Areas

From time to time, the boundaries of the California air basins have been changed to facilitate the planning process. CARB generally initiates these changes, and they are not always reflected in the U.S. EPA's area designations. For purposes of consistency, the maps in this attachment reflect area designation boundaries and nomenclature as promulgated by the U.S. EPA. In some cases, these may not be the same as those adopted by CARB. For example, the national area designations reflect the former Southeast Desert Air Basin. In accordance with Health and Safety Code section 39606.1, CARB redefined this area in 1996 to be the Mojave Desert Air Basin and Salton Sea Air Basin. The definitions and boundaries for all areas designated for the national standards can be found in Title 40, Code of Federal Regulations (CFR), Chapter I, Subchapter C, Part 81.305. They are available on the web at:

https://ecfr.io/Title-40/se40.20.81_1305

FIGURE 11



Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 11

**National Ambient Air Quality Standards
Area Designations for 8-Hour Ozone***

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN (cont.)		
LAKE COUNTY AIR BASIN		X	Yolo County (2)	X	
LAKE TAHOE AIR BASIN		X	Yuba County		X
MOUNTAIN COUNTIES AIR BASIN			SAN DIEGO COUNTY	X	
Amador County	X		SAN FRANCISCO BAY AREA AIR BASIN	X	
Calaveras County	X		SAN JOAQUIN VALLEY AIR BASIN	X	
El Dorado County (portion) (2)	X		SOUTH CENTRAL COAST AIR BASIN (1)		
Mariposa County	X		San Luis Obispo County		
Nevada County			- Eastern San Luis Obispo County	X	
- Western Nevada County	X		- Remainder of County		X
- Remainder of County		X	Santa Barbara County		X
Placer County (portion) (2)	X		Ventura County		
Plumas County		X	- Area excluding Anacapa and San Nicolas Islands	X	
Sierra County		X	- Channel Islands (1)		X
Tuolumne County	X		SOUTH COAST AIR BASIN (1)	X	
NORTH CENTRAL COAST AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		
NORTH COAST AIR BASIN		X	Kern County (portion)	X	
NORTHEAST PLATEAU AIR BASIN		X	- Indian Wells Valley		X
SACRAMENTO VALLEY AIR BASIN			Imperial County	X	
Butte County	X		Los Angeles County (portion)	X	
Colusa County		X	Riverside County (portion)		
Glenn County		X	- Coachella Valley	X	
Sacramento Metro Area (2)	X		- Non-AQMA portion		X
Shasta County		X	San Bernardino County		
Sutter County			- Western portion (AQMA)	X	
- Sutter Buttes	X		- Eastern portion (non-AQMA)		X
- Southern portion of Sutter County (2)	X				
- Remainder of Sutter County		X			
Tehama County					
- Tuscan Buttes	X				
- Remainder of Tehama County		X			

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

NOTE: This map and table reflect the 2015 8-hour ozone standard of 0.070 ppm.

(1) South Central Coast Air Basin Channel Islands:

Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.

Ventura County includes Anacapa and San Nicolas Islands.

South Coast Air Basin:

Los Angeles County includes San Clemente and Santa Catalina Islands.

(2) For this purpose, the Sacramento Metro Area comprises all of Sacramento and Yolo Counties, the Sacramento Valley Air Basin portion of Solano County, the southern portion of Sutter County, and the Sacramento Valley and Mountain Counties Air Basins portions of Placer and El Dorado counties.

FIGURE 12

Area Designations for National Ambient Air Quality Standards PM10



Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 12
National Ambient Air Quality Standards
Area Designations for Suspended Particulate Matter (PM10)*

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN				SAN DIEGO COUNTY		X	
Alpine County		X		SAN FRANCISCO BAY AREA AIR BASIN		X	
Inyo County				SAN JOAQUIN VALLEY AIR BASIN			X
- Owens Valley Planning Area	X			SOUTH CENTRAL COAST AIR BASIN		X	
- Coso Junction			X	SOUTH COAST AIR BASIN			X
- Remainder of County		X		SOUTHEAST DESERT AIR BASIN			
Mono County				Eastern Kern County			
- Mammoth Lake Planning Area			X	- Indian Wells Valley			X
- Mono Lake Basin	X			- Portion within San Joaquin Valley Planning Area	X		
- Remainder of County		X		- Remainder of County		X	
LAKE COUNTY AIR BASIN		X		Imperial County			
LAKE TAHOE AIR BASIN		X		- Imperial Valley Planning Area	X		
MOUNTAIN COUNTIES AIR BASIN				- Remainder of County		X	
Placer County (portion) (2)		X		Los Angeles County (portion)		X	
Remainder of Air Basin		X		Riverside County (portion)			
NORTH CENTRAL COAST AIR BASIN		X		- Coachella Valley (3)	X		
NORTH COAST AIR BASIN		X		- Non-AQMA portion		X	
NORTHEAST PLATEAU AIR BASIN		X		San Bernardino County			
SACRAMENTO VALLEY AIR BASIN				- Trona	X		
Butte County		X		- Remainder of County	X		
Colusa County		X					
Glenn County		X					
Placer County (portion) (2)		X					
Sacramento County (1)			X				
Shasta County		X					
Solano County (portion)		X					
Sutter County		X					
Tehama County		X					
Yolo County		X					
Yuba County		X					

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

(1) Air quality in Sacramento County meets the national PM10 standards. The request for redesignation to attainment was approved by U.S. EPA in September 2013.

(2) U.S. EPA designation puts the Sacramento Valley Air Basin portion of Placer County in the Mountain Counties Air Basin.

(3) Air quality in Coachella Valley meets the national PM10 standards. A request for redesignation to attainment has been submitted to U.S. EPA.

FIGURE 13

Area Designations for National Ambient Air Quality Standards PM2.5



Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 13

National Ambient Air Quality Standards
Area Designations for Fine Particulate Matter (PM2.5)*

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE COUNTY AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN (2)	X	
LAKE TAHOE AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN	X	
MOUNTAIN COUNTIES AIR BASIN			SOUTH CENTRAL COAST AIR BASIN		X
Plumas County			SOUTH COAST AIR BASIN (3)	X	
- Portola Valley Portion of Plumas	X		SOUTHEAST DESERT AIR BASIN		
- Remainder of Plumas County		X	Imperial County (portion) (4)	X	
Remainder of Air Basin		X	Remainder of Air Basin		X
NORTH CENTRAL COAST AIR BASIN		X			
NORTH COAST AIR BASIN		X			
NORTHEAST PLATEAU AIR BASIN		X			
SACRAMENTO VALLEY AIR BASIN					
Sacramento Metro Area (1)	X				
Sutter County		X			
Yuba County (portion)		X			
Remainder of Air Basin		X			

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305. This map reflects the 2006 24-hour PM2.5 standard as well as the 1997 and 2012 PM2.5 annual standards.

(1) For this purpose, Sacramento Metro Area comprises all of Sacramento and portions of El Dorado, Placer, Solano, and Yolo Counties. Air quality in this area meets the national PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

(2) Air quality in this area meets the national PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

(3) Those lands of the Santa Rosa Band of Cahulla Mission Indians in Riverside County are designated Unclassifiable/Attainment.

(4) That portion of Imperial County encompassing the urban and surrounding areas of Brawley, Calexico, El Centro, Heber, Holtville, Imperial, Seeley, and Westmorland. Air quality in this area meets the national PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

FIGURE 14

Area Designations for National Ambient Air Quality Standards CARBON MONOXIDE



Source Date:
 October 2018
 Air Quality Planning and Science Division

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 14

**National Ambient Air Quality Standards
Area Designations for Carbon Monoxide***

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN		X
LAKE COUNTY AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE TAHOE AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		X

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

FIGURE 15

Area Designations for National Ambient Air Quality Standards NITROGEN DIOXIDE



Source Date:
 October 2018
 Air Quality Planning and Science Division

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 15

**National Ambient Air Quality Standards
Area Designations for Nitrogen Dioxide***

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN		X
LAKE COUNTY AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE TAHOE AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		X

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

FIGURE 16

Area Designations for National Ambient Air Quality Standards SULFUR DIOXIDE



Source Date:
October 2018
Air Quality Planning and Science Division

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 16

**National Ambient Air Quality Standards
Area Designations for Sulfur Dioxide***

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		
LAKE COUNTY AIR BASIN		X	San Luis Obispo County		X
LAKE TAHOE AIR BASIN		X	Santa Barbara County		X
MOUNTAIN COUNTIES AIR BASIN		X	Ventura County		X
NORTH CENTRAL COAST AIR BASIN		X	Channel Islands (1)		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		
SACRAMENTO VALLEY AIR BASIN		X	Imperial County		X
SAN DIEGO COUNTY		X	Remainder of Air Basin		X
SAN FRANCISCO BAY AREA AIR BASIN		X			
SAN JOAQUIN VALLEY AIR BASIN					
Fresno County		X			
Kern County (portion)		X			
Kings County		X			
Madera County		X			
Merced County		X			
San Joaquin County		X			
Stanislaus County		X			
Tulare County		X			

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

NOTE: This map and table reflect the 2010 1-hour SO₂ standard of 75 ppb.

(1) South Central Coast Air Basin Channel Islands:

Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.

Ventura County includes Anacapa and San Nicolas Islands.

Note that the San Clemente and Santa Catalina Islands are considered part of Los Angeles County, and therefore, are included as part of the South Coast Air Basin.

FIGURE 17

Area Designations for National Ambient Air Quality Standards **LEAD**



Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 17

**National Ambient Air Quality Standards
Area Designations for Lead (particulate)**

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE COUNTY AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
LAKE TAHOE AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH COAST AIR BASIN		
NORTH COAST AIR BASIN		X	Los Angeles County (portion) (1)	X	
NORTHEAST PLATEAU AIR BASIN		X	Remainder of Air Basin		X
SACRAMENTO VALLEY AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		X

(1) Portion of County in Air Basin, not including Channel Islands

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 3.1:**CALEEMOD PROJECT CONSTRUCTION (UNMITIGATED) EMISSIONS MODEL OUTPUTS**

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

Compass Danbe Centerpointe (Construction - Unmitigated)
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	118.95	1000sqft	2.73	118,947.00	0
Unrefrigerated Warehouse-No Rail	277.54	1000sqft	6.37	277,541.00	0
Other Non-Asphalt Surfaces	73.97	1000sqft	1.70	73,972.00	0
Parking Lot	298.22	1000sqft	6.85	298,221.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

Project Characteristics -

Land Use -

Construction Phase - Construction is anticipated to occur over an 8-month timeframe.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment -

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Trips and VMT - Vendor Trips have been adjusted to account for Water Trucks.

Grading - This analysis conservatively assumes that up to 10 acres will be disturbed per day.

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation - Rule 403

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstructionPhase	NumDays	300.00	150.00
tblConstructionPhase	NumDays	20.00	40.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.37	0.00

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	36.52	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	48.51	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	1.06	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	3.25	0.00
tblEnergyUse	T24NG	2.00	0.00
tblGrading	AcresOfGrading	105.00	300.00
tblGrading	AcresOfGrading	20.00	100.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	111.81	0.00
tblSolidWaste	SolidWasteGenerationRate	260.89	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	126.00	128.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.68	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	27,507,187.50	0.00
tblWater	IndoorWaterUseRate	64,181,125.00	0.00

2.0 Emissions Summary

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.4328	61.0198	32.0006	0.0965	28.8853	2.6475	31.5328	11.1328	2.4358	13.5686	0.0000	9,672.802 3	9,672.802 3	2.2490	0.0000	9,697.985 3
2022	54.6884	42.0995	50.1769	0.1304	5.3370	1.5865	6.9235	1.4343	1.4858	2.9201	0.0000	12,976.26 32	12,976.26 32	1.7421	0.0000	13,019.81 54
Maximum	54.6884	61.0198	50.1769	0.1304	28.8853	2.6475	31.5328	11.1328	2.4358	13.5686	0.0000	12,976.26 32	12,976.26 32	2.2490	0.0000	13,019.81 54

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.4328	61.0198	32.0006	0.0965	11.3958	2.6475	14.0433	4.3766	2.4358	6.8123	0.0000	9,672.802 3	9,672.802 3	2.2490	0.0000	9,697.985 3
2022	54.6884	42.0995	50.1769	0.1304	5.3370	1.5865	6.9235	1.4343	1.4858	2.9201	0.0000	12,976.26 32	12,976.26 32	1.7421	0.0000	13,019.81 54
Maximum	54.6884	61.0198	50.1769	0.1304	11.3958	2.6475	14.0433	4.3766	2.4358	6.8123	0.0000	12,976.26 32	12,976.26 32	2.2490	0.0000	13,019.81 54

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.11	0.00	45.48	53.76	0.00	40.97	0.00	0.00	0.00	0.00	0.00	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	9.0249	7.2000e-004	0.0786	1.0000e-005	0.0000	2.8000e-004	2.8000e-004	0.0000	2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004	0.0000	0.1793

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	9.0249	7.2000e-004	0.0786	1.0000e-005	0.0000	2.8000e-004	2.8000e-004	0.0000	2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004	0.0000	0.1793

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/4/2021	10/15/2021	5	10	
2	Grading	Grading	10/16/2021	11/26/2021	5	30	
3	Building Construction	Building Construction	11/27/2021	6/24/2022	5	150	
4	Paving	Paving	5/28/2022	6/24/2022	5	20	
5	Architectural Coating	Architectural Coating	5/1/2022	6/24/2022	5	40	

Acres of Grading (Site Preparation Phase): 100

Acres of Grading (Grading Phase): 300

Acres of Paving: 8.55

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 594,732; Non-Residential Outdoor: 198,244; Striped Parking Area: 22,332 (Architectural Coating – sqft)

OffRoad Equipment

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	323.00	128.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	65.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					28.6713	0.0000	28.6713	11.0758	0.0000	11.0758			0.0000			0.0000
Off-Road	5.3428	60.7861	21.8537	0.0570		2.6460	2.6460		2.4343	2.4343		5,523.5047	5,523.5047	1.7864		5,568.1651
Total	5.3428	60.7861	21.8537	0.0570	28.6713	2.6460	31.3173	11.0758	2.4343	13.5101		5,523.5047	5,523.5047	1.7864		5,568.1651

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6700e-003	0.1851	0.0330	5.2000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.4000e-004	4.0200e-003		54.6502	54.6502	3.9100e-003		54.7480
Worker	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		191.6552	191.6552	4.5700e-003		191.7694
Total	0.0900	0.2337	0.6985	2.4400e-003	0.2140	1.5400e-003	0.2155	0.0571	1.4300e-003	0.0585		246.3054	246.3054	8.4800e-003		246.5174

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					11.1818	0.0000	11.1818	4.3196	0.0000	4.3196			0.0000			0.0000
Off-Road	5.3428	60.7861	21.8537	0.0570		2.6460	2.6460		2.4343	2.4343	0.0000	5,523.5047	5,523.5047	1.7864		5,568.1651
Total	5.3428	60.7861	21.8537	0.0570	11.1818	2.6460	13.8278	4.3196	2.4343	6.7539	0.0000	5,523.5047	5,523.5047	1.7864		5,568.1651

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6700e-003	0.1851	0.0330	5.2000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.4000e-004	4.0200e-003		54.6502	54.6502	3.9100e-003		54.7480
Worker	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		191.6552	191.6552	4.5700e-003		191.7694
Total	0.0900	0.2337	0.6985	2.4400e-003	0.2140	1.5400e-003	0.2155	0.0571	1.4300e-003	0.0585		246.3054	246.3054	8.4800e-003		246.5174

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					16.6271	0.0000	16.6271	4.4553	0.0000	4.4553			0.0000			0.0000
Off-Road	4.9185	56.5443	31.2281	0.0715		2.2861	2.2861		2.1032	2.1032		6,925.9674	6,925.9674	2.2400		6,981.9673
Total	4.9185	56.5443	31.2281	0.0715	16.6271	2.2861	18.9132	4.4553	2.1032	6.5585		6,925.9674	6,925.9674	2.2400		6,981.9673

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6700e-003	0.1851	0.0330	5.2000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.4000e-004	4.0200e-003		54.6502	54.6502	3.9100e-003		54.7480
Worker	0.0948	0.0540	0.7394	2.1400e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		212.9502	212.9502	5.0800e-003		213.0771
Total	0.0995	0.2391	0.7724	2.6600e-003	0.2364	1.6700e-003	0.2380	0.0630	1.5500e-003	0.0645		267.6004	267.6004	8.9900e-003		267.8251

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4846	0.0000	6.4846	1.7376	0.0000	1.7376			0.0000			0.0000
Off-Road	4.9185	56.5443	31.2281	0.0715		2.2861	2.2861		2.1032	2.1032	0.0000	6,925.9674	6,925.9674	2.2400		6,981.9673
Total	4.9185	56.5443	31.2281	0.0715	6.4846	2.2861	8.7707	1.7376	2.1032	3.8408	0.0000	6,925.9674	6,925.9674	2.2400		6,981.9673

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6700e-003	0.1851	0.0330	5.2000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.4000e-004	4.0200e-003		54.6502	54.6502	3.9100e-003		54.7480
Worker	0.0948	0.0540	0.7394	2.1400e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		212.9502	212.9502	5.0800e-003		213.0771
Total	0.0995	0.2391	0.7724	2.6600e-003	0.2364	1.6700e-003	0.2380	0.0630	1.5500e-003	0.0645		267.6004	267.6004	8.9900e-003		267.8251

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.0438	2,736.0438	0.6751		2,752.9212
Total	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.0438	2,736.0438	0.6751		2,752.9212

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2988	11.8450	2.1134	0.0332	0.8196	0.0225	0.8422	0.2360	0.0216	0.2575		3,497.613 1	3,497.613 1	0.2502		3,503.868 6
Worker	1.5313	0.8724	11.9417	0.0345	3.6104	0.0213	3.6317	0.9575	0.0196	0.9771		3,439.145 4	3,439.145 4	0.0820		3,441.195 5
Total	1.8302	12.7174	14.0550	0.0677	4.4300	0.0438	4.4738	1.1935	0.0411	1.2346		6,936.758 5	6,936.758 5	0.3322		6,945.064 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625	0.0000	2,736.043 8	2,736.043 8	0.6751		2,752.921 2
Total	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625	0.0000	2,736.043 8	2,736.043 8	0.6751		2,752.921 2

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2988	11.8450	2.1134	0.0332	0.8196	0.0225	0.8422	0.2360	0.0216	0.2575		3,497.613 1	3,497.613 1	0.2502		3,503.868 6
Worker	1.5313	0.8724	11.9417	0.0345	3.6104	0.0213	3.6317	0.9575	0.0196	0.9771		3,439.145 4	3,439.145 4	0.0820		3,441.195 5
Total	1.8302	12.7174	14.0550	0.0677	4.4300	0.0438	4.4738	1.1935	0.0411	1.2346		6,936.758 5	6,936.758 5	0.3322		6,945.064 1

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.152 0	2,737.152 0	0.6711		2,753.928 8
Total	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.152 0	2,737.152 0	0.6711		2,753.928 8

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2786	11.1754	1.9657	0.0329	0.8196	0.0189	0.8385	0.2360	0.0181	0.2541		3,467.8423	3,467.8423	0.2370		3,473.7667
Worker	1.4324	0.7851	11.0146	0.0333	3.6104	0.0207	3.6311	0.9575	0.0191	0.9766		3,313.4827	3,313.4827	0.0737		3,315.3242
Total	1.7110	11.9605	12.9803	0.0661	4.4300	0.0397	4.4696	1.1935	0.0372	1.2307		6,781.3250	6,781.3250	0.3106		6,789.0909

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288
Total	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2786	11.1754	1.9657	0.0329	0.8196	0.0189	0.8385	0.2360	0.0181	0.2541		3,467.8423	3,467.8423	0.2370		3,473.7667
Worker	1.4324	0.7851	11.0146	0.0333	3.6104	0.0207	3.6311	0.9575	0.0191	0.9766		3,313.4827	3,313.4827	0.0737		3,315.3242
Total	1.7110	11.9605	12.9803	0.0661	4.4300	0.0397	4.4696	1.1935	0.0372	1.2307		6,781.3250	6,781.3250	0.3106		6,789.0909

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0002	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.3500e-003	0.1746	0.0307	5.1000e-004	0.0128	3.0000e-004	0.0131	3.6900e-003	2.8000e-004	3.9700e-003		54.1850	54.1850	3.7000e-003		54.2776
Worker	0.0665	0.0365	0.5115	1.5400e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		153.8769	153.8769	3.4200e-003		153.9624
Total	0.0709	0.2111	0.5422	2.0500e-003	0.1805	1.2600e-003	0.1817	0.0482	1.1700e-003	0.0493		208.0620	208.0620	7.1200e-003		208.2400

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0002	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.3500e-003	0.1746	0.0307	5.1000e-004	0.0128	3.0000e-004	0.0131	3.6900e-003	2.8000e-004	3.9700e-003		54.1850	54.1850	3.7000e-003		54.2776
Worker	0.0665	0.0365	0.5115	1.5400e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		153.8769	153.8769	3.4200e-003		153.9624
Total	0.0709	0.2111	0.5422	2.0500e-003	0.1805	1.2600e-003	0.1817	0.0482	1.1700e-003	0.0493		208.0620	208.0620	7.1200e-003		208.2400

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.5308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090		375.2641	375.2641	0.0244		375.8749
Total	48.8035	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090		375.2641	375.2641	0.0244		375.8749

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2883	0.1580	2.2166	6.6900e-003	0.7266	4.1700e-003	0.7307	0.1927	3.8400e-003	0.1965		666.7999	666.7999	0.0148		667.1705
Total	0.2883	0.1580	2.2166	6.6900e-003	0.7266	4.1700e-003	0.7307	0.1927	3.8400e-003	0.1965		666.7999	666.7999	0.0148		667.1705

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.5308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090	0.0000	375.2641	375.2641	0.0244		375.8749
Total	48.8035	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090	0.0000	375.2641	375.2641	0.0244		375.8749

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.2883	0.1580	2.2166	6.6900e-003	0.7266	4.1700e-003	0.7307	0.1927	3.8400e-003	0.1965		666.7999	666.7999	0.0148			667.1705
Total	0.2883	0.1580	2.2166	6.6900e-003	0.7266	4.1700e-003	0.7307	0.1927	3.8400e-003	0.1965		666.7999	666.7999	0.0148			667.1705

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Unrefrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793
Unmitigated	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0353					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.9823					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.3100e-003	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793
Total	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0353					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.9823					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.3100e-003	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793
Total	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

Compass Danbe Centerpointe (Construction - Unmitigated)
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	118.95	1000sqft	2.73	118,947.00	0
Unrefrigerated Warehouse-No Rail	277.54	1000sqft	6.37	277,541.00	0
Other Non-Asphalt Surfaces	73.97	1000sqft	1.70	73,972.00	0
Parking Lot	298.22	1000sqft	6.85	298,221.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

Project Characteristics -

Land Use -

Construction Phase - Construction is anticipated to occur over an 8-month timeframe.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment -

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Trips and VMT - Vendor Trips have been adjusted to account for Water Trucks.

Grading - This analysis conservatively assumes that up to 10 acres will be disturbed per day.

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation - Rule 403

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstructionPhase	NumDays	300.00	150.00
tblConstructionPhase	NumDays	20.00	40.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.37	0.00

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	36.52	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	48.51	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	1.06	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	3.25	0.00
tblEnergyUse	T24NG	2.00	0.00
tblGrading	AcresOfGrading	105.00	300.00
tblGrading	AcresOfGrading	20.00	100.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	111.81	0.00
tblSolidWaste	SolidWasteGenerationRate	260.89	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	126.00	128.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.68	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	27,507,187.50	0.00
tblWater	IndoorWaterUseRate	64,181,125.00	0.00

2.0 Emissions Summary

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.4315	61.0199	31.8641	0.0917	28.8853	2.6475	31.5328	11.1328	2.4358	13.5686	0.0000	9,187.376 1	9,187.376 1	2.2488	0.0000	9,213.006 1
2022	54.6782	42.0189	47.8841	0.1249	5.3370	1.5871	6.9241	1.4343	1.4864	2.9207	0.0000	12,417.84 48	12,417.84 48	1.7579	0.0000	12,461.79 35
Maximum	54.6782	61.0199	47.8841	0.1249	28.8853	2.6475	31.5328	11.1328	2.4358	13.5686	0.0000	12,417.84 48	12,417.84 48	2.2488	0.0000	12,461.79 35

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.4315	61.0199	31.8641	0.0917	11.3958	2.6475	14.0433	4.3766	2.4358	6.8124	0.0000	9,187.376 1	9,187.376 1	2.2488	0.0000	9,213.006 1
2022	54.6782	42.0189	47.8841	0.1249	5.3370	1.5871	6.9241	1.4343	1.4864	2.9207	0.0000	12,417.84 48	12,417.84 48	1.7579	0.0000	12,461.79 35
Maximum	54.6782	61.0199	47.8841	0.1249	11.3958	2.6475	14.0433	4.3766	2.4358	6.8124	0.0000	12,417.84 48	12,417.84 48	2.2488	0.0000	12,461.79 35

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.11	0.00	45.48	53.76	0.00	40.97	0.00	0.00	0.00	0.00	0.00	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	9.0249	7.2000e-004	0.0786	1.0000e-005	0.0000	2.8000e-004	2.8000e-004	0.0000	2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004	0.0000	0.1793

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	9.0249	7.2000e-004	0.0786	1.0000e-005	0.0000	2.8000e-004	2.8000e-004	0.0000	2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004	0.0000	0.1793

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/4/2021	10/15/2021	5	10	
2	Grading	Grading	10/16/2021	11/26/2021	5	30	
3	Building Construction	Building Construction	11/27/2021	6/24/2022	5	150	
4	Paving	Paving	5/28/2022	6/24/2022	5	20	
5	Architectural Coating	Architectural Coating	5/1/2022	6/24/2022	5	40	

Acres of Grading (Site Preparation Phase): 100

Acres of Grading (Grading Phase): 300

Acres of Paving: 8.55

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 594,732; Non-Residential Outdoor: 198,244; Striped Parking Area: 22,332 (Architectural Coating – sqft)

OffRoad Equipment

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	323.00	128.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	65.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					28.6713	0.0000	28.6713	11.0758	0.0000	11.0758			0.0000			0.0000
Off-Road	5.3428	60.7861	21.8537	0.0570		2.6460	2.6460		2.4343	2.4343		5,523.5047	5,523.5047	1.7864		5,568.1651
Total	5.3428	60.7861	21.8537	0.0570	28.6713	2.6460	31.3173	11.0758	2.4343	13.5101		5,523.5047	5,523.5047	1.7864		5,568.1651

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.9600e-003	0.1835	0.0391	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.5000e-004	4.0300e-003		52.5946	52.5946	4.3600e-003		52.7036
Worker	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		171.9348	171.9348	3.9700e-003		172.0342
Total	0.0887	0.2338	0.5762	2.2200e-003	0.2140	1.5500e-003	0.2156	0.0571	1.4400e-003	0.0585		224.5295	224.5295	8.3300e-003		224.7377

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					11.1818	0.0000	11.1818	4.3196	0.0000	4.3196			0.0000			0.0000
Off-Road	5.3428	60.7861	21.8537	0.0570		2.6460	2.6460		2.4343	2.4343	0.0000	5,523.5047	5,523.5047	1.7864		5,568.1651
Total	5.3428	60.7861	21.8537	0.0570	11.1818	2.6460	13.8278	4.3196	2.4343	6.7539	0.0000	5,523.5047	5,523.5047	1.7864		5,568.1651

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.9600e-003	0.1835	0.0391	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.5000e-004	4.0300e-003		52.5946	52.5946	4.3600e-003		52.7036
Worker	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		171.9348	171.9348	3.9700e-003		172.0342
Total	0.0887	0.2338	0.5762	2.2200e-003	0.2140	1.5500e-003	0.2156	0.0571	1.4400e-003	0.0585		224.5295	224.5295	8.3300e-003		224.7377

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					16.6271	0.0000	16.6271	4.4553	0.0000	4.4553			0.0000			0.0000
Off-Road	4.9185	56.5443	31.2281	0.0715		2.2861	2.2861		2.1032	2.1032		6,925.9674	6,925.9674	2.2400		6,981.9673
Total	4.9185	56.5443	31.2281	0.0715	16.6271	2.2861	18.9132	4.4553	2.1032	6.5585		6,925.9674	6,925.9674	2.2400		6,981.9673

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Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.9600e-003	0.1835	0.0391	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.5000e-004	4.0300e-003		52.5946	52.5946	4.3600e-003		52.7036
Worker	0.0931	0.0559	0.5969	1.9200e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		191.0387	191.0387	4.4100e-003		191.1491
Total	0.0980	0.2393	0.6359	2.4200e-003	0.2364	1.6800e-003	0.2380	0.0630	1.5600e-003	0.0645		243.6334	243.6334	8.7700e-003		243.8526

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4846	0.0000	6.4846	1.7376	0.0000	1.7376			0.0000			0.0000
Off-Road	4.9185	56.5443	31.2281	0.0715		2.2861	2.2861		2.1032	2.1032	0.0000	6,925.9674	6,925.9674	2.2400		6,981.9673
Total	4.9185	56.5443	31.2281	0.0715	6.4846	2.2861	8.7707	1.7376	2.1032	3.8408	0.0000	6,925.9674	6,925.9674	2.2400		6,981.9673

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.9600e-003	0.1835	0.0391	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.5000e-004	4.0300e-003		52.5946	52.5946	4.3600e-003		52.7036
Worker	0.0931	0.0559	0.5969	1.9200e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		191.0387	191.0387	4.4100e-003		191.1491
Total	0.0980	0.2393	0.6359	2.4200e-003	0.2364	1.6800e-003	0.2380	0.0630	1.5600e-003	0.0645		243.6334	243.6334	8.7700e-003		243.8526

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.0438	2,736.0438	0.6751		2,752.9212
Total	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.0438	2,736.0438	0.6751		2,752.9212

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3174	11.7430	2.5000	0.0319	0.8196	0.0232	0.8428	0.2360	0.0222	0.2582		3,366.057 2	3,366.057 2	0.2788		3,373.027 4
Worker	1.5028	0.9022	9.6393	0.0310	3.6104	0.0213	3.6317	0.9575	0.0196	0.9771		3,085.275 2	3,085.275 2	0.0713		3,087.057 5
Total	1.8201	12.6452	12.1393	0.0629	4.4300	0.0445	4.4745	1.1935	0.0418	1.2353		6,451.332 4	6,451.332 4	0.3501		6,460.084 9

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625	0.0000	2,736.043 8	2,736.043 8	0.6751		2,752.921 2
Total	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625	0.0000	2,736.043 8	2,736.043 8	0.6751		2,752.921 2

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3174	11.7430	2.5000	0.0319	0.8196	0.0232	0.8428	0.2360	0.0222	0.2582		3,366.057 2	3,366.057 2	0.2788		3,373.027 4
Worker	1.5028	0.9022	9.6393	0.0310	3.6104	0.0213	3.6317	0.9575	0.0196	0.9771		3,085.275 2	3,085.275 2	0.0713		3,087.057 5
Total	1.8201	12.6452	12.1393	0.0629	4.4300	0.0445	4.4745	1.1935	0.0418	1.2353		6,451.332 4	6,451.332 4	0.3501		6,460.084 9

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.152 0	2,737.152 0	0.6711		2,753.928 8
Total	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.152 0	2,737.152 0	0.6711		2,753.928 8

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2963	11.0635	2.3337	0.0316	0.8196	0.0196	0.8392	0.2360	0.0187	0.2547		3,336.667 4	3,336.667 4	0.2643		3,343.275 4
Worker	1.4098	0.8116	8.8775	0.0298	3.6104	0.0207	3.6311	0.9575	0.0191	0.9766		2,972.694 6	2,972.694 6	0.0641		2,974.297 4
Total	1.7061	11.8751	11.2111	0.0614	4.4300	0.0403	4.4702	1.1935	0.0378	1.2312		6,309.362 0	6,309.362 0	0.3284		6,317.572 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.152 0	2,737.152 0	0.6711		2,753.928 8
Total	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.152 0	2,737.152 0	0.6711		2,753.928 8

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2963	11.0635	2.3337	0.0316	0.8196	0.0196	0.8392	0.2360	0.0187	0.2547		3,336.667 4	3,336.667 4	0.2643		3,343.275 4
Worker	1.4098	0.8116	8.8775	0.0298	3.6104	0.0207	3.6311	0.9575	0.0191	0.9766		2,972.694 6	2,972.694 6	0.0641		2,974.297 4
Total	1.7061	11.8751	11.2111	0.0614	4.4300	0.0403	4.4702	1.1935	0.0378	1.2312		6,309.362 0	6,309.362 0	0.3284		6,317.572 7

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.8974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0002	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6300e-003	0.1729	0.0365	4.9000e-004	0.0128	3.1000e-004	0.0131	3.6900e-003	2.9000e-004	3.9800e-003		52.1354	52.1354	4.1300e-003		52.2387
Worker	0.0655	0.0377	0.4123	1.3800e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		138.0508	138.0508	2.9800e-003		138.1253
Total	0.0701	0.2106	0.4487	1.8700e-003	0.1805	1.2700e-003	0.1817	0.0482	1.1800e-003	0.0493		190.1863	190.1863	7.1100e-003		190.3639

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0002	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6300e-003	0.1729	0.0365	4.9000e-004	0.0128	3.1000e-004	0.0131	3.6900e-003	2.9000e-004	3.9800e-003		52.1354	52.1354	4.1300e-003		52.2387
Worker	0.0655	0.0377	0.4123	1.3800e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		138.0508	138.0508	2.9800e-003		138.1253
Total	0.0701	0.2106	0.4487	1.8700e-003	0.1805	1.2700e-003	0.1817	0.0482	1.1800e-003	0.0493		190.1863	190.1863	7.1100e-003		190.3639

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.5308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090		375.2641	375.2641	0.0244		375.8749
Total	48.8035	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090		375.2641	375.2641	0.0244		375.8749

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2837	0.1633	1.7865	6.0000e-003	0.7266	4.1700e-003	0.7307	0.1927	3.8400e-003	0.1965		598.2203	598.2203	0.0129		598.5428
Total	0.2837	0.1633	1.7865	6.0000e-003	0.7266	4.1700e-003	0.7307	0.1927	3.8400e-003	0.1965		598.2203	598.2203	0.0129		598.5428

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.5308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090	0.0000	375.2641	375.2641	0.0244		375.8749
Total	48.8035	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090	0.0000	375.2641	375.2641	0.0244		375.8749

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.2837	0.1633	1.7865	6.0000e-003	0.7266	4.1700e-003	0.7307	0.1927	3.8400e-003	0.1965		598.2203	598.2203	0.0129			598.5428
Total	0.2837	0.1633	1.7865	6.0000e-003	0.7266	4.1700e-003	0.7307	0.1927	3.8400e-003	0.1965		598.2203	598.2203	0.0129			598.5428

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Unrefrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793
Unmitigated	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0353					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.9823					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.3100e-003	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793
Total	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0353					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.9823					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.3100e-003	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793
Total	9.0249	7.2000e-004	0.0786	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1682	0.1682	4.4000e-004		0.1793

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 3.2:

CALEEMOD PROJECT OPERATIONAL (PASSENGER CARS) EMISSIONS MODEL OUTPUTS

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

Compass Danbe Center (Building 1 Operations - Passenger Cars)
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	88.57	1000sqft	2.03	88,571.00	0
Unrefrigerated Warehouse-No Rail	206.67	1000sqft	4.75	206,665.00	0
Other Non-Asphalt Surfaces	45.03	1000sqft	1.03	45,032.00	0
Parking Lot	202.77	1000sqft	4.66	202,767.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - Total Building 1 Area is 12.47 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Passenger Car Fleet Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, and MDV).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.19	0.21

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LotAcreage	4.74	4.75
tblLandUse	LotAcreage	4.65	4.66
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblOperationalOffRoadEquipment	OperHoursPerDay		
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.03	2.2560e-003
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.38
tblVehicleTrips	ST_TR	1.68	0.11
tblVehicleTrips	SU_TR	1.68	1.38
tblVehicleTrips	SU_TR	1.68	0.04
tblVehicleTrips	WD_TR	1.68	1.38
tblVehicleTrips	WD_TR	1.68	1.28

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Energy	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
Mobile	0.9486	0.8824	14.1258	0.0442	4.8678	0.0217	4.8895	1.2904	0.0200	1.3104		4,496.6851	4,496.6851	0.0902		4,498.9397
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	7.9196	3.4383	16.0216	0.0551	4.8678	0.1635	5.0313	1.2904	0.1583	1.4487		6,348.8139	6,348.8139	0.2193	0.0283	6,362.7394

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Energy	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
Mobile	0.9486	0.8824	14.1258	0.0442	4.8678	0.0217	4.8895	1.2904	0.0200	1.3104		4,496.6851	4,496.6851	0.0902		4,498.9397
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	7.9196	3.4383	16.0216	0.0551	4.8678	0.1635	5.0313	1.2904	0.1583	1.4487		6,348.8139	6,348.8139	0.2193	0.0283	6,362.7394

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/29/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

Acres of Paving: 5.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9486	0.8824	14.1258	0.0442	4.8678	0.0217	4.8895	1.2904	0.0200	1.3104		4,496.685 1	4,496.685 1	0.0902		4,498.939 7
Unmitigated	0.9486	0.8824	14.1258	0.0442	4.8678	0.0217	4.8895	1.2904	0.0200	1.3104		4,496.685 1	4,496.685 1	0.0902		4,498.939 7

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	122.00	122.00	122.00	737,159	737,159
Unrefrigerated Warehouse-No Rail	263.99	22.63	9.05	1,166,745	1,166,745
Total	385.99	144.63	131.05	1,903,904	1,903,904

4.3 Trip Type Information

Attachment: Appendix A 1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
NaturalGas Unmitigated	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	12324.7	0.1329	1.2083	1.0150	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.9665	1,449.9665	0.0278	0.0266	1,458.5829
Unrefrigerated Warehouse-No Rail	809.674	8.7300e-003	0.0794	0.0667	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003		95.2558	95.2558	1.8300e-003	1.7500e-003	95.8218
Total		0.1416	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	12.3247	0.1329	1.2083	1.0150	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.9665	1,449.9665	0.0278	0.0266	1,458.5829
Unrefrigerated Warehouse-No Rail	0.809674	8.7300e-003	0.0794	0.0667	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003		95.2558	95.2558	1.8300e-003	1.7500e-003	95.8218
Total		0.1416	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Unmitigated	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.1600e-003	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Total	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.1600e-003	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Total	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Summer

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/Backhoes	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

Compass Danbe Center (Building 1 Operations - Passenger Cars)
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	88.57	1000sqft	2.03	88,571.00	0
Unrefrigerated Warehouse-No Rail	206.67	1000sqft	4.75	206,665.00	0
Other Non-Asphalt Surfaces	45.03	1000sqft	1.03	45,032.00	0
Parking Lot	202.77	1000sqft	4.66	202,767.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - Total Building 1 Area is 12.47 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Passenger Car Fleet Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, and MDV).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.19	0.21

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LotAcreage	4.74	4.75
tblLandUse	LotAcreage	4.65	4.66
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblOperationalOffRoadEquipment	OperHoursPerDay		
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.03	2.2560e-003
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.38
tblVehicleTrips	ST_TR	1.68	0.11
tblVehicleTrips	SU_TR	1.68	1.38
tblVehicleTrips	SU_TR	1.68	0.04
tblVehicleTrips	WD_TR	1.68	1.38
tblVehicleTrips	WD_TR	1.68	1.28

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Energy	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
Mobile	0.9007	0.9343	12.0455	0.0408	4.8678	0.0217	4.8895	1.2904	0.0200	1.3104		4,147.8710	4,147.8710	0.0909		4,150.1440
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	7.8717	3.4901	13.9412	0.0517	4.8678	0.1635	5.0313	1.2904	0.1583	1.4487		5,999.9999	5,999.9999	0.2201	0.0283	6,013.9437

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Energy	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
Mobile	0.9007	0.9343	12.0455	0.0408	4.8678	0.0217	4.8895	1.2904	0.0200	1.3104		4,147.8710	4,147.8710	0.0909		4,150.1440
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	7.8717	3.4901	13.9412	0.0517	4.8678	0.1635	5.0313	1.2904	0.1583	1.4487		5,999.9999	5,999.9999	0.2201	0.0283	6,013.9437

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/29/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

Acres of Paving: 5.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9007	0.9343	12.0455	0.0408	4.8678	0.0217	4.8895	1.2904	0.0200	1.3104		4,147.8710	4,147.8710	0.0909		4,150.1440
Unmitigated	0.9007	0.9343	12.0455	0.0408	4.8678	0.0217	4.8895	1.2904	0.0200	1.3104		4,147.8710	4,147.8710	0.0909		4,150.1440

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	122.00	122.00	122.00	737,159	737,159
Unrefrigerated Warehouse-No Rail	263.99	22.63	9.05	1,166,745	1,166,745
Total	385.99	144.63	131.05	1,903,904	1,903,904

4.3 Trip Type Information

Attachment: Appendix A 1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
NaturalGas Unmitigated	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	12324.7	0.1329	1.2083	1.0150	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.9665	1,449.9665	0.0278	0.0266	1,458.5829
Unrefrigerated Warehouse-No Rail	809.674	8.7300e-003	0.0794	0.0667	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003		95.2558	95.2558	1.8300e-003	1.7500e-003	95.8218
Total		0.1416	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	12.3247	0.1329	1.2083	1.0150	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.9665	1,449.9665	0.0278	0.0266	1,458.5829
Unrefrigerated Warehouse-No Rail	0.809674	8.7300e-003	0.0794	0.0667	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003		95.2558	95.2558	1.8300e-003	1.7500e-003	95.8218
Total		0.1416	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Unmitigated	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.1600e-003	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Total	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.1600e-003	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Total	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Winter

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/Backhoes	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

**Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars)
Riverside-South Coast County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	30.38	1000sqft	0.70	30,376.00	0
Unrefrigerated Warehouse-No Rail	70.88	1000sqft	1.63	70,876.00	0
Other Non-Asphalt Surfaces	28.94	1000sqft	0.66	28,940.00	0
Parking Lot	95.45	1000sqft	2.19	95,454.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - Total Building 2 Area is 5.18 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Passenger Car Fleet Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, and MDV).

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.38
tblVehicleTrips	ST_TR	1.68	0.11
tblVehicleTrips	SU_TR	1.68	1.38
tblVehicleTrips	SU_TR	1.68	0.04
tblVehicleTrips	WD_TR	1.68	1.38
tblVehicleTrips	WD_TR	1.68	1.27

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Energy	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
Mobile	0.3244	0.3018	4.8307	0.0151	1.6647	7.4200e-003	1.6721	0.4413	6.8400e-003	0.4481		1,537.7513	1,537.7513	0.0308		1,538.5223
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	2.8126	2.0112	5.9833	0.0209	1.6647	0.0848	1.7495	0.4413	0.0807	0.5220		2,374.5319	2,374.5319	0.1404	9.7200e-003	2,380.9359

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Energy	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
Mobile	0.3244	0.3018	4.8307	0.0151	1.6647	7.4200e-003	1.6721	0.4413	6.8400e-003	0.4481		1,537.7513	1,537.7513	0.0308		1,538.5223
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	2.8126	2.0112	5.9833	0.0209	1.6647	0.0848	1.7495	0.4413	0.0807	0.5220		2,374.5319	2,374.5319	0.1404	9.7200e-003	2,380.9359

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

Acres of Paving: 2.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3244	0.3018	4.8307	0.0151	1.6647	7.4200e-003	1.6721	0.4413	6.8400e-003	0.4481		1,537.7513	1,537.7513	0.0308		1,538.5223
Unmitigated	0.3244	0.3018	4.8307	0.0151	1.6647	7.4200e-003	1.6721	0.4413	6.8400e-003	0.4481		1,537.7513	1,537.7513	0.0308		1,538.5223

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	42.00	42.00	42.00	253,786	253,786
Unrefrigerated Warehouse-No Rail	90.00	7.76	3.10	397,812	397,812
Total	132.00	49.76	45.11	651,598	651,598

4.3 Trip Type Information

Attachment: Appendix A 1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
NaturalGas Unmitigated	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4226.84	0.0456	0.4144	0.3481	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.2754	497.2754	9.5300e-003	9.1200e-003	500.2305
Unrefrigerated Warehouse-No Rail	277.679	2.9900e-003	0.0272	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003		32.6681	32.6681	6.3000e-004	6.0000e-004	32.8622
Total		0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.22684	0.0456	0.4144	0.3481	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.2754	497.2754	9.5300e-003	9.1200e-003	500.2305
Unrefrigerated Warehouse-No Rail	0.277679	2.9900e-003	0.0272	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003		32.6681	32.6681	6.3000e-004	6.0000e-004	32.8622
Total		0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpoint (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Unmitigated	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2666					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1500e-003	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Total	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2666					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1500e-003	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Total	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Summer

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/Backhoes	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars)
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	30.38	1000sqft	0.70	30,376.00	0
Unrefrigerated Warehouse-No Rail	70.88	1000sqft	1.63	70,876.00	0
Other Non-Asphalt Surfaces	28.94	1000sqft	0.66	28,940.00	0
Parking Lot	95.45	1000sqft	2.19	95,454.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - Total Building 2 Area is 5.18 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Passenger Car Fleet Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, and MDV).

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.38
tblVehicleTrips	ST_TR	1.68	0.11
tblVehicleTrips	SU_TR	1.68	1.38
tblVehicleTrips	SU_TR	1.68	0.04
tblVehicleTrips	WD_TR	1.68	1.38
tblVehicleTrips	WD_TR	1.68	1.27

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Energy	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
Mobile	0.3080	0.3195	4.1192	0.0139	1.6647	7.4200e-003	1.6721	0.4413	6.8400e-003	0.4481		1,418.4658	1,418.4658	0.0311		1,419.2431
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	2.7963	2.0290	5.2719	0.0198	1.6647	0.0848	1.7495	0.4413	0.0807	0.5220		2,255.2464	2,255.2464	0.1406	9.7200e-003	2,261.6567

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Energy	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
Mobile	0.3080	0.3195	4.1192	0.0139	1.6647	7.4200e-003	1.6721	0.4413	6.8400e-003	0.4481		1,418.4658	1,418.4658	0.0311		1,419.2431
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	2.7963	2.0290	5.2719	0.0198	1.6647	0.0848	1.7495	0.4413	0.0807	0.5220		2,255.2464	2,255.2464	0.1406	9.7200e-003	2,261.6567

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

Acres of Paving: 2.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3080	0.3195	4.1192	0.0139	1.6647	7.4200e-003	1.6721	0.4413	6.8400e-003	0.4481		1,418.4658	1,418.4658	0.0311		1,419.2431
Unmitigated	0.3080	0.3195	4.1192	0.0139	1.6647	7.4200e-003	1.6721	0.4413	6.8400e-003	0.4481		1,418.4658	1,418.4658	0.0311		1,419.2431

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	42.00	42.00	42.00	253,786	253,786
Unrefrigerated Warehouse-No Rail	90.00	7.76	3.10	397,812	397,812
Total	132.00	49.76	45.11	651,598	651,598

4.3 Trip Type Information

Attachment: Appendix A 1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
NaturalGas Unmitigated	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4226.84	0.0456	0.4144	0.3481	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.2754	497.2754	9.5300e-003	9.1200e-003	500.2305
Unrefrigerated Warehouse-No Rail	277.679	2.9900e-003	0.0272	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003		32.6681	32.6681	6.3000e-004	6.0000e-004	32.8622
Total		0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.22684	0.0456	0.4144	0.3481	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.2754	497.2754	9.5300e-003	9.1200e-003	500.2305
Unrefrigerated Warehouse-No Rail	0.277679	2.9900e-003	0.0272	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003		32.6681	32.6681	6.3000e-004	6.0000e-004	32.8622
Total		0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Unmitigated	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2666					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1500e-003	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Total	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2666					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1500e-003	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Total	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Winter

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/Backhoes	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 3.3:**CALEEMOD PROJECT OPERATIONAL (TRUCKS) EMISSIONS MODEL OUTPUTS**

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

Compass Danbe Center (Building 1 Operations - Trucks)
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	88.57	1000sqft	2.03	88,571.00	0
Unrefrigerated Warehouse-No Rail	206.67	1000sqft	4.75	206,665.00	0
Other Non-Asphalt Surfaces	45.03	1000sqft	1.03	45,032.00	0
Parking Lot	202.77	1000sqft	4.66	202,767.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - Total Building 1 Area is 12.47 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Truck Fleet Mix estimated by rationing the Trip Rates for each truck type based on information provided in the Traffic Analysis.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.53
tblFleetMix	HHD	0.07	0.63
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.35
tblFleetMix	LHD1	0.02	0.16
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.12
tblFleetMix	MHD	0.02	0.20
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LotAcreage	4.74	4.75
tblLandUse	LotAcreage	4.65	4.66
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.77
tblVehicleTrips	ST_TR	1.68	0.04
tblVehicleTrips	SU_TR	1.68	0.77

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleTrips	SU_TR	1.68	0.02
tblVehicleTrips	WD_TR	1.68	0.77
tblVehicleTrips	WD_TR	1.68	0.47

2.0 Emissions Summary

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Energy	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
Mobile	0.9302	33.5999	7.1744	0.1541	5.8726	0.4366	6.3092	1.6471	0.4176	2.0647		16,389.8385	16,389.8385	0.2686		16,396.5526
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	7.9012	36.1557	9.0701	0.1650	5.8726	0.5784	6.4510	1.6471	0.5559	2.2030		18,241.9673	18,241.9673	0.3977	0.0283	18,260.3523

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Energy	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
Mobile	0.9302	33.5999	7.1744	0.1541	5.8726	0.4366	6.3092	1.6471	0.4176	2.0647		16,389.8385	16,389.8385	0.2686		16,396.5526
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	7.9012	36.1557	9.0701	0.1650	5.8726	0.5784	6.4510	1.6471	0.5559	2.2030		18,241.9673	18,241.9673	0.3977	0.0283	18,260.3523

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

Acres of Paving: 5.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9302	33.5999	7.1744	0.1541	5.8726	0.4366	6.3092	1.6471	0.4176	2.0647		16,389.8385	16,389.8385	0.2686		16,396.5526
Unmitigated	0.9302	33.5999	7.1744	0.1541	5.8726	0.4366	6.3092	1.6471	0.4176	2.0647		16,389.8385	16,389.8385	0.2686		16,396.5526

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	68.00	68.00	68.00	990,021	990,021
Unrefrigerated Warehouse-No Rail	98.00	8.37	3.35	1,043,579	1,043,579
Total	166.00	76.37	71.34	2,033,600	2,033,600

4.3 Trip Type Information

Attachment: Appendix A 1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.353000	0.000000	0.117600	0.529400	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.163200	0.000000	0.204100	0.632700	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
NaturalGas Unmitigated	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	12324.7	0.1329	1.2083	1.0150	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.9665	1,449.9665	0.0278	0.0266	1,458.5829
Unrefrigerated Warehouse-No Rail	809.674	8.7300e-003	0.0794	0.0667	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003		95.2558	95.2558	1.8300e-003	1.7500e-003	95.8218
Total		0.1416	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	12.3247	0.1329	1.2083	1.0150	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.9665	1,449.9665	0.0278	0.0266	1,458.5829
Unrefrigerated Warehouse-No Rail	0.809674	8.7300e-003	0.0794	0.0667	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003		95.2558	95.2558	1.8300e-003	1.7500e-003	95.8218
Total		0.1416	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Unmitigated	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.1600e-003	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Total	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.1600e-003	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Total	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Summer

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/Backhoes	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

Compass Danbe Center (Building 1 Operations - Trucks)
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	88.57	1000sqft	2.03	88,571.00	0
Unrefrigerated Warehouse-No Rail	206.67	1000sqft	4.75	206,665.00	0
Other Non-Asphalt Surfaces	45.03	1000sqft	1.03	45,032.00	0
Parking Lot	202.77	1000sqft	4.66	202,767.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - Total Building 1 Area is 12.47 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Truck Fleet Mix estimated by rationing the Trip Rates for each truck type based on information provided in the Traffic Analysis.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.53
tblFleetMix	HHD	0.07	0.63
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.35
tblFleetMix	LHD1	0.02	0.16
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.12
tblFleetMix	MHD	0.02	0.20
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LotAcreage	4.74	4.75
tblLandUse	LotAcreage	4.65	4.66
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.77
tblVehicleTrips	ST_TR	1.68	0.04
tblVehicleTrips	SU_TR	1.68	0.77

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleTrips	SU_TR	1.68	0.02
tblVehicleTrips	WD_TR	1.68	0.77
tblVehicleTrips	WD_TR	1.68	0.47

2.0 Emissions Summary

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Energy	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
Mobile	0.9117	34.9719	6.5456	0.1541	5.8680	0.4366	6.3045	1.6454	0.4176	2.0630		16,238.4671	16,238.4671	0.0506		16,239.7314
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	7.8827	37.5277	8.4414	0.1650	5.8680	0.5784	6.4463	1.6454	0.5559	2.2013		18,090.5959	18,090.5959	0.1797	0.0283	18,103.5311

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Energy	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
Mobile	0.9117	34.9719	6.5456	0.1541	5.8680	0.4366	6.3045	1.6454	0.4176	2.0630		16,238.4671	16,238.4671	0.0506		16,239.7314
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	7.8827	37.5277	8.4414	0.1650	5.8680	0.5784	6.4463	1.6454	0.5559	2.2013		18,090.5959	18,090.5959	0.1797	0.0283	18,103.5311

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

Acres of Paving: 5.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9117	34.9719	6.5456	0.1541	5.8680	0.4366	6.3045	1.6454	0.4176	2.0630		16,238.4671	16,238.4671	0.0506		16,239.7314
Unmitigated	0.9117	34.9719	6.5456	0.1541	5.8680	0.4366	6.3045	1.6454	0.4176	2.0630		16,238.4671	16,238.4671	0.0506		16,239.7314

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	68.00	68.00	68.00	990,021	990,021
Unrefrigerated Warehouse-No Rail	98.00	8.37	3.35	1,043,579	1,043,579
Total	166.00	76.37	71.34	2,033,600	2,033,600

4.3 Trip Type Information

Attachment: Appendix A 1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.353000	0.000000	0.117600	0.529400	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.163200	0.000000	0.204100	0.632700	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047
NaturalGas Unmitigated	0.1417	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	12324.7	0.1329	1.2083	1.0150	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.9665	1,449.9665	0.0278	0.0266	1,458.5829
Unrefrigerated Warehouse-No Rail	809.674	8.7300e-003	0.0794	0.0667	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003		95.2558	95.2558	1.8300e-003	1.7500e-003	95.8218
Total		0.1416	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	12.3247	0.1329	1.2083	1.0150	7.2500e-003		0.0918	0.0918		0.0918	0.0918		1,449.9665	1,449.9665	0.0278	0.0266	1,458.5829
Unrefrigerated Warehouse-No Rail	0.809674	8.7300e-003	0.0794	0.0667	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003		95.2558	95.2558	1.8300e-003	1.7500e-003	95.8218
Total		0.1416	1.2877	1.0817	7.7300e-003		0.0979	0.0979		0.0979	0.0979		1,545.2223	1,545.2223	0.0296	0.0283	1,554.4047

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Unmitigated	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.1600e-003	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Total	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.1600e-003	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267
Total	6.7073	5.1000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1188	0.1188	3.1000e-004		0.1267

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Winter

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/Backhoes	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

Compass Danbe Centerpointe (Building 2 Operations - Trucks)
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	30.38	1000sqft	0.70	30,376.00	0
Unrefrigerated Warehouse-No Rail	70.88	1000sqft	1.63	70,876.00	0
Other Non-Asphalt Surfaces	28.94	1000sqft	0.66	28,940.00	0
Parking Lot	95.45	1000sqft	2.19	95,454.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - Total Building 2 Area is 5.18 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Truck Fleet Mix estimated by rationing the Trip Rates for each truck type based on information provided in the Traffic Analysis.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.55
tblFleetMix	HHD	0.07	0.61
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.36
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.09
tblFleetMix	MHD	0.02	0.22
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.72
tblVehicleTrips	ST_TR	1.68	0.04
tblVehicleTrips	SU_TR	1.68	0.72
tblVehicleTrips	SU_TR	1.68	0.02
tblVehicleTrips	WD_TR	1.68	0.72

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

tblVehicleTrips	WD_TR	1.68	0.51
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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Energy	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
Mobile	0.3250	11.7119	2.5051	0.0538	2.0528	0.1528	2.2055	0.5760	0.1461	0.7221		5,716.9256	5,716.9256	0.0933		5,719.2585
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	2.8132	13.4213	3.6578	0.0596	2.0528	0.2301	2.2829	0.5760	0.2200	0.7960		6,553.7062	6,553.7062	0.2028	9.7200e-003	6,561.6721

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Energy	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
Mobile	0.3250	11.7119	2.5051	0.0538	2.0528	0.1528	2.2055	0.5760	0.1461	0.7221		5,716.9256	5,716.9256	0.0933		5,719.2585
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	2.8132	13.4213	3.6578	0.0596	2.0528	0.2301	2.2829	0.5760	0.2200	0.7960		6,553.7062	6,553.7062	0.2028	9.7200e-003	6,561.6721

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

Acres of Paving: 2.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3250	11.7119	2.5051	0.0538	2.0528	0.1528	2.2055	0.5760	0.1461	0.7221		5,716.9256	5,716.9256	0.0933		5,719.2585
Unmitigated	0.3250	11.7119	2.5051	0.0538	2.0528	0.1528	2.2055	0.5760	0.1461	0.7221		5,716.9256	5,716.9256	0.0933		5,719.2585

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	22.00	22.00	22.00	320,339	320,339
Unrefrigerated Warehouse-No Rail	36.00	2.87	1.15	382,737	382,737
Total	58.00	24.87	23.15	703,077	703,077

4.3 Trip Type Information

Attachment: Appendix A 1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.363600	0.000000	0.090900	0.545500	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.166700	0.000000	0.222200	0.611100	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
NaturalGas Unmitigated	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4226.84	0.0456	0.4144	0.3481	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.2754	497.2754	9.5300e-003	9.1200e-003	500.2305
Unrefrigerated Warehouse-No Rail	277.679	2.9900e-003	0.0272	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003		32.6681	32.6681	6.3000e-004	6.0000e-004	32.8622
Total		0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.22684	0.0456	0.4144	0.3481	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.2754	497.2754	9.5300e-003	9.1200e-003	500.2305
Unrefrigerated Warehouse-No Rail	0.277679	2.9900e-003	0.0272	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003		32.6681	32.6681	6.3000e-004	6.0000e-004	32.8622
Total		0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Unmitigated	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2666					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1500e-003	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Total	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2666					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1500e-003	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Total	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Summer

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/Backhoes	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

**Compass Danbe Centerpointe (Building 2 Operations - Trucks)
Riverside-South Coast County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	30.38	1000sqft	0.70	30,376.00	0
Unrefrigerated Warehouse-No Rail	70.88	1000sqft	1.63	70,876.00	0
Other Non-Asphalt Surfaces	28.94	1000sqft	0.66	28,940.00	0
Parking Lot	95.45	1000sqft	2.19	95,454.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - Total Building 2 Area is 5.18 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Truck Fleet Mix estimated by rationing the Trip Rates for each truck type based on information provided in the Traffic Analysis.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.55
tblFleetMix	HHD	0.07	0.61
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.36
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.09
tblFleetMix	MHD	0.02	0.22
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.72
tblVehicleTrips	ST_TR	1.68	0.04
tblVehicleTrips	SU_TR	1.68	0.72
tblVehicleTrips	SU_TR	1.68	0.02
tblVehicleTrips	WD_TR	1.68	0.72

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

tblVehicleTrips	WD_TR	1.68	0.51
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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Energy	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
Mobile	0.3186	12.1902	2.2870	0.0538	2.0512	0.1528	2.2039	0.5754	0.1461	0.7215		5,664.4084	5,664.4084	0.0177		5,664.8506
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	2.8068	13.8997	3.4396	0.0596	2.0512	0.2301	2.2813	0.5754	0.2200	0.7954		6,501.1890	6,501.1890	0.1272	9.7200e-003	6,507.2642

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Energy	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
Mobile	0.3186	12.1902	2.2870	0.0538	2.0512	0.1528	2.2039	0.5754	0.1461	0.7215		5,664.4084	5,664.4084	0.0177		5,664.8506
Offroad	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	2.8068	13.8997	3.4396	0.0596	2.0512	0.2301	2.2813	0.5754	0.2200	0.7954		6,501.1890	6,501.1890	0.1272	9.7200e-003	6,507.2642

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

Acres of Paving: 2.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3186	12.1902	2.2870	0.0538	2.0512	0.1528	2.2039	0.5754	0.1461	0.7215		5,664.4084	5,664.4084	0.0177		5,664.8506
Unmitigated	0.3186	12.1902	2.2870	0.0538	2.0512	0.1528	2.2039	0.5754	0.1461	0.7215		5,664.4084	5,664.4084	0.0177		5,664.8506

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	22.00	22.00	22.00	320,339	320,339
Unrefrigerated Warehouse-No Rail	36.00	2.87	1.15	382,737	382,737
Total	58.00	24.87	23.15	703,077	703,077

4.3 Trip Type Information

Attachment: Appendix A 1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.363600	0.000000	0.090900	0.545500	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.166700	0.000000	0.222200	0.611100	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927
NaturalGas Unmitigated	0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4226.84	0.0456	0.4144	0.3481	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.2754	497.2754	9.5300e-003	9.1200e-003	500.2305
Unrefrigerated Warehouse-No Rail	277.679	2.9900e-003	0.0272	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003		32.6681	32.6681	6.3000e-004	6.0000e-004	32.8622
Total		0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.22684	0.0456	0.4144	0.3481	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.2754	497.2754	9.5300e-003	9.1200e-003	500.2305
Unrefrigerated Warehouse-No Rail	0.277679	2.9900e-003	0.0272	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003		32.6681	32.6681	6.3000e-004	6.0000e-004	32.8622
Total		0.0486	0.4416	0.3710	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.9435	529.9435	0.0102	9.7200e-003	533.0927

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Unmitigated	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2666					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1500e-003	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Total	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2666					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1500e-003	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526
Total	2.3176	2.1000e-004	0.0231	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0494	0.0494	1.3000e-004		0.0526

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Winter

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/Backhoes	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683
Total	0.1220	1.2676	0.7586	3.1700e-003		0.0437	0.0437		0.0402	0.0402		306.7877	306.7877	0.0992		309.2683

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 3.4:
EMFAC2017 EMISSION RATES

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

EMFAC2017 Derived CalEEMod Annual Emission Rates: Year 2022^{1,2}

Season	Pollutant	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	MCY	OBUS	MH
Annual	CH4_IDLEX	0	0	0	0	0.0046573	0.002838777	0.002735836	0.022299247	0.0086193	0	0	0.08718	0
Annual	CH4_RUNEX	0.0021323	0.0066595	0.0035681	0.0047137	0.0048744	0.003516414	0.003024146	0.027344819	0.0071936	3.039609	0.3149194	0.0068646	0.0033376
Annual	CH4_STREX	0.0483239	0.0808829	0.0678879	0.0846611	0.0144216	0.00765576	0.007001349	2.13536E-07	0.0245802	0.025253	0.243112	0.008049	0
Annual	CO_IDLEX	0	0	0	0	0.1685148	0.127042827	0.139656915	6.000754905	0.477517	0	0	3.4030123	0
Annual	CO_RUNEX	0.5984624	1.3744935	0.8535908	1.0068017	0.6599647	0.479075267	0.308907948	0.30294567	0.8653173	23.57629	19.15844	0.5712088	0.3410887
Annual	CO_STREX	2.0873724	2.3667137	2.6761897	3.1454402	0.9168211	0.493048832	0.820412067	0.004654597	2.7340226	1.904172	8.6223448	1.0867549	0
Annual	CO2_NBIO_IDLEX	0	0	0	0	9.4297862	15.04024708	70.85828834	112.98621	66.930592	0	0	372.28069	0
Annual	CO2_NBIO_RUNEX	258.03615	306.08392	324.29114	407.49466	628.02344	622.3700135	946.7679684	1341.198175	1366.5243	1641.136	207.70227	1106.7073	935.85446
Annual	CO2_NBIO_STREX	53.548384	65.279819	69.428304	86.524974	10.150986	6.517982154	7.056269916	0.038741696	21.51741	23.35359	60.66584	6.9484057	0
Annual	NOX_IDLEX	0	0	0	0	0.0849776	0.126090396	0.56450814	5.853724636	0.2987984	0	0	3.424683	0
Annual	NOX_RUNEX	0.0346921	0.1214222	0.0737765	0.1001736	1.5327872	1.671546595	1.594494837	2.808044554	1.3548209	0.303771	1.1286234	4.6073102	4.4020535
Annual	NOX_STREX ³	0.1762104	0.285364	0.2800737	0.360196	0.2948791	0.165656334	1.414452996	2.221485508	0.6263402	0.234928	0.2629455	0.7172059	0
Annual	PM10_IDLEX	0	0	0	0	0.0010052	0.001507447	0.001466129	0.003031451	0.0005765	0	0	0.0036144	0
Annual	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.060431687	0.13034	0.091898	0.01176	0.7448002	0.13034
Annual	PM10_PMTW	0.008	0.008	0.008	0.008	0.0100605	0.010946841	0.012000003	0.035233293	0.012	0.020229	0.004	0.010588	0.016
Annual	PM10_RUNEX	0.0013706	0.0020657	0.001409	0.0014812	0.0108961	0.014044995	0.046809039	0.03260842	0.0199752	0.002162	0.001761	0.0273746	0.140933
Annual	PM10_STREX	0.0018338	0.0027558	0.0018664	0.0019435	0.000219	0.000110489	0.18839E-05	5.31169E-07	0.0002137	0.00021	0.0028427	4.605E-05	0
Annual	PM25_IDLEX	0	0	0	0	0.0009617	0.001442236	0.001402705	0.002900312	0.0005515	0	0	0.0034581	0
Annual	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.025899294	0.05586	0.039385	0.00504	0.3192001	0.05586
Annual	PM25_PMTW	0.002	0.002	0.002	0.002	0.0025151	0.00273671	0.003000001	0.008808323	0.003	0.005057	0.001	0.002647	0.004
Annual	PM25_RUNEX	0.0012627	0.0019009	0.0012971	0.0013664	0.0104059	0.013428529	0.044781789	0.031197786	0.0190972	0.002049	0.0016471	0.0261807	0.1348363
Annual	PM25_STREX	0.0016862	0.002534	0.0017161	0.0017873	0.0002013	9.33155E-05	7.52893E-05	4.8839E-07	0.0001965	0.000193	0.0026759	4.234E-05	0
Annual	ROG_DIURN	0.0536506	0.1775839	0.087154	0.1069751	0.00215175	0.00117141	0.000439176	2.96534E-06	0.0026566	0.0027	1.4268789	0.0014762	0
Annual	ROG_HTSK	0.0914841	0.2454321	0.126947	0.1578141	0.0725758	0.035253377	0.015178833	0.000109891	0.0263671	0.015418	0.7895327	0.010663	0
Annual	ROG_IDLEX	0	0	0	0	0.0201293	0.015152618	0.017077596	0.437369796	0.0481253	0	0	0.4068131	0
Annual	ROG_RESTL	0.0426578	0.1236415	0.0733346	0.0948216	0.0013132	0.000630451	0.000234947	1.8146E-06	0.0011655	0.001093	0.7582515	0.0007395	0
Annual	ROG_RUNEX	0.0080166	0.0291533	0.0142861	0.0195706	0.0582807	0.05882567	0.053960607	0.049346722	0.0580098	0.048628	2.1320983	0.0960761	0.0718567
Annual	ROG_RUNLS	0.199944	0.7978661	0.407726	0.4669001	0.4572341	0.208034027	0.076680948	0.005033316	0.2896294	0.076082	1.8232699	0.0645755	0
Annual	ROG_STREX	0.2089894	0.4082819	0.3101606	0.4134193	0.0716331	0.037459907	0.037794433	1.09368E-06	0.1310842	0.098385	1.8419405	0.0469909	0
Annual	SO2_IDLEX	0	0	0	0	9.108E-05	0.000143446	0.000671653	0.010458195	0.0006392	0	0	0.0035603	0
Annual	SO2_RUNEX	0.0025363	0.0030093	0.0031877	0.0040033	0.006105	0.005987865	0.008993447	0.012504767	0.0132714	0.006386	0.0020554	0.0105966	0.0088472
Annual	SO2_STREX	0.0005265	0.0006418	0.0006826	0.0008507	0.0001005	6.45007E-05	6.98275E-05	3.8338E-07	0.0002129	0.000231	0.0006003	6.876E-05	0
Annual	TOG_DIURN	0.0536666	0.1775839	0.0871802	0.1070075	0.0025175	0.00117141	0.000439176	2.96534E-06	0.0026566	0.0027	1.4268789	0.0014762	0
Annual	TOG_HTSK	0.0915115	0.2455057	0.1269851	0.1578615	0.0725758	0.035253377	0.015178833	0.000109891	0.0263671	0.015418	0.7895327	0.010663	0
Annual	TOG_IDLEX	0	0	0	0	0.0280727	0.020161123	0.022394002	0.49990888	0.0643949	0	0	0.5870771	0
Annual	TOG_RESTL	0.0426706	0.1236785	0.0733566	0.0948501	0.0013132	0.000630451	0.000234947	1.8146E-06	0.0011655	0.001093	0.7582515	0.0007395	0
Annual	TOG_RUNEX	0.0116581	0.0425208	0.0208155	0.0284374	0.0704671	0.06832071	0.062470616	0.081411206	0.0750594	3.107974	2.6272085	0.1143358	0.0818041
Annual	TOG_RUNLS	0.200004	0.7981055	0.4078483	0.4670402	0.4572341	0.208034027	0.076680948	0.000503316	0.2896294	0.076082	1.8232699	0.0645755	0
Annual	TOG_STREX	0.2289078	0.4471945	0.3397219	0.4528186	0.0784292	0.0113883	0.041380147	1.19744E-06	0.1435207	0.107719	2.0044277	0.0514791	0
Summer	CH4_IDLEX	0	0	0	0	0.0046706	0.002846409	0.002602736	0.023341464	0.008671	0	0	0.0872916	0
Summer	CH4_RUNEX	0.0024045	0.0074265	0.0040045	0.0052953	0.0049553	0.00354149	0.002345269	0.0073439	3.039654	0.31021	0.0069517	0.0033376	0
Summer	CH4_STREX	0.0419434	0.0696605	0.0588207	0.073304	0.0138687	0.007362714	0.006727665	2.03724E-07	0.0234565	0.022963	0.2145163	0.0067101	0
Summer	CO_IDLEX	0	0	0	0	0.1685148	0.127042827	0.270218426	5.87498718	0.4682564	0	0	3.3646916	0
Summer	CO_RUNEX	0.7177735	1.6227536	1.0168895	1.1961789	0.6693628	0.481766723	0.310980312	0.303092418	0.8833949	23.57848	19.13031	0.5808353	0.3410887
Summer	CO_STREX	1.7511794	1.9780854	2.237349	2.6220541	0.8690961	0.467642112	0.774228664	0.004392713	2.5420934	1.619337	7.8983767	0.7800871	0
Summer	CO2_NBIO_IDLEX	0	0	0	0	9.4297862	15.04024708	71.76800642	110.839123	66.844908	0	0	382.15181	0
Summer	CO2_NBIO_RUNEX	278.99185	327.88765	345.20747	429.83964	628.04012	622.3747409	946.771601	1341.198419	1366.5561	1641.14	207.49752	1106.7244	935.85446
Summer	CO2_NBIO_STREX	52.912888	64.459742	68.579771	85.491596	10.065351	6.472492093	6.977588427	0.038326433	21.191892	22.87169	58.759212	6.4358977	0
Summer	NOX_IDLEX	0	0	0	0	0.0849776	0.126090396	0.567249469	5.664993997	0.2926627	0	0	3.5107759	0
Summer	NOX_RUNEX	0.0314373	0.108969	0.066544	0.0903665	1.4438338	1.57878478	1.503100528	2.654111195	1.2623225	0.295492	0.9760553	4.3337255	4.1547322
Summer	NOX_STREX ³	0.1641715	0.2657236	0.2608992	0.3354792	0.2832727	0.159149649	1.411616319	2.221479665	0.615344	0.223401	0.247611	0.7116035	0
Summer	PM10_IDLEX	0	0	0	0	0.0010052	0.001507447	0.001238698	0.002673221	0.0004894	0	0	0.0030538	0
Summer	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.060431687	0.13034	0.091898	0.01176	0.7448002	0.13034
Summer	PM10_PMTW	0.008	0.008	0.008	0.008	0.0100605	0.010946841	0.012000003	0.035233293	0.012	0.020229	0.004	0.010588	0.016
Summer	PM10_RUNEX	0.0013706	0.0020657	0.001409	0.0014812	0.0108961	0.014044995	0.046809039	0.03260842	0.0199752	0.002162	0.001761	0.0273746	0.140933
Summer	PM10_STREX	0.0018338	0.0027558	0.0018664	0.0019435	0.000219	0.000110489	0.18839E-05	5.31169E-07	0.0002137	0.00021	0.0028427	4.605E-05	0
Summer	PM25_IDLEX	0	0	0	0	0.0009617	0.001442236	0.001402705	0.002900312	0.0005515	0	0	0.0034581	0
Summer	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.025899294	0.05586	0.039385	0.00504	0.3192001	0.05586
Summer	PM25_PMTW	0.002	0.002	0.002	0.002	0.0025151	0.00273671	0.003000001	0.008808323	0.003	0.005057	0.001	0.002647	0.004
Summer	PM25_RUNEX	0.0012627	0.0019009	0.0012971	0.0013664	0.0104059	0.013428529	0.044781789	0.031197786	0.0190972	0.002049	0.0016471	0.0261807	0.1348363
Summer	PM25_STREX	0.0016862	0.002534	0.0017161	0.0017873	0.0002013	9.33155E-05	7.52893E-05	4.8839E-07	0.0001965	0.000193	0.0026759	4.234E-05	0
Summer	ROG_DIURN	0.0993468	0.3302614	0.1608817	0.1968329	0.0044753	0.002086132	0.00079064	5.58519E-06	0.0046821	0.004797	2.7413126	0.0025872	0
Summer	ROG_HTSK	0.1026521	0.2880101	0.1430859	0.174794	0.0822699	0.04009149	0.017219051	0.00012087	0.0286399	0.018018	1.0931546	0.0110683	0
Summer	ROG_IDLEX	0	0	0	0	0.0201293	0.015152618	0.016478994	0.458046849	0.0486832	0	0	0.406438	0
Summer	ROG_RESTL	0.079786	0.234605	0.1352927	0.1732435	0.0025194	0.001208137	0.000464147	3.76492E-06	0.002				

Winter	CH4_IDLEX	0	0	0	0	0.0046596	0.002840096	0.002932158	0.018984827	0.0085852	0	0	0.0871884	0
Winter	CH4_RUNEX	0.0020955	0.0065513	0.0035086	0.0046307	0.0048833	0.003519566	0.003025046	0.00225575	0.0072067	3.039613	0.3122868	0.0068632	0.0033376
Winter	CH4_STREX	0.0483168	0.0808544	0.0678811	0.0846532	0.0143211	0.007603361	0.006936561	2.11875E-07	0.0245022	0.025129	0.2380506	0.0081927	0
Winter	CO_IDLEX	0	0	0	0	0.1685148	0.127042827	0.388613734	6.138731245	0.4903055	0	0	3.4559313	0
Winter	CO_RUNEX	0.5767313	1.3282424	0.8236115	0.9713122	0.6609454	0.479380313	0.30908191	0.226210244	0.8668135	23.57648	18.588627	0.5710068	0.3410887
Winter	CO_STREX	2.0711673	2.3487361	2.6578251	3.1240059	0.9082043	0.488588018	0.811652807	0.004605	2.7242863	1.887883	8.40556	1.1101001	0
Winter	CO2_NBIO_IDLEX	0	0	0	0	9.4297862	15.04024708	69.59803901	1113.281679	67.048919	0	0	358.64914	0
Winter	CO2_NBIO_RUNEX	254.50038	302.40081	320.76072	403.72151	628.02517	622.3705508	946.7682753	1323.582348	1366.527	1641.137	206.72038	1106.7069	935.85446
Winter	CO2_NBIO_STREX	53.521907	65.249167	69.398074	86.48944	10.135477	6.509959599	7.041432935	0.038663054	21.500507	23.32603	60.181595	6.9882546	0
Winter	NOX_IDLEX	0	0	0	0	0.0849776	0.126090396	0.560721944	6.079051458	0.3072715	0	0	3.3057928	0
Winter	NOX_RUNEX	0.0331298	0.1160852	0.0704748	0.0957136	1.5079758	1.64558119	1.567865596	2.757795545	1.3294207	0.301646	1.0919814	4.5383203	4.3296996
Winter	NOX_STREX ³	0.1745017	0.2827159	0.2773901	0.3567738	0.2904721	0.163173023	1.413608248	2.221483768	0.6229975	0.232883	0.2603555	0.717481	0
Winter	PM10_IDLEX	0	0	0	0	0.0010052	0.001507447	0.001780199	0.003460469	0.0006968	0	0	0.0043886	0
Winter	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.060093071	0.13034	0.091898	0.01176	0.7448002	0.13034
Winter	PM10_PMTW	0.008	0.008	0.008	0.008	0.0100605	0.010946841	0.012000003	0.035035849	0.012	0.020229	0.004	0.010588	0.016
Winter	PM10_RUNEX	0.0013706	0.0020657	0.001409	0.0014812	0.0108961	0.014044995	0.046809039	0.032581175	0.0199752	0.002162	0.001761	0.0273746	0.140933
Winter	PM10_STREX	0.0018338	0.0027558	0.0018664	0.0019435	0.000219	0.000101489	8.18839E-05	5.31169E-07	0.0002137	0.00021	0.0028427	4.605E-05	0
Winter	PM25_IDLEX	0	0	0	0	0.0009617	0.001442236	0.001703189	0.003310771	0.0006666	0	0	0.0041987	0
Winter	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.025754173	0.05586	0.039385	0.00504	0.3192001	0.05586
Winter	PM25_PMTW	0.002	0.002	0.002	0.002	0.0025151	0.00273671	0.003000001	0.008758962	0.003	0.005057	0.001	0.002647	0.004
Winter	PM25_RUNEX	0.0012627	0.0019009	0.0012971	0.0013664	0.0104059	0.013428529	0.044781789	0.031171719	0.0190972	0.002049	0.0016471	0.0261807	0.1348363
Winter	PM25_STREX	0.0016862	0.002534	0.0017161	0.0017873	0.0002013	9.33155E-05	7.52893E-05	4.8839E-07	0.0001965	0.000193	0.0026759	4.234E-05	0
Winter	ROG_DIURN	0.0527051	0.1803305	0.0838102	0.1008627	0.0026467	0.001200627	0.000463464	3.06217E-06	0.0027865	0.002759	1.6354712	0.0013983	0
Winter	ROG_HTSK	0.1004418	0.2824634	0.1398745	0.1710303	0.0846098	0.040448879	0.016874546	0.000122941	0.0283346	0.017333	1.0575845	0.010924	0
Winter	ROG_IDLEX	0	0	0	0	0.0201293	0.015152618	0.017914416	0.408738125	0.047355	0	0	0.4073311	0
Winter	ROG_RESTL	0.0427275	0.1233241	0.073516	0.0952255	0.0013783	0.000654	0.000247728	1.9621E-06	0.0012415	0.001147	0.7635438	0.0007651	0
Winter	ROG_RUNEX	0.0078721	0.0286426	0.0140344	0.0191986	0.0582495	0.058838155	0.053967818	0.048188712	0.0580726	0.04864	2.1101923	0.0960721	0.0718567
Winter	ROG_RUNLS	0.2259827	0.9317114	0.4712763	0.5357345	0.4920635	0.224700316	0.083499513	0.000535108	0.3083767	0.089294	2.0842358	0.0784382	0
Winter	ROG_STREX	0.208794	0.4076866	0.3098727	0.4130089	0.0710817	0.037176335	0.037510547	1.08547E-06	0.1306462	0.097868	1.7996021	0.0478385	0
Winter	SO2_IDLEX	0	0	0	0	9.108E-05	0.000143446	0.000659616	0.010517733	0.0006403	0	0	0.0034316	0
Winter	SO2_RUNEX	0.0025015	0.0029731	0.003153	0.0039662	0.006105	0.005987871	0.00899345	0.012504768	0.0132714	0.006386	0.0020457	0.0105966	0.0088472
Winter	SO2_STREX	0.0005262	0.0006415	0.0006823	0.0008504	0.0001003	6.44213E-05	6.96807E-05	3.82602E-07	0.0002128	0.000231	0.0005955	6.915E-05	0
Winter	TOG_DIURN	0.0527209	0.1803846	0.0838353	0.100893	0.0026467	0.001200627	0.000463464	3.06217E-06	0.0027865	0.002759	1.6354712	0.0013983	0
Winter	TOG_HTSK	0.1004719	0.2825481	0.1399164	0.1710816	0.0846098	0.040448879	0.016874546	0.000122941	0.0283346	0.017333	1.0575845	0.010924	0
Winter	TOG_IDLEX	0	0	0	0	0.0280727	0.020161123	0.023594826	0.465317242	0.0635179	0	0	0.5876667	0
Winter	TOG_RESTL	0.0427403	0.1233611	0.0735381	0.095254	0.0013783	0.000654	0.000247728	1.9621E-06	0.0012415	0.001147	0.7635438	0.0007651	0
Winter	TOG_RUNEX	0.0114475	0.0417762	0.0204485	0.0278972	0.0705276	0.068338928	0.062481137	0.054895029	0.0751509	3.107992	2.6007426	0.1143299	0.0818041
Winter	TOG_RUNLS	0.2260505	0.931991	0.4714177	0.5358952	0.4920635	0.224700316	0.083499513	0.000535108	0.3083767	0.089294	2.0842358	0.0784382	0
Winter	TOG_STREX	0.2286938	0.4465425	0.3394066	0.4523693	0.0778255	0.040703407	0.041069327	1.18845E-06	0.1430411	0.107154	1.9583823	0.0523771	0

1 Source: California Air Resources Board. EMFAC2017 Web Database. <https://www.arb.ca.gov/emfac/2017/>; California Air Pollution Control Officers Association (CAPCOA). 2017, November. California Emissions Estimator Model User's Guide, Version 2016.3.2, Appendix A.

2 Unless otherwise noted, per CalEEMod methodology, the calculated CalEEMod emission rates are derived from the emission rates obtained using the EMFAC2017 Web Database for the Riverside (SC) region.

3 Because EMFAC2017 provides vehicle trips data for MHDT and HHDT diesel trucks, the formula provided in Appendix A of the CalEEMod User's Guide in calculating the NO_x STREX emission rates are utilized.

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 3.5:
SCAQMD BRIEF OF AMICUS CURIAE

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

S219783

IN THE SUPREME COURT OF CALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,

Plaintiffs and Appellants,

v.

COUNTY OF FRESNO,

Defendant and Respondent,

and,

FRIANT RANCH, L.P.,

Real Party in Interest and Respondent.

SUPREME COURT
FILED

APR 13 2015

Frank A. McGuire Clerk
Deputy

After a Published Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726
Honorable Rosendo A. Pena, Jr.

**APPLICATION OF THE SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT FOR LEAVE TO FILE
BRIEF OF *AMICUS CURIAE* IN SUPPORT OF NEITHER PARTY
AND [*PROPOSED*] BRIEF OF *AMICUS CURIAE***

Kurt R. Wiese, General Counsel (SBN 127251)
*Barbara Baird, Chief Deputy Counsel (SBN 81507)
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765
Telephone: 909-396-2302; Facsimile: 909-396-2961
Email: bbaird@aqmd.gov
Counsel for [Proposed] Amicus Curiae,
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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CLERK SUPREME COURT

Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE OF CONTENTS

APPLICATION FOR LEAVE TO FILE <i>amicus curiae</i> brief.....	App-1
HOW THIS BRIEF WILL ASSIST THE COURT	App-1
STATEMENT OF INTEREST OF <i>AMICUS CURIAE</i>	App-3
CERTIFICATION REGARDING AUTHORSHIP & FUNDING	App-4
BRIEF OF AMICUS CURIAE.....	1
SUMMARY OF ARGUMENT	1
ARGUMENT	2
I. RELEVANT FACTUAL AND LEGAL FRAMEWORK.	2
A. Air Quality Regulatory Background.....	2
B. The SCAQMD's Role Under CEQA.....	6
II. THIS COURT SHOULD NOT SET A HARD-AND-FAST RULE CONCERNING THE EXTENT TO WHICH AN EIR MUST CORRELATE A PROJECT'S EMISSION OF POLLUTANTS WITH RESULTING HEALTH IMPACTS.....	8
III. THE QUESTION OF WHETHER AN EIR CONTAINS SUFFICIENT ANALYSIS TO MEET CEQA'S REQUIREMENTS IS A MIXED QUESTION OF FACT AND LAW GOVERNED BY TWO DIFFERENT STANDARDS OF REVIEW.....	16
A. Standard of Review for Feasibility Determination and Sufficiency as an Informative Document.....	16
B. Friant Ranch's Rationale for Rejecting the Independent Judgment Standard of Review is Unsupported by Case Law.....	23
IV. COURTS MUST SCRUPULOUSLY ENFORCE THE REQUIREMENTS THAT LEAD AGENCIES CONSULT WITH AND OBTAIN COMMENTS FROM AIR DISTRICTS.....	26
CONCLUSION	29

TABLE OF AUTHORITIES

State Cases

<i>Association of Irrigated Residents v. County of Madera</i> (2003) 107 Cal App.4th 1383	1, 9
<i>Bakersfield Citizens for Local Control v. City of Bakersfield</i> (2004) 124 Cal.App.4th 1184	9, 22
<i>Berkeley Keep Jets Over the Bay v. Board of Port Commissioners</i> (2007) 91 Cal.App.4th 1344.....	21, 28
<i>Center for Biological Diversity v. County of San Bernardino</i> (2010) 185 Cal.App.4th 866.	20
<i>Citizens of Goleta Valley v. Bd. of Supervisors</i> (1990) 52 Cal.3d 553	8-9
<i>County of Amador v. El Dorado County Water Agency</i> (1999) 76 Cal.App.4th 931	23
<i>Crocker National Bank v. City and County of San Francisco</i> (1989) 49 Cal.3d 881	18
<i>Ebbetts Pass Forest Watch v. California Dept. of Forestry & Fire Protection</i> (2008) 43 Cal.4th 936.....	21
<i>Fall River Wild Trout Foundation v. County of Shasta</i> , (1999) 70 Cal.App.4th 482	27, 28
<i>Gray v. County of Madera</i> (2008) 167 Cal.App.4th 1099	25
<i>Laurel Heights Improvement Assn. v. Regents of the Univ of Cal. ("Laurel Heights I")</i> (1988) 47 Cal.3d 376.....	1, 8, 19, 20, 21, 22
<i>Natural Res. Def. Council v SCAQMD</i> , Los Angeles Superior Court No. BS110792.....	12
<i>Neighbors for Smart Rail v. Exposition Metro Line</i> (2013) 57 Cal.4th 439	15, 20

State Cases (cont'd)

Orange County Air Pollution Control District v. Public Util. Com.
(1971) 4 Cal.3d 945.....27

Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors
(2001) 87 Cal.App.4th 99..... 19

Schenck v. County of Sonoma (2011)
198 Cal.App.4th 94926, 27

Sierra Club v. County of Fresno (2014)
226 Cal.App.4th 704 (superseded by grant of review)
172 Cal.Rptr.3d 2719, 23

Sierra Club v. State Bd. Of Forestry (1994)
7 Cal.4th 121528

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147 Cal.App.4th 58720

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v. City of Rancho Cordova (2007)
40 Cal.4th 4121, 17, 19, 24, 25, 26

Western Oil & Gas Assn. v. Monterey Bay Unified APCD (1989)
49 Cal.3d 408 5

California Statutes

Health & Saf. Code § 39666 5

Health & Saf. Code § 40000 3

Health & Saf. Code § 40001 3

Health & Saf. Code § 40410 3

Health & Saf. Code §§ 40460, et seq 4

Health & Saf. Code § 41508 5

Health & Saf. Code §§ 42300, et seq 5

Health & Saf. Code § 44320 5

Health & Saf. Code § 44322 5

Health & Saf. Code § 44360 5

Pub. Resources Code § 20180.3..... 27

Pub. Resources Code § 21061..... 19

Pub. Resources Code § 21061.1..... 16

California Statutes (cont'd)

Pub. Resources Code § 21080.....	6
Pub. Resources Code § 21080.5.....	6
Pub. Resources Code § 21083.1.....	26
Pub. Resources Code § 21100.....	27
Pub. Resources Code § 21104.....	6, 7 26
Pub. Resources Code §§ 21150-21154.....	7
Pub. Resources Code § 21151.8.....	25
Pub. Resources Code § 21153.....	6, 7, 26

California Regulations

Cal. Code Regs., tit. 14, §§ 15000, et seq. ("CEQA Guidelines")

CEQA Guidelines § 15050.....	6
CEQA Guidelines § 15051.....	1, 6
CEQA Guidelines § 15073.....	6
CEQA Guidelines § 15086.....	6
CEQA Guidelines § 15088.5.....	28
CEQA Guidelines § 15096.....	6
CEQA Guidelines § 15126.2.....	25
CEQA Guidelines § 15131.....	26
CEQA Guidelines § 15144.....	19, 24
CEQA Guidelines § 15151.....	9, 18, 19
CEQA Guidelines § 15204.....	1, 9, 21
CEQA Guidelines § 15251.....	6
CEQA Guidelines § 15366.....	7
CEQA Guidelines § 15381.....	6

Cal. Code Regs., tit. 17, § 60104.....	3
--	---

Federal Statutes

42 U.S.C. § 7401; CAA § 101.....	4
42 U.S.C. § 7408; CAA § 108.....	3
42 U.S.C. § 7409; CAA § 109.....	4
42 U.S.C. § 7410; CAA § 110.....	4, 5
42 U.S.C. § 7412; CAA § 112.....	5
42 U.S.C. § 7502; CAA § 172.....	5, 13
42 U.S.C. § 7503; CAA § 173.....	5, 13
42 U.S.C. § 7511a; CAA § 182.....	13
42 U.S.C. § 7521; CAA § 202.....	4
42 U.S.C. § 7543; CAA § 209.....	4
42 U.S.C. § 7547; CAA § 213.....	4

Rules

SCAQMD Rule 1303	7
SCAQMD Rule 1401	5, 8, 9

Other

Association of Environmental Professionals, 2015 CEQA Statute and Guidelines (2015) (Appendix G, “Environmental Checklist Form.”)	24
CARB, <i>Health Impacts Analysis: PM Premature Death Relationship</i>	14
CARB, <i>Health Impacts Analysis: PM Mortality Relationship</i>	16
CARB, Resolution 98-35, Aug. 27, 1998	8
SCAQMD, <i>Air Quality Analysis Handbook</i>	13
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SCAQMD Governing Board Agenda, April 3, 2015, Agenda Item 16, Attachment A	7
SCAQMD, Health Risk Assessment Summary form	10
SCAQMD, <i>Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics “Hot Spots” Information and Assessment Act (AB2588)</i>	10
U.S. EPA, Ground Level Ozone	11
U.S. EPA, <i>Guideline on Ozone Monitoring Site Selection</i> (Aug. 1998) EPA-454/R-98-002 § 5.1.2	11
U.S. EPA, <i>Health Effects of Ozone in the General Population</i> , Figure 9,	11
U.S. EPA, National Ambient Air Quality Standards (NAAQS)	4
U.S. EPA, Particulate Matter (PM)	4

**TO THE HONORABLE CHIEF JUSTICE AND JUSTICES OF THE
SUPREME COURT:**

APPLICATION FOR LEAVE TO FILE *AMICUS CURIAE* BRIEF

Pursuant to Rule 8.520(f) of the California Rules of Court, the South Coast Air Quality Management District (SCAQMD) respectfully requests leave to file the attached *amicus curiae* brief. Because SCAQMD's position differs from that of either party, we request leave to submit this *amicus* brief in support of neither party.

HOW THIS BRIEF WILL ASSIST THE COURT

SCAQMD's proposed *amicus* brief takes a position on two of the issues in this case. In both instances, its position differs from that of either party. The issues are:

- 1) Does the California Environmental Quality Act (CEQA) require an environmental impact report (EIR) to correlate a project's air pollution emissions with specific levels of health impacts?
- 2) What is the proper standard of review for determining whether an EIR provides sufficient information on the health impacts caused by a project's emission of air pollutants?

This brief will assist the Court by discussing the practical realities of correlating identified air quality impacts with specific health outcomes. In short, CEQA requires agencies to provide detailed information about a project's air quality impacts that is sufficient for the public and decisionmakers to adequately evaluate the project and meaningfully understand its impacts. However, the level of analysis is governed by a rule of reason; CEQA only requires agencies to conduct analysis if it is reasonably feasible to do so.

With regard to health-related air quality impacts, an analysis that correlates a project's air pollution emissions with specific levels of health impacts will be feasible in some cases but not others. Whether it is feasible depends on a variety of factors, including the nature of the project and the nature of the analysis under consideration. The feasibility of analysis may also change over time as air districts and others develop new tools for measuring projects' air quality related health impacts. Because SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, it is uniquely situated to express an opinion on the extent to which the Court should hold that CEQA requires lead agencies to correlate air quality impacts with specific health outcomes.

SCAQMD can also offer a unique perspective on the question of the appropriate standard of review. SCAQMD submits that the proper standard of review for determining whether an EIR is sufficient as an informational document is more nuanced than argued by either party. In our view, this is a mixed question of fact and law. It includes determining whether additional analysis is feasible, which is primarily a factual question that should be reviewed under the substantial evidence standard. However, it also involves determining whether the omission of a particular analysis renders an EIR insufficient to serve CEQA's purpose as a meaningful, informational document. If a lead agency has not determined that a requested analysis is infeasible, it is the court's role to determine whether the EIR nevertheless meets CEQA's purposes, and courts should not defer to the lead agency's conclusions regarding the legal sufficiency of an EIR's analysis. The ultimate question of whether an EIR's analysis is "sufficient" to serve CEQA's informational purposes is predominately a question of law that courts should review de novo.

This brief will explain the rationale for these arguments and may assist the Court in reaching a conclusion that accords proper respect to a lead agency's factual conclusions while maintaining judicial authority over the ultimate question of what level of analysis CEQA requires.

STATEMENT OF INTEREST OF *AMICUS CURIAE*

The SCAQMD is the regional agency primarily responsible for air pollution control in the South Coast Air Basin, which consists of all of Orange County and the non-desert portions of the Los Angeles, Riverside, and San Bernardino Counties. (Health & Saf. Code § 40410; Cal. Code Regs., tit. 17, § 60104.) The SCAQMD participates in the CEQA process in several ways. Sometimes it acts as a lead agency that prepares CEQA documents for projects. Other times it acts as a responsible agency when it has permit authority over some part of a project that is undergoing CEQA review by a different lead agency. Finally, SCAQMD also acts as a commenting agency for CEQA documents that it receives because it is a public agency with jurisdiction by law over natural resources affected by the project.

In all of these capacities, SCAQMD will be affected by the decision in this case. SCAQMD sometimes submits comments requesting that a lead agency perform an additional type of air quality or health impacts analysis. On the other hand, SCAQMD sometimes determines that a particular type of health impact analysis is not feasible or would not produce reliable and informative results. Thus, SCAQMD will be affected by the Court's resolution of the extent to which CEQA requires EIRs to correlate emissions and health impacts, and its resolution of the proper standard of review.

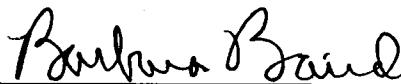
CERTIFICATION REGARDING AUTHORSHIP AND FUNDING

No party or counsel in the pending case authored the proposed amicus curiae brief in whole or in part, or made any monetary contribution intended to fund the preparation or submission of the brief. No person or entity other than the proposed *Amicus Curiae* made any monetary contribution intended to fund the preparation or submission of the brief.

Respectfully submitted,

DATED: April 3, 2015

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT
KURT R. WIESE, GENERAL COUNSEL
BARBARA BAIRD, CHIEF DEPUTY COUNSEL

By: 
Barbara Baird

Attorneys for [proposed] Amicus Curiae
SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT

BRIEF OF AMICUS CURIAE

SUMMARY OF ARGUMENT

The South Coast Air Quality Management District (SCAQMD) submits that this Court should not try to establish a hard-and-fast rule concerning whether lead agencies are required to correlate emissions of air pollutants with specific health consequences in their environmental impact reports (EIR). The level of detail required in EIRs is governed by a few, core CEQA (California Environmental Quality Act) principles. As this Court has stated, “[a]n EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.” (*Laurel Heights Improvement Assn. v. Regents of the Univ of Cal.* (1988) 47 Cal.3d 376, 405 [“*Laurel Heights I*”]) Accordingly, “an agency must use its best efforts to find out and disclose all that it reasonably can.” (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428 (quoting CEQA Guidelines § 15144)¹). However, “[a]nalysis of environmental effects need not be exhaustive, but will be judged in light of what is reasonably feasible.” (*Association of Irrigated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1390; CEQA Guidelines §§ 15151, 15204(a).)

With regard to analysis of air quality related health impacts, EIRs must generally quantify a project’s pollutant emissions, but in some cases it is not feasible to correlate these emissions to specific, quantifiable health impacts (e.g., premature mortality; hospital admissions). In such cases, a general description of the adverse health impacts resulting from the pollutants at issue may be sufficient. In other cases, due to the magnitude

¹ The CEQA Guidelines are found at Cal. Code Regs., tit. 14 §§ 15000, *et seq.*

or nature of the pollution emissions, as well as the specificity of the project involved, it may be feasible to quantify health impacts. Or there may be a less exacting, but still meaningful analysis of health impacts that can feasibly be performed. In these instances, agencies should disclose those impacts.

SCAQMD also submits that whether or not an EIR complies with CEQA's informational mandates by providing sufficient, feasible analysis is a mixed question of fact and law. Pertinent here, the question of whether an EIR's discussion of health impacts from air pollution is sufficient to allow the public to understand and consider meaningfully the issues involves two inquiries: (1) Is it feasible to provide the information or analysis that a commenter is requesting or a petitioner is arguing should be required?; and (2) Even if it is feasible, is the agency relying on other policy or legal considerations to justify not preparing the requested analysis? The first question of whether an analysis is feasible is primarily a question of fact that should be judged by the substantial evidence standard. The second inquiry involves evaluating CEQA's information disclosure purposes against the asserted reasons to not perform the requested analysis. For example, an agency might believe that its EIR meets CEQA's informational disclosure standards even without a particular analysis, and therefore choose not to conduct that analysis. SCAQMD submits that this is more of a legal question, which should be reviewed de novo as a question of law.

ARGUMENT

I. RELEVANT FACTUAL AND LEGAL FRAMEWORK.

A. Air Quality Regulatory Background

The South Coast Air Quality Management District (SCAQMD) is one of the local and regional air pollution control districts and air quality

management districts in California. The SCAQMD is the regional air pollution agency for the South Coast Air Basin, which consists of all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. (Health & Saf. Code § 40410, 17 Cal. Code Reg. § 60104.) The SCAQMD also includes the Coachella Valley in Riverside County (Palm Springs area to the Salton Sea). (SCAQMD, *Final 2012 AQMP (Feb. 2013)*, <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan>; then follow “chapter 7” hyperlink; pp 7-1, 7-3 (last visited Apr. 1, 2015).) The SCAQMD's jurisdiction includes over 16 million residents and has the worst or nearly the worst air pollution levels in the country for ozone and fine particulate matter. (SCAQMD, *Final 2012 AQMP (Feb. 2013)*, <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan>; then follow “Executive Summary” hyperlink p. ES-1 (last visited Apr. 1, 2015).)

Under California law, the local and regional districts are primarily responsible for controlling air pollution from all sources except motor vehicles. (Health & Saf. Code § 40000.) The California Air Resources Board (CARB), part of the California Environmental Protection Agency, is primarily responsible for controlling pollution from motor vehicles. (*Id.*) The air districts must adopt rules to achieve and maintain the state and federal ambient air quality standards within their jurisdictions. (Health & Saf. Code § 40001.)

The federal Clean Air Act (CAA) requires the United States Environmental Protection Agency (EPA) to identify pollutants that are widely distributed and pose a threat to human health, developing a so-called “criteria” document. (42 U.S.C. § 7408; CAA § 108.) These pollutants are frequently called “criteria pollutants.” EPA must then establish “national ambient air quality standards” at levels “requisite to protect public health”,

allowing “an adequate margin of safety.” (42 U.S.C. § 7409; CAA § 109.) EPA has set standards for six identified pollutants: ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, particulate matter (PM), and lead. (U.S. EPA, National Ambient Air Quality Standards (NAAQS), <http://www.epa.gov/air/criteria.html> (last updated Oct. 21, 2014).)²

Under the Clean Air Act, EPA sets emission standards for motor vehicles and “nonroad engines” (mobile farm and construction equipment, marine vessels, locomotives, aircraft, etc.). (42 U.S.C. §§ 7521, 7547; CAA §§ 202, 213.) California is the only state allowed to establish emission standards for motor vehicles and most nonroad sources; however, it may only do so with EPA's approval. (42 U.S.C. §§ 7543(b), 7543(e); CAA §§ 209(b), 209(c).) Sources such as manufacturing facilities, power plants and refineries that are not mobile are often referred to as “stationary sources.” The Clean Air Act charges state and local agencies with the primary responsibility to attain the national ambient air quality standards. (42 U.S.C. § 7401(a)(3); CAA § 101(a)(3).) Each state must adopt and implement a plan including enforceable measures to achieve and maintain the national ambient air quality standards. (42 U.S.C. § 7410; CAA § 110.) The SCAQMD and CARB jointly prepare portion of the plan for the South Coast Air Basin and submit it for approval by EPA. (Health & Saf. Code §§ 40460, et seq.)

The Clean Air Act also requires state and local agencies to adopt a permit program requiring, among other things, that new or modified “major” stationary sources use technology to achieve the “lowest achievable emission rate,” and to control minor stationary sources as

² Particulate matter (PM) is further divided into two categories: fine particulate or PM_{2.5} (particles with a diameter of less than or equal to 2.5 microns) and coarse particulate (PM₁₀) (particles with a diameter of 10 microns or less). (U.S. EPA, Particulate Matter (PM), <http://www.epa.gov/airquality/particulatepollution/> (last visited Apr. 1, 2015).)

needed to help attain the standards. (42 U.S.C. §§ 7502(c)(5), 7503(a)(2), 7410(a)(2)(C); CAA §§ 172(c)(5), 173(a)(2), 110(a)(2)(C).) The air districts implement these permit programs in California. (Health & Saf. Code §§ 42300, et seq.)

The Clean Air Act also sets out a regulatory structure for over 100 so-called “hazardous air pollutants” calling for EPA to establish “maximum achievable control technology” (MACT) for sources of these pollutants. (42 U.S.C. § 7412(d)(2); CAA § 112(d)(2).) California refers to these pollutants as “toxic air contaminants” (TACs) which are subject to two state-required programs. The first program requires “air toxics control measures” for specific categories of sources. (Health & Saf. Code § 39666.) The other program requires larger stationary sources and sources identified by air districts to prepare “health risk assessments” for impacts of toxic air contaminants. (Health & Saf. Code §§ 44320(b), 44322, 44360.) If the health risk exceeds levels identified by the district as “significant,” the facility must implement a “risk reduction plan” to bring its risk levels below “significant” levels. Air districts may adopt additional more stringent requirements than those required by state law, including requirements for toxic air contaminants. (Health & Saf. Code § 41508; *Western Oil & Gas Assn. v. Monterey Bay Unified APCD* (1989) 49 Cal.3d 408, 414.) For example, SCAQMD has adopted a rule requiring new or modified sources to keep their risks below specified levels and use best available control technology (BACT) for toxics. (SCAQMD, *Rule 1401-New Source Review of Toxic Air Contaminants*, <http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book/regulation-xiv>; then follow “Rule 1401” hyperlink (last visited Apr. 1, 2015).)

B. The SCAQMD's Role Under CEQA

The California Environmental Quality Act (CEQA) requires public agencies to perform an environmental review and appropriate analysis for projects that they implement or approve. (Pub. Resources Code § 21080(a).) The agency with primary approval authority for a particular project is generally the “lead agency” that prepares the appropriate CEQA document. (CEQA Guidelines §§ 15050, 15051.) Other agencies having a subsequent approval authority over all or part of a project are called “responsible” agencies that must determine whether the CEQA document is adequate for their use. (CEQA Guidelines §§ 15096(c), 15381.) Lead agencies must also consult with and circulate their environmental impact reports to “trustee agencies” and agencies “with jurisdiction by law” including “authority over resources which may be affected by the project.” (Pub. Resources Code §§ 21104(a), 21153; CEQA Guidelines §§ 15086(a)(3), 15073(c).) The SCAQMD has a role in all these aspects of CEQA.

Fulfilling its responsibilities to implement its air quality plan and adopt rules to attain the national ambient air quality standards, SCAQMD adopts a dozen or more rules each year to require pollution reductions from a wide variety of sources. The SCAQMD staff evaluates each rule for any adverse environmental impact and prepares the appropriate CEQA document. Although most rules reduce air emissions, they may have secondary environmental impacts such as use of water or energy or disposal of waste—e.g., spent catalyst from control equipment.³

³ The SCAQMD's CEQA program for its rules is a “Certified Regulatory Program” under which it prepares a “functionally equivalent” document in lieu of a negative declaration or EIR. (Pub. Resources Code § 21080.5, CEQA Guidelines § 15251(l).)

The SCAQMD also approves a large number of permits every year to construct new, modified, or replacement facilities that emit regulated air pollutants. The majority of these air pollutant sources have already been included in an earlier CEQA evaluation for a larger project, are currently being evaluated by a local government as lead agency, or qualify for an exemption. However, the SCAQMD sometimes acts as lead agency for major projects where the local government does not have a discretionary approval. In such cases, SCAQMD prepares and certifies a negative declaration or environmental impact report (EIR) as appropriate.⁴ SCAQMD evaluates perhaps a dozen such permit projects under CEQA each year. SCAQMD is often also a “responsible agency” for many projects since it must issue a permit for part of the projects (e.g., a boiler used to provide heat in a commercial building). For permit projects evaluated by another lead agency under CEQA, SCAQMD has the right to determine that the CEQA document is inadequate for its purposes as a responsible agency, but it may not do so because its permit program already requires all permitted sources to use the best available air pollution control technology. (SCAQMD, *Rule 1303(a)(1) – Requirements*, <http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book/regulation-xiii>; then follow “Rule 1303” hyperlink (last visited Apr. 1, 2015).)

Finally, SCAQMD receives as many as 60 or more CEQA documents each month (around 500 per year) in its role as commenting agency or an agency with “jurisdiction by law” over air quality—a natural resource affected by the project. (Pub. Resources Code §§ 21104(a), 21153; CEQA Guidelines § 15366(a)(3).) The SCAQMD staff provides comments on as many as 25 or 30 such documents each month.

⁴ The SCAQMD's permit projects are not included in its Certified Regulatory Program, and are evaluated under the traditional local government CEQA analysis. (Pub. Resources Code §§ 21150-21154.)

(SCAQMD Governing Board Agenda, Apr. 3, 2015, Agenda Item 16, Attachment A, <http://www.aqmd.gov/home/library/meeting-agendas-minutes/agenda?title=governing-board-meeting-agenda-april-3-2015>; then follow “16. Lead Agency Projects and Environmental Documents Received by SCAQMD” hyperlink (last visited Apr. 1, 2015).) Of course, SCAQMD focuses its commenting efforts on the more significant projects.

Typically, SCAQMD comments on the adequacy of air quality analysis, appropriateness of assumptions and methodology, and completeness of the recommended air quality mitigation measures. Staff may comment on the need to prepare a health risk assessment detailing the projected cancer and noncancer risks from toxic air contaminants resulting from the project, particularly the impacts of diesel particulate matter, which CARB has identified as a toxic air contaminant based on its carcinogenic effects. (California Air Resources Board, Resolution 98-35, Aug. 27, 1998, <http://www.arb.ca.gov/regact/diesltac/diesltac.htm>; then follow Resolution 98-35 hyperlink (last visited Apr. 1, 2015).) Because SCAQMD already requires new or modified stationary sources of toxic air contaminants to use the best available control technology for toxics and to keep their risks below specified levels, (SCAQMD Rule 1401, *supra*, note 15), the greatest opportunity to further mitigate toxic impacts through the CEQA process is by reducing emissions—particularly diesel emissions—from vehicles.

II. THIS COURT SHOULD NOT SET A HARD-AND-FAST RULE CONCERNING THE EXTENT TO WHICH AN EIR MUST CORRELATE A PROJECT’S EMISSION OF POLLUTANTS WITH RESULTING HEALTH IMPACTS.

Numerous cases hold that courts do not review the correctness of an EIR’s conclusions but rather its sufficiency as an informative document. (*Laurel Heights 1*, *supra*, 47 Cal.3d at p. 392; *Citizens of Goleta Valley v.*

Bd. of Supervisors (1990) 52 Cal.3d 553, 569; *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1197.)

As stated by the Court of Appeal in this case, where an EIR has addressed a topic, but the petitioner claims that the information provided about that topic is insufficient, courts must “draw[] a line that divides *sufficient* discussions from those that are *insufficient*.” (*Sierra Club v. County of Fresno* (2014) 226 Cal.App.4th 704 (superseded by grant of review) 172 Cal.Rptr.3d 271, 290.) The Court of Appeal readily admitted that “[t]he terms themselves – sufficient and insufficient – provide little, if any, guidance as to where the line should be drawn. They are simply labels applied once the court has completed its analysis.” (*Id.*)

The CEQA Guidelines, however, provide guidance regarding what constitutes a sufficient discussion of impacts. Section 15151 states that “the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible.” Case law reflects this: “Analysis of environmental effects need not be exhaustive, but will be judged in light of what was reasonably feasible.” (*Association of Irrigated Residents v. County of Madera, supra*, 107 Cal.App.4th at p. 1390; see also CEQA Guidelines § 15204(a).)

Applying this test, this Court cannot realistically establish a hard-and-fast rule that an analysis correlating air pollution impacts of a project to quantified resulting health impacts is always required, or indeed that it is never required. Simply put, in some cases such an analysis will be “feasible”; in some cases it will not.

For example, air pollution control districts often require a proposed new source of toxic air contaminants to prepare a “health risk assessment” before issuing a permit to construct. District rules often limit the allowable cancer risk the new source may cause to the “maximally exposed individual” (worker and residence exposures). (*See, e.g.*, SCAQMD Rule 1401(c)(8); 1401(d)(1), *supra* note 15.) In order to perform this analysis, it

is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). (SCAQMD, *Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act (AB2588)*, pp. 11-16; (last visited Apr. 1, 2015) <http://www.aqmd.gov/home/library/documents-support-material;> "Guidelines" hyperlink; AB2588; then follow AB2588 Risk Assessment Guidelines hyperlink.)

Thus, it is feasible to determine the health risk posed by a new gas station locating at an intersection in a mixed use area, where receptor locations are known. On the other hand, it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s)). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk—it does not necessarily mean anyone will contract cancer as a result of the project.

In order to find the "cancer burden" or expected additional cases of cancer resulting from the project, it is also necessary to know the numbers and location of individuals living within the "zone of impact" of the project: i.e., those living in areas where the projected cancer risk from the project exceeds one in a million. (SCAQMD, Health Risk Assessment Summary form, <http://www.aqmd.gov/home/forms>; filter by "AB2588" category; then "Health Risk Assessment" hyperlink (last visited Apr. 1, 2015).) The affected population is divided into bands of those exposed to at least 1 in a million risk, those exposed to at least 10 in a million risk, etc. up to those exposed at the highest levels. (*Id.*) This data allows agencies to calculate an approximate number of additional cancer cases expected from

the project. However, it is not possible to predict which particular individuals will be affected.

For the so-called criteria pollutants⁵, such as ozone, it may be more difficult to quantify health impacts. Ozone is formed in the atmosphere from the chemical reaction of the nitrogen oxides (NO_x) and volatile organic compounds (VOC) in the presence of sunlight. (U.S. EPA, Ground Level Ozone, <http://www.epa.gov/airquality/ozonepollution/> (last updated Mar. 25, 2015).) It takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources. (U.S. EPA, *Guideline on Ozone Monitoring Site Selection* (Aug. 1998) EPA-454/R-98-002 § 5.1.2, <http://www.epa.gov/ttnamti1/archive/cpreldoc.html> (last visited Apr. 1, 2015).) NO_x and VOC are known as “precursors” of ozone.

Scientifically, health effects from ozone are correlated with increases in the ambient level of ozone in the air a person breathes. (U.S. EPA, *Health Effects of Ozone in the General Population*, Figure 9, <http://www.epa.gov/apti/ozonehealth/population.html#levels> (last visited Apr. 1, 2015).) However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels over an entire region. For example, the SCAQMD's 2012 AQMP showed that reducing NO_x by 432 tons per day (157,680 tons/year) and reducing VOC by 187 tons per day (68,255 tons/year) would reduce ozone levels at the SCAQMD's monitor site with the highest levels by only 9 parts per billion. (South Coast Air Quality Management District, *Final 2012 AQMP (February 2013)*, <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan>; then follow “Appendix V: Modeling & Attainment Demonstrations” hyperlink,

⁵ See discussion of types of pollutants, *supra*, Part I.A.

pp. v-4-2, v-7-4, v-7-24.) SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from relatively small projects.

On the other hand, this type of analysis may be feasible for projects on a regional scale with very high emissions of NO_x and VOCs, where impacts are regional. For example, in 2011 the SCAQMD performed a health impact analysis in its CEQA document for proposed Rule 1315, which authorized various newly-permitted sources to use offsets from the districts “internal bank” of emission reductions. This CEQA analysis accounted for essentially *all* the increases in emissions due to new or modified sources in the District between 2010 and 2030.⁶ The SCAQMD was able to correlate this very large emissions increase (e.g., 6,620 pounds per day NO_x (1,208 tons per year), 89,180 pounds per day VOC (16,275 tons per year)) to expected health outcomes from ozone and particulate matter (e.g., 20 premature deaths per year and 89,947 school absences in the year 2030 due to ozone).⁷ (SCAQMD Governing Board Agenda, February 4, 2011, Agenda Item 26, *Assessment for: Re-adoption of Proposed Rule 1315 – Federal New Source Review Tracking System* (see hyperlink in fn 6) at p. 4.1-35, Table 4.1-29.)

⁶ (SCAQMD Governing Board Agenda, February 4, 2011, Agenda Item 26, Attachment G, *Assessment for: Re-adoption of Proposed Rule 1315 – Federal New Source Review Tracking System, Vol. 1, p.4.0-6*, <http://www.aqmd.gov/home/library/meeting-agendas-minutes/agenda?title=governing-board-meeting-agenda-february-4-2011>; the follow “26. Adopt Proposed Rule 1315 – Federal New Source Review Tracking System” (last visited April 1, 2015).)

⁷ The SCAQMD was able to establish the location of future NO_x and VOC emissions by assuming that new projects would be built in the same locations and proportions as existing stationary sources. This CEQA document was upheld by the Los Angeles County Superior Court in *Natural Res. Def. Council v SCAQMD*, Los Angeles Superior Court No. BS110792).

However, a project emitting only 10 tons per year of NO_x or VOC is small enough that its regional impact on ambient ozone levels may not be detected in the regional air quality models that are currently used to determine ozone levels. Thus, in this case it would not be feasible to directly correlate project emissions of VOC or NO_x with specific health impacts from ozone. This is in part because ozone formation is not linearly related to emissions. Ozone impacts vary depending on the location of the emissions, the location of other precursor emissions, meteorology and seasonal impacts, and because ozone is formed some time later and downwind from the actual emission. (EPA Guideline on Ozone Monitoring Site Selection (Aug. 1998) EPA-454/R-98-002, § 5.1.2; <https://www.epa.gov/ttnamti1/archive/cpreldoc.html>; then search “Guideline on Ozone Monitoring Site Selection” click on pdf) (last viewed Apr. 1, 2015).)

SCAQMD has set its CEQA “significance” threshold for NO_x and VOC at 10 tons per year (expressed as 55 lb/day). (SCAQMD, *Air Quality Analysis Handbook*, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>; then follow “SCAQMD Air Quality Significance Thresholds” hyperlink (last visited Apr. 1, 2015).) This is because the federal Clean Air Act defines a “major” stationary source for “extreme” ozone nonattainment areas such as SCAQMD as one emitting 10 tons/year. (42 U.S.C. §§ 7511a(e), 7511a(f); CAA §§ 182(e), 182(f).) Under the Clean Air Act, such sources are subject to enhanced control requirements (42 U.S.C. §§ 7502(c)(5), 7503; CAA §§ 172(c)(5), 173), so SCAQMD decided this was an appropriate threshold for making a CEQA “significance” finding and requiring feasible mitigation. Essentially, SCAQMD takes the position that a source that emits 10 tons/year of NO_x or VOC would contribute cumulatively to ozone formation. Therefore, lead agencies that use SCAQMD’s thresholds of significance may determine

that many projects have “significant” air quality impacts and must apply all feasible mitigation measures, yet will not be able to precisely correlate the project to quantifiable health impacts, unless the emissions are sufficiently high to use a regional modeling program.

In the case of particulate matter (PM_{2.5})⁸, another “criteria” pollutant, SCAQMD staff is aware of two possible methods of analysis. SCAQMD used regional modeling to predict expected health impacts from its proposed Rule 1315, as mentioned above. Also, the California Air Resources Board (CARB) has developed a methodology that can predict expected mortality (premature deaths) from large amounts of PM_{2.5}. (California Air Resources Board, *Health Impacts Analysis: PM Premature Death Relationship*, http://www.arb.ca.gov/research/health/pm-mort/pm-mort_arch.htm (last reviewed Jan. 19, 2012).) SCAQMD used the CARB methodology to predict impacts from three very large power plants (e.g., 731-1837 lbs/day). (Final Environmental Assessment for Rule 1315, *supra*, pp 4.0-12, 4.1-13, 4.1-37 (e.g., 125 premature deaths in the entire SCAQMD in 2030), 4.1-39 (0.05 to 1.77 annual premature deaths from power plants.) Again, this project involved large amounts of additional PM_{2.5} in the District, up to 2.82 tons/day (5,650 lbs/day of PM_{2.5}, or, or 1029 tons/year. (*Id.* at table 4.1-4, p. 4.1-10.)

However, the primary author of the CARB methodology has reported that this PM_{2.5} health impact methodology is not suited for small projects and may yield unreliable results due to various uncertainties.⁹ (SCAQMD, *Final Subsequent Mitigated Negative Declaration for: Warren*

⁸ SCAQMD has not attained the latest annual or 24-hour national ambient air quality standards for “PM_{2.5}” or particulate matter less than 2.5 microns in diameter.

⁹ Among these uncertainties are the representativeness of the population used in the methodology, and the specific source of PM and the corresponding health impacts. (*Id.* at p. 2-24.)

E&P, Inc. WTU Central Facility, New Equipment Project (certified July 19, 2011), <http://www.aqmd.gov/home/library/documents-support-material/lead-agency-permit-projects/permit-project-documents---year-2011>; then follow “Final Subsequent Mitigated Negative Declaration for Warren E&P Inc. WTU Central Facility, New Equipment Project” hyperlink, pp. 2-22, 2-23 (last visited Apr. 1, 2015).) Therefore, when SCAQMD prepared a CEQA document for the expansion of an existing oil production facility, with very small PM_{2.5} increases (3.8 lb/day) and a very small affected population, staff elected not to use the CARB methodology for using estimated PM_{2.5} emissions to derive a projected premature mortality number and explained why it would be inappropriate to do so. (*Id.* at pp 2-22 to 2-24.) SCAQMD staff concluded that use of this methodology for such a small source could result in unreliable findings and would not provide meaningful information. (*Id.* at pp. 2-23, 2-25.) This CEQA document was not challenged in court.

In the above case, while it may have been technically possible to plug the data into the methodology, the results would not have been reliable or meaningful. SCAQMD believes that an agency should not be required to perform analyses that do not produce reliable or meaningful results. This Court has already held that an agency may decline to use even the “normal” “existing conditions” CEQA baseline where to do so would be misleading or without informational value. (*Neighbors for Smart Rail v. Exposition Metro Line* (2013) 57 Cal.4th 439, 448, 457.) The same should be true for a decision that a particular study or analysis would not provide reliable or meaningful results.¹⁰

¹⁰ Whether a particular study would result in “informational value” is a part of deciding whether it is “feasible.” CEQA defines “feasible” as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and

Therefore, it is not possible to set a hard-and-fast rule on whether a correlation of air quality impacts with specific quantifiable health impacts is required in all cases. Instead, the result turns on whether such an analysis is reasonably feasible in the particular case.¹¹ Moreover, what is reasonably feasible may change over time as scientists and regulatory agencies continually seek to improve their ability to predict health impacts. For example, CARB staff has been directed by its Governing Board to reassess and improve the methodology for estimating premature deaths. (California Air Resources Board, *Health Impacts Analysis: PM Mortality Relationship*, <http://www.arb.ca.gov/research/health/pm-mort/pm-mort.htm> (last reviewed Dec. 29, 2010).) This factor also counsels against setting any hard-and-fast rule in this case.

III. THE QUESTION OF WHETHER AN EIR CONTAINS SUFFICIENT ANALYSIS TO MEET CEQA'S REQUIREMENTS IS A MIXED QUESTION OF FACT AND LAW GOVERNED BY TWO DIFFERENT STANDARDS OF REVIEW.

A. Standard of Review for Feasibility Determination and Sufficiency as an Informative Document

A second issue in this case is whether courts should review an EIR's informational sufficiency under the "substantial evidence" test as argued by Friant Ranch or the "independent judgment" test as argued by Sierra Club.

technological factors." (Pub. Resources Code § 21061.1.) A study cannot be "accomplished in a *successful* manner" if it produces unreliable or misleading results.

¹¹ In this case, the lead agency did not have an opportunity to determine whether the requested analysis was feasible because the comment was non-specific. Therefore, SCAQMD suggests that this Court, after resolving the legal issues in the case, direct the Court of Appeal to remand the case to the lead agency for a determination of whether the requested analysis is feasible. Because Fresno County, the lead agency, did not seek review in this Court, it seems likely that the County has concluded that at least some level of correlation of air pollution with health impacts is feasible.

SCAQMD submits that the issue is more nuanced than either party contends. We submit that, whether a CEQA document includes sufficient analysis to satisfy CEQA's informational mandates is a mixed question of fact and law,¹³ containing two levels of inquiry that should be judged by different standards.¹⁴

The state CEQA Guidelines set forth standards for the adequacy of environmental analysis. Guidelines Section 15151 states:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good-faith effort at full disclosure.

In this case, the basic question is whether the underlying analysis of air quality impacts made the EIR "sufficient" as an informative document. However, whether the EIR's analysis was sufficient is judged in light of what was reasonably feasible. This represents a mixed question of fact and law that is governed by two different standards of review.

¹³ Friant Ranch actually states that the claim that an EIR lacks sufficient relevant information is, "most properly thought of as raising mixed questions of fact and law." (Opening Brief, p. 27.) However, the remainder of its argument claims that the court should apply the substantial evidence standard of review to all aspects of the issue.

¹⁴ Mixed questions of fact and law issues may implicate predominantly factual subordinate questions that are reviewed under the substantial evidence test even though the ultimate question may be reviewed by the independent judgment test. *Crocker National Bank v. City and County of San Francisco* (1989) 49 Cal.3d 881, 888-889.

SCAQMD submits that an EIR's sufficiency as an informational document is ultimately a legal question that courts should determine using their independent judgment. This Court's language in *Laurel Heights I* supports this position. As this Court explained: "The court does not pass upon the correctness of the EIR's environmental conclusions, but only upon its *sufficiency as an informative document*." (*Laurel Heights I, supra*, 47 Cal.3d at 392-393) (emphasis added.) As described above, the Court in *Vineyard Area Citizens v. City of Rancho Cordova, supra*, 40 Cal.4th at 431, also used its independent judgment to determine what level of analysis CEQA requires for water supply impacts. The Court did not defer to the lead agency's opinion regarding the law's requirements; rather, it determined for itself what level of analysis was necessary to meet "[t]he law's informational demands." (*Id.* at p. 432.) Further, existing case law also holds that where an agency fails to comply with CEQA's information disclosure requirements, the agency has "failed to proceed in the manner required by law." (*Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 118.)

However, whether an EIR satisfies CEQA's requirements depends in part on whether it was reasonably feasible for an agency to conduct additional or more thorough analysis. EIRs must contain "a detailed statement" of a project's impacts (Pub. Res. Code § 21061), and an agency must "use its best efforts to find out and disclose all that it reasonably can." (CEQA Guidelines § 15144.) Nevertheless, "the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible." (CEQA Guidelines § 15151.)

SCAQMD submits that the question of whether additional analysis or a particular study suggested by a commenter is "feasible" is generally a question of fact. Courts have already held that whether a particular alternative is "feasible" is reviewed by the substantial evidence test.

(*Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587, 598-99; *Center for Biological Diversity v. County of San Bernardino* (2010) 185 Cal.App.4th 866, 883.) Thus, if a lead agency determines that a particular study or analysis is infeasible, that decision should generally be judged by the substantial evidence standard. However, SCAQMD urges this Court to hold that lead agencies must explain the basis of any determination that a particular analysis is infeasible in the EIR itself. An EIR must discuss information, including issues related to the feasibility of particular analyses “in sufficient detail to enable meaningful participation and criticism by the public. ‘[W]hatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.’” (*Laurel Heights I, supra*, 47 Cal.3d at p. 405 (quoting *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 831) (discussing analysis of alternatives).) The evidence on which the determination is based should also be summarized in the EIR itself, with appropriate citations to reference materials if necessary. Otherwise commenting agencies such as SCAQMD would be forced to guess where the lead agency's evidence might be located, thus thwarting effective public participation.

Moreover, if a lead agency determines that a particular study or analysis would not result in reliable or useful information and for that reason is not feasible, that determination should be judged by the substantial evidence test. (See *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority, supra*, 57 Cal.4th 439, 448, 457:

whether “existing conditions” baseline would be misleading or uninformative judged by substantial evidence standard.¹⁵)

If the lead agency’s determination that a particular analysis or study is not feasible is supported by substantial evidence, then the agency has not violated CEQA’s information disclosure provisions, since it would be infeasible to provide additional information. This Court’s decisions provide precedent for such a result. For example, this Court determined that the issue of whether the EIR should have included a more detailed discussion of future herbicide use was resolved because substantial evidence supported the agency’s finding that “the precise parameters of future herbicide use could not be predicted.” *Ebbetts Pass Forest Watch v. California Dept. of Forestry & Fire Protection* (2008) 43 Cal.4th 936, 955.

Of course, SCAQMD expects that courts will continue to hold lead agencies to their obligations to consult with, and not to ignore or misrepresent, the views of sister agencies having special expertise in the area of air quality. (*Berkeley Keep Jets Over the Bay v. Board of Port Commissioners* (2007) 91 Cal.App.4th 1344, 1364 n.11.) In some cases, information provided by such expert agencies may establish that the purported evidence relied on by the lead agency is not in fact “substantial”. (*Id.* at pp. 1369-1371.)

In sum, courts retain ultimate responsibility to determine what CEQA requires. However, the law does not require exhaustive analysis, but only what is reasonably feasible. Agencies deserve deference for their factual determinations regarding what type of analysis is reasonably feasible. On the other hand, if a commenter requests more information, and the lead agency declines to provide it but does *not* determine that the

¹⁵ The substantial evidence standard recognizes that the courts "have neither the resources nor the scientific expertise" to weigh conflicting evidence on technical issues. (*Laurel Heights I, supra*, 47 Cal.3d 376, 393.)

requested study or analysis would be infeasible, misleading or uninformative, the question becomes whether the omission of that analysis renders the EIR inadequate to satisfy CEQA’s informational purposes. (*Id.* at pp. 1370-71.) Again, this is predominantly a question of law and should be judged by the de novo or independent judgment standard of review. Of course, this Court has recognized that a “project opponent or reviewing court can always imagine some additional study or analysis that might provide helpful information. It is not for them to design the EIR. That further study...might be helpful does not make it necessary.” (*Laurel Heights I, supra*, 47 Cal.3d 376, 415 – see also CEQA Guidelines § 15204(a) [CEQA “does not require a lead agency to conduct every test. . . recommended or demanded by commenters.”].) Courts, then, must adjudicate whether an omission of particular information renders an EIR inadequate to serve CEQA’s informational purposes.¹⁶

¹⁶ We recognize that there is case law stating that the substantial evidence standard applies to “challenges to the scope of an EIR’s analysis of a topic” as well as the methodology used and the accuracy of the data relied on in the document “because these types of challenges involve factual questions.” (*Bakersfield Citizens for Local Control v. City of Bakersfield, supra*, 124 Cal.App.4th 1184, 1198, and cases relied on therein.) However, we interpret this language to refer to situations where the question of the scope of the analysis really is factual—that is, where it involves whether further analysis is feasible, as discussed above. This interpretation is supported by the fact that the *Bakersfield* court expressly rejected an argument that a claimed “omission of information from the EIR should be treated as inquiries whether there is substantial evidence supporting the decision approving the project.” *Bakersfield, supra*, 124 Cal.App.4th at p. 1208. And the *Bakersfield* court ultimately decided that the lead agency must analyze the connection between the identified air pollution impacts and resulting health impacts, even though the EIR already included some discussion of air-pollution-related respiratory illnesses. *Bakersfield, supra*, 124 Cal.App.4th at p. 1220. Therefore, the court must not have interpreted this question as one of the “scope of the analysis” to be judged by the substantial evidence standard.

B. Friant Ranch's Rationale for Rejecting the Independent Judgment Standard of Review is Unsupported by Case Law.

In its brief, Friant Ranch makes a distinction between cases where a required CEQA topic is not discussed at all (to be reviewed by independent judgment as a failure to proceed in the manner required by law) and cases where a topic is discussed, but the commenter claims the information provided is insufficient (to be judged by the substantial evidence test). (Opening Brief, pp. 13-17.) The Court of Appeal recognized these two types of cases, but concluded that both raised questions of law. (*Sierra Club v. County of Fresno* (2014) 226 Cal.App.4th 704 (superseded by grant of review) 172 Cal.Rptr.3d 271, 290.) We believe the distinction drawn by Friant Ranch is unduly narrow, and inconsistent with cases which have concluded that CEQA documents are insufficient. In many instances, CEQA's requirements are stated broadly, and the courts must interpret the law to determine what level of analysis satisfies CEQA's mandate for providing meaningful information, even though the EIR discusses the issue to some extent.

For example, the CEQA Guidelines require discussion of the existing environmental baseline. In *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 954-955, the lead agency had discussed the environmental baseline by describing historic month-end water levels in the affected lakes. However, the court held that this was not an adequate baseline discussion because it failed to discuss the timing and amounts of past actual water releases, to allow comparison with the proposed project. The court evidently applied the independent judgment test to its decision, even though the agency discussed the issue to some extent.

Likewise, in *Vineyard Area Citizens* (2007) 40 Cal.4th 412, this Court addressed the question of whether an EIR’s analysis of water supply impacts complied with CEQA. The parties agreed that the EIR was required to analyze the effects of providing water to the development project, “and that in order to do so the EIR had, in some manner, to identify the planned sources of that water.” (*Vineyard Area Citizens, supra*, at p. 428.) However, the parties disagreed as to the level of detail required for this analysis and “what level of uncertainty regarding the availability of water supplies can be tolerated in an EIR” (*Id.*) In other words, the EIR had analyzed water supply impacts for the project, but the petitioner claimed that the analysis was insufficient.

This Court noted that neither CEQA’s statutory language or the CEQA Guidelines specifically addressed the question of how precisely an EIR must discuss water supply impacts. (*Id.*) However, it explained that CEQA “states that ‘[w]hile foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.’” (*Id.*, [Guidelines § 15144].) The Court used this general principle, along with prior precedent, to elucidate four “principles for analytical adequacy” that are necessary in order to satisfy “CEQA’s informational purposes.” (*Vineyard Area Citizens, supra*, at p. 430.) The Court did not defer to the agency’s determination that the EIR’s analysis of water supply impacts was sufficient. Rather, this Court used its independent judgment to determine for itself the level of analysis required to satisfy CEQA’s fundamental purposes. (*Vineyard Area Citizens, supra*, at p. 441: an EIR does not serve its purposes where it neglects to explain likely sources of water and “... leaves long term water supply considerations to later stages of the project.”)

Similarly, the CEQA Guidelines require an analysis of noise impacts of the project. (Appendix G, “Environmental Checklist Form.”¹⁷) In *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1123, the court held that the lead agency’s noise impact analysis was inadequate even though it had addressed the issue and concluded that the increase would not be noticeable. If the court had been using the substantial evidence standard, it likely would have upheld this discussion.

Therefore, we do not agree that the issue can be resolved on the basis suggested by Friant Ranch, which would apply the substantial evidence standard to *every* challenge to an analysis that addresses a required CEQA topic. This interpretation would subvert the courts’ proper role in interpreting CEQA and determining what the law requires.

Nor do we agree that the Court of Appeal in this case violated CEQA’s prohibition on courts interpreting its provisions “in a manner which imposes procedural or substantive requirements beyond those explicitly stated in this division or in the state guidelines.” (Pub. Resources Code § 21083.1.) CEQA requires an EIR to describe *all* significant impacts of the project on the environment. (Pub. Resources Code § 21100(b)(2); *Vineyard Area Citizens, supra*, at p. 428.) Human beings are part of the environment, so CEQA requires EIRs to discuss a project’s significant impacts on human health. However, except in certain particular circumstances,¹⁸ neither the CEQA statute nor Guidelines specify the precise level of analysis that agencies must undertake to satisfy the law’s requirements. (see, e.g., CEQA Guidelines § 15126.2(a) [EIRs must describe “health and safety problems caused by {a project’s} physical changes”].) Accordingly, courts must interpret CEQA as a whole to

¹⁷ Association of Environmental Professionals, 2015 CEQA Statute and Guidelines (2015) p.287.

¹⁸ E.g., Pub. Resources Code § 21151.8(C)(3)(B)(iii) (requiring specific type of health risk analysis for siting schools).

determine whether a particular EIR is sufficient as an informational document. A court determining whether an EIR's discussion of human health impacts is legally sufficient does not constitute imposing a new substantive requirement.¹⁹ Under Friant Ranch's theory, the above-referenced cases holding a CEQA analysis inadequate would have violated the law. This is not a reasonable interpretation.

IV. COURTS MUST SCRUPULOUSLY ENFORCE THE REQUIREMENTS THAT LEAD AGENCIES CONSULT WITH AND OBTAIN COMMENTS FROM AIR DISTRICTS

Courts must "scrupulously enforce" CEQA's legislatively mandated requirements. (*Vineyard Area Citizens, supra*, 40 Cal.4th 412, 435.) Case law has firmly established that lead agencies must consult with the relevant air pollution control district before conducting an initial study, and must provide the districts with notice of the intention to adopt a negative declaration (or EIR). (*Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 958.) As *Schenck* held, neither publishing the notice nor providing it to the State Clearinghouse was a sufficient substitute for sending notice directly to the air district. (*Id.*) Rather, courts "must be satisfied that [administrative] agencies have fully complied with the procedural requirements of CEQA, since only in this way can the important public purposes of CEQA be protected from subversion." *Schenck*, 198 Cal.App.4th at p. 959 (citations omitted).²⁰

¹⁹ We submit that Public Resources Code Section 21083.1 was intended to prevent courts from, for example, holding that an agency must analyze economic impacts of a project where there are no resulting environmental impacts (see CEQA Guidelines § 15131), or imposing new procedural requirements, such as imposing additional public notice requirements not set forth in CEQA or the Guidelines.

²⁰ Lead agencies must consult air districts, as public agencies with jurisdiction by law over resources affected by the project, *before* releasing an EIR. (Pub. Resources Code §§ 21104(a); 21153.) Moreover, air

Lead agencies should be aware, therefore, that failure to properly seek and consider input from the relevant air district constitutes legal error which may jeopardize their project approvals. For example, the court in *Fall River Wild Trout Foundation v. County of Shasta*, (1999) 70 Cal.App.4th 482, 492 held that the failure to give notice to a trustee agency (Department of Fish and Game) was prejudicial error requiring reversal. The court explained that the lack of notice prevented the Department from providing any response to the CEQA document. (*Id.* at p. 492.) It therefore prevented relevant information from being presented to the lead agency, which was prejudicial error because it precluded informed decision-making. (*Id.*)²¹

districts should be considered “state agencies” for purposes of the requirement to consult with “trustee agencies” as set forth in Public Resources Code § 20180.3(a). This Court has long ago held that the districts are not mere “local agencies” whose regulations are superseded by those of a state agency regarding matters of statewide concern, but rather have concurrent jurisdiction over such issues. (*Orange County Air Pollution Control District v. Public Util. Com.* (1971) 4 Cal.3d 945, 951, 954.) Since air pollution is a matter of statewide concern, *Id.* at 952, air districts should be entitled to trustee agency status in order to ensure that this vital concern is adequately protected during the CEQA process.

²¹ In *Schenck*, the court concluded that failure to give notice to the air district was not prejudicial, but this was partly because the trial court had already corrected the error before the case arrived at the Court of Appeal. The trial court issued a writ of mandate requiring the lead agency to give notice to the air district. The air district responded by concurring with the lead agency that air impacts were not significant. (*Schenck*, 198 Cal.App.4th 949, 960.) We disagree with the *Schenck* court that the failure to give notice to the air district would not have been prejudicial (even in the absence of the trial court writ) merely because the lead agency purported to follow the air district’s published CEQA guidelines for significance. (*Id.*, 198 Cal.App.4th at p. 960.) In the first place, absent notice to the air district, it is uncertain whether the lead agency properly followed those guidelines. Moreover, it is not realistic to expect that an air district’s published guidelines would necessarily fully address all possible air-quality related issues that can arise with a CEQA project, or that those

Similarly, lead agencies must obtain additional information requested by expert agencies, including those with jurisdiction by law, if that information is necessary to determine a project's impacts. (*Sierra Club v. State Bd. Of Forestry* (1994) 7 Cal.4th 1215, 1236-37.) Approving a project without obtaining that information constitutes a failure to proceed in the manner prescribed by CEQA. (*Id.* at p. 1236.)

Moreover, a lead agency can save significant time and money by consulting with the air district early in the process. For example, the lead agency can learn what the air district recommends as an appropriate analysis on the facts of its case, including what kinds of health impacts analysis may be available, and what models are appropriate for use. This saves the lead agency from the need to do its analysis all over again and possibly needing to recirculate the document after errors are corrected, if new significant impacts are identified. (CEQA Guidelines § 15088.5(a).) At the same time, the air district's expert input can help the lead agency properly determine whether another commenter's request for additional analysis or studies is reasonable or feasible. Finally, the air district can provide input on what mitigation measures would be feasible and effective.

Therefore, we suggest that this Court provide guidance to lead agencies reminding them of the importance of consulting with the relevant air districts regarding these issues. Otherwise, their feasibility decisions may be vulnerable to air district evidence that establishes that there is no substantial evidence to support the lead agency decision not to provide specific analysis. (*See Berkeley Keep Jets Over the Bay, supra*, 91 Cal.App.4th 1344, 1369-1371.)

guidelines would necessarily be continually modified to reflect new developments. Therefore we believe that, had the trial court not already ordered the lead agency to obtain the air district's views, the failure to give notice would have been prejudicial, as in *Fall River, supra*, 70 Cal.App.4th 482, 492.


CONCLUSION

The SCAQMD respectfully requests this Court *not* to establish a hard-and-fast rule concerning whether CEQA requires a lead agency to correlate identified air quality impacts of a project with resulting health outcomes. Moreover, the question of whether an EIR is “sufficient as an informational document” is a mixed question of fact and law containing two levels of inquiry. Whether a particular proposed analysis is feasible is predominantly a question of fact to be judged by the substantial evidence standard of review. Where the requested analysis is feasible, but the lead agency relies on legal or policy reasons not to provide it, the question of whether the EIR is nevertheless sufficient as an informational document is predominantly a question of law to be judged by the independent judgment standard of review.

Respectfully submitted,

DATED: April 3, 2015

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT
KURT R. WIESE, GENERAL COUNSEL
BARBARA BAIRD, CHIEF DEPUTY COUNSEL

By: 
Barbara Baird


Attorneys for Amicus Curiae
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

CERTIFICATE OF WORD COUNT

Pursuant to Rule 8.520(c)(1) of the California Rules of Court, I hereby certify that this brief contains 8,476 words, including footnotes, but excluding the Application, Table of Contents, Table of Authorities, Certificate of Service, this Certificate of Word Count, and signature blocks. I have relied on the word count of the Microsoft Word Vista program used to prepare this Certificate.

DATED: April 3, 2015

Respectfully submitted,


Barbara Baird

PROOF OF SERVICE

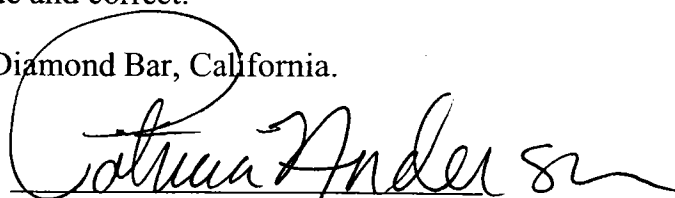
I am employed in the County of Los Angeles, California. I am over the age of 18 years and not a party to the within action. My business address is 21865 Copley Drive, Diamond Bar, California 91765.

On April 3, 2015 I served true copies of the following document(s) described as **APPLICATION OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT FOR LEAVE TO FILE BRIEF OF *AMICUS CURIAE* IN SUPPORT OF NEITHER PARTY AND [PROPOSED] BRIEF OF *AMICUS CURIAE*** by placing a true copy of the foregoing document(s) in a sealed envelope addressed as set forth on the attached service list as follows:

BY MAIL: I enclosed the document(s) in a sealed envelope or package addressed to the persons at the addresses listed in the Service List and placed the envelope for collection and mailing following our ordinary business practices. I am readily familiar with this District's practice for collection and processing of correspondence for mailing. Under that practice, the correspondence would be deposited with the United States Postal Service, with postage thereon fully prepaid at Diamond Bar, California, in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on April 3, 2015 at Diamond Bar, California.


Patricia Anderson

SERVICE LIST

James G. Moose, Tiffany K. Wright,
 Laura M. Harris
 REMY MOOSE MANLEY, LLP
 555 Capitol Mall, Suite 800
 Sacramento, CA 95814

Attorneys for Real Party in
 Interest and Respondent *Friant
 Ranch, L.P.*

Bryan N. Wagner
 WAGNER & WAGNER
 7110 N. Fresno St, Suite 340
 Fresno, CA 93720

Attorney for Real Party in Interest
 and Respondent *Friant Ranch,
 L.P.*

Sara Hedgpeth-Harris
 LAW OFFICE OF SARA
 HEDGPETH-HARRIS
 5445 E. Lane Avenue
 Fresno, CA 93727

Attorney for Plaintiffs and
 Appellants *Sierra Club, et al*

Daniel C. Cederborg
 Bruce B. Johnson, Jr.
 Zachary Stephen Redmond
 OFFICE OF THE FRESNO COUNTY
 COUNSEL
 2220 Tulare Street, Suite 500
 Fresno, CA 93721

Attorneys for Respondents
County of Fresno

Clerk of the Court
 California Court of Appeal
 Fifth Appellate District
 2424 Ventura Street
 Fresno, CA 93721
(via U.S. Mail & Electronic Transmission)

Clerk of the Court
 Superior Court of California
 County of Fresno
 1130 O Street
 Fresno, CA 93721

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Attachment: Appendix A1-Air Quality Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)



Compass Danbe Centerpointe

MOBILE SOURCE HEALTH RISK ASSESSMENT

CITY OF MORENO VALLEY

PREPARED BY:

Haseeb Qureshi
hqureshi@urbanxroads.com

NOVEMBER 12, 2020

13661-02 HRA Report

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE OF CONTENTS

TABLE OF CONTENTSI

APPENDICESI

LIST OF EXHIBITSII

LIST OF TABLESII

LIST OF ABBREVIATED TERMS.....III

EXECUTIVE SUMMARY1

1 INTRODUCTION.....4

 1.1 Site Location..... 5

 1.2 Project Description..... 5

2 BACKGROUND.....9

 2.1 Background on Recommended Methodology 9

 2.2 Emissions Estimation 9

 2.3 Exposure Quantification 14

 2.4 Carcinogenic Chemical Risk..... 17

 2.5 Non-carcinogenic Exposures..... 18

 2.6 Potential Project-Related DPM Source Cancer and Non-Cancer Risks..... 19

3 REFERENCES.....23

4 CERTIFICATIONS.....25

APPENDICES

- APPENDIX 2.1: AERMOD MODEL INPUT/OUTPUT
- APPENDIX 2.2: RISK CALCULATIONS

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

LIST OF EXHIBITS

EXHIBIT 1-A: LOCATION MAP6

EXHIBIT 1-B: SITE PLAN7

EXHIBIT 2-A: MODELED EMISSION SOURCES12

EXHIBIT 2-B: WIND ROSE (SRA 24)15

EXHIBIT 2-C: MODELED RECEPTORS21

LIST OF TABLES

TABLE ES-1: SUMMARY OF CANCER AND NON-CANCER RISKS3

TABLE 2-1: 2022 WEIGHTED AVERAGE DPM EMISSIONS FACTORS11

TABLE 2-2: DPM EMISSIONS FROM PROJECT TRUCKS (2022 ANALYSIS YEAR)13

TABLE 2-3: AERMOD MODEL PARAMETERS.....16

TABLE 2-4: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (30 YEAR RESIDENTIAL).....17

TABLE 2-5: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (25 YEAR WORKER).....17

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

LIST OF ABBREVIATED TERMS

(1)	Reference
µg	Microgram
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
APS	Auxiliary Power System
AQMD	Air Quality Management District
ARB	Air Resources Board
CEQA	California Environmental Quality Act
CPF	Cancer Potency Factor
DPM	Diesel Particulate Matter
EMFAC	Emission Factor Model
EPA	Environmental Protection Agency
HHD	Heavy Heavy-Duty
HI	Hazard Index
HRA	Health Risk Assessment
LHD	Light Heavy-Duty
MATES	Multiple Air Toxics Exposure Study
MEIR	Maximally Exposed Individual Receptor
MEISC	Maximally Exposed Individual School Child
MEIW	Maximally Exposed Individual Worker
MHD	Medium Heavy-Duty
NAD	North American Datum
OEHHA	Office of Environmental Health Hazard Assessment
PCE	Passenger Car Equivalent
PM10	Particulate Matter 10 microns in diameter or less
Project	Slover Avenue and Cypress Avenue
REL	Reference Exposure Level
RM	Recommended Measures
SCAQMD	South Coast Air Quality Management District
SRA	Source Receptor Area
TAC	Toxic Air Contaminant
TIA	Traffic Impact Analysis
URF	Unit Risk Factor
UTM	Universal Transverse Mercator
VMT	Vehicle Miles Traveled

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Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

EXECUTIVE SUMMARY

This report evaluates the potential mobile source health risk impacts to the nearest sensitive receptors (which are residents) and nearest workers to the proposed Project, more specifically, health risk impacts as a result of exposure to diesel particulate matter (DPM) emitted from heavy-duty diesel trucks accessing the site. This section summarizes the significance criteria and Project mobile source health risks.

The results of the health risk assessment of lifetime cancer risk from Project-generated DPM emissions are provided in Table ES-1 below for the Project.

Individual Exposure Scenario:

The residential land use with the greatest potential exposure to Project DPM source emissions is Location R1, which represents the existing residence at 13994 Chagall Court, approximately 152 feet north of the Project site. Since there is no private outdoor living area (back yard) facing the Project site at this location, R1 is placed at the building façade. At the maximally exposed individual receptor (MEIR), the maximum incremental cancer risk attributable to Project DPM source emissions is estimated at 4.48 in one million, which is less than the South Coast Air Quality Management District's (SCAQMD's) significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be 0.002, which would not exceed the applicable significance threshold of 1.0. Because all other modeled residential receptors are exposed to lesser concentrations and are located at a greater distance than the MEIR analyzed herein, and DPM generally dissipates with distance from the source, all other residential receptors in the vicinity of the Project site would be exposed to less emissions and therefore less risk than the MEIR identified herein. As such, the Project will not cause a significant human health or cancer risk to nearby residences.

Worker Exposure Scenario:

The worker receptor land use with the greatest potential exposure to Project DPM source emissions is Location R3, which represents the Moreno Valley City Hall at 14177 Frederick Street, approximately 744 feet west of the Project site. R3 is placed at the building façade where a worker could remain for a typical workday. At the maximally exposed individual worker (MEIW), the maximum incremental cancer risk impact is 0.18 in one million which is less than the SCAQMD's threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be 0.0006, which would not exceed the applicable significance threshold of 1.0. Because all other modeled worker receptors are located at a greater distance than the MEIW analyzed herein, and DPM dissipates with distance from the source, all other worker receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIW identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent workers.

School Child Exposure Scenario:

There are no schools located within a ¼ mile of the Project site. As such, there would be no significant impacts that would occur to any schools in the vicinity of the Project. Proximity to sources of toxics is critical to determining the impact. In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70-percent drop-off in particulate pollution levels at 500 feet. Based on CARB and SCAQMD emissions and modeling analyses, an 80-percent drop-off in pollutant concentrations is expected at approximately 1,000 feet from a distribution center (1). As such, the Project will not cause a significant human health or cancer risk to nearby school children.

TABLE ES-1: SUMMARY OF CANCER AND NON-CANCER RISKS

Time Period	Location	Maximum Lifetime Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance Threshold
30 Year Exposure	Maximum Exposed Individual Receptor	4.48	10	NO
25 Year Exposure	Maximum Exposed Worker Receptor	0.18	10	NO
Time Period	Location	Maximum Hazard Index	Significance Threshold	Exceeds Significance Threshold
Annual Average	Maximum Exposed Sensitive Receptor	0.002	1.0	NO
Annual Average	Maximum Exposed Worker Receptor	0.0006	1.0	NO

1 INTRODUCTION

The purpose of this Health Risk Assessment (HRA) is to evaluate Project-related impacts to the nearest sensitive receptors (residents) and workers as a result of heavy-duty diesel trucks accessing the site.

The SCAQMD identifies that if a proposed Project is expected to generate/attract heavy-duty diesel trucks, which emit DPM, preparation of a mobile source HRA is recommended. This document serves to meet the SCAQMD's recommendation for preparation of a HRA. The mobile source HRA has been prepared in accordance with the document Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (2) and is comprised of all relevant and appropriate procedures presented by the United States Environmental Protection Agency (U.S. EPA), California EPA and SCAQMD. Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of ten (10) persons per million as the maximum acceptable incremental cancer risk due to DPM exposure from a project such as the proposed Project. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulatively considerable impact.

The AQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (3). In this report the AQMD states (Page D-3):

"...the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is $HI > 1.0$ while the cumulative (facility-wide) is $HI > 3.0$. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs. Non-carcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A hazard index less of than one (1.0) means that adverse health effects are not expected. In this HRA, non-carcinogenic exposures of less than 1.0 are considered less-than-significant. Both the cancer risk and non-carcinogenic risk thresholds are applied to the nearest sensitive receptors below.

1.1 SITE LOCATION

The proposed project is located south of Alessandro Boulevard on either side of Chagall Court in the City of Moreno Valley as shown on Exhibit 1-A. The March Air Reserve Base/Inland Port Airport (MARB/IPA) is located approximately 0.9 miles south of the Project site. The Project site is bordered to the west by vacant land, to the east by vacant land, to the north by commercial and residential uses, and to the south are existing industrial buildings.

This proposed Project includes a General Plan Amendment (GPA) and a Zone Change (ZC). The site is currently designated as Commercial in the City's General Plan, which would require a land use and zoning change to Light Industrial use. The proposed changes are consistent with the zones to the west, south and east of the subject site and adjacent properties. The amendment is in keeping with the uses surrounding the project site.

1.2 PROJECT DESCRIPTION

Exhibit 1-B illustrates a preliminary site plan for the Project. The Project is anticipated to be developed within a single phase with an anticipated opening year of 2022. The proposed Project consists of the following uses:

- Building 1: 206,665 square feet (sf) of warehousing (70% of total building sf) and 88,571 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 295,236 sf for Building 1
- Building 2: 70,876 sf of warehousing (70% of total building sf) and 30,376 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 101,252 sf for Building 2

At the time this HRA was prepared, the future tenants of the proposed Project were unknown. Because the operating hours of perspective building tenants is not known at this time, this HRA is intended to describe potential toxic emission impacts associated with the expected typical 24-hour, seven day per week operational activities at the Project site, which provides a conservative analysis of impacts.

Per the *Alessandro Warehouse Traffic Analysis* (TA) prepared by Urban Crossroads, Inc., the Project is expected to generate a total of approximately 742 two-way vehicular trips per day (371 inbound and 371 outbound) which includes 224 two-way truck trips per day (112 inbound and 112 outbound) (4). This HRA evaluates the potential impacts resulting from diesel exhaust from the 224 two-way truck trips generated by the Project.

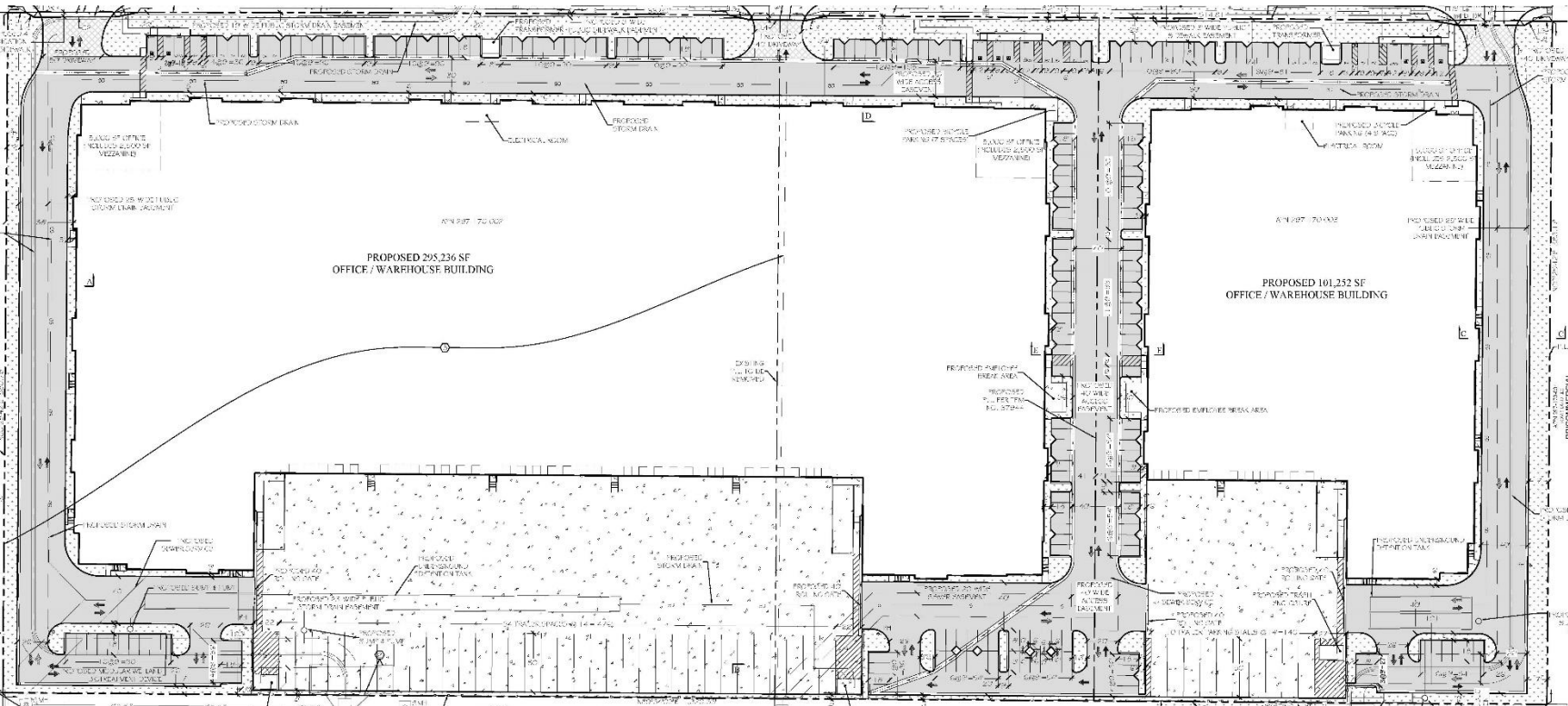
EXHIBIT 1-A: LOCATION MAP



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

EXHIBIT 1-B: SITE PLAN



Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122

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Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

2 BACKGROUND

2.1 BACKGROUND ON RECOMMENDED METHODOLOGY

This HRA is based on SCAQMD guidelines to produce conservative estimates of human health risk posed by exposure to DPM. The conservative nature of this analysis is due primarily to the following factors:

- The ARB-adopted diesel exhaust Unit Risk Factor (URF) of 300 in one million per $\mu\text{g}/\text{m}^3$ is based upon the upper 95 percentile of estimated risk for each of the epidemiological studies utilized to develop the URF. Using the 95th percentile URF represents a very conservative (health-protective) risk posed by DPM because it represents breathing rates that are high for the human body (95% higher than the average population).
- The emissions derived assume that every truck accessing the Project site will idle for 15 minutes under the unmitigated scenario, and this is an overestimation of actual idling times and thus conservative.¹ The California Air Resources Board (CARB's) anti-idling requirements impose a 5-minute maximum idling time and therefore the analysis conservatively overestimates DPM emissions from idling by a factor of 3.

2.2 EMISSIONS ESTIMATION

2.2.1 ON-SITE AND OFF-SITE TRUCK ACTIVITY

Vehicle DPM emissions were calculated using emission factors for particulate matter less than $10\mu\text{m}$ in diameter (PM_{10}) generated with the 2017 version of the Emission FACTor model (EMFAC) developed by the CARB. EMFAC 2017 is a mathematical model that CARB developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the ARB to project changes in future emissions from on-road mobile sources (5). The most recent version of this model, EMFAC 2017, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day.

Several distinct emission processes are included in EMFAC 2017. Emission factors calculated using EMFAC 2017 are expressed in units of grams per vehicle miles traveled (g/VMT) or grams per idle-hour (g/idle-hr), depending on the emission process. The emission processes and corresponding emission factor units associated with diesel particulate exhaust for this Project are presented below.

For this Project, annual average PM_{10} emission factors were generated by running EMFAC 2017 in EMFAC Mode for vehicles in the Riverside County jurisdiction. The EMFAC Mode generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of temperature, relative humidity, and vehicle speed.

¹ Although the Project is required to comply with ARB's idling limit of 5 minutes, staff at SCAQMD recommends that the on-site idling emissions should be estimated for 15 minutes of truck idling (personal communication, in person, with Jillian Wong, December 22, 2016), which would take into account on-site idling which occurs while the trucks are waiting to pull up to the truck bays, idling at the bays, idling at check-in and check-out, etc.

The model was run for speeds traveled in the vicinity of the Project. The vehicle travel speeds for each segment modeled are summarized below.

- Idling – on-site loading/unloading and truck gate
- 5 miles per hour – on-site vehicle movement including driving and maneuvering
- 25 miles per hour – off-site vehicle movement including driving and maneuvering.

Calculated emission factors are shown at Table 2-1. As a conservative measure, a 2022 EMFAC 2017 run was conducted and a static 2022 emissions factor data set was used for the entire duration of analysis herein (e.g., 30 years). Use of 2022 emission factors would overstate potential impacts since this approach assumes that emission factors remain “static” and do not change over time due to fleet turnover or cleaner technology with lower emissions that would be incorporated into vehicles after 2022. Additionally, based on EMFAC 2017, Light-Heavy-Duty Trucks are comprised of 49.43% diesel, Medium-Heavy-Duty Trucks are comprised of 88.51% diesel, and Heavy-Heavy-Duty Trucks are comprised of 98.94% diesel. Trucks fueled by diesel are accounted for by these percentages accordingly in the emissions factor generation.

The vehicle DPM exhaust emissions were calculated for running exhaust emissions. The running exhaust emissions were calculated by applying the running exhaust PM₁₀ emission factor (g/VMT) from EMFAC over the total distance traveled. The following equation was used to estimate off-site emissions for each of the different vehicle classes comprising the mobile sources (6):

$$\text{Emissions}_{\text{speedA}} \text{ (g/s)} = \text{EF}_{\text{RunExhaust}} \text{ (g/VMT)} * \text{Distance (VMT/trip)} * \text{Number of Trips (trips/day)} / \text{seconds per day}$$

Where:

$\text{Emissions}_{\text{speedA}}$ (g/s): Vehicle emissions at a given speed A;

$\text{EF}_{\text{RunExhaust}}$ (g/VMT): EMFAC running exhaust PM₁₀ emission factor at speed A;

Distance (VMT/trip): Total distance traveled per trip.

Similar to off-site traffic, on-site vehicle running emissions were calculated by applying the running exhaust PM₁₀ emission factor (g/VMT) from EMFAC and the total vehicle trip number over the length of the driving path using the same formula presented above for on-site emissions. In addition, on-site vehicle idling exhaust emissions were calculated by applying the idle exhaust PM₁₀ emission factor (g/idle-hr) from EMFAC and the total truck trip over the total assumed idle time (15 minutes). The following equation was used to estimate the on-site vehicle idling emissions for each of the different vehicle classes (6):

$$\text{Emissions}_{\text{idle}} \text{ (g/s)} = \text{EF}_{\text{idle}} \text{ (g/hr)} * \text{Number of Trips (trips/day)} * \text{Idling Time (min/trip)} * \frac{60 \text{ minutes}}{\text{per hour}} / \text{seconds per day}$$

Where:

$\text{Emissions}_{\text{idle}}$ (g/s): Vehicle emissions during idling;

EF_{idle} (g/s): EMFAC idle exhaust PM_{10} emission factor.

TABLE 2-1: 2022 WEIGHTED AVERAGE DPM EMISSIONS FACTORS

Speed	Weighted Average
0 (idling)	0.12462 (g/idle-hr)
5	0.04500 (g/s)
25	0.01931 (g/s)

Each roadway was modeled as a line source (made up of multiple adjacent volume sources). Due to the large number of volume sources modeled for this analysis, the corresponding coordinates of each volume source have not been included in this report but are included in Appendix “2.1”. The DPM emission rate for each volume source was calculated by multiplying the emission factor (based on the average travel speed along the roadway) by the number of trips and the distance traveled along each roadway segment and dividing the result by the number of volume sources along that roadway, as illustrated on Table 2-2. The modeled emission sources are illustrated on Exhibit 2-A. The modeling domain is limited to the Project’s primary truck route and includes off-site sources in the study area for approximately 1 mile. This modeling domain is more inclusive and conservative than using only a ¼ mile modeling domain which is the distance supported by several reputable studies which conclude that the greatest potential risks occur within a ¼ mile of the primary source of emissions (1) (in the case of the Project, the primary source of emissions is the on-site idling and on-site travel).

On-site truck idling was estimated to occur as trucks enter and travel through the Project site. Although the Project’s diesel-fueled truck and equipment operators will be required by State law to comply with CARB’s idling limit of 5 minutes, staff at SCAQMD recommends that the on-site idling emissions be calculated assuming 15 minutes of truck idling (7), which would take into account on-site idling which occurs while the trucks are waiting to pull up to the truck bays, idling at the bays, idling at check-in and check-out, etc. As such, this analysis calculates truck idling at 15 minutes, consistent with SCAQMD’s recommendation.

Per the TA, the Project is expected to generate a total of approximately 742 two-way vehicular trips per day (371 inbound and 371 outbound) which includes 224 two-way truck trips per day (112 inbound and 112 outbound) (4). This HRA evaluates the potential impacts resulting from diesel exhaust from the 224 two-way truck trips generated by the Project.

EXHIBIT 2-A: MODELED EMISSION SOURCES



Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 2-2: DPM EMISSIONS FROM PROJECT TRUCKS (2022 ANALYSIS YEAR)

Truck Emission Rates						
Source	Trucks Per Day	VMT ^a (miles/day)	Truck Emission Rate ^b (grams/mile)	Truck Emission Rate ^b (grams/idle-hour)	Daily Truck Emissions ^c (grams/day)	Modeled Emission Rates (g/second)
On-Site Idling Building 1	83			0.1246	13.06	1.511E-04
On-Site Idling Building 2	29			0.1246	4.29	4.967E-05
On-Site Travel Building 1	166	69.63	0.0450		6.65	7.694E-05
On-Site Travel Building 2	58	9.04	0.0450		0.83	9.593E-06
Off-Site Travel 90% Inbound Dwy 1	202	127.44	0.0193		3.72	4.309E-05
Off-Site Travel 10% Inbound Dwy 3	22	17.84	0.0193		0.52	6.033E-06
Off-Site Travel 10% Outbound Dwy 1	22	6.86	0.0193		0.20	2.321E-06
Off-Site Travel 90% Outbound Dwy 3	202	28.05	0.0193		0.82	9.484E-06
Off-Site Travel 100% Outbound on Graham St.	224	113.03	0.0193		3.30	3.822E-05

^a Vehicle miles traveled are for modeled truck route only.

^b Emission rates determined using EMFAC 2017. Idle emission rates are expressed in grams per idle hour rather than grams per mile.

This column includes the total truck travel and truck idle emissions. For idle emissions this column includes emissions based on the assumption that each truck idles for 15 minutes. Additionally, this column includes idling from

^c TRUs accessing the Project, it is assumed that TRUs would idle for up to 30 minutes.

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122

2.2.2 TRANSPORT REFRIGERATION UNITS (TRUs)

In order to account for the possibility of refrigerated uses (cold storage) that would be accommodated by the Project, all trucks accessing the refrigerated portion of the Project site are presumed to also have transport refrigeration units (TRUs). Therefore, for modeling purposes 45 total daily trucks (one-way) are presumed to be trucks with TRUs. In addition to on-site truck idling, the analysis assumes that each TRU accessing the site will also idle for 30 minutes, even though the CARB's anti-idling rules mandate a 5-minute idling time. Based on CARB's *Draft Update to Inventory for Transportation Refrigeration Units* (8) 60% of TRUs are anticipated to be 25+ horsepower and 40% of TRUs are anticipated to be 23 horsepower, as such 60% of TRUs are assumed to be 34 horsepower with a load factor of 0.53 (0.01 grams of PM₁₀ per brake-horsepower-hour) and 40% of TRUs are assumed to be 23 horsepower with a load factor of 0.46 (0.12 grams of PM₁₀ per brake-horsepower-hour). TRUs are also accounted for during on-site and off-site travel. TRU emission rates were calculated based on CARB's 2017 Off-Road Diesel Emission Factors for analysis year 2022.

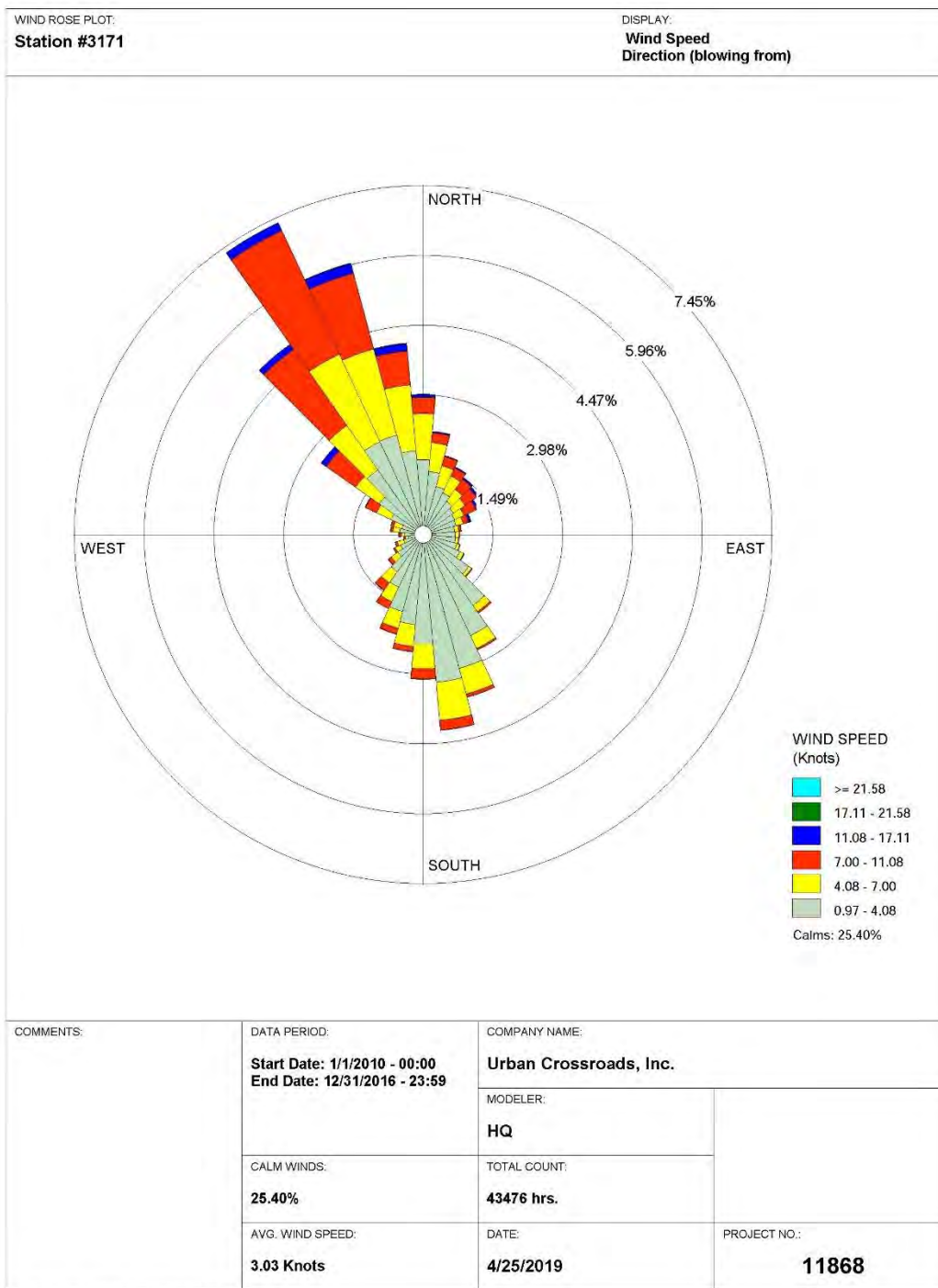
2.3 EXPOSURE QUANTIFICATION

The analysis herein has been conducted in accordance with the guidelines in the Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (2). SCAQMD recommends using the Environmental Protection Agency's (U.S. EPA's) AERMOD model. For purposes of this analysis, the Lakes AERMOD View (Version 9.9.0) was used to calculate annual average particulate concentrations associated with site operations. Lakes AERMOD View was utilized to incorporate the U.S. EPA's latest AERMOD Version 19191 (9).

The model offers additional flexibility by allowing the user to assign an initial release height and vertical dispersion parameters for mobile sources representative of a roadway. For this HRA, the roadways were modeled as adjacent volume sources. Roadways were modeled using the U.S. EPA's haul route methodology for modeling of on-site and off-site truck movement. More specifically, the Haul Road Volume Source Calculator in Lakes AERMOD View has been utilized to determine the release height parameters. Based on the US EPA methodology, the Project's modeled sources would result in a release height of 3.49 meters, and an initial lateral dimension of 4.0 meters, and an initial vertical dimension of 3.25 meters.

SCAQMD-recommended model parameters are presented in Table 2-3 (10). The model requires additional input parameters including emission data and local meteorology. Meteorological data from the SCAQMD's Perris monitoring station (SRA 24) was used to represent local weather conditions and prevailing winds (11). A wind rose exhibit of the FONT monitoring station is provided at Exhibit 2-B.

EXHIBIT 2-B: WIND ROSE (SRA 24)



Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 2-3: AERMOD MODEL PARAMETERS

Dispersion Coefficient (Urban/Rural)	Urban (Population 2,035,210)
Terrain (Flat/Elevated)	Elevated (Regulatory Default)
Averaging Time	1 year (5-year Meteorological Data Set)
Receptor Height	0 meters (Regulatory Default)

Universal Transverse Mercator (UTM) coordinates for World Geodetic System (WGS) 84 were used to locate the Project site boundaries, each volume source location, and receptor locations in the Project site's vicinity. The AERMOD dispersion model summary output files for the proposed Project are presented in Appendix "2.1". Modeled sensitive receptors were placed at residential and non-residential locations.

Receptors may be placed at applicable structure locations for residential and worker property and not necessarily the boundaries of the properties containing these uses because the human receptors (residents and workers) spend a majority of their time at the residence or in the workplace's building, and not on the property line. It should be noted that the primary purpose of receptor placement is focused on long-term exposure. For example, the HRA evaluates the potential health risks to residents and workers over a period of 30 or 25 years of exposure, respectively. Notwithstanding, as a conservative measure, receptors were placed at either the outdoor living area or the building façade, whichever is closer to the Project site.

For purposes of this HRA, receptors include both residential and non-residential (worker) land uses in the vicinity of the Project. These receptors are included in the HRA since residents, and workers may be exposed at these locations over a long-term duration of 30 and 25 years, respectively. This methodology is consistent with SCAQMD and OEHHA recommended guidance.

Any impacts to residents or workers located further away from the Project site than the modeled residential and workers would have a lesser impact than what has already been disclosed in the HRA at the MEIR, and MEIW because concentrations dissipate with distance.

Consistent with SCAQMD modeling guidance, all receptors were set to existing elevation height so that only ground-level concentrations are analyzed (12). United States Geological Survey (USGS) Digital Elevation Model (DEM) terrain data based on a 7.5-minute topographic quadrangle map series using AERMAP was utilized in the HRA modeling to set elevations.

Discrete variants for daily breathing rates, exposure frequency, and exposure duration were obtained from relevant distribution profiles presented in the 2015 OEHHA Guidelines. Tables 2-4 and 2-5 summarize the Exposure Parameters for Residents and Workers based on 2015 OEHHA Guidelines. Appendix 2.2 includes the detailed risk calculation.

TABLE 2-4: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (30 YEAR RESIDENTIAL)

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Fraction of Time at Home	Exposure Frequency (days/year)	Exposure Time (hours/day)
-0.25 to 0	361	10	0.25	0.85	350	24
0 to 2	1090	10	2	0.85	350	24
2 to 16	572	3	14	0.72	350	24
16 to 30	261	1	14	0.73	350	24

TABLE 2-5: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (25 YEAR WORKER)

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Exposure Frequency (days/year)	Exposure Time (hours/day)
16 to 41	230	1	25	250	12

2.4 CARCINOGENIC CHEMICAL RISK

The SCAQMD CEQA Air Quality Handbook (1993) states that emissions of toxic air contaminants (TACs) are considered significant if a HRA shows an increased risk of greater than 10 in one million. Based on guidance from the SCAQMD in the document Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (2), for purposes of this analysis, 10 in one million is used as the cancer risk threshold for the proposed Project.

Excess cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens over a specified exposure duration. The estimated risk is expressed as a unitless probability. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). A risk level of 10 in one million implies a likelihood that up to 10 people, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time.

Guidance from CARB and the California Environmental Protection Agency, Office of Environmental Health Hazard Assessment (OEHHA) recommends a refinement to the standard point estimate approach when alternate human body weights and breathing rates are utilized to assess risk for susceptible subpopulations such as children. For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose. Once determined, contaminant dose is multiplied by the cancer potency factor (CPF) in units of inverse dose expressed in milligrams per kilogram per day (mg/kg/day)⁻¹ to derive the cancer risk estimate. Therefore, to assess exposures, the following dose algorithm was utilized.

$$\text{DOSE}_{\text{air}} = (\text{C}_{\text{air}} \times [\text{BR}/\text{BW}] \times A \times \text{EF}) \times (1 \times 10^{-6})$$

Where:

DOSE _{air}	=	chronic daily intake (mg/kg/day)
C _{air}	=	concentration of contaminant in air (ug/m ³)
[BR/BW] BW-day)	=	daily breathing rate normalized to body weight (L/kg BW-day)
A	=	inhalation absorption factor
EF	=	exposure frequency (days/365 days)
BW	=	body weight (kg)
1 x 10 ⁻⁶	=	conversion factors (ug to mg, L to m ³)

$$\text{RISK}_{\text{air}} = \text{DOSE}_{\text{air}} \times \text{CPF} \times \text{ED}/\text{AT}$$

Where:

DOSE _{air}	=	chronic daily intake (mg/kg/day)
CPF	=	cancer potency factor
ED	=	number of years within particular age group
AT	=	averaging time

2.5 NON-CARCINOGENIC EXPOSURES

An evaluation of the potential noncarcinogenic effects of chronic exposures was also conducted. Adverse health effects are evaluated by comparing a compound's annual concentration with its toxicity factor or Reference Exposure Level (REL). The REL for diesel particulates was obtained from OEHHA for this analysis. The chronic reference exposure level (REL) for DPM was established by OEHHA as 5 µg/m³ (OEHHA Toxicity Criteria Database, <http://www.oehha.org/risk/chemicaldb/index.asp>).

The non-cancer hazard index was calculated (consistent with SCAQMD methodology) as follows:

The relationship for the non-cancer health effects of DPM is given by the following equation:

$$\text{HI}_{\text{DPM}} = \text{C}_{\text{DPM}}/\text{REL}_{\text{DPM}}$$

Where:

HI _{DPM}	=	Hazard Index; an expression of the potential for non-cancer health effects.
C _{DPM}	=	Annual average DPM concentration (µg/m ³).

REL_{DPM} = Reference exposure level (REL) for DPM; the DPM concentration at which no adverse health effects are anticipated.

For purposes of this analysis the hazard index for the respiratory endpoint totaled less than one for all receptors in the project vicinity, and thus is less than significant.

2.6 POTENTIAL PROJECT-RELATED DPM SOURCE CANCER AND NON-CANCER RISKS

Individual Exposure Scenario:

The residential land use with the greatest potential exposure to Project DPM source emissions is Location R1, which represents the existing residence at 13994 Chagall Court, approximately 152 feet north of the Project site. Since there is no private outdoor living area (back yard) facing the Project site at this location, R1 is placed at the building façade. At the MEIR, the maximum incremental cancer risk attributable to Project DPM source emissions is estimated at 4.48 in one million, which is less than the SCAQMD's significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be 0.002, which would not exceed the applicable significance threshold of 1.0. Because all other modeled residential receptors are exposed to lesser concentrations and are located at a greater distance than the MEIR analyzed herein, and DPM generally dissipates with distance from the source, all other residential receptors in the vicinity of the Project site would be exposed to less emissions and therefore less risk than the MEIR identified herein. As such, the Project will not cause a significant human health or cancer risk to nearby residences. The nearest modeled receptors are illustrated on Exhibit 2-C.

Worker Exposure Scenario²:

The worker receptor land use with the greatest potential exposure to Project DPM source emissions is Location R3, which represents the Moreno Valley City Hall at 14177 Frederick Street, approximately 744 feet west of the Project site. R3 is placed at the building façade where a worker could remain for a typical workday. At the MEIW, the maximum incremental cancer risk impact is 0.18 in one million which is less than the SCAQMD's threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be 0.0006, which would not exceed the applicable significance threshold of 1.0. Because all other modeled worker receptors are located at a greater distance than the MEIW analyze herein, and DPM dissipates with distance from the source, all other worker receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIW identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent workers. The nearest modeled receptors are illustrated on Exhibit 2-C.

School Child Exposure Scenario:



2 SCAQMD guidance does not require assessment of the potential health risk to on-site workers. Excerpts from the document OEHA Air Toxics Hot Spots Program Risk Assessment Guidelines—The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHA 2003), also indicate that it is not necessary to examine the health effects to on-site workers unless required by RCRA (Resource Conservation and Recovery Act) / CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) or the worker resides on-site.

There are no schools located within a ¼ mile of the Project site. As such, there would be no significant impacts that would occur to any schools in the vicinity of the Project. Proximity to sources of toxics is critical to determining the impact. In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70-percent drop-off in particulate pollution levels at 500 feet. Based on CARB and SCAQMD emissions and modeling analyses, an 80-percent drop-off in pollutant concentrations is expected at approximately 1,000 feet from a distribution center (1). As such, the Project will not cause a significant human health or cancer risk to nearby school children.

EXHIBIT 2-C: MODELED RECEPTORS



LEGEND:

-  Site Boundary
-  Receptor Locations

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Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

3 REFERENCES

1. **Air Resources Board.** *Air Quality and Land Use Handbook: A Community Health Perspective.* 2005.
2. **South Coast Air Quality Management District.** Mobile Source Toxics Analysis. [Online] 2003. http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html.
3. **Goss, Tracy A and Kroeger, Amy.** White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. [Online] South Coast Air Quality Management District, 2003. [Cited: June 6, 2019.] <http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf?sfvrsn=2>.
4. **Urban Crossroads, Inc.** *Alessandro Warehouse Traffic Analysis.* 2020.
5. **California Air Resources Board.** EMFAC 2017. [Online] <https://www.arb.ca.gov/emfac/2017/>.
6. **California Department of Transportation.** EMFAC Software. [Online] <http://www.dot.ca.gov/hq/env/air/pages/emfac.htm>.
7. **Wong, Jillian.** *Planning, Rule Development & Area Sources.* December 22, 2016.
8. **California Air Resources Board.** *Draft 2019 Update to Emissions Inventory for Transportation Refrigeration Units.* 2019.
9. **Environmental Protection Agency.** User's Guide for the AMS/EPA Regulatory Model (AERMOD). [Online] 2019. https://www3.epa.gov/ttn/scram/models/aermod/aermod_userguide.pdf.
10. —. User's Guide for the AMS/EPA Regulatory Model (AERMOD). [Online] April 2018. https://www3.epa.gov/ttn/scram/models/aermod/aermod_userguide.pdf.
11. **South Coast Air Quality Management District.** Data for AERMOD. [Online] [Cited: June 10, 2019.] <https://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod>.
12. —. South Coast AQMD Modeling Guidance for AERMOD. [Online] [Cited: September 18, 2019.] <http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance>.

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Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

4 CERTIFICATIONS

The contents of this health risk assessment represent an accurate depiction of the impacts to sensitive receptors associated with the proposed Compass Danbe Centerpointe Project. The information contained in this health risk assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me at (949) 660-1994.

Haseeb Qureshi
Associate Principal
URBAN CROSSROADS, INC.
hqureshi@urbanxroads.com

EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Environmental Site Assessment – American Society for Testing and Materials • June 2013
Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 2.1:
AERMOD MODEL INPUT/OUTPUT

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

```

**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.9.0
** Lakes Environmental Software Inc.
** Date: 11/12/2020
** File: C:\Lakes\AERMOD View\13661 HRA\13661 HRA.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\13661 HRA\13661 HRA.isc
  MODELOPT DFAULT CONC
  AVERTIME ANNUAL
  URBANOPT 2189641
  POLLUTID OTHER
  RUNORNOT RUN
  ERRORFIL "13661 HRA.err"
CO FINISHED

```

```

**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC On-Site Idling
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 0.0001511
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 476124.809, 3752854.739, 477.06, 3.49, 4.00
** 476280.519, 3752854.739, 477.00, 3.49, 4.00
** -----
LOCATION L0001891      VOLUME  476129.104 3752854.739 477.00

```

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

LOCATION L0001892	VOLUME	476137.694	3752854.739	477.00
LOCATION L0001893	VOLUME	476146.284	3752854.739	477.13
LOCATION L0001894	VOLUME	476154.874	3752854.739	477.31
LOCATION L0001895	VOLUME	476163.464	3752854.739	477.48
LOCATION L0001896	VOLUME	476172.054	3752854.739	477.61
LOCATION L0001897	VOLUME	476180.644	3752854.739	477.61
LOCATION L0001898	VOLUME	476189.234	3752854.739	477.61
LOCATION L0001899	VOLUME	476197.824	3752854.739	477.61
LOCATION L0001900	VOLUME	476206.414	3752854.739	477.61
LOCATION L0001901	VOLUME	476215.004	3752854.739	477.61
LOCATION L0001902	VOLUME	476223.594	3752854.739	477.61
LOCATION L0001903	VOLUME	476232.184	3752854.739	477.56
LOCATION L0001904	VOLUME	476240.774	3752854.739	477.38
LOCATION L0001905	VOLUME	476249.364	3752854.739	477.21
LOCATION L0001906	VOLUME	476257.954	3752854.739	477.04
LOCATION L0001907	VOLUME	476266.544	3752854.739	477.00
LOCATION L0001908	VOLUME	476275.134	3752854.739	477.00

** End of LINE VOLUME Source ID = SLINE1

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE2

** DESCRSRC On-Site Idling Building 2

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 0.00004967

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 2

** 476354.183, 3752856.503, 477.11, 3.49, 4.00

** 476404.469, 3752855.621, 476.85, 3.49, 4.00

** -----

LOCATION L0001909	VOLUME	476358.478	3752856.428	477.19
-------------------	--------	------------	-------------	--------

LOCATION L0001910	VOLUME	476367.066	3752856.277	477.38
-------------------	--------	------------	-------------	--------

LOCATION L0001911	VOLUME	476375.655	3752856.127	477.56
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LOCATION L0001912	VOLUME	476384.244	3752855.976	477.50
-------------------	--------	------------	-------------	--------

LOCATION L0001913	VOLUME	476392.832	3752855.825	477.21
-------------------	--------	------------	-------------	--------

LOCATION L0001914	VOLUME	476401.421	3752855.675	476.92
-------------------	--------	------------	-------------	--------

** End of LINE VOLUME Source ID = SLINE2

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE8

** DESCRSRC On-Site Travel Building 1

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 0.00007694

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 5

** 476073.943, 3752973.274, 479.00, 3.49, 4.00
 ** 476068.820, 3752933.019, 478.00, 3.49, 4.00
 ** 476070.284, 3752830.550, 477.00, 3.49, 4.00
 ** 476447.891, 3752831.291, 476.83, 3.49, 4.00
 ** 476442.924, 3752985.649, 478.00, 3.49, 4.00

** -----
 LOCATION L0001915 VOLUME 476073.401 3752969.014 479.00
 LOCATION L0001916 VOLUME 476072.317 3752960.493 479.00
 LOCATION L0001917 VOLUME 476071.232 3752951.971 478.85
 LOCATION L0001918 VOLUME 476070.148 3752943.450 478.56
 LOCATION L0001919 VOLUME 476069.063 3752934.929 478.28
 LOCATION L0001920 VOLUME 476068.915 3752926.355 478.00
 LOCATION L0001921 VOLUME 476069.038 3752917.766 478.00
 LOCATION L0001922 VOLUME 476069.161 3752909.177 478.00
 LOCATION L0001923 VOLUME 476069.283 3752900.587 478.00
 LOCATION L0001924 VOLUME 476069.406 3752891.998 478.00
 LOCATION L0001925 VOLUME 476069.529 3752883.409 478.00
 LOCATION L0001926 VOLUME 476069.651 3752874.820 478.00
 LOCATION L0001927 VOLUME 476069.774 3752866.231 477.99
 LOCATION L0001928 VOLUME 476069.897 3752857.642 477.70
 LOCATION L0001929 VOLUME 476070.020 3752849.053 477.42
 LOCATION L0001930 VOLUME 476070.142 3752840.464 477.13
 LOCATION L0001931 VOLUME 476070.265 3752831.874 476.95
 LOCATION L0001932 VOLUME 476077.550 3752830.565 476.99
 LOCATION L0001933 VOLUME 476086.140 3752830.582 477.00
 LOCATION L0001934 VOLUME 476094.730 3752830.598 477.00
 LOCATION L0001935 VOLUME 476103.320 3752830.615 477.00
 LOCATION L0001936 VOLUME 476111.910 3752830.632 476.99
 LOCATION L0001937 VOLUME 476120.500 3752830.649 476.93
 LOCATION L0001938 VOLUME 476129.090 3752830.666 476.87
 LOCATION L0001939 VOLUME 476137.680 3752830.683 476.82
 LOCATION L0001940 VOLUME 476146.270 3752830.699 476.85
 LOCATION L0001941 VOLUME 476154.860 3752830.716 476.90
 LOCATION L0001942 VOLUME 476163.450 3752830.733 476.96
 LOCATION L0001943 VOLUME 476172.039 3752830.750 477.00
 LOCATION L0001944 VOLUME 476180.629 3752830.767 477.00
 LOCATION L0001945 VOLUME 476189.219 3752830.784 477.00
 LOCATION L0001946 VOLUME 476197.809 3752830.800 477.00
 LOCATION L0001947 VOLUME 476206.399 3752830.817 477.00
 LOCATION L0001948 VOLUME 476214.989 3752830.834 477.00
 LOCATION L0001949 VOLUME 476223.579 3752830.851 477.00
 LOCATION L0001950 VOLUME 476232.169 3752830.868 477.00
 LOCATION L0001951 VOLUME 476240.759 3752830.885 477.00
 LOCATION L0001952 VOLUME 476249.349 3752830.902 477.00
 LOCATION L0001953 VOLUME 476257.939 3752830.918 477.00
 LOCATION L0001954 VOLUME 476266.529 3752830.935 477.00
 LOCATION L0001955 VOLUME 476275.119 3752830.952 477.00
 LOCATION L0001956 VOLUME 476283.709 3752830.969 477.00
 LOCATION L0001957 VOLUME 476292.299 3752830.986 477.00
 LOCATION L0001958 VOLUME 476300.889 3752831.003 477.00

LOCATION L0001959	VOLUME	476309.479	3752831.019	477.00
LOCATION L0001960	VOLUME	476318.069	3752831.036	477.00
LOCATION L0001961	VOLUME	476326.659	3752831.053	476.96
LOCATION L0001962	VOLUME	476335.249	3752831.070	476.91
LOCATION L0001963	VOLUME	476343.839	3752831.087	476.85
LOCATION L0001964	VOLUME	476352.429	3752831.104	476.82
LOCATION L0001965	VOLUME	476361.019	3752831.120	476.82
LOCATION L0001966	VOLUME	476369.609	3752831.137	476.82
LOCATION L0001967	VOLUME	476378.199	3752831.154	476.82
LOCATION L0001968	VOLUME	476386.789	3752831.171	476.63
LOCATION L0001969	VOLUME	476395.379	3752831.188	476.39
LOCATION L0001970	VOLUME	476403.969	3752831.205	476.16
LOCATION L0001971	VOLUME	476412.559	3752831.222	476.08
LOCATION L0001972	VOLUME	476421.149	3752831.238	476.31
LOCATION L0001973	VOLUME	476429.739	3752831.255	476.55
LOCATION L0001974	VOLUME	476438.329	3752831.272	476.78
LOCATION L0001975	VOLUME	476446.919	3752831.289	476.82
LOCATION L0001976	VOLUME	476447.646	3752838.905	477.00
LOCATION L0001977	VOLUME	476447.370	3752847.490	477.00
LOCATION L0001978	VOLUME	476447.094	3752856.076	477.00
LOCATION L0001979	VOLUME	476446.817	3752864.661	477.00
LOCATION L0001980	VOLUME	476446.541	3752873.247	477.22
LOCATION L0001981	VOLUME	476446.265	3752881.833	477.51
LOCATION L0001982	VOLUME	476445.988	3752890.418	477.80
LOCATION L0001983	VOLUME	476445.712	3752899.004	478.00
LOCATION L0001984	VOLUME	476445.436	3752907.589	478.00
LOCATION L0001985	VOLUME	476445.160	3752916.175	478.00
LOCATION L0001986	VOLUME	476444.883	3752924.760	478.00
LOCATION L0001987	VOLUME	476444.607	3752933.346	478.00
LOCATION L0001988	VOLUME	476444.331	3752941.931	478.00
LOCATION L0001989	VOLUME	476444.055	3752950.517	478.00
LOCATION L0001990	VOLUME	476443.778	3752959.103	478.00
LOCATION L0001991	VOLUME	476443.502	3752967.688	478.00
LOCATION L0001992	VOLUME	476443.226	3752976.274	478.00
LOCATION L0001993	VOLUME	476442.950	3752984.859	478.00

** End of LINE VOLUME Source ID = SLINE8

**

** -----
 ** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE9

** DESCRSRC On-Site Travel Building 2

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 9.593E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 3

** 476354.665, 3752830.145, 476.89, 3.49, 4.00

** 476447.891, 3752830.909, 476.83, 3.49, 4.00

** 476442.924, 3752988.323, 478.00, 3.49, 4.00

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** -----
LOCATION L0001994      VOLUME  476358.960 3752830.180 476.79
LOCATION L0001995      VOLUME  476367.550 3752830.250 476.79
LOCATION L0001996      VOLUME  476376.139 3752830.321 476.79
LOCATION L0001997      VOLUME  476384.729 3752830.391 476.66
LOCATION L0001998      VOLUME  476393.319 3752830.461 476.44
LOCATION L0001999      VOLUME  476401.909 3752830.532 476.21
LOCATION L0002000      VOLUME  476410.498 3752830.602 476.02
LOCATION L0002001      VOLUME  476419.088 3752830.673 476.25
LOCATION L0002002      VOLUME  476427.678 3752830.743 476.48
LOCATION L0002003      VOLUME  476436.267 3752830.813 476.71
LOCATION L0002004      VOLUME  476444.857 3752830.884 476.81
LOCATION L0002005      VOLUME  476447.716 3752836.462 477.00
LOCATION L0002006      VOLUME  476447.445 3752845.048 477.00
LOCATION L0002007      VOLUME  476447.174 3752853.633 477.00
LOCATION L0002008      VOLUME  476446.903 3752862.219 477.00
LOCATION L0002009      VOLUME  476446.632 3752870.805 477.14
LOCATION L0002010      VOLUME  476446.361 3752879.391 477.43
LOCATION L0002011      VOLUME  476446.090 3752887.976 477.71
LOCATION L0002012      VOLUME  476445.819 3752896.562 478.00
LOCATION L0002013      VOLUME  476445.549 3752905.148 478.00
LOCATION L0002014      VOLUME  476445.278 3752913.733 478.00
LOCATION L0002015      VOLUME  476445.007 3752922.319 478.00
LOCATION L0002016      VOLUME  476444.736 3752930.905 478.00
LOCATION L0002017      VOLUME  476444.465 3752939.491 478.00
LOCATION L0002018      VOLUME  476444.194 3752948.076 478.00
LOCATION L0002019      VOLUME  476443.923 3752956.662 478.00
LOCATION L0002020      VOLUME  476443.652 3752965.248 478.00
LOCATION L0002021      VOLUME  476443.381 3752973.834 478.00
LOCATION L0002022      VOLUME  476443.110 3752982.419 478.00

```

** End of LINE VOLUME Source ID = SLINE9

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** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE3
** DESCRSRC Off-Site Travel 90% Inbound Dwy 1
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 0.00004309
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 4
** 475059.659, 3752981.381, 476.94, 3.49, 4.00
** 475844.101, 3753000.271, 478.00, 3.49, 4.00
** 476051.893, 3753000.271, 479.00, 3.49, 4.00
** 476076.749, 3753000.271, 479.00, 3.49, 4.00

```

```

** -----
LOCATION L0002023      VOLUME  475063.953 3752981.485 476.83
LOCATION L0002024      VOLUME  475072.540 3752981.691 476.84
LOCATION L0002025      VOLUME  475081.128 3752981.898 476.84

```

LOCATION	L0002026	VOLUME	475089.715	3752982.105	476.85
LOCATION	L0002027	VOLUME	475098.303	3752982.312	476.90
LOCATION	L0002028	VOLUME	475106.890	3752982.519	476.94
LOCATION	L0002029	VOLUME	475115.478	3752982.725	476.98
LOCATION	L0002030	VOLUME	475124.065	3752982.932	477.00
LOCATION	L0002031	VOLUME	475132.653	3752983.139	477.00
LOCATION	L0002032	VOLUME	475141.240	3752983.346	477.00
LOCATION	L0002033	VOLUME	475149.828	3752983.553	477.00
LOCATION	L0002034	VOLUME	475158.415	3752983.759	476.97
LOCATION	L0002035	VOLUME	475167.003	3752983.966	476.95
LOCATION	L0002036	VOLUME	475175.590	3752984.173	476.93
LOCATION	L0002037	VOLUME	475184.178	3752984.380	476.94
LOCATION	L0002038	VOLUME	475192.765	3752984.587	476.96
LOCATION	L0002039	VOLUME	475201.353	3752984.793	476.98
LOCATION	L0002040	VOLUME	475209.940	3752985.000	477.00
LOCATION	L0002041	VOLUME	475218.528	3752985.207	476.99
LOCATION	L0002042	VOLUME	475227.115	3752985.414	476.98
LOCATION	L0002043	VOLUME	475235.703	3752985.621	476.97
LOCATION	L0002044	VOLUME	475244.290	3752985.827	476.98
LOCATION	L0002045	VOLUME	475252.878	3752986.034	476.98
LOCATION	L0002046	VOLUME	475261.465	3752986.241	476.99
LOCATION	L0002047	VOLUME	475270.053	3752986.448	477.00
LOCATION	L0002048	VOLUME	475278.640	3752986.655	477.00
LOCATION	L0002049	VOLUME	475287.228	3752986.861	477.00
LOCATION	L0002050	VOLUME	475295.815	3752987.068	477.00
LOCATION	L0002051	VOLUME	475304.403	3752987.275	477.00
LOCATION	L0002052	VOLUME	475312.991	3752987.482	477.00
LOCATION	L0002053	VOLUME	475321.578	3752987.689	477.00
LOCATION	L0002054	VOLUME	475330.166	3752987.895	477.00
LOCATION	L0002055	VOLUME	475338.753	3752988.102	477.00
LOCATION	L0002056	VOLUME	475347.341	3752988.309	477.00
LOCATION	L0002057	VOLUME	475355.928	3752988.516	477.00
LOCATION	L0002058	VOLUME	475364.516	3752988.723	477.01
LOCATION	L0002059	VOLUME	475373.103	3752988.929	477.04
LOCATION	L0002060	VOLUME	475381.691	3752989.136	477.06
LOCATION	L0002061	VOLUME	475390.278	3752989.343	477.09
LOCATION	L0002062	VOLUME	475398.866	3752989.550	477.10
LOCATION	L0002063	VOLUME	475407.453	3752989.757	477.11
LOCATION	L0002064	VOLUME	475416.041	3752989.963	477.11
LOCATION	L0002065	VOLUME	475424.628	3752990.170	477.10
LOCATION	L0002066	VOLUME	475433.216	3752990.377	477.07
LOCATION	L0002067	VOLUME	475441.803	3752990.584	477.04
LOCATION	L0002068	VOLUME	475450.391	3752990.791	477.00
LOCATION	L0002069	VOLUME	475458.978	3752990.997	477.00
LOCATION	L0002070	VOLUME	475467.566	3752991.204	477.00
LOCATION	L0002071	VOLUME	475476.153	3752991.411	477.00
LOCATION	L0002072	VOLUME	475484.741	3752991.618	477.03
LOCATION	L0002073	VOLUME	475493.328	3752991.824	477.08
LOCATION	L0002074	VOLUME	475501.916	3752992.031	477.13
LOCATION	L0002075	VOLUME	475510.503	3752992.238	477.19

LOCATION	L0002076	VOLUME	475519.091	3752992.445	477.20
LOCATION	L0002077	VOLUME	475527.678	3752992.652	477.20
LOCATION	L0002078	VOLUME	475536.266	3752992.858	477.21
LOCATION	L0002079	VOLUME	475544.853	3752993.065	477.18
LOCATION	L0002080	VOLUME	475553.441	3752993.272	477.12
LOCATION	L0002081	VOLUME	475562.028	3752993.479	477.06
LOCATION	L0002082	VOLUME	475570.616	3752993.686	477.00
LOCATION	L0002083	VOLUME	475579.203	3752993.892	477.00
LOCATION	L0002084	VOLUME	475587.791	3752994.099	477.00
LOCATION	L0002085	VOLUME	475596.378	3752994.306	477.00
LOCATION	L0002086	VOLUME	475604.966	3752994.513	477.05
LOCATION	L0002087	VOLUME	475613.553	3752994.720	477.13
LOCATION	L0002088	VOLUME	475622.141	3752994.926	477.21
LOCATION	L0002089	VOLUME	475630.728	3752995.133	477.31
LOCATION	L0002090	VOLUME	475639.316	3752995.340	477.52
LOCATION	L0002091	VOLUME	475647.903	3752995.547	477.72
LOCATION	L0002092	VOLUME	475656.491	3752995.754	477.93
LOCATION	L0002093	VOLUME	475665.078	3752995.960	478.00
LOCATION	L0002094	VOLUME	475673.666	3752996.167	478.00
LOCATION	L0002095	VOLUME	475682.253	3752996.374	478.00
LOCATION	L0002096	VOLUME	475690.841	3752996.581	478.00
LOCATION	L0002097	VOLUME	475699.428	3752996.788	478.00
LOCATION	L0002098	VOLUME	475708.016	3752996.994	478.00
LOCATION	L0002099	VOLUME	475716.604	3752997.201	478.00
LOCATION	L0002100	VOLUME	475725.191	3752997.408	478.00
LOCATION	L0002101	VOLUME	475733.779	3752997.615	478.00
LOCATION	L0002102	VOLUME	475742.366	3752997.822	478.00
LOCATION	L0002103	VOLUME	475750.954	3752998.028	478.00
LOCATION	L0002104	VOLUME	475759.541	3752998.235	478.00
LOCATION	L0002105	VOLUME	475768.129	3752998.442	478.00
LOCATION	L0002106	VOLUME	475776.716	3752998.649	478.00
LOCATION	L0002107	VOLUME	475785.304	3752998.856	478.00
LOCATION	L0002108	VOLUME	475793.891	3752999.062	478.00
LOCATION	L0002109	VOLUME	475802.479	3752999.269	478.00
LOCATION	L0002110	VOLUME	475811.066	3752999.476	478.00
LOCATION	L0002111	VOLUME	475819.654	3752999.683	478.00
LOCATION	L0002112	VOLUME	475828.241	3752999.890	478.00
LOCATION	L0002113	VOLUME	475836.829	3753000.096	478.00
LOCATION	L0002114	VOLUME	475845.417	3753000.271	478.00
LOCATION	L0002115	VOLUME	475854.007	3753000.271	478.00
LOCATION	L0002116	VOLUME	475862.597	3753000.271	478.00
LOCATION	L0002117	VOLUME	475871.187	3753000.271	478.00
LOCATION	L0002118	VOLUME	475879.777	3753000.271	478.00
LOCATION	L0002119	VOLUME	475888.367	3753000.271	478.00
LOCATION	L0002120	VOLUME	475896.957	3753000.271	478.00
LOCATION	L0002121	VOLUME	475905.547	3753000.271	478.09
LOCATION	L0002122	VOLUME	475914.137	3753000.271	478.22
LOCATION	L0002123	VOLUME	475922.727	3753000.271	478.35
LOCATION	L0002124	VOLUME	475931.317	3753000.271	478.49
LOCATION	L0002125	VOLUME	475939.907	3753000.271	478.64

LOCATION L0002126	VOLUME	475948.497	3753000.271	478.80
LOCATION L0002127	VOLUME	475957.087	3753000.271	478.95
LOCATION L0002128	VOLUME	475965.677	3753000.271	479.00
LOCATION L0002129	VOLUME	475974.267	3753000.271	479.00
LOCATION L0002130	VOLUME	475982.857	3753000.271	479.00
LOCATION L0002131	VOLUME	475991.447	3753000.271	479.00
LOCATION L0002132	VOLUME	476000.037	3753000.271	479.00
LOCATION L0002133	VOLUME	476008.627	3753000.271	479.00
LOCATION L0002134	VOLUME	476017.217	3753000.271	479.00
LOCATION L0002135	VOLUME	476025.807	3753000.271	479.00
LOCATION L0002136	VOLUME	476034.397	3753000.271	479.00
LOCATION L0002137	VOLUME	476042.987	3753000.271	479.00
LOCATION L0002138	VOLUME	476051.577	3753000.271	479.00
LOCATION L0002139	VOLUME	476060.167	3753000.271	479.00
LOCATION L0002140	VOLUME	476068.757	3753000.271	479.00

** End of LINE VOLUME Source ID = SLINE3

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** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE4

** DESCRSRC Off-Site Travel 10% Inbound Dwy 3

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 6.033E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 4

** 475059.659, 3752981.381, 476.94, 3.49, 4.00

** 475844.101, 3753000.271, 478.00, 3.49, 4.00

** 476051.893, 3753000.271, 479.00, 3.49, 4.00

** 476341.212, 3753001.266, 478.00, 3.49, 4.00

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LOCATION L0002141	VOLUME	475063.953	3752981.485	476.83
LOCATION L0002142	VOLUME	475072.540	3752981.691	476.84
LOCATION L0002143	VOLUME	475081.128	3752981.898	476.84
LOCATION L0002144	VOLUME	475089.715	3752982.105	476.85
LOCATION L0002145	VOLUME	475098.303	3752982.312	476.90
LOCATION L0002146	VOLUME	475106.890	3752982.519	476.94
LOCATION L0002147	VOLUME	475115.478	3752982.725	476.98
LOCATION L0002148	VOLUME	475124.065	3752982.932	477.00
LOCATION L0002149	VOLUME	475132.653	3752983.139	477.00
LOCATION L0002150	VOLUME	475141.240	3752983.346	477.00
LOCATION L0002151	VOLUME	475149.828	3752983.553	477.00
LOCATION L0002152	VOLUME	475158.415	3752983.759	476.97
LOCATION L0002153	VOLUME	475167.003	3752983.966	476.95
LOCATION L0002154	VOLUME	475175.590	3752984.173	476.93
LOCATION L0002155	VOLUME	475184.178	3752984.380	476.94
LOCATION L0002156	VOLUME	475192.765	3752984.587	476.96
LOCATION L0002157	VOLUME	475201.353	3752984.793	476.98
LOCATION L0002158	VOLUME	475209.940	3752985.000	477.00

LOCATION L0002159	VOLUME	475218.528	3752985.207	476.99
LOCATION L0002160	VOLUME	475227.115	3752985.414	476.98
LOCATION L0002161	VOLUME	475235.703	3752985.621	476.97
LOCATION L0002162	VOLUME	475244.290	3752985.827	476.98
LOCATION L0002163	VOLUME	475252.878	3752986.034	476.98
LOCATION L0002164	VOLUME	475261.465	3752986.241	476.99
LOCATION L0002165	VOLUME	475270.053	3752986.448	477.00
LOCATION L0002166	VOLUME	475278.640	3752986.655	477.00
LOCATION L0002167	VOLUME	475287.228	3752986.861	477.00
LOCATION L0002168	VOLUME	475295.815	3752987.068	477.00
LOCATION L0002169	VOLUME	475304.403	3752987.275	477.00
LOCATION L0002170	VOLUME	475312.991	3752987.482	477.00
LOCATION L0002171	VOLUME	475321.578	3752987.689	477.00
LOCATION L0002172	VOLUME	475330.166	3752987.895	477.00
LOCATION L0002173	VOLUME	475338.753	3752988.102	477.00
LOCATION L0002174	VOLUME	475347.341	3752988.309	477.00
LOCATION L0002175	VOLUME	475355.928	3752988.516	477.00
LOCATION L0002176	VOLUME	475364.516	3752988.723	477.01
LOCATION L0002177	VOLUME	475373.103	3752988.929	477.04
LOCATION L0002178	VOLUME	475381.691	3752989.136	477.06
LOCATION L0002179	VOLUME	475390.278	3752989.343	477.09
LOCATION L0002180	VOLUME	475398.866	3752989.550	477.10
LOCATION L0002181	VOLUME	475407.453	3752989.757	477.11
LOCATION L0002182	VOLUME	475416.041	3752989.963	477.11
LOCATION L0002183	VOLUME	475424.628	3752990.170	477.10
LOCATION L0002184	VOLUME	475433.216	3752990.377	477.07
LOCATION L0002185	VOLUME	475441.803	3752990.584	477.04
LOCATION L0002186	VOLUME	475450.391	3752990.791	477.00
LOCATION L0002187	VOLUME	475458.978	3752990.997	477.00
LOCATION L0002188	VOLUME	475467.566	3752991.204	477.00
LOCATION L0002189	VOLUME	475476.153	3752991.411	477.00
LOCATION L0002190	VOLUME	475484.741	3752991.618	477.03
LOCATION L0002191	VOLUME	475493.328	3752991.824	477.08
LOCATION L0002192	VOLUME	475501.916	3752992.031	477.13
LOCATION L0002193	VOLUME	475510.503	3752992.238	477.19
LOCATION L0002194	VOLUME	475519.091	3752992.445	477.20
LOCATION L0002195	VOLUME	475527.678	3752992.652	477.20
LOCATION L0002196	VOLUME	475536.266	3752992.858	477.21
LOCATION L0002197	VOLUME	475544.853	3752993.065	477.18
LOCATION L0002198	VOLUME	475553.441	3752993.272	477.12
LOCATION L0002199	VOLUME	475562.028	3752993.479	477.06
LOCATION L0002200	VOLUME	475570.616	3752993.686	477.00
LOCATION L0002201	VOLUME	475579.203	3752993.892	477.00
LOCATION L0002202	VOLUME	475587.791	3752994.099	477.00
LOCATION L0002203	VOLUME	475596.378	3752994.306	477.00
LOCATION L0002204	VOLUME	475604.966	3752994.513	477.05
LOCATION L0002205	VOLUME	475613.553	3752994.720	477.13
LOCATION L0002206	VOLUME	475622.141	3752994.926	477.21
LOCATION L0002207	VOLUME	475630.728	3752995.133	477.31
LOCATION L0002208	VOLUME	475639.316	3752995.340	477.52

LOCATION	L0002209	VOLUME	475647.903	3752995.547	477.72
LOCATION	L0002210	VOLUME	475656.491	3752995.754	477.93
LOCATION	L0002211	VOLUME	475665.078	3752995.960	478.00
LOCATION	L0002212	VOLUME	475673.666	3752996.167	478.00
LOCATION	L0002213	VOLUME	475682.253	3752996.374	478.00
LOCATION	L0002214	VOLUME	475690.841	3752996.581	478.00
LOCATION	L0002215	VOLUME	475699.428	3752996.788	478.00
LOCATION	L0002216	VOLUME	475708.016	3752996.994	478.00
LOCATION	L0002217	VOLUME	475716.604	3752997.201	478.00
LOCATION	L0002218	VOLUME	475725.191	3752997.408	478.00
LOCATION	L0002219	VOLUME	475733.779	3752997.615	478.00
LOCATION	L0002220	VOLUME	475742.366	3752997.822	478.00
LOCATION	L0002221	VOLUME	475750.954	3752998.028	478.00
LOCATION	L0002222	VOLUME	475759.541	3752998.235	478.00
LOCATION	L0002223	VOLUME	475768.129	3752998.442	478.00
LOCATION	L0002224	VOLUME	475776.716	3752998.649	478.00
LOCATION	L0002225	VOLUME	475785.304	3752998.856	478.00
LOCATION	L0002226	VOLUME	475793.891	3752999.062	478.00
LOCATION	L0002227	VOLUME	475802.479	3752999.269	478.00
LOCATION	L0002228	VOLUME	475811.066	3752999.476	478.00
LOCATION	L0002229	VOLUME	475819.654	3752999.683	478.00
LOCATION	L0002230	VOLUME	475828.241	3752999.890	478.00
LOCATION	L0002231	VOLUME	475836.829	3753000.096	478.00
LOCATION	L0002232	VOLUME	475845.417	3753000.271	478.00
LOCATION	L0002233	VOLUME	475854.007	3753000.271	478.00
LOCATION	L0002234	VOLUME	475862.597	3753000.271	478.00
LOCATION	L0002235	VOLUME	475871.187	3753000.271	478.00
LOCATION	L0002236	VOLUME	475879.777	3753000.271	478.00
LOCATION	L0002237	VOLUME	475888.367	3753000.271	478.00
LOCATION	L0002238	VOLUME	475896.957	3753000.271	478.00
LOCATION	L0002239	VOLUME	475905.547	3753000.271	478.09
LOCATION	L0002240	VOLUME	475914.137	3753000.271	478.22
LOCATION	L0002241	VOLUME	475922.727	3753000.271	478.35
LOCATION	L0002242	VOLUME	475931.317	3753000.271	478.49
LOCATION	L0002243	VOLUME	475939.907	3753000.271	478.64
LOCATION	L0002244	VOLUME	475948.497	3753000.271	478.80
LOCATION	L0002245	VOLUME	475957.087	3753000.271	478.95
LOCATION	L0002246	VOLUME	475965.677	3753000.271	479.00
LOCATION	L0002247	VOLUME	475974.267	3753000.271	479.00
LOCATION	L0002248	VOLUME	475982.857	3753000.271	479.00
LOCATION	L0002249	VOLUME	475991.447	3753000.271	479.00
LOCATION	L0002250	VOLUME	476000.037	3753000.271	479.00
LOCATION	L0002251	VOLUME	476008.627	3753000.271	479.00
LOCATION	L0002252	VOLUME	476017.217	3753000.271	479.00
LOCATION	L0002253	VOLUME	476025.807	3753000.271	479.00
LOCATION	L0002254	VOLUME	476034.397	3753000.271	479.00
LOCATION	L0002255	VOLUME	476042.987	3753000.271	479.00
LOCATION	L0002256	VOLUME	476051.577	3753000.271	479.00
LOCATION	L0002257	VOLUME	476060.166	3753000.300	479.00
LOCATION	L0002258	VOLUME	476068.756	3753000.329	479.00

LOCATION L0002259	VOLUME	476077.346	3753000.359	479.00
LOCATION L0002260	VOLUME	476085.936	3753000.388	479.00
LOCATION L0002261	VOLUME	476094.526	3753000.418	479.00
LOCATION L0002262	VOLUME	476103.116	3753000.448	479.00
LOCATION L0002263	VOLUME	476111.706	3753000.477	479.00
LOCATION L0002264	VOLUME	476120.296	3753000.507	479.00
LOCATION L0002265	VOLUME	476128.886	3753000.536	479.00
LOCATION L0002266	VOLUME	476137.476	3753000.566	479.00
LOCATION L0002267	VOLUME	476146.066	3753000.595	478.89
LOCATION L0002268	VOLUME	476154.656	3753000.625	478.74
LOCATION L0002269	VOLUME	476163.246	3753000.654	478.59
LOCATION L0002270	VOLUME	476171.836	3753000.684	478.51
LOCATION L0002271	VOLUME	476180.426	3753000.713	478.66
LOCATION L0002272	VOLUME	476189.016	3753000.743	478.81
LOCATION L0002273	VOLUME	476197.606	3753000.772	478.96
LOCATION L0002274	VOLUME	476206.196	3753000.802	479.00
LOCATION L0002275	VOLUME	476214.786	3753000.831	479.00
LOCATION L0002276	VOLUME	476223.376	3753000.861	479.00
LOCATION L0002277	VOLUME	476231.965	3753000.890	479.00
LOCATION L0002278	VOLUME	476240.555	3753000.920	479.00
LOCATION L0002279	VOLUME	476249.145	3753000.949	479.00
LOCATION L0002280	VOLUME	476257.735	3753000.979	479.00
LOCATION L0002281	VOLUME	476266.325	3753001.008	478.89
LOCATION L0002282	VOLUME	476274.915	3753001.038	478.74
LOCATION L0002283	VOLUME	476283.505	3753001.067	478.59
LOCATION L0002284	VOLUME	476292.095	3753001.097	478.45
LOCATION L0002285	VOLUME	476300.685	3753001.126	478.31
LOCATION L0002286	VOLUME	476309.275	3753001.156	478.17
LOCATION L0002287	VOLUME	476317.865	3753001.185	478.03
LOCATION L0002288	VOLUME	476326.455	3753001.215	478.00
LOCATION L0002289	VOLUME	476335.045	3753001.245	478.00

** End of LINE VOLUME Source ID = SLINE4

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** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE5

** DESCRSRC Off-Site Travel 10% Outbound Dwy 1

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 2.321E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 2

** 476073.766, 3753000.271, 479.00, 3.49, 4.00

** 476566.895, 3753003.254, 479.00, 3.49, 4.00

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LOCATION L0002290	VOLUME	476078.061	3753000.297	479.00
LOCATION L0002291	VOLUME	476086.651	3753000.349	479.00
LOCATION L0002292	VOLUME	476095.241	3753000.401	479.00
LOCATION L0002293	VOLUME	476103.831	3753000.453	479.00

LOCATION	L0002294	VOLUME	476112.421	3753000.505	479.00
LOCATION	L0002295	VOLUME	476121.010	3753000.557	479.00
LOCATION	L0002296	VOLUME	476129.600	3753000.609	479.00
LOCATION	L0002297	VOLUME	476138.190	3753000.661	479.00
LOCATION	L0002298	VOLUME	476146.780	3753000.713	478.88
LOCATION	L0002299	VOLUME	476155.370	3753000.765	478.73
LOCATION	L0002300	VOLUME	476163.960	3753000.817	478.58
LOCATION	L0002301	VOLUME	476172.549	3753000.869	478.53
LOCATION	L0002302	VOLUME	476181.139	3753000.921	478.68
LOCATION	L0002303	VOLUME	476189.729	3753000.973	478.83
LOCATION	L0002304	VOLUME	476198.319	3753001.025	478.98
LOCATION	L0002305	VOLUME	476206.909	3753001.077	479.00
LOCATION	L0002306	VOLUME	476215.499	3753001.129	479.00
LOCATION	L0002307	VOLUME	476224.088	3753001.181	479.00
LOCATION	L0002308	VOLUME	476232.678	3753001.233	479.00
LOCATION	L0002309	VOLUME	476241.268	3753001.285	479.00
LOCATION	L0002310	VOLUME	476249.858	3753001.337	479.00
LOCATION	L0002311	VOLUME	476258.448	3753001.389	479.00
LOCATION	L0002312	VOLUME	476267.038	3753001.440	478.88
LOCATION	L0002313	VOLUME	476275.628	3753001.492	478.73
LOCATION	L0002314	VOLUME	476284.217	3753001.544	478.59
LOCATION	L0002315	VOLUME	476292.807	3753001.596	478.45
LOCATION	L0002316	VOLUME	476301.397	3753001.648	478.31
LOCATION	L0002317	VOLUME	476309.987	3753001.700	478.16
LOCATION	L0002318	VOLUME	476318.577	3753001.752	478.02
LOCATION	L0002319	VOLUME	476327.167	3753001.804	478.00
LOCATION	L0002320	VOLUME	476335.756	3753001.856	478.00
LOCATION	L0002321	VOLUME	476344.346	3753001.908	478.00
LOCATION	L0002322	VOLUME	476352.936	3753001.960	478.00
LOCATION	L0002323	VOLUME	476361.526	3753002.012	478.00
LOCATION	L0002324	VOLUME	476370.116	3753002.064	478.00
LOCATION	L0002325	VOLUME	476378.706	3753002.116	478.00
LOCATION	L0002326	VOLUME	476387.295	3753002.168	478.00
LOCATION	L0002327	VOLUME	476395.885	3753002.220	478.00
LOCATION	L0002328	VOLUME	476404.475	3753002.272	478.00
LOCATION	L0002329	VOLUME	476413.065	3753002.324	478.00
LOCATION	L0002330	VOLUME	476421.655	3753002.376	478.00
LOCATION	L0002331	VOLUME	476430.245	3753002.428	478.00
LOCATION	L0002332	VOLUME	476438.835	3753002.480	478.00
LOCATION	L0002333	VOLUME	476447.424	3753002.532	478.14
LOCATION	L0002334	VOLUME	476456.014	3753002.583	478.29
LOCATION	L0002335	VOLUME	476464.604	3753002.635	478.44
LOCATION	L0002336	VOLUME	476473.194	3753002.687	478.59
LOCATION	L0002337	VOLUME	476481.784	3753002.739	478.72
LOCATION	L0002338	VOLUME	476490.374	3753002.791	478.86
LOCATION	L0002339	VOLUME	476498.963	3753002.843	478.99
LOCATION	L0002340	VOLUME	476507.553	3753002.895	479.00
LOCATION	L0002341	VOLUME	476516.143	3753002.947	479.00
LOCATION	L0002342	VOLUME	476524.733	3753002.999	479.00
LOCATION	L0002343	VOLUME	476533.323	3753003.051	479.00

LOCATION L0002344	VOLUME	476541.913	3753003.103	479.00
LOCATION L0002345	VOLUME	476550.502	3753003.155	479.00
LOCATION L0002346	VOLUME	476559.092	3753003.207	479.00

** End of LINE VOLUME Source ID = SLINE5

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** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE6

** DESCRSRC Off-Site Travel 90% Outbound Dwy 3

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 9.484E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 2

** 476338.229, 3753001.266, 478.06, 3.49, 4.00

** 476562.080, 3753003.638, 479.00, 3.49, 4.00

** -----

LOCATION L0002347	VOLUME	476342.524	3753001.311	478.00
LOCATION L0002348	VOLUME	476351.114	3753001.402	478.00
LOCATION L0002349	VOLUME	476359.703	3753001.493	478.00
LOCATION L0002350	VOLUME	476368.293	3753001.584	478.00
LOCATION L0002351	VOLUME	476376.882	3753001.675	478.00
LOCATION L0002352	VOLUME	476385.472	3753001.766	478.00
LOCATION L0002353	VOLUME	476394.061	3753001.857	478.00
LOCATION L0002354	VOLUME	476402.651	3753001.948	478.00
LOCATION L0002355	VOLUME	476411.240	3753002.039	478.00
LOCATION L0002356	VOLUME	476419.830	3753002.130	478.00
LOCATION L0002357	VOLUME	476428.419	3753002.221	478.00
LOCATION L0002358	VOLUME	476437.009	3753002.312	478.00
LOCATION L0002359	VOLUME	476445.598	3753002.403	478.10
LOCATION L0002360	VOLUME	476454.188	3753002.494	478.26
LOCATION L0002361	VOLUME	476462.777	3753002.585	478.41
LOCATION L0002362	VOLUME	476471.367	3753002.676	478.56
LOCATION L0002363	VOLUME	476479.957	3753002.767	478.70
LOCATION L0002364	VOLUME	476488.546	3753002.858	478.83
LOCATION L0002365	VOLUME	476497.136	3753002.949	478.96
LOCATION L0002366	VOLUME	476505.725	3753003.040	479.00
LOCATION L0002367	VOLUME	476514.315	3753003.131	479.00
LOCATION L0002368	VOLUME	476522.904	3753003.222	479.00
LOCATION L0002369	VOLUME	476531.494	3753003.313	479.00
LOCATION L0002370	VOLUME	476540.083	3753003.404	479.00
LOCATION L0002371	VOLUME	476548.673	3753003.495	479.00
LOCATION L0002372	VOLUME	476557.262	3753003.586	479.00

** End of LINE VOLUME Source ID = SLINE6

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE7

** DESCRSRC Off-Site Travel 100% Outbound on Graham St.

** PREFIX

** Length of Side = 8.59
 ** Configuration = Adjacent
 ** Emission Rate = 0.00003822
 ** Vertical Dimension = 6.99
 ** SZINIT = 3.25
 ** Nodes = 10
 ** 476566.036, 3752996.559, 478.95, 3.49, 4.00
 ** 476584.691, 3752991.262, 478.97, 3.49, 4.00
 ** 476614.861, 3752984.813, 478.96, 3.49, 4.00
 ** 476627.298, 3752977.904, 478.81, 3.49, 4.00
 ** 476638.122, 3752967.770, 478.00, 3.49, 4.00
 ** 476647.795, 3752952.800, 478.00, 3.49, 4.00
 ** 476652.171, 3752930.460, 478.00, 3.49, 4.00
 ** 476656.920, 3752865.684, 477.95, 3.49, 4.00
 ** 476658.846, 3752792.788, 477.00, 3.49, 4.00
 ** 476661.982, 3752238.461, 472.00, 3.49, 4.00

** -----
 LOCATION L0002373 VOLUME 476570.167 3752995.386 479.00
 LOCATION L0002374 VOLUME 476578.431 3752993.039 479.00
 LOCATION L0002375 VOLUME 476586.727 3752990.826 479.00
 LOCATION L0002376 VOLUME 476595.127 3752989.031 479.00
 LOCATION L0002377 VOLUME 476603.528 3752987.235 479.00
 LOCATION L0002378 VOLUME 476611.928 3752985.440 478.96
 LOCATION L0002379 VOLUME 476619.748 3752982.098 478.85
 LOCATION L0002380 VOLUME 476627.257 3752977.926 478.71
 LOCATION L0002381 VOLUME 476633.535 3752972.065 478.52
 LOCATION L0002382 VOLUME 476639.374 3752965.833 478.31
 LOCATION L0002383 VOLUME 476644.035 3752958.618 478.07
 LOCATION L0002384 VOLUME 476648.115 3752951.168 478.00
 LOCATION L0002385 VOLUME 476649.766 3752942.739 478.00
 LOCATION L0002386 VOLUME 476651.417 3752934.309 478.00
 LOCATION L0002387 VOLUME 476652.512 3752925.804 478.00
 LOCATION L0002388 VOLUME 476653.140 3752917.237 478.00
 LOCATION L0002389 VOLUME 476653.768 3752908.670 478.00
 LOCATION L0002390 VOLUME 476654.396 3752900.103 478.00
 LOCATION L0002391 VOLUME 476655.024 3752891.536 478.00
 LOCATION L0002392 VOLUME 476655.653 3752882.969 478.00
 LOCATION L0002393 VOLUME 476656.281 3752874.402 478.00
 LOCATION L0002394 VOLUME 476656.909 3752865.835 477.98
 LOCATION L0002395 VOLUME 476657.143 3752857.249 477.69
 LOCATION L0002396 VOLUME 476657.370 3752848.662 477.40
 LOCATION L0002397 VOLUME 476657.597 3752840.075 477.12
 LOCATION L0002398 VOLUME 476657.824 3752831.488 477.00
 LOCATION L0002399 VOLUME 476658.051 3752822.901 477.00
 LOCATION L0002400 VOLUME 476658.277 3752814.314 477.00
 LOCATION L0002401 VOLUME 476658.504 3752805.727 477.00
 LOCATION L0002402 VOLUME 476658.731 3752797.140 477.00
 LOCATION L0002403 VOLUME 476658.870 3752788.551 477.00
 LOCATION L0002404 VOLUME 476658.919 3752779.961 477.00
 LOCATION L0002405 VOLUME 476658.968 3752771.372 476.83

LOCATION L0002406	VOLUME	476659.016	3752762.782	476.54
LOCATION L0002407	VOLUME	476659.065	3752754.192	476.26
LOCATION L0002408	VOLUME	476659.113	3752745.602	476.00
LOCATION L0002409	VOLUME	476659.162	3752737.012	476.00
LOCATION L0002410	VOLUME	476659.210	3752728.422	476.00
LOCATION L0002411	VOLUME	476659.259	3752719.832	476.00
LOCATION L0002412	VOLUME	476659.308	3752711.243	476.00
LOCATION L0002413	VOLUME	476659.356	3752702.653	476.00
LOCATION L0002414	VOLUME	476659.405	3752694.063	476.00
LOCATION L0002415	VOLUME	476659.453	3752685.473	476.00
LOCATION L0002416	VOLUME	476659.502	3752676.883	476.00
LOCATION L0002417	VOLUME	476659.551	3752668.293	476.00
LOCATION L0002418	VOLUME	476659.599	3752659.703	476.00
LOCATION L0002419	VOLUME	476659.648	3752651.114	475.82
LOCATION L0002420	VOLUME	476659.696	3752642.524	475.53
LOCATION L0002421	VOLUME	476659.745	3752633.934	475.25
LOCATION L0002422	VOLUME	476659.793	3752625.344	475.00
LOCATION L0002423	VOLUME	476659.842	3752616.754	475.00
LOCATION L0002424	VOLUME	476659.891	3752608.164	475.00
LOCATION L0002425	VOLUME	476659.939	3752599.574	475.00
LOCATION L0002426	VOLUME	476659.988	3752590.984	475.00
LOCATION L0002427	VOLUME	476660.036	3752582.395	475.00
LOCATION L0002428	VOLUME	476660.085	3752573.805	475.00
LOCATION L0002429	VOLUME	476660.133	3752565.215	474.96
LOCATION L0002430	VOLUME	476660.182	3752556.625	474.67
LOCATION L0002431	VOLUME	476660.231	3752548.035	474.38
LOCATION L0002432	VOLUME	476660.279	3752539.445	474.10
LOCATION L0002433	VOLUME	476660.328	3752530.855	474.00
LOCATION L0002434	VOLUME	476660.376	3752522.266	474.00
LOCATION L0002435	VOLUME	476660.425	3752513.676	474.00
LOCATION L0002436	VOLUME	476660.474	3752505.086	474.00
LOCATION L0002437	VOLUME	476660.522	3752496.496	474.00
LOCATION L0002438	VOLUME	476660.571	3752487.906	474.00
LOCATION L0002439	VOLUME	476660.619	3752479.316	474.00
LOCATION L0002440	VOLUME	476660.668	3752470.726	474.00
LOCATION L0002441	VOLUME	476660.716	3752462.137	474.00
LOCATION L0002442	VOLUME	476660.765	3752453.547	474.00
LOCATION L0002443	VOLUME	476660.814	3752444.957	473.95
LOCATION L0002444	VOLUME	476660.862	3752436.367	473.66
LOCATION L0002445	VOLUME	476660.911	3752427.777	473.37
LOCATION L0002446	VOLUME	476660.959	3752419.187	473.09
LOCATION L0002447	VOLUME	476661.008	3752410.597	473.00
LOCATION L0002448	VOLUME	476661.057	3752402.007	473.00
LOCATION L0002449	VOLUME	476661.105	3752393.418	473.00
LOCATION L0002450	VOLUME	476661.154	3752384.828	473.00
LOCATION L0002451	VOLUME	476661.202	3752376.238	473.00
LOCATION L0002452	VOLUME	476661.251	3752367.648	473.00
LOCATION L0002453	VOLUME	476661.299	3752359.058	473.00
LOCATION L0002454	VOLUME	476661.348	3752350.468	472.80
LOCATION L0002455	VOLUME	476661.397	3752341.878	472.51

LOCATION	L0002456	VOLUME	476661.445	3752333.289	472.22
LOCATION	L0002457	VOLUME	476661.494	3752324.699	472.00
LOCATION	L0002458	VOLUME	476661.542	3752316.109	472.00
LOCATION	L0002459	VOLUME	476661.591	3752307.519	472.00
LOCATION	L0002460	VOLUME	476661.640	3752298.929	472.00
LOCATION	L0002461	VOLUME	476661.688	3752290.339	472.00
LOCATION	L0002462	VOLUME	476661.737	3752281.749	472.00
LOCATION	L0002463	VOLUME	476661.785	3752273.160	472.00
LOCATION	L0002464	VOLUME	476661.834	3752264.570	472.00
LOCATION	L0002465	VOLUME	476661.882	3752255.980	472.00
LOCATION	L0002466	VOLUME	476661.931	3752247.390	472.00
LOCATION	L0002467	VOLUME	476661.980	3752238.800	472.00

** End of LINE VOLUME Source ID = SLINE7

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM	L0001891	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001892	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001893	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001894	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001895	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001896	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001897	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001898	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001899	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001900	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001901	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001902	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001903	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001904	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001905	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001906	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001907	0.000008394	3.49	4.00	3.25
SRCPARAM	L0001908	0.000008394	3.49	4.00	3.25

**

** LINE VOLUME Source ID = SLINE2

SRCPARAM	L0001909	0.000008278	3.49	4.00	3.25
SRCPARAM	L0001910	0.000008278	3.49	4.00	3.25
SRCPARAM	L0001911	0.000008278	3.49	4.00	3.25
SRCPARAM	L0001912	0.000008278	3.49	4.00	3.25
SRCPARAM	L0001913	0.000008278	3.49	4.00	3.25
SRCPARAM	L0001914	0.000008278	3.49	4.00	3.25

**

** LINE VOLUME Source ID = SLINE8

SRCPARAM	L0001915	0.0000009739	3.49	4.00	3.25
SRCPARAM	L0001916	0.0000009739	3.49	4.00	3.25
SRCPARAM	L0001917	0.0000009739	3.49	4.00	3.25
SRCPARAM	L0001918	0.0000009739	3.49	4.00	3.25
SRCPARAM	L0001919	0.0000009739	3.49	4.00	3.25
SRCPARAM	L0001920	0.0000009739	3.49	4.00	3.25
SRCPARAM	L0001921	0.0000009739	3.49	4.00	3.25

SRCPARAM L0001922	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001923	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001924	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001925	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001926	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001927	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001928	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001929	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001930	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001931	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001932	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001933	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001934	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001935	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001936	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001937	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001938	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001939	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001940	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001941	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001942	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001943	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001944	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001945	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001946	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001947	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001948	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001949	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001950	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001951	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001952	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001953	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001954	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001955	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001956	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001957	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001958	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001959	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001960	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001961	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001962	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001963	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001964	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001965	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001966	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001967	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001968	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001969	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001970	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001971	0.0000009739	3.49	4.00	3.25

SRCPARAM L0001972	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001973	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001974	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001975	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001976	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001977	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001978	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001979	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001980	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001981	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001982	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001983	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001984	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001985	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001986	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001987	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001988	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001989	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001990	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001991	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001992	0.0000009739	3.49	4.00	3.25
SRCPARAM L0001993	0.0000009739	3.49	4.00	3.25

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** LINE VOLUME Source ID = SLINE9

SRCPARAM L0001994	0.0000003308	3.49	4.00	3.25
SRCPARAM L0001995	0.0000003308	3.49	4.00	3.25
SRCPARAM L0001996	0.0000003308	3.49	4.00	3.25
SRCPARAM L0001997	0.0000003308	3.49	4.00	3.25
SRCPARAM L0001998	0.0000003308	3.49	4.00	3.25
SRCPARAM L0001999	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002000	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002001	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002002	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002003	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002004	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002005	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002006	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002007	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002008	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002009	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002010	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002011	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002012	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002013	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002014	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002015	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002016	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002017	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002018	0.0000003308	3.49	4.00	3.25
SRCPARAM L0002019	0.0000003308	3.49	4.00	3.25

SRCPARAM	L0002020	0.0000003308	3.49	4.00	3.25
SRCPARAM	L0002021	0.0000003308	3.49	4.00	3.25
SRCPARAM	L0002022	0.0000003308	3.49	4.00	3.25

**

** LINE VOLUME Source ID = SLINE3

SRCPARAM	L0002023	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002024	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002025	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002026	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002027	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002028	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002029	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002030	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002031	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002032	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002033	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002034	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002035	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002036	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002037	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002038	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002039	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002040	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002041	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002042	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002043	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002044	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002045	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002046	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002047	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002048	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002049	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002050	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002051	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002052	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002053	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002054	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002055	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002056	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002057	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002058	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002059	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002060	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002061	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002062	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002063	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002064	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002065	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002066	0.0000003652	3.49	4.00	3.25
SRCPARAM	L0002067	0.0000003652	3.49	4.00	3.25

SRCPARAM L0002068	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002069	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002070	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002071	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002072	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002073	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002074	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002075	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002076	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002077	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002078	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002079	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002080	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002081	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002082	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002083	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002084	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002085	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002086	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002087	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002088	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002089	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002090	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002091	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002092	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002093	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002094	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002095	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002096	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002097	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002098	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002099	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002100	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002101	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002102	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002103	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002104	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002105	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002106	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002107	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002108	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002109	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002110	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002111	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002112	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002113	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002114	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002115	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002116	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002117	0.0000003652	3.49	4.00	3.25

SRCPARAM L0002118	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002119	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002120	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002121	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002122	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002123	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002124	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002125	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002126	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002127	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002128	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002129	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002130	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002131	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002132	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002133	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002134	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002135	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002136	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002137	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002138	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002139	0.0000003652	3.49	4.00	3.25
SRCPARAM L0002140	0.0000003652	3.49	4.00	3.25

**

** LINE VOLUME Source ID = SLINE4

SRCPARAM L0002141	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002142	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002143	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002144	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002145	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002146	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002147	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002148	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002149	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002150	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002151	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002152	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002153	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002154	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002155	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002156	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002157	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002158	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002159	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002160	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002161	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002162	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002163	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002164	0.0000004049	3.49	4.00	3.25
SRCPARAM L0002165	0.0000004049	3.49	4.00	3.25

SRCPARAM L0002166	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002167	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002168	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002169	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002170	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002171	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002172	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002173	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002174	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002175	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002176	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002177	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002178	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002179	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002180	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002181	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002182	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002183	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002184	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002185	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002186	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002187	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002188	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002189	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002190	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002191	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002192	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002193	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002194	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002195	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002196	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002197	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002198	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002199	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002200	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002201	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002202	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002203	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002204	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002205	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002206	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002207	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002208	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002209	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002210	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002211	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002212	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002213	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002214	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002215	0.00000004049	3.49	4.00	3.25

SRCPARAM L0002216	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002217	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002218	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002219	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002220	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002221	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002222	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002223	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002224	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002225	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002226	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002227	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002228	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002229	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002230	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002231	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002232	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002233	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002234	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002235	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002236	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002237	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002238	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002239	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002240	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002241	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002242	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002243	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002244	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002245	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002246	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002247	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002248	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002249	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002250	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002251	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002252	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002253	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002254	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002255	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002256	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002257	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002258	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002259	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002260	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002261	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002262	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002263	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002264	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002265	0.00000004049	3.49	4.00	3.25

SRCPARAM L0002266	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002267	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002268	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002269	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002270	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002271	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002272	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002273	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002274	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002275	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002276	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002277	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002278	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002279	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002280	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002281	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002282	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002283	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002284	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002285	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002286	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002287	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002288	0.00000004049	3.49	4.00	3.25
SRCPARAM L0002289	0.00000004049	3.49	4.00	3.25

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** LINE VOLUME Source ID = SLINE5

SRCPARAM L0002290	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002291	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002292	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002293	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002294	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002295	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002296	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002297	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002298	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002299	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002300	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002301	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002302	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002303	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002304	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002305	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002306	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002307	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002308	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002309	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002310	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002311	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002312	0.00000004072	3.49	4.00	3.25
SRCPARAM L0002313	0.00000004072	3.49	4.00	3.25

SRCPARAM	L0002314	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002315	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002316	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002317	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002318	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002319	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002320	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002321	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002322	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002323	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002324	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002325	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002326	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002327	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002328	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002329	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002330	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002331	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002332	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002333	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002334	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002335	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002336	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002337	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002338	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002339	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002340	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002341	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002342	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002343	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002344	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002345	0.00000004072	3.49	4.00	3.25
SRCPARAM	L0002346	0.00000004072	3.49	4.00	3.25

**

** LINE VOLUME Source ID = SLINE6

SRCPARAM	L0002347	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002348	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002349	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002350	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002351	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002352	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002353	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002354	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002355	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002356	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002357	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002358	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002359	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002360	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002361	0.0000003648	3.49	4.00	3.25

SRCPARAM	L0002362	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002363	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002364	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002365	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002366	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002367	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002368	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002369	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002370	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002371	0.0000003648	3.49	4.00	3.25
SRCPARAM	L0002372	0.0000003648	3.49	4.00	3.25

**

** LINE VOLUME Source ID = SLINE7

SRCPARAM	L0002373	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002374	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002375	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002376	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002377	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002378	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002379	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002380	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002381	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002382	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002383	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002384	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002385	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002386	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002387	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002388	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002389	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002390	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002391	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002392	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002393	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002394	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002395	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002396	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002397	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002398	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002399	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002400	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002401	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002402	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002403	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002404	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002405	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002406	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002407	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002408	0.0000004023	3.49	4.00	3.25
SRCPARAM	L0002409	0.0000004023	3.49	4.00	3.25

SRCPARAM L0002410	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002411	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002412	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002413	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002414	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002415	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002416	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002417	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002418	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002419	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002420	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002421	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002422	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002423	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002424	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002425	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002426	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002427	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002428	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002429	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002430	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002431	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002432	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002433	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002434	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002435	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002436	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002437	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002438	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002439	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002440	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002441	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002442	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002443	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002444	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002445	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002446	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002447	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002448	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002449	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002450	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002451	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002452	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002453	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002454	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002455	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002456	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002457	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002458	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002459	0.0000004023	3.49	4.00	3.25

SRCPARAM L0002460	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002461	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002462	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002463	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002464	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002465	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002466	0.0000004023	3.49	4.00	3.25
SRCPARAM L0002467	0.0000004023	3.49	4.00	3.25

** -----

URBANSRC ALL
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED "13661 HRA.rou"

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE PerrisADJU\PERI_V9_ADJU\PERI_v9.SFC

PROFFILE PerrisADJU\PERI_V9_ADJU\PERI_v9.PFL

SURFDATA 3171 2010

UAIRDATA 3190 2010

SITEDATA 99999 2010

PROFBASE 442.0 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

** Auto-Generated Plotfiles

PLOTFILE ANNUAL ALL "13661 HRA.AD\AN00GALL.PLT" 31

SUMMFILE "13661 HRA.sum"

OU FINISHED

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 1385 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
0.50
ME W187 1385 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

*** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 19191 *** ** C:\Lakes\AERMOD View\13661 HRA\13661
HRA.isc *** 11/12/20
*** AERMET - VERSION 16216 *** **
*** 19:36:52

PAGE 1
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for 577 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 2189641.0 ; Urban Roughness Length = 1.000 m

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.

4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. Urban Roughness Length of 1.0 Meter Assumed.

****Other Options Specified:**

ADJ_U* - Use ADJ_U* option for SBL in AERMET
 CCVR_Sub - Meteorological data includes CCVR substitutions
 TEMP_Sub - Meteorological data includes TEMP substitutions

****Model Assumes No FLAGPOLE Receptor Heights.**

****The User Specified a Pollutant Type of: OTHER**

****Model Calculates ANNUAL Averages Only**

****This Run Includes: 577 Source(s); 1 Source Group(s); and 5 Receptor(s)**

with: 0 POINT(s), including
 0 POINTCAP(s) and 0 POINTHOR(s)
 and: 577 VOLUME source(s)
 and: 0 AREA type source(s)
 and: 0 LINE source(s)
 and: 0 RLINE/RLINEXT source(s)
 and: 0 OPENPIT source(s)
 and: 0 BUOYANT LINE source(s) with 0 line(s)

****Model Set To Continue RUNNING After the Setup Testing.**

****The AERMET Input Meteorological Data Version Date: 16216**

****Output Options Selected:**

Model Outputs Tables of ANNUAL Averages by Receptor
 Model Outputs External File(s) of High Values for Plotting (PLOTFILE
 Keyword)
 Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
 Keyword)

****NOTE: The Following Flags May Appear Following CONC Values:** c for Calm Hours
 m for Missing
 Hours
 b for Both Calm
 and Missing Hours

****Misc. Inputs:** Base Elev. for Pot. Temp. Profile (m MSL) = 442.00 ; Decay
 Coef. = 0.000 ; Rot. Angle = 0.0
 Emission Units = GRAMS/SEC ;
 Emission Rate Unit Factor = 0.10000E+07
 Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.7 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: 13661 HRA.err

**File for Summary of Results: 13661 HRA.sum

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^ *** AERMOD - VERSION 19191 *** *** C:\Lakes\AERMOD View\13661 HRA\13661
HRA.isc *** 11/12/20
*** AERMET - VERSION 16216 *** ***
*** 19:36:52

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PAGE 2

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	
SZ	SOURCE	EMISSION	RATE		X	Y	ELEV.	HEIGHT	SY
ID		SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY						
L0001891		0	0.83940E-05		476129.1	3752854.7	477.0	3.49	4.00
3.25	YES								
L0001892		0	0.83940E-05		476137.7	3752854.7	477.0	3.49	4.00
3.25	YES								
L0001893		0	0.83940E-05		476146.3	3752854.7	477.1	3.49	4.00
3.25	YES								
L0001894		0	0.83940E-05		476154.9	3752854.7	477.3	3.49	4.00
3.25	YES								
L0001895		0	0.83940E-05		476163.5	3752854.7	477.5	3.49	4.00
3.25	YES								
L0001896		0	0.83940E-05		476172.1	3752854.7	477.6	3.49	4.00
3.25	YES								
L0001897		0	0.83940E-05		476180.6	3752854.7	477.6	3.49	4.00
3.25	YES								
L0001898		0	0.83940E-05		476189.2	3752854.7	477.6	3.49	4.00
3.25	YES								
L0001899		0	0.83940E-05		476197.8	3752854.7	477.6	3.49	4.00
3.25	YES								

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

L0001900	0	0.83940E-05	476206.4	3752854.7	477.6	3.49	4.00
3.25 YES							
L0001901	0	0.83940E-05	476215.0	3752854.7	477.6	3.49	4.00
3.25 YES							
L0001902	0	0.83940E-05	476223.6	3752854.7	477.6	3.49	4.00
3.25 YES							
L0001903	0	0.83940E-05	476232.2	3752854.7	477.6	3.49	4.00
3.25 YES							
L0001904	0	0.83940E-05	476240.8	3752854.7	477.4	3.49	4.00
3.25 YES							
L0001905	0	0.83940E-05	476249.4	3752854.7	477.2	3.49	4.00
3.25 YES							
L0001906	0	0.83940E-05	476258.0	3752854.7	477.0	3.49	4.00
3.25 YES							
L0001907	0	0.83940E-05	476266.5	3752854.7	477.0	3.49	4.00
3.25 YES							
L0001908	0	0.83940E-05	476275.1	3752854.7	477.0	3.49	4.00
3.25 YES							
L0001909	0	0.82780E-05	476358.5	3752856.4	477.2	3.49	4.00
3.25 YES							
L0001910	0	0.82780E-05	476367.1	3752856.3	477.4	3.49	4.00
3.25 YES							
L0001911	0	0.82780E-05	476375.7	3752856.1	477.6	3.49	4.00
3.25 YES							
L0001912	0	0.82780E-05	476384.2	3752856.0	477.5	3.49	4.00
3.25 YES							
L0001913	0	0.82780E-05	476392.8	3752855.8	477.2	3.49	4.00
3.25 YES							
L0001914	0	0.82780E-05	476401.4	3752855.7	476.9	3.49	4.00
3.25 YES							
L0001915	0	0.97390E-06	476073.4	3752969.0	479.0	3.49	4.00
3.25 YES							
L0001916	0	0.97390E-06	476072.3	3752960.5	479.0	3.49	4.00
3.25 YES							
L0001917	0	0.97390E-06	476071.2	3752952.0	478.9	3.49	4.00
3.25 YES							
L0001918	0	0.97390E-06	476070.1	3752943.4	478.6	3.49	4.00
3.25 YES							
L0001919	0	0.97390E-06	476069.1	3752934.9	478.3	3.49	4.00
3.25 YES							
L0001920	0	0.97390E-06	476068.9	3752926.4	478.0	3.49	4.00
3.25 YES							
L0001921	0	0.97390E-06	476069.0	3752917.8	478.0	3.49	4.00
3.25 YES							
L0001922	0	0.97390E-06	476069.2	3752909.2	478.0	3.49	4.00
3.25 YES							
L0001923	0	0.97390E-06	476069.3	3752900.6	478.0	3.49	4.00
3.25 YES							
L0001924	0	0.97390E-06	476069.4	3752892.0	478.0	3.49	4.00
3.25 YES							

L0001925	0	0.97390E-06	476069.5	3752883.4	478.0	3.49	4.00
3.25	YES						
L0001926	0	0.97390E-06	476069.7	3752874.8	478.0	3.49	4.00
3.25	YES						
L0001927	0	0.97390E-06	476069.8	3752866.2	478.0	3.49	4.00
3.25	YES						
L0001928	0	0.97390E-06	476069.9	3752857.6	477.7	3.49	4.00
3.25	YES						
L0001929	0	0.97390E-06	476070.0	3752849.1	477.4	3.49	4.00
3.25	YES						
L0001930	0	0.97390E-06	476070.1	3752840.5	477.1	3.49	4.00
3.25	YES						

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 HRA.isc *** 11/12/20
 *** AERMET - VERSION 16216 *** ***
 *** 19:36:52

PAGE 3

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE	BASE	RELEASE	INIT.
SZ	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	Y	SY
ID	SCALAR	VARY	CATS.		(METERS)	(METERS)	(METERS)
(METERS)		BY			(METERS)	(METERS)	(METERS)

L0001931	0	0.97390E-06	476070.3	3752831.9	476.9	3.49	4.00
3.25	YES						
L0001932	0	0.97390E-06	476077.5	3752830.6	477.0	3.49	4.00
3.25	YES						
L0001933	0	0.97390E-06	476086.1	3752830.6	477.0	3.49	4.00
3.25	YES						
L0001934	0	0.97390E-06	476094.7	3752830.6	477.0	3.49	4.00
3.25	YES						
L0001935	0	0.97390E-06	476103.3	3752830.6	477.0	3.49	4.00
3.25	YES						
L0001936	0	0.97390E-06	476111.9	3752830.6	477.0	3.49	4.00
3.25	YES						
L0001937	0	0.97390E-06	476120.5	3752830.6	476.9	3.49	4.00
3.25	YES						
L0001938	0	0.97390E-06	476129.1	3752830.7	476.9	3.49	4.00
3.25	YES						
L0001939	0	0.97390E-06	476137.7	3752830.7	476.8	3.49	4.00
3.25	YES						

L0001940	0	0.97390E-06	476146.3	3752830.7	476.9	3.49	4.00
3.25 YES							
L0001941	0	0.97390E-06	476154.9	3752830.7	476.9	3.49	4.00
3.25 YES							
L0001942	0	0.97390E-06	476163.5	3752830.7	477.0	3.49	4.00
3.25 YES							
L0001943	0	0.97390E-06	476172.0	3752830.8	477.0	3.49	4.00
3.25 YES							
L0001944	0	0.97390E-06	476180.6	3752830.8	477.0	3.49	4.00
3.25 YES							
L0001945	0	0.97390E-06	476189.2	3752830.8	477.0	3.49	4.00
3.25 YES							
L0001946	0	0.97390E-06	476197.8	3752830.8	477.0	3.49	4.00
3.25 YES							
L0001947	0	0.97390E-06	476206.4	3752830.8	477.0	3.49	4.00
3.25 YES							
L0001948	0	0.97390E-06	476215.0	3752830.8	477.0	3.49	4.00
3.25 YES							
L0001949	0	0.97390E-06	476223.6	3752830.9	477.0	3.49	4.00
3.25 YES							
L0001950	0	0.97390E-06	476232.2	3752830.9	477.0	3.49	4.00
3.25 YES							
L0001951	0	0.97390E-06	476240.8	3752830.9	477.0	3.49	4.00
3.25 YES							
L0001952	0	0.97390E-06	476249.3	3752830.9	477.0	3.49	4.00
3.25 YES							
L0001953	0	0.97390E-06	476257.9	3752830.9	477.0	3.49	4.00
3.25 YES							
L0001954	0	0.97390E-06	476266.5	3752830.9	477.0	3.49	4.00
3.25 YES							
L0001955	0	0.97390E-06	476275.1	3752831.0	477.0	3.49	4.00
3.25 YES							
L0001956	0	0.97390E-06	476283.7	3752831.0	477.0	3.49	4.00
3.25 YES							
L0001957	0	0.97390E-06	476292.3	3752831.0	477.0	3.49	4.00
3.25 YES							
L0001958	0	0.97390E-06	476300.9	3752831.0	477.0	3.49	4.00
3.25 YES							
L0001959	0	0.97390E-06	476309.5	3752831.0	477.0	3.49	4.00
3.25 YES							
L0001960	0	0.97390E-06	476318.1	3752831.0	477.0	3.49	4.00
3.25 YES							
L0001961	0	0.97390E-06	476326.7	3752831.1	477.0	3.49	4.00
3.25 YES							
L0001962	0	0.97390E-06	476335.2	3752831.1	476.9	3.49	4.00
3.25 YES							
L0001963	0	0.97390E-06	476343.8	3752831.1	476.9	3.49	4.00
3.25 YES							
L0001964	0	0.97390E-06	476352.4	3752831.1	476.8	3.49	4.00
3.25 YES							

L0001980	0	0.97390E-06	476446.5	3752873.2	477.2	3.49	4.00
3.25 YES							
L0001981	0	0.97390E-06	476446.3	3752881.8	477.5	3.49	4.00
3.25 YES							
L0001982	0	0.97390E-06	476446.0	3752890.4	477.8	3.49	4.00
3.25 YES							
L0001983	0	0.97390E-06	476445.7	3752899.0	478.0	3.49	4.00
3.25 YES							
L0001984	0	0.97390E-06	476445.4	3752907.6	478.0	3.49	4.00
3.25 YES							
L0001985	0	0.97390E-06	476445.2	3752916.2	478.0	3.49	4.00
3.25 YES							
L0001986	0	0.97390E-06	476444.9	3752924.8	478.0	3.49	4.00
3.25 YES							
L0001987	0	0.97390E-06	476444.6	3752933.3	478.0	3.49	4.00
3.25 YES							
L0001988	0	0.97390E-06	476444.3	3752941.9	478.0	3.49	4.00
3.25 YES							
L0001989	0	0.97390E-06	476444.1	3752950.5	478.0	3.49	4.00
3.25 YES							
L0001990	0	0.97390E-06	476443.8	3752959.1	478.0	3.49	4.00
3.25 YES							
L0001991	0	0.97390E-06	476443.5	3752967.7	478.0	3.49	4.00
3.25 YES							
L0001992	0	0.97390E-06	476443.2	3752976.3	478.0	3.49	4.00
3.25 YES							
L0001993	0	0.97390E-06	476443.0	3752984.9	478.0	3.49	4.00
3.25 YES							
L0001994	0	0.33080E-06	476359.0	3752830.2	476.8	3.49	4.00
3.25 YES							
L0001995	0	0.33080E-06	476367.5	3752830.2	476.8	3.49	4.00
3.25 YES							
L0001996	0	0.33080E-06	476376.1	3752830.3	476.8	3.49	4.00
3.25 YES							
L0001997	0	0.33080E-06	476384.7	3752830.4	476.7	3.49	4.00
3.25 YES							
L0001998	0	0.33080E-06	476393.3	3752830.5	476.4	3.49	4.00
3.25 YES							
L0001999	0	0.33080E-06	476401.9	3752830.5	476.2	3.49	4.00
3.25 YES							
L0002000	0	0.33080E-06	476410.5	3752830.6	476.0	3.49	4.00
3.25 YES							
L0002001	0	0.33080E-06	476419.1	3752830.7	476.2	3.49	4.00
3.25 YES							
L0002002	0	0.33080E-06	476427.7	3752830.7	476.5	3.49	4.00
3.25 YES							
L0002003	0	0.33080E-06	476436.3	3752830.8	476.7	3.49	4.00
3.25 YES							
L0002004	0	0.33080E-06	476444.9	3752830.9	476.8	3.49	4.00
3.25 YES							

L0002020	0	0.33080E-06	476443.7	3752965.2	478.0	3.49	4.00
3.25 YES							
L0002021	0	0.33080E-06	476443.4	3752973.8	478.0	3.49	4.00
3.25 YES							
L0002022	0	0.33080E-06	476443.1	3752982.4	478.0	3.49	4.00
3.25 YES							
L0002023	0	0.36520E-06	475064.0	3752981.5	476.8	3.49	4.00
3.25 YES							
L0002024	0	0.36520E-06	475072.5	3752981.7	476.8	3.49	4.00
3.25 YES							
L0002025	0	0.36520E-06	475081.1	3752981.9	476.8	3.49	4.00
3.25 YES							
L0002026	0	0.36520E-06	475089.7	3752982.1	476.9	3.49	4.00
3.25 YES							
L0002027	0	0.36520E-06	475098.3	3752982.3	476.9	3.49	4.00
3.25 YES							
L0002028	0	0.36520E-06	475106.9	3752982.5	476.9	3.49	4.00
3.25 YES							
L0002029	0	0.36520E-06	475115.5	3752982.7	477.0	3.49	4.00
3.25 YES							
L0002030	0	0.36520E-06	475124.1	3752982.9	477.0	3.49	4.00
3.25 YES							
L0002031	0	0.36520E-06	475132.7	3752983.1	477.0	3.49	4.00
3.25 YES							
L0002032	0	0.36520E-06	475141.2	3752983.3	477.0	3.49	4.00
3.25 YES							
L0002033	0	0.36520E-06	475149.8	3752983.6	477.0	3.49	4.00
3.25 YES							
L0002034	0	0.36520E-06	475158.4	3752983.8	477.0	3.49	4.00
3.25 YES							
L0002035	0	0.36520E-06	475167.0	3752984.0	476.9	3.49	4.00
3.25 YES							
L0002036	0	0.36520E-06	475175.6	3752984.2	476.9	3.49	4.00
3.25 YES							
L0002037	0	0.36520E-06	475184.2	3752984.4	476.9	3.49	4.00
3.25 YES							
L0002038	0	0.36520E-06	475192.8	3752984.6	477.0	3.49	4.00
3.25 YES							
L0002039	0	0.36520E-06	475201.4	3752984.8	477.0	3.49	4.00
3.25 YES							
L0002040	0	0.36520E-06	475209.9	3752985.0	477.0	3.49	4.00
3.25 YES							
L0002041	0	0.36520E-06	475218.5	3752985.2	477.0	3.49	4.00
3.25 YES							
L0002042	0	0.36520E-06	475227.1	3752985.4	477.0	3.49	4.00
3.25 YES							
L0002043	0	0.36520E-06	475235.7	3752985.6	477.0	3.49	4.00
3.25 YES							
L0002044	0	0.36520E-06	475244.3	3752985.8	477.0	3.49	4.00
3.25 YES							

L0002045	0	0.36520E-06	475252.9	3752986.0	477.0	3.49	4.00
3.25	YES						
L0002046	0	0.36520E-06	475261.5	3752986.2	477.0	3.49	4.00
3.25	YES						
L0002047	0	0.36520E-06	475270.1	3752986.4	477.0	3.49	4.00
3.25	YES						
L0002048	0	0.36520E-06	475278.6	3752986.7	477.0	3.49	4.00
3.25	YES						
L0002049	0	0.36520E-06	475287.2	3752986.9	477.0	3.49	4.00
3.25	YES						
L0002050	0	0.36520E-06	475295.8	3752987.1	477.0	3.49	4.00
3.25	YES						

*** AERMOD - VERSION 19191 *** C:\Lakes\AERMOD View\13661 HRA\13661
 HRA.isc *** 11/12/20
 *** AERMET - VERSION 16216 ***
 *** 19:36:52

PAGE 6

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	
SZ	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY						

L0002051	0	0.36520E-06	475304.4	3752987.3	477.0	3.49	4.00
3.25	YES						
L0002052	0	0.36520E-06	475313.0	3752987.5	477.0	3.49	4.00
3.25	YES						
L0002053	0	0.36520E-06	475321.6	3752987.7	477.0	3.49	4.00
3.25	YES						
L0002054	0	0.36520E-06	475330.2	3752987.9	477.0	3.49	4.00
3.25	YES						
L0002055	0	0.36520E-06	475338.8	3752988.1	477.0	3.49	4.00
3.25	YES						
L0002056	0	0.36520E-06	475347.3	3752988.3	477.0	3.49	4.00
3.25	YES						
L0002057	0	0.36520E-06	475355.9	3752988.5	477.0	3.49	4.00
3.25	YES						
L0002058	0	0.36520E-06	475364.5	3752988.7	477.0	3.49	4.00
3.25	YES						
L0002059	0	0.36520E-06	475373.1	3752988.9	477.0	3.49	4.00
3.25	YES						

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

L0002060	0	0.36520E-06	475381.7	3752989.1	477.1	3.49	4.00
3.25 YES							
L0002061	0	0.36520E-06	475390.3	3752989.3	477.1	3.49	4.00
3.25 YES							
L0002062	0	0.36520E-06	475398.9	3752989.5	477.1	3.49	4.00
3.25 YES							
L0002063	0	0.36520E-06	475407.5	3752989.8	477.1	3.49	4.00
3.25 YES							
L0002064	0	0.36520E-06	475416.0	3752990.0	477.1	3.49	4.00
3.25 YES							
L0002065	0	0.36520E-06	475424.6	3752990.2	477.1	3.49	4.00
3.25 YES							
L0002066	0	0.36520E-06	475433.2	3752990.4	477.1	3.49	4.00
3.25 YES							
L0002067	0	0.36520E-06	475441.8	3752990.6	477.0	3.49	4.00
3.25 YES							
L0002068	0	0.36520E-06	475450.4	3752990.8	477.0	3.49	4.00
3.25 YES							
L0002069	0	0.36520E-06	475459.0	3752991.0	477.0	3.49	4.00
3.25 YES							
L0002070	0	0.36520E-06	475467.6	3752991.2	477.0	3.49	4.00
3.25 YES							
L0002071	0	0.36520E-06	475476.2	3752991.4	477.0	3.49	4.00
3.25 YES							
L0002072	0	0.36520E-06	475484.7	3752991.6	477.0	3.49	4.00
3.25 YES							
L0002073	0	0.36520E-06	475493.3	3752991.8	477.1	3.49	4.00
3.25 YES							
L0002074	0	0.36520E-06	475501.9	3752992.0	477.1	3.49	4.00
3.25 YES							
L0002075	0	0.36520E-06	475510.5	3752992.2	477.2	3.49	4.00
3.25 YES							
L0002076	0	0.36520E-06	475519.1	3752992.4	477.2	3.49	4.00
3.25 YES							
L0002077	0	0.36520E-06	475527.7	3752992.7	477.2	3.49	4.00
3.25 YES							
L0002078	0	0.36520E-06	475536.3	3752992.9	477.2	3.49	4.00
3.25 YES							
L0002079	0	0.36520E-06	475544.9	3752993.1	477.2	3.49	4.00
3.25 YES							
L0002080	0	0.36520E-06	475553.4	3752993.3	477.1	3.49	4.00
3.25 YES							
L0002081	0	0.36520E-06	475562.0	3752993.5	477.1	3.49	4.00
3.25 YES							
L0002082	0	0.36520E-06	475570.6	3752993.7	477.0	3.49	4.00
3.25 YES							
L0002083	0	0.36520E-06	475579.2	3752993.9	477.0	3.49	4.00
3.25 YES							
L0002084	0	0.36520E-06	475587.8	3752994.1	477.0	3.49	4.00
3.25 YES							

L0002085	0	0.36520E-06	475596.4	3752994.3	477.0	3.49	4.00
3.25	YES						
L0002086	0	0.36520E-06	475605.0	3752994.5	477.1	3.49	4.00
3.25	YES						
L0002087	0	0.36520E-06	475613.6	3752994.7	477.1	3.49	4.00
3.25	YES						
L0002088	0	0.36520E-06	475622.1	3752994.9	477.2	3.49	4.00
3.25	YES						
L0002089	0	0.36520E-06	475630.7	3752995.1	477.3	3.49	4.00
3.25	YES						
L0002090	0	0.36520E-06	475639.3	3752995.3	477.5	3.49	4.00
3.25	YES						

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 HRA.isc *** 11/12/20
 *** AERMET - VERSION 16216 *** ***
 *** 19:36:52

PAGE 7

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE	BASE	RELEASE	INIT.
SZ	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	Y	SY
ID	SOURCE	SCALAR	VARY		(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY		(METERS)	(METERS)	(METERS)

L0002091	0	0.36520E-06	475647.9	3752995.5	477.7	3.49	4.00
3.25	YES						
L0002092	0	0.36520E-06	475656.5	3752995.8	477.9	3.49	4.00
3.25	YES						
L0002093	0	0.36520E-06	475665.1	3752996.0	478.0	3.49	4.00
3.25	YES						
L0002094	0	0.36520E-06	475673.7	3752996.2	478.0	3.49	4.00
3.25	YES						
L0002095	0	0.36520E-06	475682.3	3752996.4	478.0	3.49	4.00
3.25	YES						
L0002096	0	0.36520E-06	475690.8	3752996.6	478.0	3.49	4.00
3.25	YES						
L0002097	0	0.36520E-06	475699.4	3752996.8	478.0	3.49	4.00
3.25	YES						
L0002098	0	0.36520E-06	475708.0	3752997.0	478.0	3.49	4.00
3.25	YES						
L0002099	0	0.36520E-06	475716.6	3752997.2	478.0	3.49	4.00
3.25	YES						

L0002100	0	0.36520E-06	475725.2	3752997.4	478.0	3.49	4.00
3.25 YES							
L0002101	0	0.36520E-06	475733.8	3752997.6	478.0	3.49	4.00
3.25 YES							
L0002102	0	0.36520E-06	475742.4	3752997.8	478.0	3.49	4.00
3.25 YES							
L0002103	0	0.36520E-06	475751.0	3752998.0	478.0	3.49	4.00
3.25 YES							
L0002104	0	0.36520E-06	475759.5	3752998.2	478.0	3.49	4.00
3.25 YES							
L0002105	0	0.36520E-06	475768.1	3752998.4	478.0	3.49	4.00
3.25 YES							
L0002106	0	0.36520E-06	475776.7	3752998.6	478.0	3.49	4.00
3.25 YES							
L0002107	0	0.36520E-06	475785.3	3752998.9	478.0	3.49	4.00
3.25 YES							
L0002108	0	0.36520E-06	475793.9	3752999.1	478.0	3.49	4.00
3.25 YES							
L0002109	0	0.36520E-06	475802.5	3752999.3	478.0	3.49	4.00
3.25 YES							
L0002110	0	0.36520E-06	475811.1	3752999.5	478.0	3.49	4.00
3.25 YES							
L0002111	0	0.36520E-06	475819.7	3752999.7	478.0	3.49	4.00
3.25 YES							
L0002112	0	0.36520E-06	475828.2	3752999.9	478.0	3.49	4.00
3.25 YES							
L0002113	0	0.36520E-06	475836.8	3753000.1	478.0	3.49	4.00
3.25 YES							
L0002114	0	0.36520E-06	475845.4	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002115	0	0.36520E-06	475854.0	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002116	0	0.36520E-06	475862.6	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002117	0	0.36520E-06	475871.2	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002118	0	0.36520E-06	475879.8	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002119	0	0.36520E-06	475888.4	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002120	0	0.36520E-06	475897.0	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002121	0	0.36520E-06	475905.5	3753000.3	478.1	3.49	4.00
3.25 YES							
L0002122	0	0.36520E-06	475914.1	3753000.3	478.2	3.49	4.00
3.25 YES							
L0002123	0	0.36520E-06	475922.7	3753000.3	478.4	3.49	4.00
3.25 YES							
L0002124	0	0.36520E-06	475931.3	3753000.3	478.5	3.49	4.00
3.25 YES							

L0002125	0	0.36520E-06	475939.9	3753000.3	478.6	3.49	4.00
3.25	YES						
L0002126	0	0.36520E-06	475948.5	3753000.3	478.8	3.49	4.00
3.25	YES						
L0002127	0	0.36520E-06	475957.1	3753000.3	478.9	3.49	4.00
3.25	YES						
L0002128	0	0.36520E-06	475965.7	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002129	0	0.36520E-06	475974.3	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002130	0	0.36520E-06	475982.9	3753000.3	479.0	3.49	4.00
3.25	YES						

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 HRA.isc *** 11/12/20
 *** AERMET - VERSION 16216 *** ***
 *** 19:36:52

PAGE 8

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	
SZ	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY						

L0002131	0	0.36520E-06	475991.4	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002132	0	0.36520E-06	476000.0	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002133	0	0.36520E-06	476008.6	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002134	0	0.36520E-06	476017.2	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002135	0	0.36520E-06	476025.8	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002136	0	0.36520E-06	476034.4	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002137	0	0.36520E-06	476043.0	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002138	0	0.36520E-06	476051.6	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002139	0	0.36520E-06	476060.2	3753000.3	479.0	3.49	4.00
3.25	YES						

L0002140	0	0.36520E-06	476068.8	3753000.3	479.0	3.49	4.00
3.25 YES							
L0002141	0	0.40490E-07	475064.0	3752981.5	476.8	3.49	4.00
3.25 YES							
L0002142	0	0.40490E-07	475072.5	3752981.7	476.8	3.49	4.00
3.25 YES							
L0002143	0	0.40490E-07	475081.1	3752981.9	476.8	3.49	4.00
3.25 YES							
L0002144	0	0.40490E-07	475089.7	3752982.1	476.9	3.49	4.00
3.25 YES							
L0002145	0	0.40490E-07	475098.3	3752982.3	476.9	3.49	4.00
3.25 YES							
L0002146	0	0.40490E-07	475106.9	3752982.5	476.9	3.49	4.00
3.25 YES							
L0002147	0	0.40490E-07	475115.5	3752982.7	477.0	3.49	4.00
3.25 YES							
L0002148	0	0.40490E-07	475124.1	3752982.9	477.0	3.49	4.00
3.25 YES							
L0002149	0	0.40490E-07	475132.7	3752983.1	477.0	3.49	4.00
3.25 YES							
L0002150	0	0.40490E-07	475141.2	3752983.3	477.0	3.49	4.00
3.25 YES							
L0002151	0	0.40490E-07	475149.8	3752983.6	477.0	3.49	4.00
3.25 YES							
L0002152	0	0.40490E-07	475158.4	3752983.8	477.0	3.49	4.00
3.25 YES							
L0002153	0	0.40490E-07	475167.0	3752984.0	476.9	3.49	4.00
3.25 YES							
L0002154	0	0.40490E-07	475175.6	3752984.2	476.9	3.49	4.00
3.25 YES							
L0002155	0	0.40490E-07	475184.2	3752984.4	476.9	3.49	4.00
3.25 YES							
L0002156	0	0.40490E-07	475192.8	3752984.6	477.0	3.49	4.00
3.25 YES							
L0002157	0	0.40490E-07	475201.4	3752984.8	477.0	3.49	4.00
3.25 YES							
L0002158	0	0.40490E-07	475209.9	3752985.0	477.0	3.49	4.00
3.25 YES							
L0002159	0	0.40490E-07	475218.5	3752985.2	477.0	3.49	4.00
3.25 YES							
L0002160	0	0.40490E-07	475227.1	3752985.4	477.0	3.49	4.00
3.25 YES							
L0002161	0	0.40490E-07	475235.7	3752985.6	477.0	3.49	4.00
3.25 YES							
L0002162	0	0.40490E-07	475244.3	3752985.8	477.0	3.49	4.00
3.25 YES							
L0002163	0	0.40490E-07	475252.9	3752986.0	477.0	3.49	4.00
3.25 YES							
L0002164	0	0.40490E-07	475261.5	3752986.2	477.0	3.49	4.00
3.25 YES							

L0002180	0	0.40490E-07	475398.9	3752989.5	477.1	3.49	4.00
3.25 YES							
L0002181	0	0.40490E-07	475407.5	3752989.8	477.1	3.49	4.00
3.25 YES							
L0002182	0	0.40490E-07	475416.0	3752990.0	477.1	3.49	4.00
3.25 YES							
L0002183	0	0.40490E-07	475424.6	3752990.2	477.1	3.49	4.00
3.25 YES							
L0002184	0	0.40490E-07	475433.2	3752990.4	477.1	3.49	4.00
3.25 YES							
L0002185	0	0.40490E-07	475441.8	3752990.6	477.0	3.49	4.00
3.25 YES							
L0002186	0	0.40490E-07	475450.4	3752990.8	477.0	3.49	4.00
3.25 YES							
L0002187	0	0.40490E-07	475459.0	3752991.0	477.0	3.49	4.00
3.25 YES							
L0002188	0	0.40490E-07	475467.6	3752991.2	477.0	3.49	4.00
3.25 YES							
L0002189	0	0.40490E-07	475476.2	3752991.4	477.0	3.49	4.00
3.25 YES							
L0002190	0	0.40490E-07	475484.7	3752991.6	477.0	3.49	4.00
3.25 YES							
L0002191	0	0.40490E-07	475493.3	3752991.8	477.1	3.49	4.00
3.25 YES							
L0002192	0	0.40490E-07	475501.9	3752992.0	477.1	3.49	4.00
3.25 YES							
L0002193	0	0.40490E-07	475510.5	3752992.2	477.2	3.49	4.00
3.25 YES							
L0002194	0	0.40490E-07	475519.1	3752992.4	477.2	3.49	4.00
3.25 YES							
L0002195	0	0.40490E-07	475527.7	3752992.7	477.2	3.49	4.00
3.25 YES							
L0002196	0	0.40490E-07	475536.3	3752992.9	477.2	3.49	4.00
3.25 YES							
L0002197	0	0.40490E-07	475544.9	3752993.1	477.2	3.49	4.00
3.25 YES							
L0002198	0	0.40490E-07	475553.4	3752993.3	477.1	3.49	4.00
3.25 YES							
L0002199	0	0.40490E-07	475562.0	3752993.5	477.1	3.49	4.00
3.25 YES							
L0002200	0	0.40490E-07	475570.6	3752993.7	477.0	3.49	4.00
3.25 YES							
L0002201	0	0.40490E-07	475579.2	3752993.9	477.0	3.49	4.00
3.25 YES							
L0002202	0	0.40490E-07	475587.8	3752994.1	477.0	3.49	4.00
3.25 YES							
L0002203	0	0.40490E-07	475596.4	3752994.3	477.0	3.49	4.00
3.25 YES							
L0002204	0	0.40490E-07	475605.0	3752994.5	477.1	3.49	4.00
3.25 YES							

L0002205	0	0.40490E-07	475613.6	3752994.7	477.1	3.49	4.00
3.25	YES						
L0002206	0	0.40490E-07	475622.1	3752994.9	477.2	3.49	4.00
3.25	YES						
L0002207	0	0.40490E-07	475630.7	3752995.1	477.3	3.49	4.00
3.25	YES						
L0002208	0	0.40490E-07	475639.3	3752995.3	477.5	3.49	4.00
3.25	YES						
L0002209	0	0.40490E-07	475647.9	3752995.5	477.7	3.49	4.00
3.25	YES						
L0002210	0	0.40490E-07	475656.5	3752995.8	477.9	3.49	4.00
3.25	YES						

^ *** AERMOD - VERSION 19191 *** *** C:\Lakes\AERMOD View\13661 HRA\13661
 HRA.isc *** 11/12/20
 *** AERMET - VERSION 16216 *** ***
 *** 19:36:52

PAGE 10

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	
SZ	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY						

L0002211	0	0.40490E-07	475665.1	3752996.0	478.0	3.49	4.00
3.25	YES						
L0002212	0	0.40490E-07	475673.7	3752996.2	478.0	3.49	4.00
3.25	YES						
L0002213	0	0.40490E-07	475682.3	3752996.4	478.0	3.49	4.00
3.25	YES						
L0002214	0	0.40490E-07	475690.8	3752996.6	478.0	3.49	4.00
3.25	YES						
L0002215	0	0.40490E-07	475699.4	3752996.8	478.0	3.49	4.00
3.25	YES						
L0002216	0	0.40490E-07	475708.0	3752997.0	478.0	3.49	4.00
3.25	YES						
L0002217	0	0.40490E-07	475716.6	3752997.2	478.0	3.49	4.00
3.25	YES						
L0002218	0	0.40490E-07	475725.2	3752997.4	478.0	3.49	4.00
3.25	YES						
L0002219	0	0.40490E-07	475733.8	3752997.6	478.0	3.49	4.00
3.25	YES						

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

L0002220	0	0.40490E-07	475742.4	3752997.8	478.0	3.49	4.00
3.25 YES							
L0002221	0	0.40490E-07	475751.0	3752998.0	478.0	3.49	4.00
3.25 YES							
L0002222	0	0.40490E-07	475759.5	3752998.2	478.0	3.49	4.00
3.25 YES							
L0002223	0	0.40490E-07	475768.1	3752998.4	478.0	3.49	4.00
3.25 YES							
L0002224	0	0.40490E-07	475776.7	3752998.6	478.0	3.49	4.00
3.25 YES							
L0002225	0	0.40490E-07	475785.3	3752998.9	478.0	3.49	4.00
3.25 YES							
L0002226	0	0.40490E-07	475793.9	3752999.1	478.0	3.49	4.00
3.25 YES							
L0002227	0	0.40490E-07	475802.5	3752999.3	478.0	3.49	4.00
3.25 YES							
L0002228	0	0.40490E-07	475811.1	3752999.5	478.0	3.49	4.00
3.25 YES							
L0002229	0	0.40490E-07	475819.7	3752999.7	478.0	3.49	4.00
3.25 YES							
L0002230	0	0.40490E-07	475828.2	3752999.9	478.0	3.49	4.00
3.25 YES							
L0002231	0	0.40490E-07	475836.8	3753000.1	478.0	3.49	4.00
3.25 YES							
L0002232	0	0.40490E-07	475845.4	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002233	0	0.40490E-07	475854.0	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002234	0	0.40490E-07	475862.6	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002235	0	0.40490E-07	475871.2	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002236	0	0.40490E-07	475879.8	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002237	0	0.40490E-07	475888.4	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002238	0	0.40490E-07	475897.0	3753000.3	478.0	3.49	4.00
3.25 YES							
L0002239	0	0.40490E-07	475905.5	3753000.3	478.1	3.49	4.00
3.25 YES							
L0002240	0	0.40490E-07	475914.1	3753000.3	478.2	3.49	4.00
3.25 YES							
L0002241	0	0.40490E-07	475922.7	3753000.3	478.4	3.49	4.00
3.25 YES							
L0002242	0	0.40490E-07	475931.3	3753000.3	478.5	3.49	4.00
3.25 YES							
L0002243	0	0.40490E-07	475939.9	3753000.3	478.6	3.49	4.00
3.25 YES							
L0002244	0	0.40490E-07	475948.5	3753000.3	478.8	3.49	4.00
3.25 YES							

L0002245	0	0.40490E-07	475957.1	3753000.3	478.9	3.49	4.00
3.25	YES						
L0002246	0	0.40490E-07	475965.7	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002247	0	0.40490E-07	475974.3	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002248	0	0.40490E-07	475982.9	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002249	0	0.40490E-07	475991.4	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002250	0	0.40490E-07	476000.0	3753000.3	479.0	3.49	4.00
3.25	YES						

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 HRA.isc *** 11/12/20
 *** AERMET - VERSION 16216 *** ***
 *** 19:36:52

PAGE 11

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	
SZ	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY						

L0002251	0	0.40490E-07	476008.6	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002252	0	0.40490E-07	476017.2	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002253	0	0.40490E-07	476025.8	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002254	0	0.40490E-07	476034.4	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002255	0	0.40490E-07	476043.0	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002256	0	0.40490E-07	476051.6	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002257	0	0.40490E-07	476060.2	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002258	0	0.40490E-07	476068.8	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002259	0	0.40490E-07	476077.3	3753000.4	479.0	3.49	4.00
3.25	YES						

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

L0002260	0	0.40490E-07	476085.9	3753000.4	479.0	3.49	4.00
3.25 YES							
L0002261	0	0.40490E-07	476094.5	3753000.4	479.0	3.49	4.00
3.25 YES							
L0002262	0	0.40490E-07	476103.1	3753000.4	479.0	3.49	4.00
3.25 YES							
L0002263	0	0.40490E-07	476111.7	3753000.5	479.0	3.49	4.00
3.25 YES							
L0002264	0	0.40490E-07	476120.3	3753000.5	479.0	3.49	4.00
3.25 YES							
L0002265	0	0.40490E-07	476128.9	3753000.5	479.0	3.49	4.00
3.25 YES							
L0002266	0	0.40490E-07	476137.5	3753000.6	479.0	3.49	4.00
3.25 YES							
L0002267	0	0.40490E-07	476146.1	3753000.6	478.9	3.49	4.00
3.25 YES							
L0002268	0	0.40490E-07	476154.7	3753000.6	478.7	3.49	4.00
3.25 YES							
L0002269	0	0.40490E-07	476163.2	3753000.7	478.6	3.49	4.00
3.25 YES							
L0002270	0	0.40490E-07	476171.8	3753000.7	478.5	3.49	4.00
3.25 YES							
L0002271	0	0.40490E-07	476180.4	3753000.7	478.7	3.49	4.00
3.25 YES							
L0002272	0	0.40490E-07	476189.0	3753000.7	478.8	3.49	4.00
3.25 YES							
L0002273	0	0.40490E-07	476197.6	3753000.8	479.0	3.49	4.00
3.25 YES							
L0002274	0	0.40490E-07	476206.2	3753000.8	479.0	3.49	4.00
3.25 YES							
L0002275	0	0.40490E-07	476214.8	3753000.8	479.0	3.49	4.00
3.25 YES							
L0002276	0	0.40490E-07	476223.4	3753000.9	479.0	3.49	4.00
3.25 YES							
L0002277	0	0.40490E-07	476232.0	3753000.9	479.0	3.49	4.00
3.25 YES							
L0002278	0	0.40490E-07	476240.6	3753000.9	479.0	3.49	4.00
3.25 YES							
L0002279	0	0.40490E-07	476249.1	3753000.9	479.0	3.49	4.00
3.25 YES							
L0002280	0	0.40490E-07	476257.7	3753001.0	479.0	3.49	4.00
3.25 YES							
L0002281	0	0.40490E-07	476266.3	3753001.0	478.9	3.49	4.00
3.25 YES							
L0002282	0	0.40490E-07	476274.9	3753001.0	478.7	3.49	4.00
3.25 YES							
L0002283	0	0.40490E-07	476283.5	3753001.1	478.6	3.49	4.00
3.25 YES							
L0002284	0	0.40490E-07	476292.1	3753001.1	478.4	3.49	4.00
3.25 YES							

L0002285	0	0.40490E-07	476300.7	3753001.1	478.3	3.49	4.00
3.25	YES						
L0002286	0	0.40490E-07	476309.3	3753001.2	478.2	3.49	4.00
3.25	YES						
L0002287	0	0.40490E-07	476317.9	3753001.2	478.0	3.49	4.00
3.25	YES						
L0002288	0	0.40490E-07	476326.5	3753001.2	478.0	3.49	4.00
3.25	YES						
L0002289	0	0.40490E-07	476335.0	3753001.2	478.0	3.49	4.00
3.25	YES						
L0002290	0	0.40720E-07	476078.1	3753000.3	479.0	3.49	4.00
3.25	YES						

^ *** AERMOD - VERSION 19191 *** *** C:\Lakes\AERMOD View\13661 HRA\13661
 HRA.isc *** 11/12/20
 *** AERMET - VERSION 16216 *** ***
 *** 19:36:52

PAGE 12

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	
SZ	SOURCE	EMISSION	RATE		X	Y	ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY						

L0002291	0	0.40720E-07	476086.7	3753000.3	479.0	3.49	4.00
3.25	YES						
L0002292	0	0.40720E-07	476095.2	3753000.4	479.0	3.49	4.00
3.25	YES						
L0002293	0	0.40720E-07	476103.8	3753000.5	479.0	3.49	4.00
3.25	YES						
L0002294	0	0.40720E-07	476112.4	3753000.5	479.0	3.49	4.00
3.25	YES						
L0002295	0	0.40720E-07	476121.0	3753000.6	479.0	3.49	4.00
3.25	YES						
L0002296	0	0.40720E-07	476129.6	3753000.6	479.0	3.49	4.00
3.25	YES						
L0002297	0	0.40720E-07	476138.2	3753000.7	479.0	3.49	4.00
3.25	YES						
L0002298	0	0.40720E-07	476146.8	3753000.7	478.9	3.49	4.00
3.25	YES						
L0002299	0	0.40720E-07	476155.4	3753000.8	478.7	3.49	4.00
3.25	YES						

L0002300	0	0.40720E-07	476164.0	3753000.8	478.6	3.49	4.00
3.25 YES							
L0002301	0	0.40720E-07	476172.5	3753000.9	478.5	3.49	4.00
3.25 YES							
L0002302	0	0.40720E-07	476181.1	3753000.9	478.7	3.49	4.00
3.25 YES							
L0002303	0	0.40720E-07	476189.7	3753001.0	478.8	3.49	4.00
3.25 YES							
L0002304	0	0.40720E-07	476198.3	3753001.0	479.0	3.49	4.00
3.25 YES							
L0002305	0	0.40720E-07	476206.9	3753001.1	479.0	3.49	4.00
3.25 YES							
L0002306	0	0.40720E-07	476215.5	3753001.1	479.0	3.49	4.00
3.25 YES							
L0002307	0	0.40720E-07	476224.1	3753001.2	479.0	3.49	4.00
3.25 YES							
L0002308	0	0.40720E-07	476232.7	3753001.2	479.0	3.49	4.00
3.25 YES							
L0002309	0	0.40720E-07	476241.3	3753001.3	479.0	3.49	4.00
3.25 YES							
L0002310	0	0.40720E-07	476249.9	3753001.3	479.0	3.49	4.00
3.25 YES							
L0002311	0	0.40720E-07	476258.4	3753001.4	479.0	3.49	4.00
3.25 YES							
L0002312	0	0.40720E-07	476267.0	3753001.4	478.9	3.49	4.00
3.25 YES							
L0002313	0	0.40720E-07	476275.6	3753001.5	478.7	3.49	4.00
3.25 YES							
L0002314	0	0.40720E-07	476284.2	3753001.5	478.6	3.49	4.00
3.25 YES							
L0002315	0	0.40720E-07	476292.8	3753001.6	478.4	3.49	4.00
3.25 YES							
L0002316	0	0.40720E-07	476301.4	3753001.6	478.3	3.49	4.00
3.25 YES							
L0002317	0	0.40720E-07	476310.0	3753001.7	478.2	3.49	4.00
3.25 YES							
L0002318	0	0.40720E-07	476318.6	3753001.8	478.0	3.49	4.00
3.25 YES							
L0002319	0	0.40720E-07	476327.2	3753001.8	478.0	3.49	4.00
3.25 YES							
L0002320	0	0.40720E-07	476335.8	3753001.9	478.0	3.49	4.00
3.25 YES							
L0002321	0	0.40720E-07	476344.3	3753001.9	478.0	3.49	4.00
3.25 YES							
L0002322	0	0.40720E-07	476352.9	3753002.0	478.0	3.49	4.00
3.25 YES							
L0002323	0	0.40720E-07	476361.5	3753002.0	478.0	3.49	4.00
3.25 YES							
L0002324	0	0.40720E-07	476370.1	3753002.1	478.0	3.49	4.00
3.25 YES							

L0002325	0	0.40720E-07	476378.7	3753002.1	478.0	3.49	4.00
3.25	YES						
L0002326	0	0.40720E-07	476387.3	3753002.2	478.0	3.49	4.00
3.25	YES						
L0002327	0	0.40720E-07	476395.9	3753002.2	478.0	3.49	4.00
3.25	YES						
L0002328	0	0.40720E-07	476404.5	3753002.3	478.0	3.49	4.00
3.25	YES						
L0002329	0	0.40720E-07	476413.1	3753002.3	478.0	3.49	4.00
3.25	YES						
L0002330	0	0.40720E-07	476421.7	3753002.4	478.0	3.49	4.00
3.25	YES						

^ *** AERMOD - VERSION 19191 *** *** C:\Lakes\AERMOD View\13661 HRA\13661
 HRA.isc *** 11/12/20
 *** AERMET - VERSION 16216 *** ***
 *** 19:36:52

PAGE 13

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	
SZ	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY						

L0002331	0	0.40720E-07	476430.2	3753002.4	478.0	3.49	4.00
3.25	YES						
L0002332	0	0.40720E-07	476438.8	3753002.5	478.0	3.49	4.00
3.25	YES						
L0002333	0	0.40720E-07	476447.4	3753002.5	478.1	3.49	4.00
3.25	YES						
L0002334	0	0.40720E-07	476456.0	3753002.6	478.3	3.49	4.00
3.25	YES						
L0002335	0	0.40720E-07	476464.6	3753002.6	478.4	3.49	4.00
3.25	YES						
L0002336	0	0.40720E-07	476473.2	3753002.7	478.6	3.49	4.00
3.25	YES						
L0002337	0	0.40720E-07	476481.8	3753002.7	478.7	3.49	4.00
3.25	YES						
L0002338	0	0.40720E-07	476490.4	3753002.8	478.9	3.49	4.00
3.25	YES						
L0002339	0	0.40720E-07	476499.0	3753002.8	479.0	3.49	4.00
3.25	YES						

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

L0002340	0	0.40720E-07	476507.6	3753002.9	479.0	3.49	4.00
3.25 YES							
L0002341	0	0.40720E-07	476516.1	3753002.9	479.0	3.49	4.00
3.25 YES							
L0002342	0	0.40720E-07	476524.7	3753003.0	479.0	3.49	4.00
3.25 YES							
L0002343	0	0.40720E-07	476533.3	3753003.1	479.0	3.49	4.00
3.25 YES							
L0002344	0	0.40720E-07	476541.9	3753003.1	479.0	3.49	4.00
3.25 YES							
L0002345	0	0.40720E-07	476550.5	3753003.2	479.0	3.49	4.00
3.25 YES							
L0002346	0	0.40720E-07	476559.1	3753003.2	479.0	3.49	4.00
3.25 YES							
L0002347	0	0.36480E-06	476342.5	3753001.3	478.0	3.49	4.00
3.25 YES							
L0002348	0	0.36480E-06	476351.1	3753001.4	478.0	3.49	4.00
3.25 YES							
L0002349	0	0.36480E-06	476359.7	3753001.5	478.0	3.49	4.00
3.25 YES							
L0002350	0	0.36480E-06	476368.3	3753001.6	478.0	3.49	4.00
3.25 YES							
L0002351	0	0.36480E-06	476376.9	3753001.7	478.0	3.49	4.00
3.25 YES							
L0002352	0	0.36480E-06	476385.5	3753001.8	478.0	3.49	4.00
3.25 YES							
L0002353	0	0.36480E-06	476394.1	3753001.9	478.0	3.49	4.00
3.25 YES							
L0002354	0	0.36480E-06	476402.7	3753001.9	478.0	3.49	4.00
3.25 YES							
L0002355	0	0.36480E-06	476411.2	3753002.0	478.0	3.49	4.00
3.25 YES							
L0002356	0	0.36480E-06	476419.8	3753002.1	478.0	3.49	4.00
3.25 YES							
L0002357	0	0.36480E-06	476428.4	3753002.2	478.0	3.49	4.00
3.25 YES							
L0002358	0	0.36480E-06	476437.0	3753002.3	478.0	3.49	4.00
3.25 YES							
L0002359	0	0.36480E-06	476445.6	3753002.4	478.1	3.49	4.00
3.25 YES							
L0002360	0	0.36480E-06	476454.2	3753002.5	478.3	3.49	4.00
3.25 YES							
L0002361	0	0.36480E-06	476462.8	3753002.6	478.4	3.49	4.00
3.25 YES							
L0002362	0	0.36480E-06	476471.4	3753002.7	478.6	3.49	4.00
3.25 YES							
L0002363	0	0.36480E-06	476480.0	3753002.8	478.7	3.49	4.00
3.25 YES							
L0002364	0	0.36480E-06	476488.5	3753002.9	478.8	3.49	4.00
3.25 YES							

L0002365	0	0.36480E-06	476497.1	3753002.9	479.0	3.49	4.00
3.25	YES						
L0002366	0	0.36480E-06	476505.7	3753003.0	479.0	3.49	4.00
3.25	YES						
L0002367	0	0.36480E-06	476514.3	3753003.1	479.0	3.49	4.00
3.25	YES						
L0002368	0	0.36480E-06	476522.9	3753003.2	479.0	3.49	4.00
3.25	YES						
L0002369	0	0.36480E-06	476531.5	3753003.3	479.0	3.49	4.00
3.25	YES						
L0002370	0	0.36480E-06	476540.1	3753003.4	479.0	3.49	4.00
3.25	YES						

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 HRA.isc *** 11/12/20
 *** AERMET - VERSION 16216 *** ***
 *** 19:36:52

PAGE 14

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	
SZ	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY						

L0002371	0	0.36480E-06	476548.7	3753003.5	479.0	3.49	4.00
3.25	YES						
L0002372	0	0.36480E-06	476557.3	3753003.6	479.0	3.49	4.00
3.25	YES						
L0002373	0	0.40230E-06	476570.2	3752995.4	479.0	3.49	4.00
3.25	YES						
L0002374	0	0.40230E-06	476578.4	3752993.0	479.0	3.49	4.00
3.25	YES						
L0002375	0	0.40230E-06	476586.7	3752990.8	479.0	3.49	4.00
3.25	YES						
L0002376	0	0.40230E-06	476595.1	3752989.0	479.0	3.49	4.00
3.25	YES						
L0002377	0	0.40230E-06	476603.5	3752987.2	479.0	3.49	4.00
3.25	YES						
L0002378	0	0.40230E-06	476611.9	3752985.4	479.0	3.49	4.00
3.25	YES						
L0002379	0	0.40230E-06	476619.7	3752982.1	478.9	3.49	4.00
3.25	YES						

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

L0002380	0	0.40230E-06	476627.3	3752977.9	478.7	3.49	4.00
3.25 YES							
L0002381	0	0.40230E-06	476633.5	3752972.1	478.5	3.49	4.00
3.25 YES							
L0002382	0	0.40230E-06	476639.4	3752965.8	478.3	3.49	4.00
3.25 YES							
L0002383	0	0.40230E-06	476644.0	3752958.6	478.1	3.49	4.00
3.25 YES							
L0002384	0	0.40230E-06	476648.1	3752951.2	478.0	3.49	4.00
3.25 YES							
L0002385	0	0.40230E-06	476649.8	3752942.7	478.0	3.49	4.00
3.25 YES							
L0002386	0	0.40230E-06	476651.4	3752934.3	478.0	3.49	4.00
3.25 YES							
L0002387	0	0.40230E-06	476652.5	3752925.8	478.0	3.49	4.00
3.25 YES							
L0002388	0	0.40230E-06	476653.1	3752917.2	478.0	3.49	4.00
3.25 YES							
L0002389	0	0.40230E-06	476653.8	3752908.7	478.0	3.49	4.00
3.25 YES							
L0002390	0	0.40230E-06	476654.4	3752900.1	478.0	3.49	4.00
3.25 YES							
L0002391	0	0.40230E-06	476655.0	3752891.5	478.0	3.49	4.00
3.25 YES							
L0002392	0	0.40230E-06	476655.7	3752883.0	478.0	3.49	4.00
3.25 YES							
L0002393	0	0.40230E-06	476656.3	3752874.4	478.0	3.49	4.00
3.25 YES							
L0002394	0	0.40230E-06	476656.9	3752865.8	478.0	3.49	4.00
3.25 YES							
L0002395	0	0.40230E-06	476657.1	3752857.2	477.7	3.49	4.00
3.25 YES							
L0002396	0	0.40230E-06	476657.4	3752848.7	477.4	3.49	4.00
3.25 YES							
L0002397	0	0.40230E-06	476657.6	3752840.1	477.1	3.49	4.00
3.25 YES							
L0002398	0	0.40230E-06	476657.8	3752831.5	477.0	3.49	4.00
3.25 YES							
L0002399	0	0.40230E-06	476658.1	3752822.9	477.0	3.49	4.00
3.25 YES							
L0002400	0	0.40230E-06	476658.3	3752814.3	477.0	3.49	4.00
3.25 YES							
L0002401	0	0.40230E-06	476658.5	3752805.7	477.0	3.49	4.00
3.25 YES							
L0002402	0	0.40230E-06	476658.7	3752797.1	477.0	3.49	4.00
3.25 YES							
L0002403	0	0.40230E-06	476658.9	3752788.6	477.0	3.49	4.00
3.25 YES							
L0002404	0	0.40230E-06	476658.9	3752780.0	477.0	3.49	4.00
3.25 YES							

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L0002405      0  0.40230E-06  476659.0  3752771.4  476.8    3.49    4.00
3.25      YES
L0002406      0  0.40230E-06  476659.0  3752762.8  476.5    3.49    4.00
3.25      YES
L0002407      0  0.40230E-06  476659.1  3752754.2  476.3    3.49    4.00
3.25      YES
L0002408      0  0.40230E-06  476659.1  3752745.6  476.0    3.49    4.00
3.25      YES
L0002409      0  0.40230E-06  476659.2  3752737.0  476.0    3.49    4.00
3.25      YES
L0002410      0  0.40230E-06  476659.2  3752728.4  476.0    3.49    4.00
3.25      YES

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^ *** AERMOD - VERSION 19191 ***      *** C:\Lakes\AERMOD View\13661 HRA\13661
HRA.isc      ***      ***      11/12/20
*** AERMET - VERSION 16216 ***      ***
***      ***      19:36:52

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PAGE 15

*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

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INIT.  URBAN  NUMBER EMISSION RATE      BASE  RELEASE  INIT.
SOURCE  SOURCE  EMISSION RATE      X      Y      ELEV.  HEIGHT  SY
SZ      SOURCE  SCALAR VARY      (METERS) (METERS) (METERS) (METERS) (METERS)
ID      CATS.      BY
(METERS)

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L0002411      0  0.40230E-06  476659.3  3752719.8  476.0    3.49    4.00
3.25      YES
L0002412      0  0.40230E-06  476659.3  3752711.2  476.0    3.49    4.00
3.25      YES
L0002413      0  0.40230E-06  476659.4  3752702.7  476.0    3.49    4.00
3.25      YES
L0002414      0  0.40230E-06  476659.4  3752694.1  476.0    3.49    4.00
3.25      YES
L0002415      0  0.40230E-06  476659.5  3752685.5  476.0    3.49    4.00
3.25      YES
L0002416      0  0.40230E-06  476659.5  3752676.9  476.0    3.49    4.00
3.25      YES
L0002417      0  0.40230E-06  476659.6  3752668.3  476.0    3.49    4.00
3.25      YES
L0002418      0  0.40230E-06  476659.6  3752659.7  476.0    3.49    4.00
3.25      YES
L0002419      0  0.40230E-06  476659.6  3752651.1  475.8    3.49    4.00
3.25      YES

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L0002420	0	0.40230E-06	476659.7	3752642.5	475.5	3.49	4.00
3.25 YES							
L0002421	0	0.40230E-06	476659.7	3752633.9	475.2	3.49	4.00
3.25 YES							
L0002422	0	0.40230E-06	476659.8	3752625.3	475.0	3.49	4.00
3.25 YES							
L0002423	0	0.40230E-06	476659.8	3752616.8	475.0	3.49	4.00
3.25 YES							
L0002424	0	0.40230E-06	476659.9	3752608.2	475.0	3.49	4.00
3.25 YES							
L0002425	0	0.40230E-06	476659.9	3752599.6	475.0	3.49	4.00
3.25 YES							
L0002426	0	0.40230E-06	476660.0	3752591.0	475.0	3.49	4.00
3.25 YES							
L0002427	0	0.40230E-06	476660.0	3752582.4	475.0	3.49	4.00
3.25 YES							
L0002428	0	0.40230E-06	476660.1	3752573.8	475.0	3.49	4.00
3.25 YES							
L0002429	0	0.40230E-06	476660.1	3752565.2	475.0	3.49	4.00
3.25 YES							
L0002430	0	0.40230E-06	476660.2	3752556.6	474.7	3.49	4.00
3.25 YES							
L0002431	0	0.40230E-06	476660.2	3752548.0	474.4	3.49	4.00
3.25 YES							
L0002432	0	0.40230E-06	476660.3	3752539.4	474.1	3.49	4.00
3.25 YES							
L0002433	0	0.40230E-06	476660.3	3752530.9	474.0	3.49	4.00
3.25 YES							
L0002434	0	0.40230E-06	476660.4	3752522.3	474.0	3.49	4.00
3.25 YES							
L0002435	0	0.40230E-06	476660.4	3752513.7	474.0	3.49	4.00
3.25 YES							
L0002436	0	0.40230E-06	476660.5	3752505.1	474.0	3.49	4.00
3.25 YES							
L0002437	0	0.40230E-06	476660.5	3752496.5	474.0	3.49	4.00
3.25 YES							
L0002438	0	0.40230E-06	476660.6	3752487.9	474.0	3.49	4.00
3.25 YES							
L0002439	0	0.40230E-06	476660.6	3752479.3	474.0	3.49	4.00
3.25 YES							
L0002440	0	0.40230E-06	476660.7	3752470.7	474.0	3.49	4.00
3.25 YES							
L0002441	0	0.40230E-06	476660.7	3752462.1	474.0	3.49	4.00
3.25 YES							
L0002442	0	0.40230E-06	476660.8	3752453.5	474.0	3.49	4.00
3.25 YES							
L0002443	0	0.40230E-06	476660.8	3752445.0	473.9	3.49	4.00
3.25 YES							
L0002444	0	0.40230E-06	476660.9	3752436.4	473.7	3.49	4.00
3.25 YES							

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 , L0002009 , L0002010 , ,
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 , L0002017 , L0002018 , ,
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 , L0002041 , L0002042 , ,
 L0002048 , L0002043 , L0002044 , L0002045 , L0002046 , L0002047 ,
 , L0002049 , L0002050 , ,
 *** AERMOD - VERSION 19191 *** C:\Lakes\AERMOD View\13661 HRA\13661
 HRA.isc *** 11/12/20
 *** AERMET - VERSION 16216 ***
 *** 19:36:52

PAGE 18

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS

SRCGROUP ID -----	SOURCE IDs -----					
L0002056	L0002051 , L0002057	L0002052 , L0002058	L0002053 ,	L0002054 ,	L0002055 ,	
L0002064	L0002059 , L0002065	L0002060 , L0002066	L0002061 ,	L0002062 ,	L0002063 ,	
L0002072	L0002067 , L0002073	L0002068 , L0002074	L0002069 ,	L0002070 ,	L0002071 ,	
L0002080	L0002075 , L0002081	L0002076 , L0002082	L0002077 ,	L0002078 ,	L0002079 ,	
L0002088	L0002083 , L0002089	L0002084 , L0002090	L0002085 ,	L0002086 ,	L0002087 ,	
L0002096	L0002091 , L0002097	L0002092 , L0002098	L0002093 ,	L0002094 ,	L0002095 ,	
L0002104	L0002099 , L0002105	L0002100 , L0002106	L0002101 ,	L0002102 ,	L0002103 ,	
L0002112	L0002107 , L0002113	L0002108 , L0002114	L0002109 ,	L0002110 ,	L0002111 ,	
L0002120	L0002115 , L0002121	L0002116 , L0002122	L0002117 ,	L0002118 ,	L0002119 ,	
L0002128	L0002123 , L0002129	L0002124 , L0002130	L0002125 ,	L0002126 ,	L0002127 ,	
L0002136	L0002131 , L0002137	L0002132 , L0002138	L0002133 ,	L0002134 ,	L0002135 ,	
L0002144	L0002139 , L0002145	L0002140 , L0002146	L0002141 ,	L0002142 ,	L0002143 ,	
L0002152	L0002147 , L0002153	L0002148 , L0002154	L0002149 ,	L0002150 ,	L0002151 ,	
L0002160	L0002155 , L0002161	L0002156 , L0002162	L0002157 ,	L0002158 ,	L0002159 ,	
	L0002163 ,	L0002164 ,	L0002165 ,	L0002166 ,	L0002167 ,	

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L0002168 , L0002169 , L0002170 ,
      L0002171 , L0002172 , L0002173 , L0002174 , L0002175 ,
L0002176 , L0002177 , L0002178 ,
      L0002179 , L0002180 , L0002181 , L0002182 , L0002183 ,
L0002184 , L0002185 , L0002186 ,
      L0002187 , L0002188 , L0002189 , L0002190 , L0002191 ,
L0002192 , L0002193 , L0002194 ,
      L0002195 , L0002196 , L0002197 , L0002198 , L0002199 ,
L0002200 , L0002201 , L0002202 ,
      L0002203 , L0002204 , L0002205 , L0002206 , L0002207 ,
L0002208 , L0002209 , L0002210 ,
^ *** AERMOD - VERSION 19191 *** *** C:\Lakes\AERMOD View\13661 HRA\13661
HRA.isc *** 11/12/20
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*** 19:36:52

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PAGE 19

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS

```

SRCGROUP ID                SOURCE IDs
-----
L0002216  L0002211 , L0002212 , L0002213 , L0002214 , L0002215 ,
      , L0002217 , L0002218 ,
L0002224  L0002219 , L0002220 , L0002221 , L0002222 , L0002223 ,
      , L0002225 , L0002226 ,
L0002232  L0002227 , L0002228 , L0002229 , L0002230 , L0002231 ,
      , L0002233 , L0002234 ,
L0002240  L0002235 , L0002236 , L0002237 , L0002238 , L0002239 ,
      , L0002241 , L0002242 ,
L0002248  L0002243 , L0002244 , L0002245 , L0002246 , L0002247 ,
      , L0002249 , L0002250 ,
L0002256  L0002251 , L0002252 , L0002253 , L0002254 , L0002255 ,
      , L0002257 , L0002258 ,

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L0002264 L0002259 , L0002260 , L0002261 , L0002262 , L0002263 ,
 , L0002265 , L0002266 ,

 L0002272 L0002267 , L0002268 , L0002269 , L0002270 , L0002271 ,
 , L0002273 , L0002274 ,

 L0002280 L0002275 , L0002276 , L0002277 , L0002278 , L0002279 ,
 , L0002281 , L0002282 ,

 L0002288 L0002283 , L0002284 , L0002285 , L0002286 , L0002287 ,
 , L0002289 , L0002290 ,

 L0002296 L0002291 , L0002292 , L0002293 , L0002294 , L0002295 ,
 , L0002297 , L0002298 ,

 L0002304 L0002299 , L0002300 , L0002301 , L0002302 , L0002303 ,
 , L0002305 , L0002306 ,

 L0002312 L0002307 , L0002308 , L0002309 , L0002310 , L0002311 ,
 , L0002313 , L0002314 ,

 L0002320 L0002315 , L0002316 , L0002317 , L0002318 , L0002319 ,
 , L0002321 , L0002322 ,

 L0002328 L0002323 , L0002324 , L0002325 , L0002326 , L0002327 ,
 , L0002329 , L0002330 ,

 L0002336 L0002331 , L0002332 , L0002333 , L0002334 , L0002335 ,
 , L0002337 , L0002338 ,

 L0002344 L0002339 , L0002340 , L0002341 , L0002342 , L0002343 ,
 , L0002345 , L0002346 ,

 L0002352 L0002347 , L0002348 , L0002349 , L0002350 , L0002351 ,
 , L0002353 , L0002354 ,

 L0002360 L0002355 , L0002356 , L0002357 , L0002358 , L0002359 ,
 , L0002361 , L0002362 ,

 L0002368 L0002363 , L0002364 , L0002365 , L0002366 , L0002367 ,
 , L0002369 , L0002370 ,
 ▲ *** AERMOD - VERSION 19191 *** *** C:\Lakes\AERMOD View\13661 HRA\13661
 HRA.isc *** *** 11/12/20
 *** AERMET - VERSION 16216 *** ***
 *** 19:36:52

 PAGE 20
 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS

SRCGROUP ID	SOURCE IDs					
-----	-----					
L0002376	L0002371	, L0002372	, L0002373	, L0002374	, L0002375	,
	, L0002377	, L0002378	,			
L0002384	L0002379	, L0002380	, L0002381	, L0002382	, L0002383	,
	, L0002385	, L0002386	,			
L0002392	L0002387	, L0002388	, L0002389	, L0002390	, L0002391	,
	, L0002393	, L0002394	,			
L0002400	L0002395	, L0002396	, L0002397	, L0002398	, L0002399	,
	, L0002401	, L0002402	,			
L0002408	L0002403	, L0002404	, L0002405	, L0002406	, L0002407	,
	, L0002409	, L0002410	,			
L0002416	L0002411	, L0002412	, L0002413	, L0002414	, L0002415	,
	, L0002417	, L0002418	,			
L0002424	L0002419	, L0002420	, L0002421	, L0002422	, L0002423	,
	, L0002425	, L0002426	,			
L0002432	L0002427	, L0002428	, L0002429	, L0002430	, L0002431	,
	, L0002433	, L0002434	,			
L0002440	L0002435	, L0002436	, L0002437	, L0002438	, L0002439	,
	, L0002441	, L0002442	,			
L0002448	L0002443	, L0002444	, L0002445	, L0002446	, L0002447	,
	, L0002449	, L0002450	,			
L0002456	L0002451	, L0002452	, L0002453	, L0002454	, L0002455	,
	, L0002457	, L0002458	,			
L0002464	L0002459	, L0002460	, L0002461	, L0002462	, L0002463	,
	, L0002465	, L0002466	,			

L0002467 ,
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Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs					
-----	-----	-----					
L0001895 L0001898	2189641. , L0001896 ,	L0001891 , L0001897	, L0001892 ,	, L0001893	, L0001894	,	
L0001904	, L0001899 , L0001905	, L0001900 , L0001906	, L0001901 ,	, L0001902	, L0001903	,	
L0001912	, L0001907 , L0001913	, L0001908 , L0001914	, L0001909 ,	, L0001910	, L0001911	,	
L0001920	, L0001915 , L0001921	, L0001916 , L0001922	, L0001917 ,	, L0001918	, L0001919	,	
L0001928	, L0001923 , L0001929	, L0001924 , L0001930	, L0001925 ,	, L0001926	, L0001927	,	
L0001936	, L0001931 , L0001937	, L0001932 , L0001938	, L0001933 ,	, L0001934	, L0001935	,	
L0001944	, L0001939 , L0001945	, L0001940 , L0001946	, L0001941 ,	, L0001942	, L0001943	,	
L0001952	, L0001947 , L0001953	, L0001948 , L0001954	, L0001949 ,	, L0001950	, L0001951	,	
L0001960	, L0001955 , L0001961	, L0001956 , L0001962	, L0001957 ,	, L0001958	, L0001959	,	
L0001968	, L0001963 , L0001969	, L0001964 , L0001970	, L0001965 ,	, L0001966	, L0001967	,	
L0001976	, L0001971 , L0001977	, L0001972 , L0001978	, L0001973 ,	, L0001974	, L0001975	,	
L0001984	, L0001979 , L0001985	, L0001980 , L0001986	, L0001981 ,	, L0001982	, L0001983	,	
L0001992	, L0001987 , L0001993	, L0001988 , L0001994	, L0001989 ,	, L0001990	, L0001991	,	

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L0002000      L0001995      , L0001996      , L0001997      , L0001998      , L0001999      ,
, L0002001      , L0002002      ,

L0002008      L0002003      , L0002004      , L0002005      , L0002006      , L0002007      ,
, L0002009      , L0002010      ,

L0002016      L0002011      , L0002012      , L0002013      , L0002014      , L0002015      ,
, L0002017      , L0002018      ,

L0002024      L0002019      , L0002020      , L0002021      , L0002022      , L0002023      ,
, L0002025      , L0002026      ,

L0002032      L0002027      , L0002028      , L0002029      , L0002030      , L0002031      ,
, L0002033      , L0002034      ,

L0002040      L0002035      , L0002036      , L0002037      , L0002038      , L0002039      ,
, L0002041      , L0002042      ,

L0002048      L0002043      , L0002044      , L0002045      , L0002046      , L0002047      ,
, L0002049      , L0002050      ,
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*** 19:36:52

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PAGE 22

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES

```

URBAN ID      URBAN POP      SOURCE IDs
-----      -
L0002056      L0002051      , L0002052      , L0002053      , L0002054      , L0002055      ,
, L0002057      , L0002058      ,

L0002064      L0002059      , L0002060      , L0002061      , L0002062      , L0002063      ,
, L0002065      , L0002066      ,

L0002072      L0002067      , L0002068      , L0002069      , L0002070      , L0002071      ,
, L0002073      , L0002074      ,

L0002080      L0002075      , L0002076      , L0002077      , L0002078      , L0002079      ,
, L0002081      , L0002082      ,

L0002088      L0002083      , L0002084      , L0002085      , L0002086      , L0002087      ,
, L0002089      , L0002090      ,

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L0002096 L0002091 , L0002092 , L0002093 , L0002094 , L0002095 ,
 , L0002097 , L0002098 ,

 L0002104 L0002099 , L0002100 , L0002101 , L0002102 , L0002103 ,
 , L0002105 , L0002106 ,

 L0002112 L0002107 , L0002108 , L0002109 , L0002110 , L0002111 ,
 , L0002113 , L0002114 ,

 L0002120 L0002115 , L0002116 , L0002117 , L0002118 , L0002119 ,
 , L0002121 , L0002122 ,

 L0002128 L0002123 , L0002124 , L0002125 , L0002126 , L0002127 ,
 , L0002129 , L0002130 ,

 L0002136 L0002131 , L0002132 , L0002133 , L0002134 , L0002135 ,
 , L0002137 , L0002138 ,

 L0002144 L0002139 , L0002140 , L0002141 , L0002142 , L0002143 ,
 , L0002145 , L0002146 ,

 L0002152 L0002147 , L0002148 , L0002149 , L0002150 , L0002151 ,
 , L0002153 , L0002154 ,

 L0002160 L0002155 , L0002156 , L0002157 , L0002158 , L0002159 ,
 , L0002161 , L0002162 ,

 L0002168 L0002163 , L0002164 , L0002165 , L0002166 , L0002167 ,
 , L0002169 , L0002170 ,

 L0002176 L0002171 , L0002172 , L0002173 , L0002174 , L0002175 ,
 , L0002177 , L0002178 ,

 L0002184 L0002179 , L0002180 , L0002181 , L0002182 , L0002183 ,
 , L0002185 , L0002186 ,

 L0002192 L0002187 , L0002188 , L0002189 , L0002190 , L0002191 ,
 , L0002193 , L0002194 ,

 L0002200 L0002195 , L0002196 , L0002197 , L0002198 , L0002199 ,
 , L0002201 , L0002202 ,

 L0002208 L0002203 , L0002204 , L0002205 , L0002206 , L0002207 ,
 , L0002209 , L0002210 ,
 ▲ *** AERMOD - VERSION 19191 *** *** C:\Lakes\AERMOD View\13661 HRA\13661
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 *** AERMET - VERSION 16216 *** ***
 *** 19:36:52

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs				
-----	-----	-----				
L0002216	L0002211 , L0002217	L0002212 , L0002218	L0002213 ,	L0002214 ,	L0002215 ,	
L0002224	L0002219 , L0002225	L0002220 , L0002226	L0002221 ,	L0002222 ,	L0002223 ,	
L0002232	L0002227 , L0002233	L0002228 , L0002234	L0002229 ,	L0002230 ,	L0002231 ,	
L0002240	L0002235 , L0002241	L0002236 , L0002242	L0002237 ,	L0002238 ,	L0002239 ,	
L0002248	L0002243 , L0002249	L0002244 , L0002250	L0002245 ,	L0002246 ,	L0002247 ,	
L0002256	L0002251 , L0002257	L0002252 , L0002258	L0002253 ,	L0002254 ,	L0002255 ,	
L0002264	L0002259 , L0002265	L0002260 , L0002266	L0002261 ,	L0002262 ,	L0002263 ,	
L0002272	L0002267 , L0002273	L0002268 , L0002274	L0002269 ,	L0002270 ,	L0002271 ,	
L0002280	L0002275 , L0002281	L0002276 , L0002282	L0002277 ,	L0002278 ,	L0002279 ,	
L0002288	L0002283 , L0002289	L0002284 , L0002290	L0002285 ,	L0002286 ,	L0002287 ,	
L0002296	L0002291 , L0002297	L0002292 , L0002298	L0002293 ,	L0002294 ,	L0002295 ,	
L0002304	L0002299 , L0002305	L0002300 , L0002306	L0002301 ,	L0002302 ,	L0002303 ,	
L0002312	L0002307 , L0002313	L0002308 , L0002314	L0002309 ,	L0002310 ,	L0002311 ,	

Name: UNKNOWN

Name: UNKNOWN

Year: 2010

Year: 2010

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN
ALBEDO	REF	WS	WD	HT	REF	TA	HT							
10	01	01	1	01	-7.9	0.125	-9.000	-9.000	-999.	106.	21.2	0.19	0.61	
1.00	1.30	335.		9.1	282.5	5.5								
10	01	01	1	02	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	
1.00	0.90	142.		9.1	280.9	5.5								
10	01	01	1	03	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	
1.00	0.90	324.		9.1	280.4	5.5								
10	01	01	1	04	-1.3	0.064	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	
1.00	0.40	294.		9.1	278.8	5.5								
10	01	01	1	05	-3.9	0.088	-9.000	-9.000	-999.	62.	15.0	0.19	0.61	
1.00	0.90	205.		9.1	278.1	5.5								
10	01	01	1	06	-1.3	0.065	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	
1.00	0.40	3.		9.1	277.0	5.5								
10	01	01	1	07	-8.0	0.125	-9.000	-9.000	-999.	106.	21.0	0.19	0.61	
1.00	1.30	99.		9.1	277.0	5.5								
10	01	01	1	08	-3.3	0.086	-9.000	-9.000	-999.	61.	16.8	0.19	0.61	
0.54	0.90	319.		9.1	278.8	5.5								
10	01	01	1	09	20.1	0.128	0.307	0.010	49.	110.	-9.0	0.19	0.61	
0.33	0.90	239.		9.1	284.2	5.5								
10	01	01	1	10	56.7	0.087	0.560	0.010	107.	62.	-1.0	0.19	0.61	
0.26	0.40	188.		9.1	289.2	5.5								
10	01	01	1	11	81.5	0.323	0.867	0.008	277.	441.	-35.9	0.19	0.61	
0.23	2.70	310.		9.1	290.9	5.5								
10	01	01	1	12	97.1	0.281	1.058	0.008	421.	357.	-19.7	0.19	0.61	
0.22	2.20	357.		9.1	293.1	5.5								
10	01	01	1	13	92.2	0.279	1.117	0.008	523.	354.	-20.4	0.19	0.61	
0.22	2.20	356.		9.1	293.8	5.5								
10	01	01	1	14	77.6	0.275	1.102	0.008	595.	347.	-23.2	0.19	0.61	
0.23	2.20	50.		9.1	294.2	5.5								
10	01	01	1	15	54.9	0.230	1.006	0.008	640.	266.	-19.2	0.19	0.61	
0.27	1.80	53.		9.1	293.8	5.5								
10	01	01	1	16	12.3	0.206	0.613	0.008	648.	225.	-61.5	0.19	0.61	
0.36	1.80	11.		9.1	292.5	5.5								
10	01	01	1	17	-3.6	0.087	-9.000	-9.000	-999.	71.	15.6	0.19	0.61	
0.64	0.90	351.		9.1	290.4	5.5								
10	01	01	1	18	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61	
1.00	0.90	186.		9.1	287.5	5.5								
10	01	01	1	19	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61	
1.00	0.90	275.		9.1	285.9	5.5								
10	01	01	1	20	-1.2	0.064	-9.000	-9.000	-999.	39.	18.1	0.19	0.61	
1.00	0.40	181.		9.1	285.4	5.5								
10	01	01	1	21	-7.8	0.125	-9.000	-9.000	-999.	106.	21.3	0.19	0.61	

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

```

1.00  1.30  318.  9.1  284.9  5.5
  10 01 01  1 22  -3.8  0.088 -9.000 -9.000 -999.  62.  15.1  0.19  0.61
1.00  0.90  196.  9.1  283.1  5.5
  10 01 01  1 23  -3.8  0.088 -9.000 -9.000 -999.  62.  15.1  0.19  0.61
1.00  0.90  330.  9.1  281.4  5.5
  10 01 01  1 24  -7.9  0.125 -9.000 -9.000 -999. 106.  21.2  0.19  0.61
1.00  1.30  332.  9.1  280.9  5.5

```

First hour of profile data

```

YR MO DY HR HEIGHT F WDIR WSPD AMB_TMP sigmaA sigmaW sigmaV
10 01 01 01 5.5 0 -999. -99.00 282.6 99.0 -99.00 -99.00
10 01 01 01 9.1 1 335. 1.30 -999.0 99.0 -99.00 -99.00

```

F indicates top of profile (=1) or below (=0)

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PAGE 28

*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

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*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5
YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0001891 , L0001892
, L0001893 , L0001894 , L0001895 ,
, L0001896 , L0001897 , L0001898 , L0001899 , L0001900
, L0001901 , L0001902 , L0001903 ,
, L0001904 , L0001905 , L0001906 , L0001907 , L0001908
, L0001909 , L0001910 , L0001911 ,
, L0001912 , L0001913 , L0001914 , L0001915 , L0001916
, L0001917 , L0001918 , . . . ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF OTHER IN MICROGRAMS/M**3

**

```

X-COORD (M) Y-COORD (M) CONC X-COORD (M)
Y-COORD (M) CONC
-----
476280.36 3753038.93 0.00793 476774.46
3752924.97 0.00246
475830.74 3752777.31 0.00280 475836.57
3753080.71 0.00324
476121.66 3753059.02 0.00638

```

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HRA.isc *** 11/12/20
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PAGE 29

*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS

AVERAGED OVER 5 YEARS ***

** CONC OF OTHER IN MICROGRAMS/M**3

**

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR,
ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID	
ALL	1ST HIGHEST VALUE IS	0.00793 AT (	476280.36, 3753038.93,
479.00,	479.00, 0.00) DC		
	2ND HIGHEST VALUE IS	0.00638 AT (	476121.66, 3753059.02,
479.00,	479.00, 0.00) DC		
	3RD HIGHEST VALUE IS	0.00324 AT (	475836.57, 3753080.71,
478.00,	478.00, 0.00) DC		
	4TH HIGHEST VALUE IS	0.00280 AT (	475830.74, 3752777.31,
476.01,	476.01, 0.00) DC		
	5TH HIGHEST VALUE IS	0.00246 AT (	476774.46, 3752924.97,
478.00,	478.00, 0.00) DC		
0.00,	0.00, 0.00) IS	0.00000 AT (	0.00, 0.00,
	7TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00) IS		
	8TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00) IS		
	9TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00) IS		
	10TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00) IS		

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** AERMOD - VERSION 19191 *** C:\Lakes\AERMOD View\13661 HRA\13661
HRA.isc *** 11/12/20

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

*** AERMET - VERSION 16216 ***
*** 19:36:52

PAGE 30

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 4 Warning Message(s)
A Total of 2028 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 978 Calm Hours Identified

A Total of 1050 Missing Hours Identified (2.40 Percent)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****

ME W186 1385 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
0.50
ME W187 1385 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

MX W450 17521 CHKDAT: Record Out of Sequence in Meteorological File at:
14010101
MX W450 17521 CHKDAT: Record Out of Sequence in Meteorological File at:
2 year gap

*** AERMOD Finishes Successfully ***

**AVERAGE EMISSION FACTOR
RIVERSIDE COUNTY 2022**

Speed	LHD1	MHD	HHD
0	0.389075	0.130109	0.01485
5	0.037927	0.062152	0.04296
25	0.013603	0.0316	0.01812

Speed	Weighted Average Emissions
0	0.12462
5	0.04500
25	0.01931

Emission Rates - 2022 Emission Factors

Truck Emission Rates						
Source	Trucks Per Day	VMT ^a (miles/day)	Truck Emission Rate ^b (grams/mile)	Truck Emission Rate ^b (grams/idle-hour)	Daily Truck Emissions ^c (grams/day)	Modeled Emission Rates (g/second)
On-Site Idling Building 1	83			0.1246	13.06	1.511E-04
On-Site Idling Building 2	29			0.1246	4.29	4.967E-05
On-Site Travel Building 1	166	69.63	0.0450		6.65	7.694E-05
On-Site Travel Building 2	58	9.04	0.0450		0.83	9.593E-06
Off-Site Travel 90% Inbound Dwy 1	202	127.44	0.0193		3.72	4.309E-05
Off-Site Travel 10% Inbound Dwy 3	22	17.84	0.0193		0.52	6.033E-06
Off-Site Travel 10% Outbound Dwy 1	22	6.86	0.0193		0.20	2.321E-06
Off-Site Travel 90% Outbound Dwy 3	202	28.05	0.0193		0.82	9.484E-06
Off-Site Travel 100% Outbound on Graham St.	224	113.03	0.0193		3.30	3.822E-05

^a Vehicle miles traveled are for modeled truck route only.

^b Emission rates determined using EMFAC 2017. Idle emission rates are expressed in grams per idle hour rather than grams per mile.

^c This column includes the total truck travel and truck idle emissions. For idle emissions this column includes emissions based on the assumption that each truck idles for 15 minutes. Additionally, this column includes idling from TRUs accessing the Project, it is assumed that TRUs would idle for up to 30 minutes.

calendar_y	season_m	sub_area	vehicle_class	fuel	temperatu	relative_ht	process	speed_tim	pollutant	emission_rate
2022	Annual	Riverside (	HHDT	Dsl	60	70	RUNEX	5	PM10	0.043461
2022	Annual	Riverside (	HHDT	Dsl	60	70	RUNEX	25	PM10	0.018326
2022	Annual	Riverside (	LHDT1	Dsl	60	70	RUNEX	5	PM10	0.076718
2022	Annual	Riverside (	LHDT1	Dsl	60	70	RUNEX	25	PM10	0.027515
2022	Annual	Riverside (	MHDT	Dsl	60	70	RUNEX	5	PM10	0.070223
2022	Annual	Riverside (	MHDT	Dsl	60	70	RUNEX	25	PM10	0.035704
2022	Annual	Riverside (	HHDT	Dsl			IDLEX		PM10	0.015028
2022	Annual	Riverside (	LHDT1	Dsl			IDLEX		PM10	0.78701
2022	Annual	Riverside (	MHDT	Dsl			IDLEX		PM10	0.147006

Idling / TRU Unmitigated

Emission Factor:	
TRU EF	0.12 g/bhp-hr
TRU HP	23 HP
TRU Load Factor	0.46
TRU EF @23 HP and 0.53 LF	1.2696 g/idle-hr
Emission Factor:	
TRU EF	0.01 g/bhp-hr
TRU HP	34 HP
TRU Load Factor	0.53
TRU EF @34 HP and 0.53 LF	0.1802 g/idle-hr
Emission Factor:	
Weighted Avg TRU EF (60% 25+ HP, 40% <25 HP)	0.61596 g/idle-hr

Source: EMFAC2017 (v1.0.3) Emissions Inventory

Region Type: County

Region: Riverside

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/year for VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	Calendar Y	Vehicle Ca	Model Yea	Speed	Fuel	Population
Riverside	2022	HHDT	Aggregate	Aggregate	Gasoline	7.255052
Riverside	2022	HHDT	Aggregate	Aggregate	Diesel	27819.82
Riverside	2022	HHDT	Aggregate	Aggregate	Natural Ga	316.9854
Riverside	2022	LHDT1	Aggregate	Aggregate	Gasoline	20620.88
Riverside	2022	LHDT1	Aggregate	Aggregate	Diesel	20161.77
Riverside	2022	MHDT	Aggregate	Aggregate	Gasoline	2027.159
Riverside	2022	MHDT	Aggregate	Aggregate	Diesel	15610.04

HHDT% GAS/NG	0.011521
HHDT% DSL	0.988479
LHDT1% GAS	0.505629
LHDT1% DSL	0.494371
MHDT% GAS	0.114937
MHDT% DSL	0.885063

APPENDIX 2.2:
RISK CALCULATIONS

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Table 1
 Quantification of Carcinogenic Risks and Noncarcinogenic Hazards
 -0.25 to 0 Age Bin Exposure Scenario

Source (a)	Mass GLC		Weight Fraction (d)	Contaminant (e)	Carcinogenic Risk				Noncarcinogenic Hazards/ Toxicological Endpoints**									
	(ug/m ³) (b)	(mg/m ³) (c)			URF (ug/m ³) ⁻¹ (f)	CPF (mg/kg/day) ⁻¹ (g)	DOSE (mg/kg-day) (h)	RISK (i)	REL (ug/m ³) (j)	RfD (mg/kg/day) (k)	RESP (l)	CNS/PNS (m)	CV/BL (n)	IMMUN (o)	KIDN (p)	GI/LV (q)	REPRO (r)	EYES (s)
		0.00793			7.93E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	2.7E-06	8.7E-08	5.0E+00	1.4E-03	1.6E-03				
TOTAL								8.7E-08			1.6E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

** Key to Toxicological Endpoints

- RESP Respiratory System
- CNS/PNS Central/Peripheral Nervous System
- CV/BL Cardiovascular/Blood System
- IMMUN Immune System
- KIDN Kidney
- GI/LV Gastrointestinal System/Liver
- REPRO Reproductive System (e.g. teratogenic and developmental effects)
- EYES Eye irritation and/or other effects

Note: Exposure factors used to calculate contaminant intake

- exposure frequency (days/year) 350
- exposure duration (years) 0.25
- inhalation rate (L/kg-day) 361
- inhalation absorption factor 1
- averaging time (years) 70
- fraction of time at home 0.85
- age sensitivity factor (age third trimester) 10

Attachment: Appendix A2-Mobile Source Health Risk Assessment (4465 : PEN20-0118-0119, PEN20-0122

Table 2
 Quantification of Carcinogenic Risks and Noncarcinogenic Hazards
 0-2 Age Bin Exposure Scenario

Source (a)	Mass GLC		Weight Fraction (d)	Contaminant (e)	Carcinogenic Risk				Noncarcinogenic Hazards/ Toxicological Endpoints**									
	(ug/m ³) (b)	(mg/m ³) (c)			URF (ug/m ³) ⁻¹ (f)	CPF (mg/kg/day) ⁻¹ (g)	DOSE (mg/kg-day) (h)	RISK (i)	REL (ug/m ³) (j)	RfD (mg/kg/day) (k)	RESP (l)	CNS/PNS (m)	CV/BL (n)	IMMUN (o)	KIDN (p)	GI/LV (q)	REPRO (r)	EYES (s)
		0.00793			7.93E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	8.3E-06	2.1E-06	5.0E+00	1.4E-03	1.6E-03				
TOTAL								2.1E-06			1.6E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

** Key to Toxicological Endpoints

- RESP Respiratory System
- CNS/PNS Central/Peripheral Nervous System
- CV/BL Cardiovascular/Blood System
- IMMUN Immune System
- KIDN Kidney
- GI/LV Gastrointestinal System/Liver
- REPRO Reproductive System (e.g. teratogenic and developmental effects)
- EYES Eye irritation and/or other effects

Note: Exposure factors used to calculate contaminant intake

exposure frequency (days/year)	350
exposure duration (years)	2
inhalation rate (L/kg-day)	1090
inhalation absorption factor	1
averaging time (years)	70
fraction of time at home	0.85
age sensitivity factor (0 to 2 years old)	10

Table 3
 Quantification of Carcinogenic Risks and Noncarcinogenic Hazards
 2-16 Age Bin Exposure Scenario

Source (a)	Mass GLC		Weight Fraction (d)	Contaminant (e)	Carcinogenic Risk				Noncarcinogenic Hazards/ Toxicological Endpoints**									
	(ug/m ³) (b)	(mg/m ³) (c)			URF (ug/m ³) ⁻¹ (f)	CPF (mg/kg/day) ⁻¹ (g)	DOSE (mg/kg-day) (h)	RISK (i)	REL (ug/m ³) (j)	RfD (mg/kg/day) (k)	RESP (l)	CNS/PNS (m)	CV/BL (n)	IMMUN (o)	KIDN (p)	GI/LV (q)	REPRO (r)	EYES (s)
		0.00793			7.93E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	4.3E-06	2.0E-06	5.0E+00	1.4E-03	1.6E-03				
TOTAL								2.0E-06			1.6E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

** Key to Toxicological Endpoints

- RESP Respiratory System
- CNS/PNS Central/Peripheral Nervous System
- CV/BL Cardiovascular/Blood System
- IMMUN Immune System
- KIDN Kidney
- GI/LV Gastrointestinal System/Liver
- REPRO Reproductive System (e.g. teratogenic and developmental effects)
- EYES Eye irritation and/or other effects

Note: Exposure factors used to calculate contaminant intake

exposure frequency (days/year)	350
exposure duration (years)	14
inhalation rate (L/kg-day)	572
inhalation absorption factor	1
averaging time (years)	70
fraction of time at home	0.72
age sensitivity factor (ages 2 to 16 years)	3

Table 5
Quantification of Carcinogenic Risks and Noncarcinogenic Risks
25-Year Worker Exposure Scenario

	Source (a)	Mass GLC		Weight Fraction (d)	Contaminant (e)	Carcinogenic Risk				Noncarcinogenic Hazards/ Toxicological Endpoints**										
		(ug/m ³) (b)	(mg/m ³) (c)			URF (ug/m ³) ⁻¹ (f)	CPF (mg/kg/day) ⁻¹ (g)	DOSE (mg/kg-day) (h)	RISK (i)	REL (ug/m ³) (j)	RfD (mg/kg/day) (k)	RESP (l)	CNS/PNS (m)	CV/BL (n)	IMMUN (o)	KIDN (p)	GI/LV (q)	REPRO (r)	EYES (s)	
		1	Diesel Particulates			2.80E-03	2.80E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	4.4E-07	1.7E-07	5.0E+00	1.4E-03	5.6E-04				
TOTAL									1.8E-07 0.18		6.0E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	

** Key to Toxicological Endpoints

Note: Exposure factors used to calculate contaminant intake

RESP	Respiratory System	exposure frequency (days/year)	250
CNS/PNS	Central/Peripheral Nervous System	exposure duration (years)	25
CV/BL	Cardiovascular/Blood System	inhalation rate (L/kg-day)	230
IMMUN	Immune System	inhalation absorption factor	1
KIDN	Kidney	averaging time (years)	70
GI/LV	Gastrointestinal System/Liver		
REPRO	Reproductive System (e.g. teratogenic and developmental effects)		
EYES	Eye irritation and/or other effects		

Table 6
Quantification of Carcinogenic Risks and Noncarcinogenic Risks
9-Year School Child Exposure Scenario

	Source (a)	Mass GLC		Weight Fraction (d)	Contaminant (e)	Carcinogenic Risk				Noncarcinogenic Hazards/ Toxicological Endpoints**										
		(ug/m ³) (b)	(mg/m ³) (c)			URF (ug/m ³) ⁻¹ (f)	CPF (mg/kg/day) ⁻¹ (g)	DOSE (mg/kg-day) (h)	RISK (i)	REL (ug/m ³) (j)	RfD (mg/kg/day) (k)	RESP (l)	CNS/PNS (m)	CV/BL (n)	IMMUN (o)	KIDN (p)	GI/LV (q)	REPRO (r)	EYES (s)	
		1	Diesel Particulates			4.60E-04	4.60E-07	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	1.3E-07	5.3E-08	5.0E+00	1.4E-03	9.2E-05				
TOTAL										7.3E-08 0.07		1.3E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

** Key to Toxicological Endpoints

Note: Exposure factors used to calculate contaminant intake

RESP	Respiratory System	exposure frequency (days/year)	180
CNS/PNS	Central/Peripheral Nervous System	exposure duration (years)	9
CV/BL	Cardiovascular/Blood System	inhalation rate (L/kg-day)	572
IMMUN	Immune System	inhalation absorption factor	1
KIDN	Kidney	averaging time (years)	70
GI/LV	Gastrointestinal System/Liver	age sensitivity factor (ages 4-13)	3
REPRO	Reproductive System (e.g. teratogenic and developmental effects)		
EYES	Eye irritation and/or other effects		

MSHCP General Biological Resources Assessment & Compliance Analysis

Alessandro Project Site

City of Moreno Valley, Riverside County, California



Prepared for:

Compass Danbe Real Estate Partners
523 Main St
El Segundo, CA 90245

Prepared by:

MIG
1650 Spruce Street, Suite 102
Riverside, California 92507



October 2020

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Table of Contents

TABLE OF CONTENTS	1
1.0 INTRODUCTION.....	1
1.1 Project Location	1
2.0 REGULATORY SETTING.....	1
2.1 Federal	1
2.1.1 Federal Endangered Species Act	1
2.1.2 The Migratory Bird Treaty Act.....	2
2.1.3 Bald and Golden Eagle Protection Act.....	2
2.1.4 Wetlands and Waters of the US.....	2
2.1.5 Executive Order 11990 for Protection of Wetlands	4
2.2 State.....	4
2.2.1 California Endangered Species Act	4
2.2.2 Native Plant Protection Act	5
2.2.3 California Environmental Quality Act	5
2.2.4 Fully Protected Species and Species of Special Concern	5
2.2.5 California Fish and Game Code Sections 3503 and 3513	6
2.2.6 Other Special-Status Plants – California Native Plant Society.....	6
2.2.7 National Pollutant Discharge Elimination System	6
2.2.8 Sensitive Natural Communities.....	7
2.2.9 Waters of the State	7
2.3 Local.....	8
2.3.1 Western Riverside County MSHCP	8
3.0 METHODS.....	9
3.1 Literature Review.....	9
3.2 Field Surveys.....	10
3.2.1 Vegetation Communities.....	10
3.2.2 Special-Status Species Habitat Assessment	10
3.2.3 Focused Special-Status Plant Assessment	11
3.2.4 Focused Special-Status Wildlife Surveys	11
3.2.6 Jurisdictional Wetlands and Waters Assessment	12
3.2.7 MSHCP Section 6.1.2 Riparian, Riverine, & Vernal Pool Resources Assessment	12
4.0 EXISTING CONDITIONS.....	13
4.1 Physical Characteristics.....	13
4.2 Soils.....	13
4.3 Vegetation Communities.....	13
4.4 Wildlife	14
4.5 Sensitive Natural Communities.....	15
4.6 Special-Status Plants.....	15
4.7 Special-Status Animals.....	15
4.8 Jurisdictional Wetlands and Waters Assessment	16
4.9 MSHCP Riparian/Riverine Resources and Vernal Pool Analysis.....	16
4.10 Wildlife Movement Corridors.....	17
5.0 MSHCP & CEQA COMPLIANCE ANALYSIS	17
5.1 Mitigation Measures and Conditions of Approval.....	19

6.0 REFERENCES..... 21
List of Figures

Figure 1	Regional Location Map
Figure 2	Project Site Map
Figure 3	Soils Association Map
Figure 4	Vegetation Communities Map
Figure 5 (a-b)	Current Project Site Photographs
Figure 6	MSHCP Section 6.1.2 Resources Map
Figure 7	Project Site Impact Map

List of Tables

Table 1	Summary of Survey Dates and Personnel
Table 2	Project Site Plant Communities and Land Cover Types

List of Appendices

Appendix A	Burrowing Owl Survey Report for the Alessandro Project Site
Appendix B	Least Bell's Vireo Survey Results for the Alessandro Project Site

List of Abbreviated Terms

APN	Assessor Parcel Number
AWRS	Arid West Regional Supplement
BMP	Best Management Practice
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Ranking
CSC	California Species of Special Concern
CWA	Clean Water Act
DBESP	Determination of Biologically Equivalent or Superior Preservation
EPA	Environmental Protection Agency
FE	Federally Endangered
FT	Federally Threatened
FESA	Federal Endangered Species Act
GPS	Global Positioning System
HANS	Habitat Acquisition and Negotiation Strategy
HCP	Habitat Conservation Plan
JPR	Joint Project Review
MBTA	Migratory Bird Treaty Act
MSHCP	Western Riverside Multiple Species Habitat Conservation Plan
MOU	Memorandum of Understanding
NPDES	National Pollutant Discharge Elimination System
NOAA	National Oceanic and Atmospheric Administrations
NMFS	National Marine Fisheries Service
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
OHWM	Ordinary High Water Mark
RCA	Regional Conservation Authority
RCIP	Riverside County Integrated Project
RWQCB	Regional Water Quality Control Board
SE	State Endangered
ST	State Threatened
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TNW	Traditionally Navigable Water
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 INTRODUCTION

This report presents the results of MIG's Biological Resources Assessment and Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Compliance Analysis of the 17.66-acre (2.65-acre offsite) Alessandro Project Site (Project Site). The purpose of this report is to verify the type, location, and extent of potential sensitive biological resources on and around the Project Site based on an initial habitat evaluation by MIG biologists on May 21st, 2020 and additional field surveys conducted during spring/summer 2020. These surveys include a jurisdictional wetlands delineation and MSHCP riparian/riverine analysis (July 2020), burrowing owl (*Athene cunicularia*) surveys (May-July 2020), and protocol-level surveys for least Bell's vireo (*Vireo bellii pusillus*) (May-July 2020). Based on information gathered from the field surveys listed above, this draft report provides a description of the biological setting of the Project Site, as well as a description of vegetation communities, wildlife, potential movement/migration corridors, special-status plant and animal species, sensitive natural communities including riparian/riverine resources, potentially jurisdictional waters and wetlands, and assessment of the project impacts and recommended mitigation measures/conditions of approval to ensure compliance with all California Environmental Quality Act (CEQA) and MSHCP conservation goals and guidelines.

1.1 Project Location

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley (City), Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5' series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.0 REGULATORY SETTING

The following discussion identifies federal, state, and local environmental regulations that serve to protect sensitive biological resources relevant to the proposed Project Site, as well as the MSHCP and CEQA review process.

2.1 Federal

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under FESA. FESA has the following four major components: (1) provisions for listing species, (2) requirements for consultation with the United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA NMFS), (3) prohibitions against "taking" (meaning harassing, harming, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct) of listed species, and (4) provisions for permits that allow incidental "take". The FESA also discusses recovery plans and the designation of critical habitat for listed species. Section 7 requires federal

agencies, in consultation with, and with the assistance of the USFWS or NOAA NMFS, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. Both the USFWS and NOAA NMFS share the responsibility for administration of FESA.

For purposes of this assessment, the following acronyms are used for federally-listed species: federally endangered (FE) and federally threatened (FT).

The MSHCP serves as a Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the FESA of 1973, allowing participating jurisdictions to authorize "take" of plant and wildlife species. The MSHCP has been issued under this Section and provides incidental "take" for all covered species.

2.1.2 The Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (MBTA) (16 USC. 703 et seq.), Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." With a few exceptions, most birds are considered migratory under the MBTA. Disturbances that cause nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the MBTA.

2.1.3 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act that was first passed in 1940 regulates take, possession, sale, purchase, barter, transport, import and export of any bald or golden eagle or their parts (e.g., nests, eggs, young) unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). Take was broadly defined to include shoot, wound, kill, capture, collect, molest, or disturb. In the 1972 amendments, penalties for violations were raised to a maximum of fine \$250,000 for an individual or a maximum of two years in prison for a felony conviction, with a doubling for organizations instead of individuals.

2.1.4 Wetlands and Waters of the US

Section 404 of the Clean Water Act

The objective of the Clean Water Act (CWA) is to maintain and restore the chemical, physical, and biological integrity of the waters of the US (33 CFR Part 328 Section 328.4). "Waters of the US" is the encompassing term for areas that qualify for federal regulation under Section 404 of the CWA. Section 404 of the CWA gives the US Environmental Protection Agency (EPA) and the US Army Corps of Engineers (USACE) regulatory and permitting authority regarding discharge of dredged or fill material into "navigable waters of the US." Section 502(7) of the CWA defines navigable waters as "waters of the US, including territorial seas." Section 328 of Chapter 33 in the CFR defines the term "waters of the US" as it applies to the jurisdictional limits of the authority of the USACE under the CWA. A summary of this definition of "waters of the US" in 33 CFR 328.3 includes: (1) waters used for commerce and subject to tides; (2) interstate waters and wetlands; (3) "other waters" such as intrastate lakes, rivers, streams, and wetlands; (4) impoundments of waters; (5) tributaries of waters; (6) territorial seas; and (7) wetlands adjacent to waters. Therefore, for purposes of determining USACE jurisdiction under the CWA, "navigable waters" as defined in the CWA are the same as

“waters of the US” defined in the CFR above. Waters of the US include non-isolated “wetlands” and “other waters of the US”

The term “wetlands” (a subset of “waters of the US”) is defined at 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.” The USACE developed field methods for identifying the location and extent of jurisdictional wetlands (a subset of waters of the US) using the USACE Wetland Delineation Manual (Environmental Laboratory 1987) Arid West Regional Supplement (AWRS) (USACE 2008a). This supplement was intended to address specific wetland issues within the arid west and supersedes much of the 1987 Wetland Delineation Manual in arid regions.

In the absence of wetlands, other waters of the US refer to unvegetated waterways and other water bodies with a defined bed and bank, such as drainages, creeks, rivers, and lakes. This approximately translates to the bank-to-bank portion of water bodies, up to the ordinary high water mark (OHWM). The limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(c)(6) as: “...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.”

The OHWM in the Arid West Region is consistent with the physical and biological signature established and maintained at the boundaries of the active channel. Delineation of the active channel signature, and thus the OHWM, is based largely on identification of three primary physical or biological indicators—topographic break in slope, change in sediment characteristics, and change in vegetation characteristics. A break in slope refers to a localized and distinct change in the lateral topographic gradient (i.e., perpendicular to the principal direction of flow) within a stream system. Changes in sediment characteristics include any transition in the physical, chemical, or biological qualities of the sediments within and adjacent to a stream channel. For the purposes of OHWM identification, changes in vegetation characteristics include any lateral transition (i.e., perpendicular to the principal direction of flow) in the abundance, growth stage, or plant cover and composition within and adjacent to a stream channel. Supporting features including drift/wrack (i.e., debris deposits), signs of erosion/scour, bank undercutting, root exposure, point bars (meanders), silt deposits, and shelving (“benches” and breaks in slope along the active channel), were also used to help determine the location of the OHWM.

Isolated Areas Excluded from Section 404 Jurisdiction

In addition to areas that may be exempt from Section 404 jurisdiction, some isolated wetlands and waters may also be considered outside of USACE jurisdiction as a result of the Supreme Court’s decision in *Solid Waste Agency of Northern Cook County (SWANCC) v. USACE* (531 US 159 [2001]). Isolated wetlands and waters are those areas that do not have a surface or groundwater connection to and are not adjacent to a navigable waters of the US, and do not otherwise exhibit an interstate commerce connection.

Rapanos v. United States and Carabell v. United States

On June 5, 2007, the USACE and the EPA issued joint guidance on implementing the June 19, 2006 US Supreme Court opinions resulting from *Rapanos v. United States* and *Carabell v. United States* (Rapanos) cases. The agencies received 66,047 public comments on the Rapanos Guidance (65,765 form letters, 282 non-form letters), from states, environmental and conservation organizations, regulated entities, industry associations, and the general public. EPA and the USACE jointly reviewed the comments and released a

revised version of the guidance on December 2, 2008 (USACE 2008b). The revised guidance states that the agencies will assert jurisdiction over:

- Non-navigable tributaries that are not relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally (i.e., typically three months)
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow)
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of downstream traditional navigable waters (TNW)
- Significant nexus includes consideration of hydrologic and ecologic factors

2.1.5 Executive Order 11990 for Protection of Wetlands

Executive Order 11990 for the Protection of Wetlands (May 24, 1977) establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. On federally funded projects, impacts on wetlands must be identified in the environmental document. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm must be included. This must be documented in a specific "Wetlands Only Practicable Alternative Finding" in the final environmental document. An additional requirement is to provide early public involvement in projects affecting wetlands.

2.2 State

2.2.1 California Endangered Species Act

The State of California enacted similar laws to FESA including the California Native Plant Protection Act (NPPA) in 1977 and the California Endangered Species Act (CESA) in 1984. CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the California Fish and Game Code. To align with FESA, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the CESA as threatened species, but did not do so for rare plants. Thus, these laws provide the legal framework for protection of California-listed rare, threatened, and endangered plant and animal species. The California Department of Fish and Wildlife (CDFW) implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the California Natural Diversity Database (CNDDDB), a computerized inventory of information on the general location and status of California's rarest plants, animals, and natural communities. During the CEQA review process, the CDFW is given the opportunity to comment on the potential of the proposed project to affect listed plants and animals.



For purposes of this assessment, the following acronyms are used for state-listed species: state endangered (SE) and state threatened (ST).

2.2.2 Native Plant Protection Act

The NPPA of 1977 (California Fish and Game Code, §§ 1900 through 1913) directed CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by the CDFW, which has the authority to designate native plants as endangered or rare and to protect them from "take."

2.2.3 California Environmental Quality Act

The CEQA was enacted in 1970 to provide for full disclosure of environmental impacts to the public before issuance of a permit by state and local public agencies. CEQA (Public Resources Code Sections 21000 et. seq.) requires public agencies to review activities which may affect the quality of the environment so that consideration is given to preventing damage to the environment. When a lead agency issues a permit for development that could affect the environment, it must disclose the potential environmental effects of the project. This is done with an Initial Study and Negative Declaration (or Mitigated Negative Declaration) or with an Environmental Impact Report. Certain classes of projects are exempt from detailed analysis under CEQA. CEQA Guidelines Section 15380 defines endangered, threatened, and rare species for purposes of CEQA and clarifies that CEQA review extends to other species that are not formally listed under the state or federal Endangered Species Acts but that meet specified criteria.

2.2.4 Fully Protected Species and Species of Special Concern

The classification of "fully protected" was the CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians, reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at §5515, amphibian and reptiles at §5050, birds at §3511, and mammals at §4700) dealing with "fully protected" species states that these species "...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," (CDFW Fish and Game Commission 1998) although "take" may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

Species of special concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing, or because they historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under the CEQA during project review.

2.2.5 California Fish and Game Code Sections 3503 and 3513

According to Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (with limited exceptions). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MBTA, prohibiting the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFW.

2.2.6 Other Special-Status Plants – California Native Plant Society

The California Native Plant Society (CNPS), a non-profit plant conservation organization, publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (<http://www.cnps.org/cnps/rareplants/inventory/>).

The Inventory employs the California Rare Plant Ranking (CRPR) to assign plants to the following categories:

- 1A Presumed extinct in California
- 1B Rare, threatened, or endangered in California and elsewhere
- 2A Plants presumed extirpated in California but common elsewhere
- 2B Plants rare, threatened, or endangered in California but more common elsewhere
- 3 Plants for which more information is needed – A review list
- 4 Plants of limited distribution – A watch list

Additional endangerment codes are assigned to each taxon as follows:

- 0.1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat)
- 0.2 Fairly endangered in California (20-80% occurrences threatened)
- 0.3 Not very endangered in California (<20% of occurrences threatened or no current threats known)

CRPR 1A, 1B, and 2 plants consist of individuals that may qualify for listing by state and federal agencies. As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the NPPA and Sections 2062 and 2067 of the California Fish and Game Code. CRPR 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents (CNPS 2001, 2020).

2.2.7 National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) program requires permitting for activities that discharge pollutants into waters of the US. This includes discharges from municipal, industrial, and construction sources. These are considered point-sources from a regulatory standpoint. Generally, these permits are issued and monitored under the oversight of the State Water Resources Control Board (SWRCB) and administered by each regional water quality control board. Construction activities that disturb one acre or more (whether a single project or part of a larger development) are required to obtain coverage under the state’s General Permit for Dischargers of Storm Water Associated with Construction Activity. All dischargers are required to obtain coverage under the Construction General Permit. The activities covered under the

Construction General Permit include clearing, grading, and other disturbances. The permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) with a monitoring program. The project will require coverage under the Construction General Permit.

2.2.8 Sensitive Natural Communities

Sensitive natural communities are vegetation communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by the CDFW (i.e., CNDDDB) or the USFWS. The CNDDDB identifies a number of natural communities as rare, which are given the highest inventory priority (Holland 1986; CNDDDB 2020). Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA California Code of Regulations (CCR): Title 14, Div. 6, Chap. 3.

2.2.9 Waters of the State

Section 401 of the Clean Water Act

The Regional Water Quality Control Board (RWQCB) regulates activities in “waters of the state”, including wetlands, through Section 401 of the CWA. “Waters of the state” are defined by the Porter-Cologne Control Act (see below) as “any surface water or groundwater, including saline waters, within the boundaries of the state.” While the USACE administers permitting programs that authorize impacts to “waters of the US”, any USACE permit authorized for a project would be invalid unless the RWQCB has issued a project-specific water quality certification or waiver of water quality. A water quality certification requires a finding by the RWQCB that the activities permitted by the USACE will not violate water quality standards individually or cumulatively over the term of the issued USACE permit.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Act (Porter-Cologne Act) (California Water Code Section 13260) requires “any person discharging waste, or proposing to discharge waste, within any region that could affect the “waters of the state” to file a report of discharge” with the RWQCB through an application for waste discharge. The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These water bodies have high resource value, are vulnerable to filling, and may not be regulated by other programs (e.g. Section 404 of the CWA).

California Fish and Game Code Section 1600-1603

Under Section 1602 of California Fish and Game Code, CDFW has authority over any proposed activity that may substantially modify a river, stream, or lake. CDFW requires notification for any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. The CDFW typically considers a river, stream, or lake to include its

riparian vegetation, but it may also extend to its floodplain. The term “stream”, which includes creeks and rivers, is defined in the CCR as follows: “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life”. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. Riparian is defined as “on, or pertaining to, the banks of a stream”; therefore, riparian vegetation is defined as, “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself” (CDFW 1994).

If the CDFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement (LSAA) will be prepared, which includes reasonable conditions necessary to protect those resources. The applicant may then proceed with the activity in accordance with the final LSAA. Section 1602 does not extend to isolated wetlands and waters, such as small ponds not located on drainages.

2.3 Local

2.3.1 Western Riverside County MSHCP

The proposed Project Site is located completely within the MSHCP, which is a comprehensive multi-jurisdictional effort that includes western Riverside County (County) and eighteen (18) cities. Rather than addressing sensitive species on an individual basis, the MSHCP focuses on the conservation of 146 species, including those listed at the federal and state levels and those that could become listed in the future. The MSHCP provides mitigation for project-specific impacts to these species so that the impacts would be reduced to below a level of significance pursuant to the California Environmental Quality Act (CEQA). The MSHCP proposes a reserve system of approximately 500,000 acres, of which 347,000 acres are currently within public ownership and 153,000 acres will need to be assembled from lands currently in private ownership. On June 7th, 2003, the County Board of Supervisors certified the Environmental Impact Report/Environmental Impact Statement, adopted the MSHCP, and authorized the Chairman to sign the Implementing Agreement with USFWS and CDFW, the respective Wildlife Agencies. The Incidental Take Permit was issued by the Wildlife Agencies on June 22, 2004.

In order to meet overall conservation goals of the MSHCP, some of the 146 species have additional survey requirements based on a project’s occurrence within a predetermined survey area and/or based on the presence of suitable habitat. These include Narrow Endemic Plant Species and Criteria Area Plant Species; animal species identified by Survey Areas (burrowing owl, mammals, and amphibians); species associated with riparian/riverine areas and vernal pool habitats, including the least Bell’s vireo, southwestern willow flycatcher, western yellow-billed cuckoo, and listed fairy shrimp; and an additional 28 species (Table 9.3 of the MSHCP document) that are not yet adequately conserved. If portions of a property occur within Criteria Areas (areas that may be needed for inclusion in the MSHCP Conservation Area), development of the property is subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process of the MSHCP. Through the HANS process, the County determines whether the portions of the subject property within the Criteria Areas (and/or supporting the above-mentioned habitats) will need to be dedicated for inclusion in the MSHCP Conservation Area.

MSHCP Sensitive Species Surveys

The Project Site is not located within an MSHCP Amphibian Species, Mammal Species, Narrow Endemic Plant or Criteria Area Plant Species Survey Area. Therefore, surveys for these species are not required (Regional Conservation Authority (RCA) GIS Data Downloads 2020). The Project Site occurs within a predetermined Survey Area for the burrowing owl. If suitable habitat is documented onsite during the habitat assessment within and adjacent to the Project Site, focused surveys and a 30-day preconstruction survey are required.

MSHCP Section 6.1.2 Riparian/Riverine and Vernal Pool Surveys

Regulated activities within inland streams, wetlands and riparian areas in Western Riverside County fall under the jurisdiction of the MSHCP Section 6.1.2. Riparian/riverine areas are defined as lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water that flows during all or a portion of the year. Vernal pools are defined as seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetland plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season (Riverside County 2003). As projects are proposed within the MSHCP Plan Area, an assessment of the potentially significant effects of those projects on riparian/riverine areas and vernal pools will be performed as currently required by CEQA, using available information supported by project-specific mapping and evaluation.

MSHCP Reserve Design & Criteria Area Objectives

Regions within the MSHCP have been organized into Area Plans that generally coincide with logical political boundaries, including City limits or long-standing unincorporated communities. The Project Site is located within the Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area. Therefore, no HANS or Joint Project Review (JPR) are required.

3.0 METHODS

This analysis of potential biological resources located on the Project Site includes a review of available background information in and around the vicinity of the Project Site and completion of multiple field surveys conducted from May to July 2020.

3.1 Literature Review

Prior to conducting field surveys, MIG biologists reviewed available background information pertaining to biological resources on and in the vicinity of the Project Site. Available literature and resource mapping reviewed included the occurrence records for special-status species and sensitive natural communities and numerous other information sources listed below:

- CNDDDB record search of Riverside East and surrounding USGS 7.5' Quadrangles (CNDDDB 2020)
- CNPS Online Inventory (CNPS 2020)
- Soil Survey Staff, Natural Resource Conservation Service (NRCS), United States Department of Agricultural (USDA) (Soil Survey Staff 2020)

- State & Federally Listed Endangered, & Threatened Animals of California (CDFW 2019a)
- State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2019b)
- USFWS National Wetlands Inventory (USFWS 2019a)
- USFWS, Carlsbad Office, Threatened and Endangered Species (USFWS 2019b)
- Jepson Manual: Vascular Plants of California, Second Edition (Baldwin et al. 2012)
- Western Riverside County MSHCP Burrowing Owl Survey Instructions (MSHCP 2006)

3.2 Field Surveys

Several biological field surveys were conducted to assess the existing conditions of the Project Site, record observed plant and wildlife species, characterize and delineate onsite vegetation communities and associated wildlife habitats, habitat for special-status species, and sensitive natural communities. MIG biologists conducted an initial biological field survey on May 21st, 2020. Additional field surveys conducted in in spring/summer 2020 include a jurisdictional wetlands delineation and MSHCP riparian/riverine analysis, and resource agency mandated protocol-level surveys for burrowing owl, and least Bell's vireo. The biological field surveys were conducted according to the schedule shown in Table 1.

Table 1. Summary of Survey Dates and Personnel

Survey Type	Date	Personnel ¹
Biological site reconnaissance	May 21 st , 2020	JC
Jurisdictional delineation and MSHCP riparian/riverine analysis	July 2020	JF
Burrowing owl surveys	May 21 st , June 20 th , July 10 th and 30 th , 2020	JC, RR
Riparian bird habitat suitability assessment	May 21 st , 2020	JC
Least Bell's vireo surveys	May 21 st , 31 st , June 10 th , 20 th , 30 th , July 10 th , 20 th , and 30 th , 2020	JC, RR

3.2.1 Vegetation Communities

During the field surveys, MIG biologists traversed the entire Project Site by foot and evaluated the suitability of onsite vegetation communities to support special-status species or sensitive natural communities documented in the vicinity of the Project Site. Vegetation communities were preliminarily mapped on aerial photography per A Manual of California Vegetation (MCV), 2nd Edition (Sawyer et. al 2009) or Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) vegetation community classification systems when appropriate. When a vegetation community could not be accurately characterized using the cited literature, an updated community classification was developed to represent onsite habitat types more accurately.

3.2.2 Special-Status Species Habitat Assessment

The potential occurrence of special-status plant and animal species on the Project Site was initially evaluated by developing a list of special-status species that are known to or have the potential to occur in the vicinity of the Project Site based on: (1) a review of past studies including species-specific studies; (2) a search of current database records (e.g., CNDDDB and CNPS Electronic Inventory records); and (3) a review of the

¹ JC=Dr. Jonathan Campbell, RR=Ruben Ramirez, JF=Julie Fontaine

USFWS list of federal endangered and threatened species. The potential for occurrence of those species included on the list were then evaluated based on the habitat requirements of each species relative to the conditions observed during the field survey conducted by MIG biologists. Each species was evaluated for its potential to occur on or in the immediate vicinity of the Project Site per the following criteria:

Not Expected. There is no suitable habitat present on the Project Site (i.e., habitats on the Project Site are clearly unsuitable for the species requirements [e.g., foraging, breeding, cover, substrate, elevation, hydrology, vegetation community, disturbance regime, etc.]). Additionally, there are no recent known records of occurrence in the vicinity of the Project Site. The species has no potential of being found on the Project Site.

Low Potential. Limited suitable habitat is present on the Project Site (i.e., few of the habitat components meeting the species requirements are present and/or the majority of habitat on the Project Site is unsuitable or of very low quality). Additionally, there are no or few recent known records of occurrence in the vicinity of the Project Site. The species has a low probability of being found on the Project Site.

Moderate Potential. Suitable habitat is present on the Project Site (i.e., some of the habitat components meeting the species requirements are present and/or the majority of the habitat on the Project Site is suitable or of marginal quality). Additionally, there are few or many recent known records of occurrences in the vicinity of the Project Site. The species has a moderate probability of being found on the Project Site.

High Potential. Highly suitable habitat is present on the Project Site (i.e., all habitat components meeting the species requirements are present and/or all of the habitat on the Project Site is highly suitable or of high quality). Additionally, there are few or many recent known records of occurrences in the vicinity of the Project Site. This species has a high probability of being found on the Project Site.

Present. Species was observed on the Project Site (i.e., species was either observed during recent surveys or has a recorded observation in the CNDDDB on the Project Site).

Nomenclature used for plant names follows the Second Edition of the Jepson Manual (Baldwin, B.G., et al. 2012). Nomenclature for wildlife follows CDFW's Complete List of Amphibian, Reptile, Bird, And Mammal Species in California (CDFW 2019c) and any changes made to species nomenclature as published in scientific journals since the publication of CDFW's list were updated accordingly.

3.2.3 Focused Special-Status Plant Assessment

The Project Site does not occur within a predetermined MSHCP Survey Area for Criteria Area or Narrow Endemic plant species. Therefore, no surveys are required.

3.2.4 Focused Special-Status Wildlife Surveys

Burrowing Owl Surveys

The Project Site is situated within a predetermined MSHCP Burrowing Owl Survey Area (Regional Conservation Authority GIS Data Downloads 2020). Conducted by MIG biologist on May 21st, 2020, a

burrowing owl habitat assessment confirmed the presence of low potential habitat on the Project Site. Subsequently, focused surveys were conducted on May 21st, June 20th, July 10th and 30th, 2020 within and adjacent to the Project Site. The surveys were conducted in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (Riverside County 2006). The protocol consists of three parts: habitat assessment, burrow mapping, and owl detection. The burrow search was conducted utilizing 100-foot belt transects to ensure 100 percent coverage of the site.

Least Bell's Vireo

Conducted by MIG biologist on May 21st, 2020, a least Bell's vireo habitat assessment confirmed the presence of low potential habitat on the Project Site. A focused survey for least Bell's vireo was conducted according to *Least Bell's Vireo Survey Guidelines* (USFWS 2001). In accordance with USFWS guidelines, the protocol consists of eight (8) surveys undertaken by a qualified biologist between April and July, 2020 with a ten (10) day interval between each site visit. The surveys for least Bell's vireo were conducted on May 21st, 31st, June 10th, 20th, 30th, July 10th, 20th, and 30th, 2020. All low potential habitat including black willow woodland were surveyed to listen for calls and used binoculars to aid in visual identification. No least Bell's vireo calls were used. All surveys were conducted within the prescribed time, temperature, and wind conditions as outlined in the survey guidelines (USFWS 2001).

3.2.6 Jurisdictional Wetlands and Waters Assessment

A formal jurisdictional delineation was conducted by MIG biologist in July 2020. The delineation determined the boundaries or absence of potential wetland and non-wetland waters of the U.S. subject to the regulatory jurisdiction of the USACE pursuant to CWA Section 404; wetland and non-wetland waters of the State subject to the regulatory jurisdiction of the RWQCB pursuant to CWA Section 401 and State Porter-Cologne Water Quality Control Act (Porter-Cologne); streambed and riparian habitat subject to the regulatory jurisdiction of the CDFW pursuant Sections 1600 *et seq.* of the California Fish and Game Code (CFG Code); and Riparian/Riverine Areas and Vernal Pools defined in Section 6.1.2 of the Western Riverside County MSHCP.

3.2.7 MSHCP Section 6.1.2 Riparian, Riverine, & Vernal Pool Resources Assessment

Pursuant to Section 6.1.2 of the MSHCP (Riverside County 2003), habitats were assessed to determine if MSHCP riparian/riverine resources and/or vernal pools are present onsite. The purpose of this assessment is to ensure that the biological functions and values of these areas throughout the MSHCP Plan Area are maintained such that habitat values for riparian/riverine species inside the MSHCP Conservation Area are maintained. The MSHCP requires that as projects are proposed within the overall Plan Area, the effect of those projects on riparian/riverine areas and vernal pools must be addressed. Riparian/riverine resources are those lands that contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source, or areas with fresh water flow during all or a portion of the year. Vernal pools are seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. In addition, stock ponds, ephemeral pools, and other areas of potential fairy shrimp habitat were noted, if applicable.

4.0 EXISTING CONDITIONS

The following provides a description of the soils, vegetation communities, wildlife, and wildlife movement corridors present on the Project Site.

4.1 Physical Characteristics

The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands. Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below.

4.2 Soils

The USDA NRCS Web Soil Survey maps the following soil classification within the boundary of the Project Site as shown on Figure 3 (Soil Survey Staff, NRCS, USDA 2020) and described in detail below.

Monserate sandy loam 0 to 5 percent slopes (MmB). This map unit occurs throughout the Project Site. The Monserate series consist of well to well drained and moderately slow permeable soils. These soils are found primarily on nearly level to moderately steep terraces and fans in southern California and are primarily used for growing grain or pasture. The NRCS does not list this soil as hydric.

4.3 Vegetation Communities

As described in Section 3 (Methods), vegetation communities were mapped in the field onto a color aerial photograph (Figure 4) and were evaluated to determine if they are considered sensitive under federal, state, or local regulations or policies. Vegetation communities were classified as sensitive or non-sensitive as defined by CEQA and other applicable laws and regulations. Vegetation community names and hierarchical structure follows the CDFW "List of California Terrestrial Natural Communities" or Holland (1986) classification systems. A summary of the acreages of each mapped vegetation community or land cover type is provided in Table 2. Distribution of onsite vegetation communities and representative photographs are provided as Figure 4, and 5 (a-b). The species listed below represent those individuals identified onsite during the field surveys listed in this report. All 20.31 acres of the Project Site will be permanently or temporarily (offsite) impacted as a result of project initiation. As outlined in the MSHCP, impacts will be mitigated by payment of the local development mitigation fee as established by the City of Moreno Valley (Section 5.1, BIO-1: Payment of Local Development Mitigation Fee for Conservation of Covered Species)

Table 2. Project Site Plant Communities and Land Cover Types

Plant Communities/Land Cover Type	Onsite Area (acres)	Offsite Area (acres)	TOTAL Impacts (acres)
Disturbed/Non-Native Grassland	17.19	0.00	17.19
Black Willow Woodland	0.39	0.00	0.39
Developed	0.05	2.65	2.70
Disturbed Wetland – Cattail	0.02	0.00	0.02
Ornamental (individual tree)	0.01	0.00	0.01
Mule Fat (individual shrub)	0.001	0.00	0.001
Total	17.66	2.65	20.31

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual disking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding's willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracunculus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

4.4 Wildlife

General wildlife species documented onsite or within the vicinity of the Project Site include but are not limited to red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), American crow (*Corvus brachyrhynchos*), western meadowlark (*Sturnella neglecta*) common raven (*Corvus corax*), house sparrow (*Passer domesticus*), American goldfinch (*Spinus tristis*), house finch (*Haemorhous mexicanus*), western tanager (*Piranga ludoviciana*), and desert cottontail (*Sylvilagus audubonii*).

4.5 Sensitive Natural Communities

CDFW and CNPS have identified native vegetation communities that are rare and unique to California. While they have no legal, protective status, impacts to these natural communities may be considered “significant” under CEQA. A total of 0.39-acre of black willow woodland (G4 S3) is present on the Project Site (Figure 4 and Figure 5a) that would qualify as a sensitive natural community. These features would be regulated as CDFW riparian habitat pursuant to Division 2, Chapter 6, Section 1600-1603 of the California Fish and Game Code.

All 20.31 acres of the Project Site will be permanently or temporarily (offsite) impacted as a result of project initiation. As outlined in the MSHCP, impacts will be mitigated by payment of the local development mitigation fee as established by the City of Moreno Valley (Section 5.1, BIO-1: Payment of Local Development Mitigation Fee for Conservation of Covered Species)

4.6 Special-Status Plants

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for narrow endemic plants and/or criteria area plant species if suitable habitat is documented onsite and/or if the property is located within a predetermined “Survey Area” (MSHCP 2003).

The Project Site does not occur within a predetermined Survey Area for MSHCP criteria area or narrow endemic plant species (RCA GIS Data Downloads 2020). No surveys are required.

4.7 Special-Status Animals

The MSHCP has determined that all of the sensitive wildlife species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for criteria area wildlife species if suitable habitat is documented onsite and/or if the property is located within a predetermined “Survey Area” (MSHCP 2003).

The Project Site does not occur within a predetermined Survey Area for amphibians (RCA GIS Data Downloads 2020). No surveys are required.

Burrowing Owl

The Project Site occurs within a predetermined MSHCP Survey Area for burrowing owl (RCA GIS Data Downloads 2020). Based on the presence of low potential habitat documented during the May 21st, 2020 habitat assessment² within and adjacent to the Project Site, focused surveys for burrowing owl were conducted. No burrowing owl or their sign (e.g., molted feathers, pellets with characteristic prey remains, or excrement (wash) near a burrow entrance) was observed. In compliance with the conservation goals outlined in the MSHCP, a 30-day preconstruction survey will be conducted prior to the initiation of construction to ensure protection for this species (Section 5.1 BIO-2: Conduct 30-Day Burrowing Owl Preconstruction Survey). The *Burrowing Owl Survey Report for the Alessandro Project Site* is provided in Appendix A.

² Personnel: Dr. Jonathan Campbell

Least Bell's Vireo

Low potential habitat for least Bell's vireo was initially identified onsite in the black willow woodland vegetation community (Figure 4, Vegetation Communities Map). Focused protocol surveys were conducted in spring/summer 2020 to determine the presence/absence of this species on the Project Site. No least Bell's vireo were detected during the 2020 surveys. The *Least Bell's Vireo Survey Report for the Alessandro Project Site* is provided in Appendix B.

The Project Site does not occur within a predetermined Survey Area for mammals (RCA GIS Data Downloads 2020). No surveys are required.

The Project Site falls within the Stephens' kangaroo rat (*Dipodomys stephensi*, SKR) Fee Area outlined in the Riverside County SKR Habitat Conservation Plan (HCP) (Section 5.1, BIO-3: SKR Mitigation Fee).

Nesting Songbirds and Raptors

Onsite vegetation communities represent suitable nesting habitat for common, as well as special-status resident and migratory bird/raptor species with the potential to occur within the Project Site. Typically, migratory birds and raptors nest within trees and other vegetation in areas that are removed from human disturbance; however, some species such as great horned owl (*Bubo virginianus*) and red-tailed hawk are known to nest in and adjacent to developed areas where there is nearby undeveloped land supporting an abundance of prey. The Project Site provides potential foraging and/or nesting habitat for migratory birds and raptors. The loss of an active nest of common or special-status bird species would be considered a violation of the CDFW Code, Section 3503, 3503.5, 3513. The following condition of approval will ensure no nesting birds or raptors are impacted as a result of project initiation (Section 5.1, BIO-4: Pre-Construction Surveys for Nesting and Breeding Songbirds and Raptors)

4.8 Jurisdictional Wetlands and Waters Assessment

The two (2) drainage features including A and B that bisect the Project Site represent jurisdictional resources which may be regulated by the Santa Ana Regional Water Quality Control Board and California Department of Fish and Wildlife. A formal jurisdictional delineation will be required, and all applicable regulatory permits acquired for direct and/or indirect impacts to these features (Section 5.1, BIO-5: CDFW/RWQCB Regulatory Resources, Permits and Certifications).

4.9 MSHCP Riparian/Riverine Resources and Vernal Pool Analysis

No vernal pools or suitable resources for the vernal pool fairy shrimp (*Branchinecta lynchi*) and Riverside fairy shrimp (*Streptocephalus woottoni*) were documented onsite. No surveys are required.

No suitable habitat for the southwestern willow flycatcher (*Empidonax traillii extimus*) or western yellow-billed cuckoo (*Coccyzus americanus*) was detected within or adjacent to the Project Site. These species are not expected to be present. No surveys are required.

Both drainage features A and B and associated riparian vegetation (black willow woodland and disturbed wetland-cattail) represent MSHCP Section 6.1.2 riverine/riparian resources. Direct or indirect impacts to these MSHCP Section 6.1.2 resources will require the development of an MSHCP DBESP (Section 5.1, BIO-5: MSHCP Riverine and Riparian Resources Section 6.1.2 Compliance)

4.10 Wildlife Movement Corridors

Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and animal species. The regional movement and migration of wildlife species has been substantially altered due to habitat fragmentation over the past century. This fragmentation is most commonly caused by development of open areas, which can result in large patches of land becoming inaccessible and forming a virtual barrier between undeveloped areas. Roads associated with development, although narrow, may result in barriers to smaller or less mobile wildlife species. Habitat fragmentation results in isolated islands of habitat, which affects wildlife behavior, foraging activity, reproductive patterns, immigration and emigration or dispersal capabilities, and survivability. Wildlife corridors can consist of a sequence of stepping-stones across the landscape (i.e., discontinuous areas of habitat such as isolated wetlands), continuous lineal strips of vegetation and habitat (e.g., riparian strips and ridge lines), or they may be parts of larger habitat areas selected for their known or likely importance to local wildlife.

The Project Site likely supports habitat for resident and transient species locally, and would not facilitate regional wildlife movement. Regional movement through the Project Site is substantively constrained by proximate urban development, major roads, and marginal habitat. The Project Site is not within an MSHCP Core Area or Linkage and is not otherwise identified as a regionally important wildlife movement corridor.

5.0 MSHCP & CEQA COMPLIANCE ANALYSIS

The purpose of this report is to document the existing biological resources, identify general vegetation types, and assess the potential biological and regulatory constraints associated with the proposed development within the Project Site as outlined by the MSHCP. The following sections summarize the Project Site's relationship to MSHCP criteria areas and MSHCP/CEQA compliance guidelines.

CRITERIA AREAS

The 17.66-acre Project Site including offsite assessment area (2.65-acre) is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

No Habitat Evaluation and Acquisition Negotiation Strategy, Joint Project Review or Criteria Area Consistency Analysis is required.

CRITERIA AREA SPECIES SURVEY AREA

The Project Site does not occur within a predetermined Survey Area for MSHCP criteria area plant species; therefore, no surveys are required (RCA GIS Data Downloads 2020).

The project is compliant with MSHCP Section 6.3.2.

NARROW ENDEMIC PLANT SPECIES SURVEY AREA



The Project Site does not occur within a predetermined Survey Area for MSHCP narrow endemic plant species; therefore, no surveys are required (RCA GIS Data Downloads 2020).

The project is compliant with MSHCP Section 6.1.3

AMPHIBIAN SPECIES SURVEY AREA

The Project Site does not occur within a predetermined Amphibian Species Survey Area; therefore, no surveys are required (RCA GIS Data Downloads 2020).

The project is compliant with MSHCP Section 6.3.2.

MAMMAL SPECIES SURVEY AREA

The Project Site does not occur within a predetermined Mammal Species Survey Area; therefore, no surveys are required (RCA GIS Data Downloads 2020).

The project is compliant with MSHCP Section 6.3.2.

BURROWING OWL SURVEY AREA

The Project Site occurs within a predetermined Survey Area for the burrowing owl. Based on the presence of low potential habitat documented during the May 21st, 2020 habitat assessment within and adjacent to the Project Site, focused surveys for burrowing owl were conducted. No burrowing owl or their sign (e.g., molted feathers, pellets with characteristic prey remains, or excrement (wash) near a burrow entrance) was observed. In compliance with the conservation goals outlined in the MSHCP, a 30-day preconstruction survey will be conducted prior to the initiation of construction to ensure protection for this species (MIG 2020a).

Following submittal, review and approval of the 30-day burrowing owl preconstruction survey report by the City of Moreno Valley and compliance with all species-specific owl conservation goals, if detected within or adjacent to the Project Site, the project will be compliant with MSHCP Section 6.3.2.

MSHCP RIPARIAN/RIVERINE AREAS AND VERNAL POOLS

Both drainage features A and B and associated riparian vegetation (black willow woodland and disturbed wetland-cattail) represent MSHCP Section 6.1.2 riverine/riparian resources. Direct or indirect impacts to these MSHCP Section 6.1.2 resources will require the development of an MSHCP DBESP.

No vernal pool resources, seasonal depressions or associated clay substrates were documented onsite.

Following submittal, review and approval of the DBESP report by the City of Moreno Valley and wildlife agencies, the project will be compliant with MSHCP Section 6.1.2.

URBAN/WILDLANDS INTERFACE

The MSHCP Urban/Wildlands Interface guidelines presented in Section 6.1.4 are intended to address indirect effects associated with locating commercial, mixed uses and residential developments in proximity to a

MSHCP Conservation Area. The Project Site is not located adjacent to an existing or proposed MSHCP Conservation Area.

The project is compliant with MSHCP Section 6.1.4.

FUELS MANAGEMENT

The fuels management guidelines presented in Section 6.4 of the MSHCP are intended to address brush management activities around new development within or adjacent to MSHCP Conservation Areas. The Project Site is not located adjacent to an existing or proposed MSHCP Conservation Area.

The project is compliant with MSHCP Section 6.4.

5.1 Mitigation Measures and Conditions of Approval

The following section summarizes potential constraints, mitigation measures, preconstruction survey requirements and conditions of approval which will need to be implemented to ensure development of the Project Site remains in compliance with CEQA and MSHCP guidelines.

BIO-1: Payment of Local Development Mitigation Fee for Conservation of Covered Species

In Volume 3 of the MSHCP (Implementing Agreement), a Local Development Mitigation Fee (Section 4) has been established to assist in providing revenue to acquire and preserve vegetation communities and natural areas within Riverside County which are known to support threatened, endangered or key sensitive populations of plant and wildlife species. Acquisition and preservation of these vegetation communities and natural areas will also benefit common species. The Applicant will pay the Local Development Mitigation Fee for the development of the proposed Project Site, established by the City of Moreno Valley.

BIO-2: Conduct 30-Day Burrowing Owl Preconstruction Survey

A 30-day burrowing owl preconstruction survey will be required to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP. The survey will be conducted in compliance with both MSHCP and CDFW guidelines (MSHCP 2006, CDFW 2012). A report of the findings prepared by a qualified biologist shall be submitted to the City of Moreno Valley for review and approval prior to any permit or ground disturbing activities.

If burrowing owls are detected onsite during the 30-day preconstruction survey, during the breeding season (February 1st to August 31st) then construction activities shall be limited to beyond 300 feet of the active burrows until a qualified biologist has confirmed that nesting efforts are completed or not initiated. In addition to monitoring breeding activity, if construction is proposed to be initiated during the breeding season or active relocation is proposed, a burrowing owl mitigation plan will be developed based on the City of Moreno Valley, CDFW and USFWS requirements for the passive or active relocation of individuals.

BIO-3: SKR Mitigation Fee

The Project Site falls within the SKR Fee Area outlined in the Riverside County SKR HCP. The project applicant shall pay the fees pursuant to County Ordinance 663.10 for the SKR HCP Fee Assessment Area as established and implemented by the County of Riverside.

BIO-4: Pre-Construction Surveys for Nesting and Breeding Songbirds and Raptors

To avoid impacts to nesting birds associated with the proposed development, initial construction related grubbing and grading activities should occur outside the avian nesting season (prior to February 1 or after September 1). If construction and construction noise occur within the avian nesting season (during the period from February 1 to September 1), all suitable habitats within 100 feet of the Project Site shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five (5) days before commencement of any vegetation removal. If it is determined that the Project Site is occupied by nesting birds, protective measures shall be implemented as described below.

If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within 300 feet of non-raptor nests and 500 feet of raptor nests, or as determined by a qualified biologist. Protective measures (e.g., sampling) shall be required to ensure compliance with the California Fish and Game Code requirements. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to the City of Moreno Valley prior to construction-related activities that have the potential to disturb any active nests during the nesting season.

BIO-5: CDFW/RWQCB Regulatory Resources, Permits and Certifications

Prior to issuance of a grading permit, the project applicant will conduct a formal jurisdictional delineation to determine the extent of resources onsite regulated by the CDFW, or RWQCB. The project applicant will be required to obtain all applicable permits which may include a 1602 Streambed Alteration Agreement from CDFW and a 401 Certification issued by the RWQCB pursuant to the California Water Code Section 13260.

Impacts to jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from the agencies indicating that a permit is not required.

BIO-5: MSHCP Riverine and Riparian Resources Section 6.1.2 Compliance

Both drainage features A and B and associated riparian vegetation represent MSHCP Section 6.1.2 riverine/riparian resources. Direct or indirect impacts to these MSHCP Section 6.1.2 resources will require the development of an MSHCP DBESP.

To meet the criteria of a biologically equivalent or superior alternative, the applicant will offset impacts to any MSHCP riverine or riparian habitat as directed by the City of Moreno Valley. Specifically, an MSHCP DBESP will be prepared and submitted to the City of Moreno Valley, and wildlife agencies for review and approval.

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FIGURES



Attachment: Appendix B1-MSHCP General Biological Resources Assessment and Compliance Analysis (4465 : PEN20-0118-0119, PEN20-0122

Figure 1 Regional Location Map

Alessandro Project Site, City of Moreno Valley, CA



- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- # → Photo Point & Direction



Figure 2 Project Site Map

Alessandro Project Site, City of Modesto, CA



- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- MmB - Monserate Sandy Loam (NRCS 2020)



Figure 3 Soils Associations Map

Alessandro Project Site, City of Modesto, CA



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |

Figure 4 Vegetation Communities Map

Alessandro Project Site, City of Mo...





Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 5a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.



MSHCP Section 6.1.2 Riparian Resources

BW Black Willow Woodland

DW Disturbed Wetland - Cattail

Project Site Boundary (17.66 acres)
 Offsite Assessment Area (2.65 acres)



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | Impact Boundary (20.31 acres) |

Figure 7 Project Site Impact Map

Alessandro Project Site, City of Mo...

APPENDICES



Appendix A
Burrowing Owl Survey Report for the Alessandro Project Site

Attachment: Appendix B1-MSHCP General Biological Resources Assessment and Compliance Analysis (4465 : PEN20-0118-0119, PEN20-0122

Burrowing Owl Focused Survey Report

Alessandro Project Site

City of Moreno Valley, Riverside County, California



Prepared for:

Compass Danbe Real Estate Partners

523 Main St

El Segundo, CA 90245

Prepared by:

MIG

1500 Iowa Avenue, Suite 110

Riverside, California 92507



August 2020

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Table of Contents

TABLE OF CONTENTS	I
1.0 INTRODUCTION.....	1
1.1 Project Location.....	1
2.0 METHODS AND RESULTS	1
2.1 Step 1 – Habitat Assessment.....	1
2.2 Step II – Locating Burrows and Burrowing Owls.....	3
2.3 Step III – Reporting Requirements.....	4
2.4 Preconstruction Surveys.....	4
3.0 CONCLUSIONS AND RECOMMENDATIONS	4
4.0 REFERENCES.....	5

List of Figures

Figure 1	Regional Location Map
Figure 2	Project Site Map
Figure 3	Vegetation Communities Map
Figure 4 (a-b)	Current Project Site Photographs
Figure 5	Burrowing Owl Survey Area Map

List of Tables

Table 1	Summary of Focused Survey Weather Conditions during the Breeding Season
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1.0 INTRODUCTION

This report presents the results of focused burrowing owl (*Athene cunicularia*) surveys conducted at the 17.66-acre (2.65-acre offsite) Alessandro project site (Project Site) in the City of Moreno Valley, Riverside County, California. The Project Site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) planning area. The MSHCP is a regional multi-jurisdictional habitat conservation program that addresses multiple species' habitat needs in western Riverside County. According to MSHCP guidelines, surveys for the burrowing owl are to be conducted as part of the environmental review process. Specifically, the MSHCP Additional Surveys Needs and Procedures identify a burrowing owl Survey Area within the MSHCP Plan Area. The Project Site occurs within this predetermined Survey Area. Suitable low potential habitat was identified on the Project Site during an initial site reconnaissance conducted in May 21st, 2020. Subsequently, focused burrowing owl surveys were conducted during the breeding season in order to comply with MSHCP requirements. The purpose of this report is to document the results of the burrowing owl habitat assessment and focused burrow and burrowing owl surveys.

1.1 Project Location

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley (City), Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5' series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.0 METHODS AND RESULTS

The survey was conducted in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (2006). Survey protocol consists of three steps: Step I – Habitat Assessment; Step II – Locating Burrows and Burrowing Owls; and Step III – Reporting Requirements. Each step conducted during this survey is briefly outlined below. Surveys were conducted during weather that is conducive to observing burrowing owls outside of their burrows and detecting burrowing owl sign. All surveys were conducted from two hours before sunset to one hour after or from one hour before to two hours after sunrise. Surveys were not conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. Surveys were not conducted within five days of measurable precipitation.

2.1 Step 1 – Habitat Assessment

Step 1 of the burrowing owl focused survey consists of walking the Project Site to determine if suitable habitat is present. This initial habitat assessment was conducted on May 21st, 2020 by MIG Senior Biologist Jonathan Campbell, PhD (Table 1. Summary of Focused Survey Weather Conditions during the Nesting Season). Upon arrival at the Project Site and prior to initiating the assessment survey, binoculars were used to scan all suitable habitats on and adjacent to the property, including perch locations, to ascertain owl presence.

All suitable areas of the Project Site were surveyed on foot by walking slowly and methodically across each habitat type while recording/mapping areas that may represent suitable owl habitat onsite. Primary indicators of suitable burrowing owl habitat include, but are not limited to: native and non-native grassland, grassland interspersed with shrubland along ecotonal areas, shrublands with low density shrub cover, concrete rubble, and earthen berms. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels (*Otospermophilus beecheyi*) or badgers (*Taxidea taxus*), but they often utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock or wood debris piles, or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or near man-made structures. A majority of the habitat mapped onsite represents low potential habitat for burrowing owl.

According to the MSHCP (2006) guidelines, if suitable habitat is present, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Project Site boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars.

The largest area and center of the Project Site is characterized as “disturbed/non-native grassland” and currently offers limited habitat value to plants and wildlife. The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands. Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below. Natural community names and hierarchical structure follows List of Alliances and Associations (CDFW September 2010) which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the classification system. Scientific nomenclature and common names used for plants in this report follows Hickman (1993). Vertebrate taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists’ Union (1998 and supplemental) for birds, and Jones et al. (1992) for mammals. The onsite plant communities are as follows (Figure 3, Vegetation Communities Map, Figures 4a/4b, Current Project Site Photographs):

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), riggut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding’s willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracuncululus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

Results from the Step I - Habitat Assessment indicate that the disturbed/non-native grassland (described above) represent low potential habitat for the burrowing owl. Accordingly, due to the presence of potential habitat onsite, Step II – Locating Burrows and Burrowing Owls is required. In addition, due to the presence of potential habitat onsite, a pre-construction survey within 30 days of any project-related or construction-related activities is therefore required.

2.2 Step II – Locating Burrows and Burrowing Owls**Part A – Focused Burrow Survey**

Due to the presence of low potential burrowing owl habitat, focused burrow surveys, including documentation of appropriately sized natural burrows or suitable man-made structures that may be utilized by burrowing owl, were conducted as part of the protocol on May 21st, 2020 (Table 1. Summary of Focused Survey Weather Conditions during the Nesting Season).

The systematic surveys for burrows, including burrowing owl signs, were conducted by walking across all potential habitat mapped at the Project Site. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 30 meters (approximately 100 feet) apart. The burrow survey began within two hours prior to sunset. Accordingly, due to the presence of suitable burrowing owl burrows onsite, Step II, Part B – Focused Burrowing Owl Surveys are required.

General wildlife species documented onsite or within the vicinity of the Project Site include but are not limited to red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaidura macroura*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*),

American crow (*Corvus brachyrhynchos*), western meadowlark (*Sturnella neglecta*) common raven (*Corvus corax*), house sparrow (*Passer domesticus*), American goldfinch (*Spinus tristis*), house finch (*Haemorhous mexicanus*), western tanager (*Piranga ludoviciana*), and desert cottontail (*Sylvilagus audubonii*).

Part B – Focused Burrowing Owl Surveys

If any burrows are found during the Part A – Focused Burrow Survey, Part B – Focused Burrowing Owl Surveys are required to determine presence or absence of the species. The Part B effort consists of at least four focused surveys to search for signs of occupation at the burrows, or observations of burrowing owls. Focused surveys are to be conducted within the breeding season between March 1st and August 31st. A review of local documentation (CNDDDB 2020) suggests that no burrowing owls have been historically identified within the extent of the Project Site boundary. In addition to the breeding season survey conducted on May 21st, 2020, three additional breeding season surveys were conducted throughout the Project Site on June 20th, July 10th, and 30th, 2020 (Figure 5, Burrowing Owl Survey Area Map). All surveys were conducted during times and conditions conducive to observing burrowing owl (Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season). A thorough investigation of the potentially suitable burrows concluded that no evidence of burrowing owl activity was present in any of the onsite burrow complexes.

Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season

Date	Time Start/End	Temperature (°F)	Wind Speed (mph)	Conditions
5/21/2020	6:30AM – 7:30AM	72	2-5	Clear
6/20/2020	6:00AM – 9:00AM	68	0-4	Clear
7/10/2020	6:00AM – 9:00AM	66	4-8	Clear
7/30/2020	6:00AM – 9:00AM	66	2-8	Clear

2.3 Step III – Reporting Requirements

This report represents the third step of the burrowing owl focused survey, the preparation of a report that provides the results of each step of the survey protocol. After completion of appropriate surveys, a final report shall be submitted to the City of Moreno Valley, which discusses the survey methodology, transect width, duration, conditions, and results of the survey.

2.4 Preconstruction Surveys

All project sites containing burrows or suitable habitat (based on Step I/Habitat Assessment), whether owls were found or not, require pre-construction surveys that shall be conducted within 30 days prior to ground disturbance to avoid direct take of burrowing owls (MSHCP Species-Specific Objective 6).

3.0 CONCLUSIONS AND RECOMMENDATIONS

Both low potential burrowing owl habitat and burrowing owl burrows were identified within the Project Site during the Step I – Habitat Assessment performed on May 21st, 2020 and the Step II, Part A – Focused Burrow Survey performed on May 21st, 2020. Three additional Step II, Part B – Focused Burrowing Owl Surveys were therefore performed during the breeding season on June 20th, July 10th, and 30th, 2020 throughout the Project Site. No evidence of burrowing owl activity was observed during any of the surveys.

A pre-construction burrowing owl survey will need to be completed within 30 days prior to any project-related or construction-related disturbances to onsite areas.

4.0 REFERENCES

- American Ornithologist Union (AOU). 1998. Check-list of North American Birds. 8th ed. American Ornithologists' Union, Washington, DC.
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FIGURES



Attachment: Appendix B1-MSHCP General Biological Resources Assessment and Compliance Analysis (4465 : PEN20-0118-0119, PEN20-0122

Figure 1 Regional Location Map

Alessandro Project Site, City of Moreno Valley, CA





- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- # → Photo Point & Direction



Figure 2 Project Site Map

Alessandro Project Site, City of Modesto, CA



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |

Figure 3 Vegetation Communities Map

Alessandro Project Site, City of Mo...

Attachment: Appendix B1-MSHCP General Biological Resources Assessment and Compliance Analysis (4465 : PEN20-0118-0119, PEN20-0122





Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 4a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.

Figure 4b Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



--- Survey Transects

- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)

Figure 5 Burrowing Survey Area Map

Alessandro Project Site, City of Modesto, CA



Appendix B
Least Bell's Vireo Survey Results for the Alessandro Project Site

Least Bell's Vireo Focused Survey Report

Alessandro Project Site

City of Moreno Valley, Riverside County, California



Prepared for:

Compass Danbe Real Estate Partners
523 Main St
El Segundo, CA 90245

Prepared by:

MIG
1500 Iowa Avenue, Suite 110
Riverside, California 92507



August 2020

This document is formatted for double-sided printing

Table of Contents

TABLE OF CONTENTS	I
1.0 INTRODUCTION.....	1
1.1 Project Location.....	1
2.0 METHODS AND RESULTS	1
3.0 CONCLUSIONS	5
4.0 REFERENCES.....	5

List of Figures

Figure 1	Regional Location Map
Figure 2	Project Site Map
Figure 3	Vegetation Communities Map
Figure 4 (a-b)	Current Project Site Photographs

List of Tables

Table 1	Summary of Focused Survey Weather Conditions during the Breeding Season
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1.0 INTRODUCTION

This report presents the results of focused least Bell's vireo (*Vireo bellii pusillus*) surveys conducted at the 17.66-acre (2.65-acre offsite) Alessandro project site (Project Site) in the City of Moreno Valley, Riverside County, California. The Project Site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) planning area. The MSHCP is a regional multi-jurisdictional habitat conservation program that addresses multiple species' habitat needs in western Riverside County. According to MSHCP Section 6.1.2 guidelines, surveys for riparian birds are to be conducted as part of the environmental review process, if suitable habitat is present. Suitable low potential habitat was identified on the Project Site during an initial site reconnaissance conducted in May 21st, 2020 for the least Bell's vireo. Subsequently, focused surveys were conducted during the breeding season in order to comply with MSHCP Section 6.1.2 requirements. The purpose of this report is to document the results of the least Bell's vireo assessment and focused surveys.

1.1 Project Location

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley (City), Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5' series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.0 METHODS AND RESULTS

An initial habitat assessment for potential least Bell's vireo habitat was conducted on May 21st, 2020. As described below, all vegetation communities onsite were mapped and assessed for suitability for least Bell's vireo. A single vegetation community including black willow woodland was characterized as representing low potential habitat for the species. Therefore, focused United States Fish and Wildlife Service (USFWS) protocol surveys were initiated. As stated by the USFWS:

"Under normal circumstances, all riparian areas and any other potential vireo habitats should be surveyed at least eight (8) times during the period from April 10 to July 31. However, we may concur, on a case by case basis, with a reduced effort if unusual circumstances dictate that this is a prudent course of action. For instance, intensive surveys of small, marginal or extralimital habitats by experienced personnel may well result in defensible conclusions that eight (or more) individual surveys are unnecessary. Under such unusual circumstances, we will consider requests for reductions in the prescribed number of individual surveys. In any case, site visits should be conducted at least 10 days apart to maximize the detection of, for instance, late and early arrivals, females, particularly "non-vocal" birds of both sexes, and nesting pairs.

- 1) *Although the period from April 10 to July 31 encompasses the period during which most vireo nesting activity occurs, eight surveys are generally sufficient to detect most*

- (if not all) vireo adults in occupied habitats. Precise vireo censuses and estimations of home range likely will not be possible unless surveys are conducted outside of this time window. Although focused surveys conducted in accordance with these guidelines substantially reduce the risk of an unauthorized take* that could potentially occur as a result of land development or other projects, individual project proponents may wish to conduct surveys that are more rigorous than those that would otherwise result from strict adherence to these survey guidelines. If additional information (e.g., extent of occupied habitat, total numbers of adult and juvenile vireos in study area) is desired or necessary, surveys should be extended to August 31 and conducted in such a manner as to collect the data necessary to prepare reports that reflect the methods and standards established in the current scientific literature on this subject. In particular, information collected after July 15 will reflect a broader extent to the riparian habitat and other adjacent habitat types that the vireo typically utilizes during the latter phase of the breeding season, especially when the young become independent of the adults.*
- 2) *Surveys should be conducted by a qualified biologist familiar with the songs, whisper songs, calls, scolds, and plumage characteristics of adult and juvenile vireos. These skills are essential to maximize the probability of detecting vireos and to avoid potentially harassing the species in occupied habitats.*
 - 3) *Surveys should be conducted between dawn and 11:00 a.m. Surveys should not be conducted during periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather that individually or collectively may reduce the likelihood of detection.*
 - 4) *Surveyors should not survey more than 3 linear kilometers or more than 50 hectares of habitat on any given survey day. Although surveyors should generally station themselves in the best possible locations to hear or see vireos, care should be taken not to disturb potential or actual vireo habitats and nests or the habitat of any sensitive or listed riparian species.*
 - 5) *All vireo detections (e.g., vocalization points, areas used for foraging, etc.) should be recorded and subsequently plotted to estimate the location and extent of habitats utilized. These data should be mapped on the appropriate USGS quadrangle map.*
 - 6) *Data pertaining to vireo status and distribution (e.g., numbers and locations of paired or unpaired territorial males, ages and sexes of all birds encountered) should be noted and recorded during each survey. In addition, surveyors should look for leg bands on vireo adults and juveniles if, in fact, it is possible to do so without disturbing or harassing the birds. If leg bands or other markers are observed, then surveyors should record and report the detection and associated circumstances to us by telephone, facsimile, or electronic mail as soon as possible. Reports should include the colors and relative locations of any and all bands detected, the age and sex of the marked bird, and the precise location of the detection.*

- 7) *The numbers and locations of all brown-headed cowbirds (Molothrus ater) detected within vireo territories should be recorded during each survey and subsequently reported to us. In addition, all detections of the State and federally endangered southwestern willow flycatcher (Empidonax trallii extimus, flycatcher) and State endangered yellow-billed cuckoo (Coccyzus americanus, cuckoo) should be recorded and reported. Any and all cuckoo and flycatcher adults, young, or nests should not be approached, and taped vocalizations of these species should not be used unless authorized in advance by scientific permits to take* issued by us (if appropriate) and the California Department of Fish and Game. Flycatcher presence/absence surveys require a recovery permit issued by us per section 10(a)(1)(A) of the Endangered Species Act.” (USFWS 2001)*

A total of eight (8) focused least Bell's vireo surveys were conducted on May 21st, 31st, June 10th, 20th, 30th, July 10th, 20th, and 30th, 2020 by Senior Biologist Jonathan Campbell, PhD and Ruben Ramirez throughout the black willow woodland documented onsite and described below. All surveys were conducted during times and conditions conducive to observing least Bell's vireo (Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season).

Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season

Date	Time Start/End	Temperature (°F)	Wind Speed (mph)	Conditions
5/21/2020	7:30AM – 9:00AM	74	0-5	Clear
5/31/2020	8:00AM – 9:30AM	70	3-5	Clear
6/10/2020	6:00AM – 9:00AM	66	2-8	Clear
6/20/2020	6:00AM – 9:00AM	68	0-4	Clear
6/30/2020	6:00AM – 9:00AM	64	0-4	Clear
7/10/2020	6:00AM – 9:00AM	66	4-8	Clear
7/20/2020	6:00AM – 9:00AM	70	2-8	Clear
7/30/2020	6:00AM – 9:00AM	66	2-8	Clear

The largest area and center of the Project Site is characterized as “disturbed/non-native grassland” and currently offers limited habitat value to plants and wildlife. The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands.

Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below. Natural community names and hierarchical structure follows List of Alliances and Associations (CDFW September 2010) which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the classification system. Scientific nomenclature and common names used for plants in this report follows Hickman (1993). Vertebrate taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists’ Union (1998 and supplemental) for birds, and Jones et al. (1992) for mammals. The onsite plant communities are as follows (Figure 3, Vegetation Communities Map, Figures 4a/4b, Current Project Site Photographs):

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding's willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracunculus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

General wildlife species documented onsite or within the vicinity of the Project Site include but are not limited to red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), American crow (*Corvus brachyrhynchos*), western meadowlark (*Sturnella neglecta*) common raven (*Corvus corax*), house sparrow (*Passer domesticus*), American goldfinch (*Spinus tristis*), house finch (*Haemorhous mexicanus*), western tanager (*Piranga ludoviciana*), and desert cottontail (*Sylvilagus audubonii*).

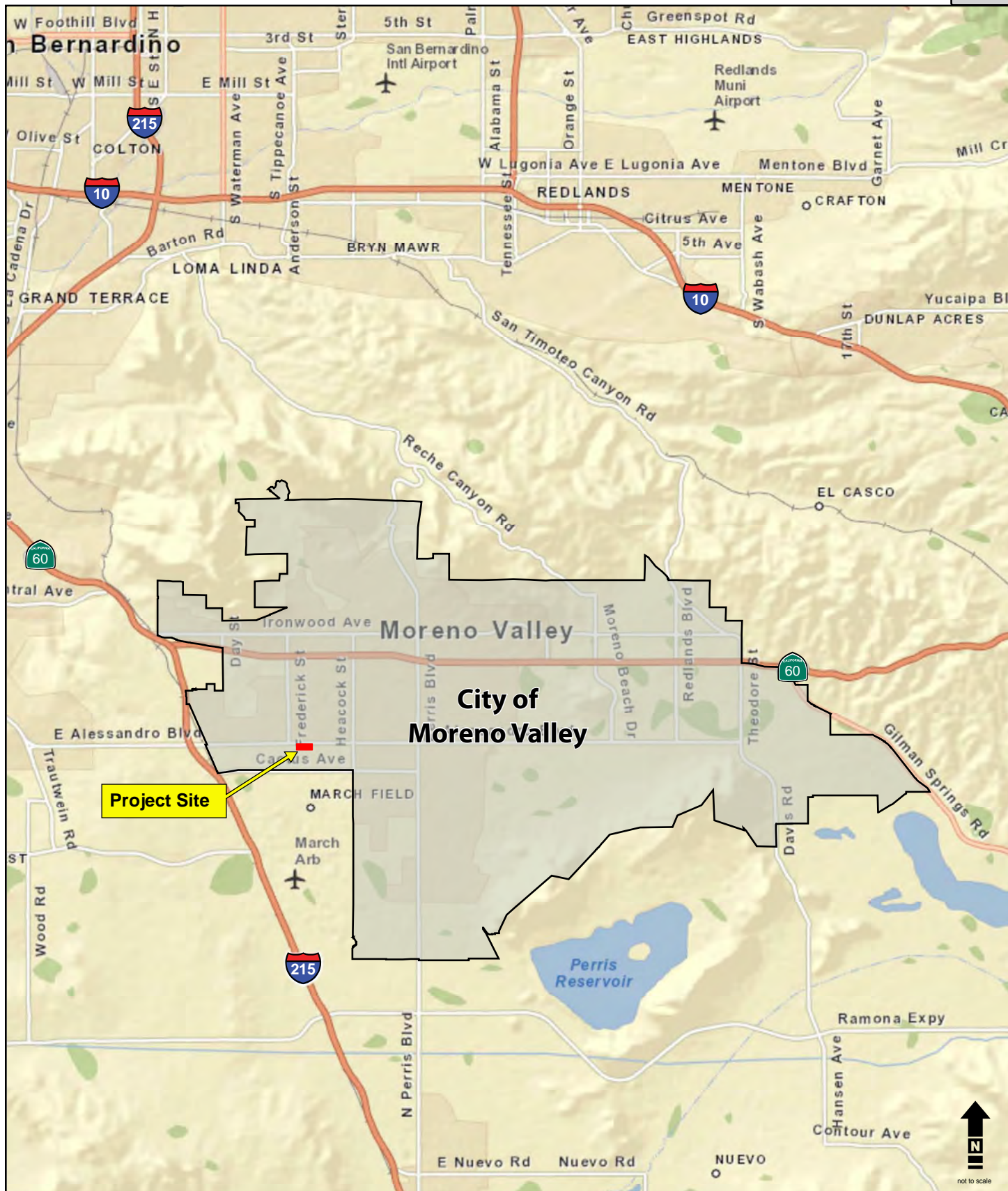
3.0 CONCLUSIONS

No least Bell's vireo were detected onsite during the focused survey efforts conducted during the 2020 breeding season.

4.0 REFERENCES

- American Ornithologist Union (AOU). 1998. Check-list of North American Birds. 8th ed. American Ornithologists' Union, Washington, DC.
- CDFW. 2010. The Vegetation Classification and Mapping Program – List of California Terrestrial Natural Communities Recognized by The California Natural Diversity Database. September 2010.
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- USFWS. 2006. Least Bell's Vireo 5-Year Review Summary and Evaluation.
- USFWS. 2001. Least Bell's Vireo Survey Guidelines, Carlsbad California.

FIGURES



Attachment: Appendix B1-MSHCP General Biological Resources Assessment and Compliance Analysis (4465 : PEN20-0118-0119, PEN20-0122

Figure 1 Regional Location Map

Alessandro Project Site, City of Moreno Valley, CA








-  Project Site Boundary (17.66 acres)
-  Offsite Assessment Area (2.65 acres)
-  Photo Point & Direction



Figure 2 Project Site Map



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |

Figure 3 Vegetation Communities Map

Alessandro Project Site, City of Mo...



Attachment: Appendix B1-MSHCP General Biological Resources Assessment and Compliance Analysis (4465 : PEN20-0118-0119, PEN20-0122



Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 4a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.

Figure 4b Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA

**Alessandro and Frederick Project Site
Jurisdictional Delineation Report & Impact Analysis**
City of Moreno Valley, Riverside County, CA



Prepared for:
Compass Danbe Real Estate Partners
523 Main St
El Segundo, CA 90245

Prepared by:
MIG, Inc.
1500 Iowa Avenue, Suite 110
Riverside, California 92507
Contact: Jonathan Campbell (310) 903-7876
jcampbell@migcom.com



March 2021

Contents		Page
1	Introduction	5
1.1	Project Location	5
1.2	Applicant Information	5
1.3	Directions to the Project	5
1.4	Project Description	5
1.5	Adjacent Land Uses	6
1.6	Field Delineator Contact Information	6
2	Summary of Regulations	7
2.1	Waters of the U.S.	7
2.2	California Department of Fish and Wildlife Jurisdiction	9
2.3	Regional and State Water Quality Control Board Jurisdiction	9
2.4	MSHCP Riparian/Riverine and Vernal Pool Habitat	12
3	Jurisdictional Delineation Methodology	13
3.1	Database and Literature Review	13
3.2	Field Surveys	13
3.3	Delineation of Wetland Waters of the US	14
3.4	Delineation of Non-Wetland Waters of the US	15
3.5	Delineation of Wetland and Non-Wetland Waters of the State under RWQCB	16
3.6	Delineation of CDFW Streambed & Riparian Habitat	16
3.7	Delineation of MSHCP Riparian/Riverine and Vernal Pools	16
4	Environmental Setting	18
4.1	Topography	18
4.2	Soils	18
4.3	Precipitation	18
4.4	Hydrologic Unit	18
4.5	Hydrology	19
4.6	Vegetation Communities	19
4.7	U.S. Fish and Wildlife Service National Wetland Inventory	20
4.8	Federal Emergency Management Agency	21
5	Jurisdictional Delineation Results and Discussion	22
5.1	Sample Point Summary	23
5.2	Waters of the US Under the USACE	25
5.3	Waters of the State Under the RWQCB	25
5.4	CDFW Jurisdictional Areas	25
5.5	MSHCP Riparian/Riverine Resources	26
6	Impacts to Jurisdictional Resources & Habitat Mitigation	27
6.1	Impacts to Jurisdictional Resources	27
6.2	Habitat Mitigation	27
7	Conclusions and Summary	28

8 References 29

List of Figures

Figure 1. Vicinity Map	31
Figure 2. Project Site Map	32
Figure 3. USGS Topographic Map	33
Figure 4. NRCS Soils Map	34
Figure 5. Vegetation Communities Map	35
Figure 6. RWQCB Jurisdiction	36
Figure 7. CDFW Jurisdiction	37
Figure 8. MSHCP Riparian/Riverine Habitat Map	38

List of Tables

Table 1: Classification of Wetland-Associated Plant Species	14
Table 2: Vegetation Communities	20
Table 3: Summary of Jurisdictional Waters and Habitats within the Project	21

List of Appendices

Appendix A: Plants Observed Onsite	39
Appendix B: USACE Wetland Determination Forms	40
Appendix C: Photo Locations & Site Photographs	41

List of Abbreviated Terms

APN	Assessor's Parcel Number
AWRS	Arid West Regional Supplement
CCR	California Code of Regulations
CFR	Code of Federal Regulations
CDFW	California Department of Fish and Wildlife
CWA	Clean Water Act
EPA	Environmental Protection Agency
°F	degrees Fahrenheit
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
FEMA	Federal Emergency Management Agency
GPS	Global Positioning System
HUC	Hydrologic Unit Code
LSAA	Lake and Streambed Alteration Agreement
MSCHP	Multiple Species Habitat Conservation Plan
NCDC	National Climatic Data Center
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resource Conservation Service
NTCHS	National Technical Committee for Hydric Soils
NWI	National Wetland Inventory
NWS	National Weather Service
OBL	Obligate
OHWM	Ordinary High Water Mark
RPW	Relatively Permanent Waters
RWQCB	Regional Water Quality Control Board
SP	Sample Point
TNW	Traditional Navigable Water
TOB	Top of Bank
UPL	Upland
US	United States
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1 Introduction

On April 21, 2020, MIG, Inc. (MIG) conducted a routine-level delineation of jurisdictional waters, wetlands, riparian/riverine and vernal pool resources on the Compass Danbe Real Estate Partners-owned Alessandro Project Site (Project) located in Moreno Valley, Riverside County, California. The Project is located in the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Plan Area.

The purpose of this jurisdictional delineation is to identify the extend of local, federal and state wetlands and waters within the Project boundaries to support necessary documentation and analysis under the California Environmental Quality Control Act (CEQA), as well as resource-agency permitting process under Sections 401 and 404 of the Clean Water Act (CWA), Section 13260 of the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), Section 1602 of the California Fish and Game Code and the MSHCP.

Details regarding each of these resource agencies as well as their regulatory authority, jurisdiction, permits, and regulatory processes are provided in Chapter 2, "Summary of Regulations."

The information and results presented herein document the investigation, best professional judgment and conclusions of MIG. It is correct and complete to the best of our knowledge. However, all jurisdictional determinations should be considered preliminary until reviewed and approved by the regulatory agencies.

1.1 Project Location

The 17.66-acre Project is located in the City of Moreno Valley, Riverside County, California and includes Assessor Parcel Numbers (APN): 297-170-002 and -003 (Figure 1 and Figure 2). The Project is south of Alessandro Boulevard, east of Frederick Street, and west of Graham Street. It is situated in the *Riverside East* U.S. Geological Survey (USGS) 7.5-minute quadrangle, Riverside County, Section 13, Township 3 South, Range 4 West (Figure 3). NAD83 Long/Lat is: -117.25391, 33.9151.

1.2 Applicant Information

Compass Danbe Real Estate Partners, LLC
523 Main St
El Segundo, CA 90245
Attn: Mark Bachli

1.3 Directions to the Project

Regional access to the Project is provided by taking the Alessandro Boulevard exit (exit 27-c) from Interstate 215 (I-215). Head east on Alessandro Boulevard and travel for approximately 1.5 miles to Frederick Street. The Project is located south of Alessandro Boulevard between Frederick and Graham Streets.

1.4 Project Description

The proposed Project includes the construction of two industrial warehouse buildings with a combined footprint of 372,309 square feet. Building 1 is 277,181 square feet and Building 2 is 95,128 square feet. Landscaping will be installed around the perimeter of the parcels and the buildings; and interspersed in the parking areas. Both buildings provide parking spaces for automobiles, ADA, Clean Air recharging, and trailer parking spaces according to the City's parking standards. The entire 17.66 acres will be developed.

1.5 Adjacent Land Uses

The Project lies in a mostly developed landscape in Moreno Valley. To the north and south of the Project is residential and commercial development. Directly east and west of the Project are small parcels of annually disced land, but beyond those parcels the general landscape is developed.

1.6 Field Delineator Contact Information

Jonathan Campbell
MIG, Inc.
500 Iowa Avenue, Suite 110
Riverside, California 92507
Contact: (310) 903-7876
jcampbell@migcom.com

2 Summary of Regulations

There are four primary agencies that regulate activities within creeks, wetlands and riparian areas in the City of Moreno Valley.

- 1) The U.S. Army Corps of Engineers Regulatory Program regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA).
- 2) The State Water Resources Control Board (SWRCB), administered by the Regional Water Quality Control Board regulates activities pursuant to Section 401 of the Federal CWA and the California Porter-Cologne Water Quality Control Act of 1969 (California Water Code).
- 3) The California Department of Fish and Wildlife (CDFW) regulates activities within streambeds, lakes, and wetlands pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code.
- 4) Western Riverside Regional Conservation Authority (RCA) regulates activities within riparian areas, riverine areas, and vernal pools pursuant to the Western Riverside MSHCP, Section 6.1.2.

If a proposed project impacts waters, wetlands, riparian/riverine or vernal pool habitat, the project limits must be evaluated to determine the presence of jurisdictional waters and wetlands.

2.1 Waters of the U.S.

The Army Corps of Engineers and the Environmental Protection Agency (EPA) have issued a set of guidance documents detailing the process for determining Clean Water Act (CWA) jurisdiction over waters of the U.S. (including wetlands) under the 2020 USACE Navigable Waters Protection Rule (2020 Rule). This supersedes all previous court decisions and rules. The EPA and USACE issued this Rule in January of 2020 and is in full effect at the time of this report preparation and is utilized for determining the jurisdiction over waters of the United States under the CWA. The complete set of guidance documents, summarized as key points below, were used to collect relevant data for evaluation to determine USACE jurisdiction over the project limits.

The 2020 Rule redefines “Waters of the United States” (WoUS) so that it includes only four simple categories of jurisdictional waters and provides clear exclusions for many water features that traditionally have not been regulated. The significant nexus test is no longer in effect.

These four categories protect the nation’s navigable waters and the core perennial and intermittent tributary systems that flow into those waters.

(1) Territorial seas and traditional navigable waters (TNWs) [Category (a)(1)]

The 2020 Rule regulates territorial seas and traditional navigable waters include large rivers and lakes and tidally-influenced waterbodies used in interstate or foreign commerce.

(2) Tributaries [Category (a)(2)]

The 2020 Rule regulates tributaries and includes perennial and intermittent rivers and streams that contribute surface flow to traditional navigable waters in a typical year. These tributaries must have perennial or intermittent flow. **Ephemeral drainages are no longer regulated under the 2020 Rule.**

Tributaries can connect to a traditional navigable water or territorial sea in a typical year either directly or through other WoUS, through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).

Ditches are to be considered tributaries only where they satisfy the flow conditions of the perennial and intermittent tributary definition and either were constructed in or relocate a tributary or were constructed in an adjacent wetland and contribute perennial or intermittent flow to a traditional navigable water in a typical year.

(3) Lakes, ponds, and impoundments of jurisdictional waters [Category (a)(3)]

Lakes, ponds, and impoundments of jurisdictional waters are jurisdictional where they contribute surface water flow to a traditional navigable water or territorial sea in a typical year either directly or through other WoUS through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways) or through natural features (including debris piles and boulder fields).

Lakes, ponds, and impoundments of jurisdictional waters are also jurisdictional where they are flooded by a WoUS in a typical year.

(4) Adjacent wetlands [Category (a)(4)]

Wetlands that physically touch other jurisdictional waters are "adjacent wetlands". This includes marshland habitats in tidal estuaries.

Wetlands separated from a WoUS by only a natural berm, bank or dune are also "adjacent."

Wetlands inundated by flooding from a WoUS in a typical year are "adjacent."

Wetlands that are physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure are "adjacent" so long as that structure allows for a direct hydrologic surface connection between the wetlands and the jurisdictional water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.

An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

The USACE generally takes jurisdiction within rivers and streams to the "ordinary high water mark (OHWM)," determined by erosion, the deposition of vegetation or debris, and changes in vegetation or soil characteristics.

The 2020 also outlines what are not WoUS. The following waters/features are not jurisdictional under the 2020 Rule:

- Waterbodies that are not included in the four categories of WoUS listed above.

- Groundwater, including groundwater drained through subsurface drainage systems, such as drains in agricultural lands.
- Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools.
- Diffuse stormwater run-off and directional sheet flow over upland.
- Many farm and roadside ditches.
- Prior converted cropland retains its longstanding exclusion, but is defined for the first time in the 2020 Rule. The agencies are clarifying that this exclusion will cease to apply when cropland is abandoned (i.e., not used for, or in support of, agricultural purposes in the immediately preceding five years) and has reverted to wetlands.
- Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease.
- Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters.
- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel.
- Stormwater control features excavated or constructed in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off.
- Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention and infiltration basins and ponds, that are constructed in upland or in non-jurisdictional waters
- Waste treatment systems have been excluded from the definition of WoUS since 1979 and will continue to be excluded under the 2020 Rule.

2.2 California Department of Fish and Wildlife Jurisdiction

Pursuant to Division 2, Chapter 6, Section 1602 of the Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake which supports fish or wildlife. A notification of a Lake or Streambed Alteration Agreement must be submitted to CDFW for “any activity” that may substantially change the bed, channel, or bank of any river, stream, or lake.” In addition, CDFW has jurisdiction over riparian habitats associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of a stream or lake, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. The CDFW reviews proposed actions, and if necessary, submits to the applicant a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement (LSAA).

2.3 Regional and State Water Quality Control Board Jurisdiction

The SWRCB together with the local RWQCB are the principal state agency with primary responsibility for the coordination and control of water quality. In Riverside County, the Santa Ana Regional Water Quality Control Board regulates water quality activities, pursuant to Section 401(a)(1) of the federal CWA as well as the Porter Cologne Water Quality Control Act (Porter-Cologne) (Water Code Section 13260). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable water at the point where the discharge originates or will originate. Any

such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.

In April 2019, the SWRCB adopted a “State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State” (Procedures). The Procedures consist of four major elements for State-regulated wetlands: 1) a wetland definition; 2) wetland delineation procedures; 3) a framework for determining if a feature that meets the wetland definition is a Water of the State; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. In adopting the Procedures, the State Water Board directed staff to develop implementation guidance for potential applicants.

In April 21, 2020 the SWRCB issued the “Implementation Guidance for the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State” , providing guidance for implementing the 2019 Procedures. The wetland definition and delineation methods set forth in the Procedures apply to wetlands only, and not to non-wetland Waters of the State.

Wetland Waters of the State

The Procedures define an area as wetland if, under normal circumstances:

- 1) The area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
- 2) The duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
- 3) The area’s vegetation is dominated by hydrophytes or the area lacks vegetation.

This modified three-parameter definition is similar to the federal definition in that it identifies three wetland characteristics that determine the presence of a wetland: wetland hydrology, hydric soils and hydrophytic vegetation. Unlike the federal definition however, the Procedures’ wetland definition allows for the presence of hydric substrates as a criteria for wetland identification (not just wetland soils) and wetland hydrology for an area devoid of vegetation (less than 5% cover) to be considered a wetland. However, if any vegetation is present then the USACE delineation procedures would apply to the vegetated component (i.e., hydrophytes must dominate). When determining the boundary of wetlands (vegetated or not) applicants can rely on Part II of the 1987 USACE Manual that provides information that is sufficient to determine wetland boundaries for compliance with the Procedures.

The USACE definition refers to “saturated soil conditions,” whereas the Procedures’ definition refers to saturated substrate leading to “anaerobic conditions in the upper substrate” which is a more inclusive term. Both of these descriptions define conditions that would lead to dominance of hydrophytes, if the site is vegetated. The Procedures definition refers to “continuous or recurrent saturation of the upper substrate.” Continuous saturation describes hydrological conditions that are perennial or tend to persist for at least twelve months. Recurrent saturation describes hydrological conditions that persist for less than twelve months. Hydrological conditions may be periodic and sustained regularly (i.e., tidewater) or episodic and intermittent, (i.e., vernal pools). In order for the recurrent saturation to support the development of anaerobic conditions, the substrate must become, and remain, saturated for a duration of 14 days during an annual cycle.

Waters of the State

California Code of Regulations, title 23, section 3831(w) states that "[a]ll Waters of the United States (WoUS) are also 'Waters of the State.'" The regulation reflects the SWRCB intent to include a broad interpretation of Waters of the US into the definition of Waters of the State. Waters of the State includes features that have been determined by the U.S. EPA or the USACE to be WoUS in an approved jurisdictional determination; WoUS identified in an aquatic resource report certified by the USACE upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of WoUS or any current or historic federal regulation defining WoUS. Because the interpretation of waters of the U.S. in place at the time section 3831(w) was adopted was broader than any post-Rapanos or post-SWANCC regulatory definitions that incorporated more limitations into the scope of federal jurisdiction, it is consistent with the SWRCB's intent to include both historic and current definitions of Waters of the US into the SWRCB's wetland jurisdictional framework.

A wetland will continue to be protected when it has been regulated in the past as a WoUS regardless of any subsequent changes in federal regulations. The inclusion of both current and historic definitions of WoUS ensures regulatory stability in an area that has otherwise been in flux. Like the other categories of the SWRCB's wetland jurisdictional framework, the status as a WoUS may only be used to establish that a wetland qualifies as a Water of the State. It cannot be used to exclude a wetland from qualifying as a Water of the State. Thus, wetlands that are categorically excluded from qualifying as a WoUS may nevertheless qualify as Waters of the State under another jurisdictional category.

Jurisdictional Framework

The jurisdictional framework is intended to exclude small (less than an acre) artificially-created, temporary features, such as tire ruts or other transient depressions caused by human activity from regulation, while still capturing smaller, naturally-occurring features, such as seasonal wetlands and small vernal pools that may be outside of federal jurisdiction. All artificial wetlands that are less than an acre in size and do not satisfy the criteria listed in section II.2, II.3.a, II.3.b, or II.3.c are not Waters of the State. Note that this jurisdictional framework applies only to features meeting the technical definition of a wetland.

If an aquatic feature does not meet the definition of a wetland, it may nonetheless be a different type of aquatic feature that may still be regulated as a non-wetland Water of the State (e.g., lakes, streams, and ocean waters). The Procedures do not include guidance for jurisdictional determinations for other Waters of the State. Non-wetland Waters of the State typically follow USACE regulations, however under the 2020 Rule, ephemeral drainages are excluded. No regulatory guidance has been issued by the SWRCB regarding the delineation of ephemeral drainages. However, until further notice the use of the OHWM will be used to delineate such resources.

Porter-Cologne Act

In the Porter-Cologne, the Legislature declared that the "State must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the State from degradation..." (California Water Code Section 13000). Porter-Cologne grants the Boards the authority to implement and enforce the water quality laws, regulations, policies and plans to protect the groundwater and surface waters of the State. It is important to note that enforcement of the State's water quality requirements is not solely the purview of the Boards and their staff. Other agencies [e.g., CDFW] have the ability to enforce certain water quality provisions in state law.

The Porter Cologne Act requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the Waters of the State to file a report of discharge (an application for waste discharge requirements (WDRs))" (Water Code § 13260(a)(1)). Discharge of fill material into Waters of the State which does not fall under the jurisdiction of the USACE pursuant to Section 404 of the CWA may require authorization through application for WDRs or through waiver of WDRs.

2.4 MSHCP Riparian/Riverine and Vernal Pool Habitat

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the FESA, as well as a NCCP under the NCCP Act of 2001. The MSHCP is being used to allow the participating jurisdictions to authorize "Take" of covered plant and wildlife species identified within the Plan Area. As projects are proposed within a Western Riverside MSHCP Plan Area, an assessment of the potentially significant effects of those projects on riparian/riverine areas, and vernal pools are required, as currently mandated by the California Environmental Quality Act (CEQA), using available information augmented by project-specific mapping provided to and reviewed by the Permittee's biologist(s).

Riparian/riverine areas and vernal pools are defined for this section as follows in accordance with Section 6.1.2, Vol I, of the Final MSHCP Plan:

"Riparian/Riverine Areas are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year."

Vernal pools are defined as:

"...seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season".

Although not expressly defined, it is assumed that the Army Corps of Engineer's 1987 Manual for delineating wetlands should be used in determining the presence of wetland indicators in vernal pools. With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.

3 Jurisdictional Delineation Methodology

3.1 Database and Literature Review

Prior to conducting the field survey, MIG reviewed available background information pertaining to wetlands and streams on and in the vicinity of the study area. Available literature and resources reviewed included:

- Regional Climate Data (PRISM Climate Group 2020),
- NOAA Palmer Drought Indices. <https://www.ncdc.noaa.gov/temp-and-precip/drought/historical-palmers/> (NOAA 2020),
- United States Department of Agricultural (USDA) Natural Resource Conservation Service (NRCS) web soil survey (NRCS 2020b),
- Aerial photographs (Google Earth Pro 2020),
- UC Santa Barbara Library's collection of aerial photography (UCSB 2019),
- NWI map data for the *Riverside East* 7.5-minute USGS quadrangle that characterize wetland and waters of the United States according to the Classification of Wetlands and Deepwater Habitats of the United States developed by the United States Fish and Wildlife Service (USFWS) (Cowardin et al. 1979; NWI 2020), and
- Federal Emergency Management Agency (FEMA) Flood Map Service Center (FEMA 2020).

3.2 Field Surveys

MIG's senior biologist Jonathan Campbell, PhD performed the field investigation on April 21, 2020 to evaluate the extent of jurisdictional features subject to the USACE, the RWQCB and the CDFW, as well as riparian, riverine and vernal pool habitat subject to the MSHCP. The limits of WoUS and Waters of the State, as well as riparian/riverine features were recorded in the field within accessible areas using aerial maps and Google earth

The jurisdictional delineation was conducted in accordance with the Corps of Engineers 1987 Wetlands Delineation Manual (Corps Manual; Environmental Laboratory 1987) and the SWQCB 2019 Procedures. Additionally, the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West (Version 2.0) (Regional Supplement) (USACE 2008a) the Arid West Supplement wetland delineation methodology for wetlands (USACE 2008a) and *A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b) were followed to document site conditions relative to hydrophytic vegetation, hydric soils, and wetland hydrology.

During the survey, the Project was examined for topographic features, drainages, alterations to hydrology or vegetation, and recent significant disturbance. A determination was then made as to whether normal environmental conditions were present at the time of the field survey. In the field, the techniques used to identify jurisdictional wetland waters of the US/State included observing the vegetation growing near the soil sample points and characterizing the current surface and subsurface hydrologic features present near the sample points through both wetland indicators and direct observation of hydrology. Features meeting wetland vegetation, soil, and hydrology criteria were then mapped in the field. A Trimble GeoXT geographic positioning system (GPS) unit with sub meter accuracy was used to collect geospatial data in the field. These GPS data, aerial photographic interpretation, and notes were then used in the office to identify jurisdictional boundaries on high resolution, geo-rectified aerial photography.

This report was prepared in accordance with guidance provided in Updated Map and Drawing Standards for the South Pacific Division Regulatory Program (USACE 2016a) and Information Requested for Verification of USACE Jurisdiction (USACE 2016b).

3.3 Delineation of Wetland Waters of the US

Where wetland field characteristics were present, Dr. Campbell examined vegetation, soils, and hydrology using the Routine Determination Method outlined in the Corps Manual (Environmental Laboratory 1987), using the Arid West data forms, vegetation sampling methods, and hydric soil and hydrology indicators developed for the Regional Supplement (USACE 2008a).

Hydrophytic Vegetation. Plant species identified on the Project were assigned a wetland status according to the USFWS list of plant species that occur in wetlands (Lichvar et al. 2016) and the USACE California Wetland Plant list (USACE, 2018). This wetland classification system is based on the expected frequency of occurrence in wetlands as shown in Table 1.

Table 1. Classification of Wetland-Associated Plant Species (Lichvar et al. 2016)

Indicator Category	Symbol	Frequency (Percent) of Occurrence in Wetlands ¹
Obligate	OBL	>99 (Almost always is a hydrophyte, rarely in uplands)
Facultative wetland	FACW	67 – 99 (Usually a hydrophyte but occasionally found in uplands)
Facultative	FAC	34 – 66 (Commonly occurs as either a hydrophyte or non-hydrophyte)
Facultative upland	FACU	1 – 33 (Occasionally is a hydrophyte, but usually occurs in uplands)
Upland ²	UPL	<1% (Rarely is a hydrophyte, almost always in uplands)
Not listed ²	NI	Considered to be an upland species

The USACE Arid West Supplement requires that a three-step process be conducted to determine if hydrophytic vegetation is present. The procedure first requires the delineator to apply the “50/20 rule” (Indicator 1) described in the manual. To apply the “50/20 rule,” dominant species are evaluated within each herb, shrub, and tree stratum of the community. In general, dominants are the most abundant species that individually or collectively account for more than 50 percent of the total coverage of vegetation in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total. If greater than 50 percent of the dominant species can be classified by an OBL, FACW, or FAC wetland indicator status, ignoring + and - qualifiers, hydrophytic vegetation is present.

If the community passes Indicator 1 then the community is hydrophytic. If the community fails Indicator 1 and neither hydric soils nor wetland hydrology is present, then the hydrophytic vegetation criterion is not met, unless the site is a problematic wetland situation due to natural processes or recent disturbances. However, if the plant community fails Indicator 1 but hydric soils and wetland hydrology are both present, the delineator must apply Indicator 2.

¹ Based on information contained in the Corps Manual.

² Plant species that are not listed in the *Arid West 2016 Regional Wetland Plant List* (Lichvar et al. 2016) are considered UPL species

Indicator 2 is known as the Prevalence Index. The prevalence index is a weighted average of the wetland indicator status for all plant species within the sampling plot. Each indicator status is given a numeric code (OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5). Indicator 2 requires the delineator to estimate the percent cover of each species in every stratum of the community and sum the cover estimates for any species that is present in more than one stratum. All species are then organized into groups according to their wetland indicator status and the Prevalence Index is calculated using the following formula:

$$PI = \frac{AOBL + 2AFACW + 3AFAC + 4AFACU + 5AUPL}{AOBL + AFACW + AFAC + AFACU + AUPL}$$

The Prevalence Index will yield a number between 1 and 5. If the Prevalence Index is equal to or less than 3, hydrophytic vegetation is present. However, if the community fails Indicator 2, the delineator must proceed to Indicator 3.

Indicator 3 is known as Morphological Adaptations. Some hydrophytes in the Western Mountain Region develop easily recognized physical characteristics (or morphological adaptations) when they occur in wetland areas. Some of these adaptations may include, but are not necessarily limited to, adventitious roots and shallow root systems developed on or near the soil surface. If more than 50 percent of the individuals of a FACU species exhibit morphological adaptations for life in wetlands, that species is considered to be a hydrophyte and its wetland indicator status should be reassigned to FAC. If such observations are made, the delineator must recalculate Indicator 1 and 2 using a FAC indicator status for this species. The vegetation is hydrophytic if either test is satisfied.

Hydric Soils. The National Technical Committee for Hydric Soils (NTCHS) defines a hydric soil as *a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the in the upper part [top 12 inches of soil]* (NRCS 2010). Hydric soils are listed by the U.S. Department of Agriculture (USDA) on the National Hydric Soils List (NRCS 2020a). Nearly all hydric soils exhibit characteristic morphologies that result from repeated periods of saturation or inundation for more than a few days, including redoximorphic features such as orange oxidized mottles or light-colored (high value, low chroma) reduced matrix or mottle colors.

The Arid West Supplement (USACE 2008b) contains a list of 23 hydric soil indicators that are known to occur in the Arid West region. Soils samples were collected and described according to the methodology provided in the NRCS. Soil chroma and values were determined by utilizing a standard Munsell soil color chart (Kollmorgen Instruments Corporation 2009). Hydric soils were determined to be present if any of the soil samples met the criteria defining wetland soils, as described in the Arid West Supplement (USACE 2008b).

Wetland Hydrology. Wetland hydrology exists in areas that are periodically inundated or have saturated soils at some time during the growing season, and for a sufficient duration to support hydrophytic vegetation (Environmental Laboratory 1987). This condition can either be observed through direct observation of primary indicators (such as ponding, saturation, sediment deposits, algal matting), or through indirect or “secondary” indicators (such as drainage pattern, saturation visible on an aerial photograph, raised ant mounds).

3.4 Delineation of Non-Wetland Waters of the US

Non-wetland waters (“Other waters”) were also identified in the field and mapped. This could include lakes, slough channels, seasonal ponds, tributary waters, non-wetland linear drainages, and salt ponds. Non-wetland waters meet the one or more of the wetland criteria, but not all three. In non-tidal or muted tidal

waters USACE jurisdiction extends to the ordinary high water mark (OHWM) which is defined in 33 CFR Part 328.3 as “the line on the shore established by the fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation or the presence of litter and debris.”

In tidal waters, USACE jurisdiction extends to the landward extent of vegetation associated with salt or brackish water or the high tide line (HTL) (see 33 CFR, Part 328.4). The HTL is defined in 33 CFR, Part 328.3 as “the line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The HTL may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gauges, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other tides that occur with periodic frequency, but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.”

3.5 Delineation of Wetland and Non-Wetland Waters of the State under RWQCB

Evaluation of jurisdiction under the RWQCB was completed, and traditionally follows guidance from Section 401 of the CWA. It generally has the same jurisdictional areas as the USACE. In addition, the wetland delineation procedures were followed per the “State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State” (April 2019).

3.6 Delineation of CDFW Streambed & Riparian Habitat

CDFW jurisdiction was identified, including any unvegetated streambed, aquatic and riparian areas. Evaluation of potentially jurisdictional areas followed the guidance of relevant CDFW materials and standard practices by CDFW personnel. CDFW jurisdiction was delineated by measuring the outer width and length boundaries of potentially jurisdictional areas, consisting of the greater of either the top of bank measurement or the extent of associated riparian or wetland vegetation.

Ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows fall under CDFW jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. Jurisdiction does not include tidal areas such as tidal sloughs unless there is freshwater input. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.

3.7 Delineation of MSHCP Riparian/Riverine and Vernal Pools

Habitats were assessed to determine if MSHCP riparian/riverine resources and vernal pools, pursuant to section 6.1.2 of the MSHCP are present onsite. MSHCP riparian/riverine resources are defined as, “*those lands that contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year. Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season*” (MSHCP 2004).

In addition, stock ponds, ephemeral pools, and other areas of potential fairy shrimp habitat are identified and mapped, where present.

4 Environmental Setting

This chapter describes the topography, land use, hydrology, vegetation characteristics, and soils associated with the Project.

4.1 Topography

Elevation within the Project ranges from 1,562 to 1,574 feet NAVD88, and gently slopes from the north to the south (Google Earth 2020). The site is mostly flat.

4.2 Soils

The NRCS has identified one soil series within the Project (Figure 4), and is described below (NRCS 2020b). The National List and California List of Hydric Soils was reviewed to determine if the soil type within the Project is hydric. The mapped soil series is not classified as a hydric soil on the National List or California List of Hydric soils (NRCS 2020a).

Monserate sandy loam, 0 to 5 percent slopes. The Monserate series is a member of the fine-loamy, mixed, thermic family of Typic Durixeralfs. This soil type has an impermeable layer (duripan) approximately 28 inches below the surface, which can form a perched water table when water is present, since infiltration through this soil layer is very slow. This may be a strong influence on the emergent cattail ponds that are present onsite, and allow for willow and other hydrophytic vegetation to persist in the swales.

The soils formed in alluvium derived principally from granitic rocks. Monserate soils have brown and yellowish red, slightly acid, sandy loam A horizons, reddish brown, neutral, sandy clay loam B2t horizons underlain by a silica-cemented duripan. Monserate soils are found in the interior valleys in the western part of southern California. Monserate soils are moderately well to well drained with slow to rapid runoff. Permeability is moderately slow below 10 to 20 inches and very slow in the duripan.

4.3 Precipitation

In Moreno Valley, the climate is hot-summer Mediterranean, with most rain falling in the winter and spring. Mild cool temperatures are common in the winter and hot to very hot temperatures are common in the summer. Climate conditions include a 30-year average (1986-2015) of approximately 8.7 inches of annual precipitation with an average temperature range from 53°F to 81°F (PRISM Climate Group 2020).

The jurisdictional delineation was conducted during normal conditions that were categorized as Mid-Range on the Palmer Drought Severity Index (NOAA 2020). The jurisdictional delineation field investigation took place during the wet season (April 2020). Relative to the 30-year climate normal, precipitation was normal for the 2019-20 wet season prior to the delineation. Total precipitation recorded in the area from October 2019 through February 2020 was 5.4 inches, which is approximately 87% of the 30-year average (PRISM Climate Group 2020). These normal conditions were taken into account when assessing the jurisdictional features present.

4.4 Hydrologic Unit

The Project is located in the San Jacinto sub-watershed (USGS Hydrologic Unit 18070202), which is part of the larger Santa Ana Watershed (USGS Hydrologic Unit 180702).

4.5 Hydrology

There are two small emergent marshes that connect with, and flow into, two ephemeral drainage swales within the Project limits (Figure 2). The primary sources of hydrology that support these features are runoff from storm flows, as well as nuisance flows (irrigation overspray, etc) from surrounding residential and commercial areas. The underlying duripan found within Monserate soils keeps water present in the marsh, and retains moisture sufficient for willows to grow, since the duripan can create a perched water table.

The drainage features are the remnants of natural braided channels that were present prior to urbanization. Evidence of these channels are visible in aerial photography in 1977 (UCSB 2020). The present day drainage swales convey runoff through overland flow into culverts that terminate at a detention basin, approximately 0.75 mile east of the Project, located at Brodiaea Avenue and Gilbert Street.

The drainage swales within the project are not confluent with the Sunnymead or Perris Valley Storm Drain Channels based on stormwater facility maps published by the Riverside County Flood Control and Water Conservation District.

The Sunnymead Storm Drain Channel is the nearest named hydrologic feature and is located offsite, and approximately 0.3 mile west of the Project. The Sunnymead Channel is confluent with the Perris Valley Storm Drain Channel which is located approximately 2.4 miles southeast of the Project. The Perris Valley Storm Drain Channel is confluent to the San Jacinto River, which flows into Lake Elsinore. Lake Elsinore generally acts as a sink, although high water flows are occasionally diverted through the Elsinore Spillway Channel to Temescal Creek. Temescal Creek flows to the Santa Ana River (nearest Traditional Navigable Water [TNW]) and finally to the Pacific Ocean.

4.6 Vegetation Communities

The Project supports four main vegetation communities, of which two are aquatic/riparian in nature (Figure 5). Vegetation communities were mapped using CDFW's Vegetation Classification and Mapping Program's (VegCAMP) currently accepted list of vegetation alliances and associations (CDFW 2020). Table 2 provides a summary of the main vegetation communities onsite. One mule fat and one palo verde individuals were separately mapped and constitute 0.011 acre, which is not included in the table or discussion below. Appendix A list of plant species recorded onsite.

Riparian or Wetland Habitat

Black Willow Riparian Woodland (0.39 acre). This riparian community is dominated by black willow (*Salix gooddingii*) [FACW] and occurs primarily within the onsite western drainage swale (Drainage A). A small patch of black willow is also found on the eastern swale. One mule fat (*Baccharis salicifolia*) [FACW] individual was also mapped within this vegetation community. Understory plants include ripgut brome (*Bromus diandrus*) [UPL], wild raddish (*Rhapanus sativus*) [FAC], chickweed (*Stellaria media*) [FACU], bedstraw (*Galium aparine*) [FACU], small-flowered fiddleneck (*Amsinckia menziesii*) [UPL], and hairy vetch (*Vicia villosa*) [UPL].

Typha Alliance (Disturbed Wetland - Cattail Marsh) (0.02 acre). Cattail marsh occurs at the upstream-most end of both onsite drainages, and form as a result of urban runoff in combination with the hardpan layer below the surface. The dominant specie is southern cattail (*Typha domingensis*) [OBL].

Wet Meadow (0.81 acre). Wet meadow vegetation community includes the seasonally inundated drainage pattern which bisects the non-native grassland. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Rhapanus sativus*),

Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), riggut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Upland Habitat

Non-native Grassland (16.39 acre). Non-native grassland is the dominant vegetation community throughout the property and is a result of annual discing operations. The dominant species is foxtail barley (*Hordeum murinum*) [FACU].

Developed Land (0.05 acre). Developed areas include buildings, impervious surfaces, and areas that are regularly disturbed, or are devoid of substantial vegetation cover. The concrete drainage at a culvert inlet at the terminus of Drainage A is considered developed land.

Table 2 - Vegetation Communities

Vegetation Community	Within Project Limits (acres)
Riparian or Wetland	
Black Willow Riparian Woodland	0.39
Typha Alliance (Disturbed wetland - cattail marsh)	0.02
Wet Meadow	0.81
Upland	
Non-Native Grassland	16.39
Developed (onsite only)	0.05
TOTAL	17.66

4.7 U.S. Fish and Wildlife Service National Wetland Inventory

As part of the evaluation for the presence of jurisdictional resources, USFWS National Wetland Inventory (NWI) map data were reviewed. NWI maps are based on interpretation of aerial photography, limited verification of mapped units, and/or classification of wetland types using the classification system developed by Cowardin et al. (1979). These wetland data are available for general reference purposes and do not necessarily correspond to jurisdictional waters/wetlands as defined in the USACE Arid West Supplement. According to the NWI map no wetlands are mapped within the Project, although the two onsite cattail marshes would be considered emergent wetland (PEM1C).

Nearby offsite wetland features include two intermittent riverine features (R4SBA): one approximately 0.5 mile east, and the other one approximately 0.3 mile west of the Project. The NWI also maps a freshwater emergent wetland (PEM1C) approximately 0.3 mile west of the Project Site.

4.8 Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) produces maps depicting flood zones that are generally associated with rivers, oceans and other water bodies. Like the NWI maps, the FEMA flood zone maps are based predominantly on topography and regional modeling.

Based upon a review of the FEMA flood zone maps, no portion of the Project occurs within the 100-year flood zone. The area is mapped as Zone X – Area of Minimal Flood Hazard (FEMA 2020).

5 Jurisdictional Delineation Results and Discussion

This chapter describes the delineated features, existing conditions and expected jurisdictional status within the Project limits. The information and results included herein document the investigation, best professional judgment, and conclusions of MIG. It is correct and complete to the best of our knowledge. However, all jurisdictional determinations should be considered preliminary until reviewed and approved by the regulatory agencies.

The Project contain two ephemeral drainages, willow woodland, and two emergent cattail marshes that are drainage subject to the jurisdiction of the RWQCB, the CDFW, and the MSHCP. A total of eight sample points (SP1 to SP8) were examined to identify jurisdictional features. See Figures 6 through 8 for a map of each jurisdiction. Table 3 provides a summary of acreage. The Arid Land JD Forms are found in Appendix B. Site photos locations and photographs are depicted are depicted in Appendix C.

A total of 1.22 acres of potentially jurisdictional waters & riparian/riverine habitat regulated by the RWQCB, the CDFW and the MSHCP were mapped onsite (see Table 3 below). The onsite aquatic and drainage swale features are not subject to the jurisdiction of the USACE under the 2020 Rule, since they do not meet any of the definitions of Category (a)(1-4) waters.

Table 3. Summary of Jurisdictional Waters and Habitats within the Project

Jurisdictional Waters	Acres ¹
RWQCB Jurisdiction Total	0.38 acre
Section 401 Waters of the State	
Wetland Waters of the State	
Cattail marshes	0.02 acre
Non-Wetland Waters of the State	
Drainages A & B (1,149 linear feet)	0.35 acre
Developed land (concrete drainage inlet, impacted)	0.01 acre
CDFW Jurisdiction Total	1.22 acre
Streambed	0.81 acre
Riparian/Aquatic	0.41 acre
MSHCP Riparian/Riverine Total	1.22 acre
Riverine	0.81 acre
Riparian/Aquatic	0.41 acre

¹Note: Values are approximate due to rounding.

Cattail Marshes

Two cattail marshes, totaling 0.02 acre, each situated on the north end of the two drainage swales met the definition of a Wetland Waters of the State, under the SWQCB 2019 Procedures and are considered Special Aquatic Sites. These two marshes are regulated by the RWQCB, CDFW and MSHCP. They are not jurisdictional under the USACE.

Black Willow Woodland

Black willow woodland is found just downstream of the cattail marsh along the western Drainage A and forms a broad woodland habitat. A small patch is also present on the upstream end of Drainage B. This area constitutes 0.39 acre of riparian habitat and is regulated by the CDFW and under the MSHCP to the outer dripline of the trees.

It did not meet the 3-parameter definition of a Wetland, and therefore it would be considered a non-wetland Water of the State subject to the RWQCB jurisdiction. Hydric soil characteristics were lacking. Examination of historic aerial photographs (Google Earth 1994-present) indicates an OHWM of approximately 20 feet wide in Drainage A and 7 feet wide in Drainage B under the canopy, which the RWQCB would take jurisdiction over. The acreage is included in Drainage A and B below.

Drainage A

Directly downstream of the Black Willow Woodland, woody vegetation disappears and is dominated by an array of grasses and forbs. The dominant plant species range from FAC to UPL and do not meet the criteria of hydrophytic vegetation and hydric soil characteristics are absent. These areas remain green for much longer duration than the surrounding area, indicating the presence of soil moisture, resulting from the urban hydrologic input. Examination of historic aerial photographs confirmed a defined bed and bank under non-discarded conditions, indicating that wetland hydrology is present. This drainage would be considered ephemeral in nature and extends for 218 linear feet beyond the willow woodland until it terminates in a concrete drainage inlet (already impacted jurisdictional feature) and exits the site. The total drainage length is 546 feet. The width of jurisdiction was determined by the presence of hydrology which averages 20 feet wide, for a total of 0.25 acre of jurisdiction. This drainage is regulated by the RWQCB, CDFW and under the MSHCP as non-wetland Waters of the State and Riverine habitat (MSHCP).

Drainage B

Drainage B is located directly downstream and adjacent to the eastern cattail marsh. Like Drainage A, woody vegetation is absent and grasses and forbs are dominant. The Project limits are regularly disced, so this occurs under a highly disturbed conditions. The dominant plant species are mostly FACU, but range from a few FACW to UPL species. This drainage does not meet the criteria of hydrophytic vegetation and hydric soil characteristics are absent. Like Drainage A, these areas remain green for much longer duration than the surrounding area, indicating the presence of soil moisture, resulting from the urban hydrologic input. Examination of historic aerial photographs confirmed a defined bed and bank under non-discarded conditions. Wetland hydrology is present. This drainage would be considered ephemeral in nature and extends for 603 linear feet until it terminates off-site in a concrete inlet. The width of jurisdiction was determined by the presence of hydrology which averages 7 feet wide, for a total of 0.10 acre of jurisdiction. This drainage is regulated by the RWQCB, CDFW and under the MSHCP as non-wetland Waters of the State and Riverine habitat (MSHCP).

5.1 Sample Point Summary

A total of eight (8) Sample Points (SP) were collected during the jurisdictional delineation. Arid West Wetland Determination Data Forms and SP locations are found in Appendix B.

- **SP1** was located just outside the cattail marsh of Drainage A. Dominant species were a mix of grasses and forbs which were FACU to UPL. It did not meet the criteria for hydrophytic vegetation or soils. Soils are regularly disced. Based upon historic aerial photographs this location is outside the OHWM. This Sample Point is not subject to the jurisdiction to any of the authorities that

regulate wetlands and waters.

- **SP2** is situated on the edge of the cattail marsh. Dominant species was southern cattail (*Typha domingensis*) [OBL]. The pond was inundated at the time of the survey. Due to the present of the OBL vegetation with the ponded water, hydric soils were assumed. This Sample Point meets the RWQCB definition of a wetland. It is an aquatic feature also regulated by the CDFW and MSHCP.
- **SP3** is located just downstream of the cattail pond of SP1 and SP2 on the western-most drainage (Drainage A). Overstory is black willow (FACW), with an understory of various invasive grasses and forbs (UPL and FACU plants). Soils did not exhibit hydric characteristic. Hydrology is from upstream sources with the duripan most likely acting as a perched water table. This SP does not meet the RWQCB definition of a wetland, but it would be considered a Waters of the State under the Porter Cologne Act, and Riparian Habitat regulated by the CDFW and the MSHCP.
- **SP4** is situated just outside the dripline of the Black Willow Woodland. It is dominated by forbs and grasses that occur in non-wetland areas, including annual fescue (*Vulpia myuros*) [FACU], wild radish [FAC], sweet clover (*Mellilotus officinalis*) [FACU], chickweed [FACU], hairy vetch [UPL] and bobtail barley (*Hordeum intercedens*) [FAC]. No hydric soils were noted. Normal circumstances do not exist due to annual discing. Examination of historic aerial photographs indicate this sample point is outside any OHWM. This Sample Point is not subject to the jurisdiction to any of the authorities that regulate wetlands and waters.
- **SP5** is downstream of SP1-4 in the same drainage, in the center of the swale where annual grasses and forbs dominate and willows are absent. Dominant plants include annual fescue [FACU], wild radish [FAC], sweet clover [FACU], chickweed [FACU], and Pacific popcorn flower (*Plagiobothrys tenellus*) [FACU]. There was no evidence of hydric soils. Normal circumstances do not exist due to annual discing. Examination of historic aerial photographs indicate a drainage with an OHWM of ~20 feet wide. This Sample Point meets the RWQCB definition of non-wetland waters of the State, is considered streambed by the CDFW and riverine habitat under the MSHCP.
- **SP6** lies at the edge of the eastern cattail marsh upstream of Drainage B. The dominant plant species was southern cattail [OBL], with curly dock (*Rumex crispus*) [FAC] and perennial ryegrass (*Lolium perenne*) [FAC] also present, but comprise a minor component. The pond was inundated. Due to the dominance of the OBL vegetation with the ponded water, hydric soils were assumed. This Sample Point meets the RWQCB definition of a wetland, and would also be regulated by the CDFW and under the MSHCP.
- **SP7** is along the eastern Drainage B with one mule fat [FACW] and black willow [FACW] present, along with a mix of FACW to FACU annual grasses and forbs. It met the Prevalence Index for hydrophytic vegetation, but did not meet the criteria for hydric soils. Examination of historic aerial photographs indicate a drainage with an OHWM of ~7 feet wide. This Sample Point meets the RWQCB definition of non-wetland waters of the State, is considered streambed by the CDFW and riverine habitat under the MSHCP.
- **SP8** is further downstream of SP7 in Drainage B. Dominant plants that are common in upland habitats, and were dominated by FACU species such as annual fescue, sweet clover and storksbill (*Erodium cicutarium*) [FAC]. It did not meet the criteria for hydrophytic vegetation or soils. Examination of historic aerial photographs indicate a drainage with an OHWM of ~7 feet wide. This

Sample Point meets the RWQCB definition of non-wetland waters of the State, is considered streambed by the CDFW and riverine habitat under the MSHCP.

5.2 Waters of the US Under the USACE

The two onsite cattail marshes, the willow woodland, and two drainages swales do not meet the definition of Waters of the US under the 2020 Rule, and thus the USACE will likely not exert jurisdiction, as of the date of this report. It should be noted however, that at least one state (Colorado) has an injunction, thus regulations in Colorado revert back to the pre-2020 Rule. Should a California injunction occur prior to permit application submittal, the USACE might exert jurisdiction over these features.

5.3 Waters of the State Under the RWQCB

Wetland Waters of the State

Both cattail marshes meet the definition of a Wetland under the SWQCB 2019 Procedures. All three wetland parameters are met, and thus these would be considered Wetland Waters of the State, and falls under the category of Special Aquatic Sites (§ 230.41 *Wetlands* in the 2019 Procedures). A total of 0.02 acre of RWQCB jurisdictional wetlands were identified onsite (Figure 6).

Non-Wetland Waters of the State

The OHWM under the black willow riparian woodland, Drainage A and B, and the already impacted concrete stormdrain inlet are considered non-wetland Waters of the State. Because they are not jurisdictional under the CWA, the RWQCB may exert jurisdiction under the California Porter Cologne Act and a Waste Discharge Requirement (WDR) or waiver of WDR would be required, should any waters of the State be impacted.

The RWQCB would take jurisdiction just the OHWM below the canopy in the black willow woodland. This acreage has been included as part of the overall acreage of the two drainage swales. Annual discing of the soil along Drainages A and B, has disturbed any OHWM features, thus historic aerial photographs were examined (Google Earth 1994-present). Evidence of an OHWM was observed and estimated widths extrapolated. Drainage A is estimated at 20 feet wide and is 546 feet long, for a total of 0.25 acre. Drainage B is estimated at 7 feet wide and extends for 603 linear feet, for a total of 0.10 acre. Total length of both drainages sums to 1,149 acres. Drainages A and B are non-wetland Waters of the US due to the presence of hydrology. They would take jurisdiction over 0.35 acre.

The concrete drainage inlet conveying water offsite is a non-wetland Water of the State. However, it is already considered "impacted" and therefore would not be subject to compensatory mitigation requirements over the 0.01 acre.

5.4 CDFW Jurisdictional Areas

All ecological systems associated with drainages (i.e., riparian vegetation) and drainage and pond features with bed and bank topography are regulated by the CDFW under Sections 1600-1616 of the California Fish and Game Code. This includes the 0.02 acre of cattail marshes, 0.39 acre of black willow woodland, and 0.81 acre of wetland meadow along Drainages A and B outside the black willow woodland, (Figure 7). A total of 1.22 acres of CDFW jurisdictional resources were identified onsite.

The cattail marsh and black willow woodland would be considered riparian/aquatic and generally requires higher mitigation ratios (e.g., 2:1) if impacted than the non-native grassland dominated wet meadow (1:1 mitigation ratio).

The concrete drainage inlet where water is conveyed offsite is a unvegetated stream channel by the CDFW since it conveys water. However, it is already considered "impacted" and therefore would not be subject to compensatory mitigation requirements over the 0.01 acre.

5.5 MSHCP Riparian/Riverine Resources

The cattail marshes and black willow woodlands are considered Riparian resources under the MSHCP. Drainages A and B are considered Riverine resources under the MSHCP. Thus, a total of 0.41 acre of riparian habitat and 0.81 acre of riverine habitat is present onsite for a total of 1.22 acres (Figure 8).

The concrete drainage inlet would not be regulated under the MSHCP. No vernal pool habitat occurs onsite.

6 Impacts to Jurisdictional Resources & Habitat Mitigation

6.1 Impacts to Jurisdictional Resources

Impacts to jurisdictional resources listed in this report as a result of the proposed development would trigger the need for regulatory permits. The current design would impact all jurisdictional resources. Impacts to Wetlands under the 2019 Procedures triggers the requirement for an Alternatives Analysis by the RWOCB. The 0.02 acre of cattail marsh would fall under this category.

6.2 Habitat Mitigation

Any permanent impacts to jurisdictional resources require that the resources be mitigated for (aka replaced or preserved). Impacts to 0.81 acre of wet meadow, which are ephemeral in nature and low quality, will be mitigated for by purchasing re-establishment credits at a 1:1 ratio from the Riverpark Mitigation Bank. Impacts to 0.41 acre of cattail marsh and black willow woodland will be mitigated for by purchasing rehabilitation credits at a 2:1 ratio at the Riverpark Mitigation Bank.

Habitat mitigation credits can be purchased either at an approved Habitat Mitigation Bank (privately owned) or via an In-Lieu Fee Program (public agency). Approval to purchase the mitigation credits must be granted in advance by the resource agencies. The Riverpark Mitigation Bank may be the preferred bank for purchase by the resource agencies, due to the approved Service Area that includes Riverside County. .

7 Conclusions and Summary

The Project limits support jurisdictional resources subject to the RWQCB, CDFW and under the MSHCP.

- Wetland habitat (Wetland Waters of the State) includes 0.02 acre of cattail marshes.
- Riparian habitat (non-Wetland Waters of the State & MSHCP habitat) includes 0.39 acre of black willow woodland.
- RWQCB streambed (Non-Wetland Waters of the State) includes Drainages A and B, which extend for 1,149 linear feet, totaling 0.35 acre.
- CDFW and MSHCP streambed totals 0.81 acre, includes Drainages A and B outside the willow woodland. This acreage is included with the total RWQCB jurisdiction.
- The onsite 0.01 acre concrete outlet is also considered jurisdictional by the RWQCB and CDFW but is already an impacted feature thus would not be subject to any mitigation requirement. It is not regulated under the MSHCP.

Under the USACE 2020 Rule, none of the features would be regulated under Section 404 of the CWA, since none meet the definition of Category (a)(1-4) regulated waters. Should there be a California injunction over the new rule, this may be subject to change. Obtaining a letter of non-jurisdiction by the USACE is recommended.

Impacts to 0.81 acre of CDFW and MSHCP streambed, which are ephemeral in nature and low quality, will be mitigated for by purchasing re-establishment credits at a 1:1 ratio from the Riverpark Mitigation Bank. Impacts to 0.41 acre of CDFW and MSHCP riparian areas will be mitigated for by purchasing rehabilitation credits at a 2:1 ratio at the Riverpark Mitigation Bank.

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Attachment: Appendix B2-Jurisdictional Delineation Report and Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Figure 1 Vicinity Map

Alessandro Project Site, City of Moreno Valley, CA

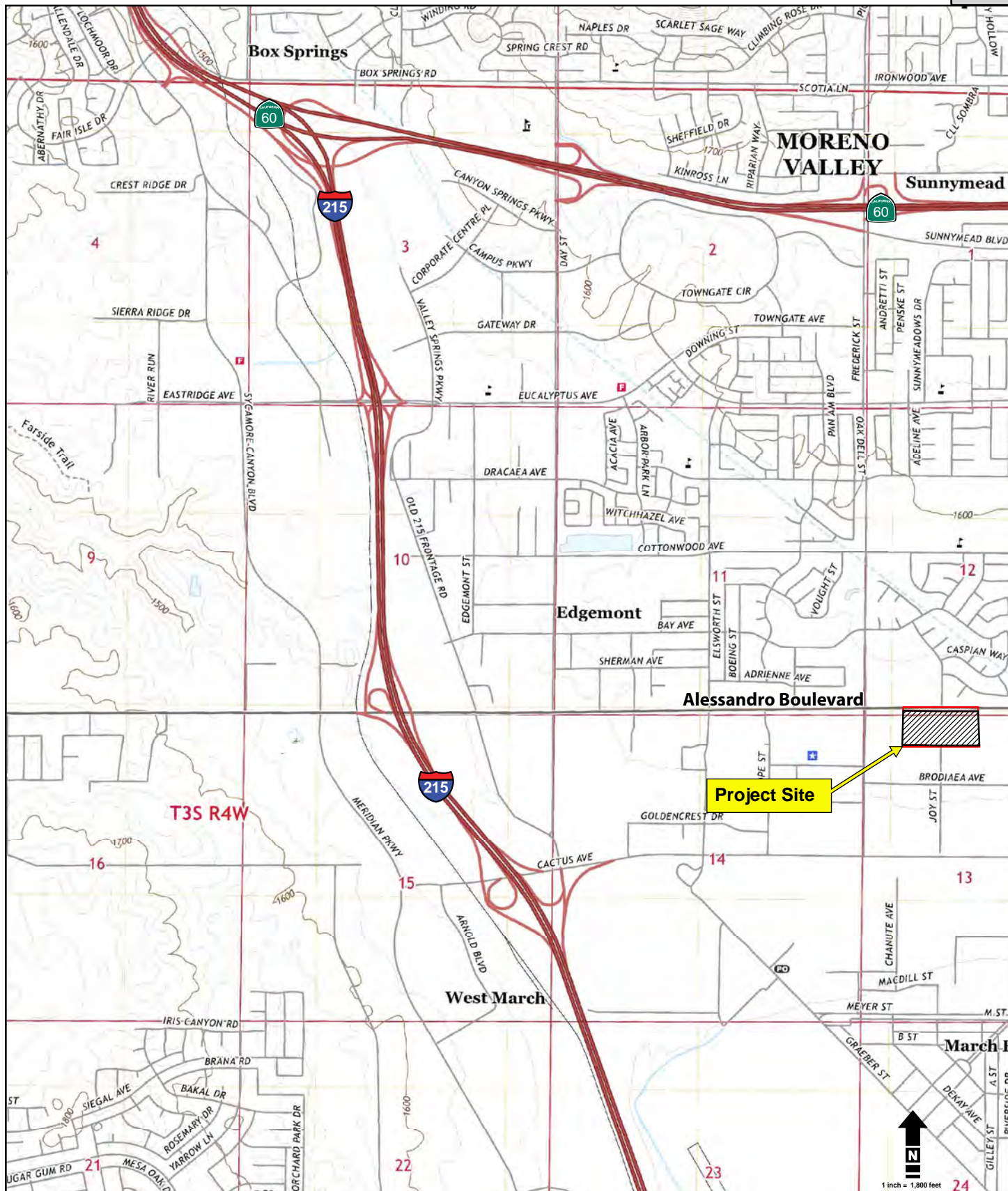






- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)

Attachment: Appendix B2-Jurisdictional Delineation Report and Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Figure 2 Project Site Map



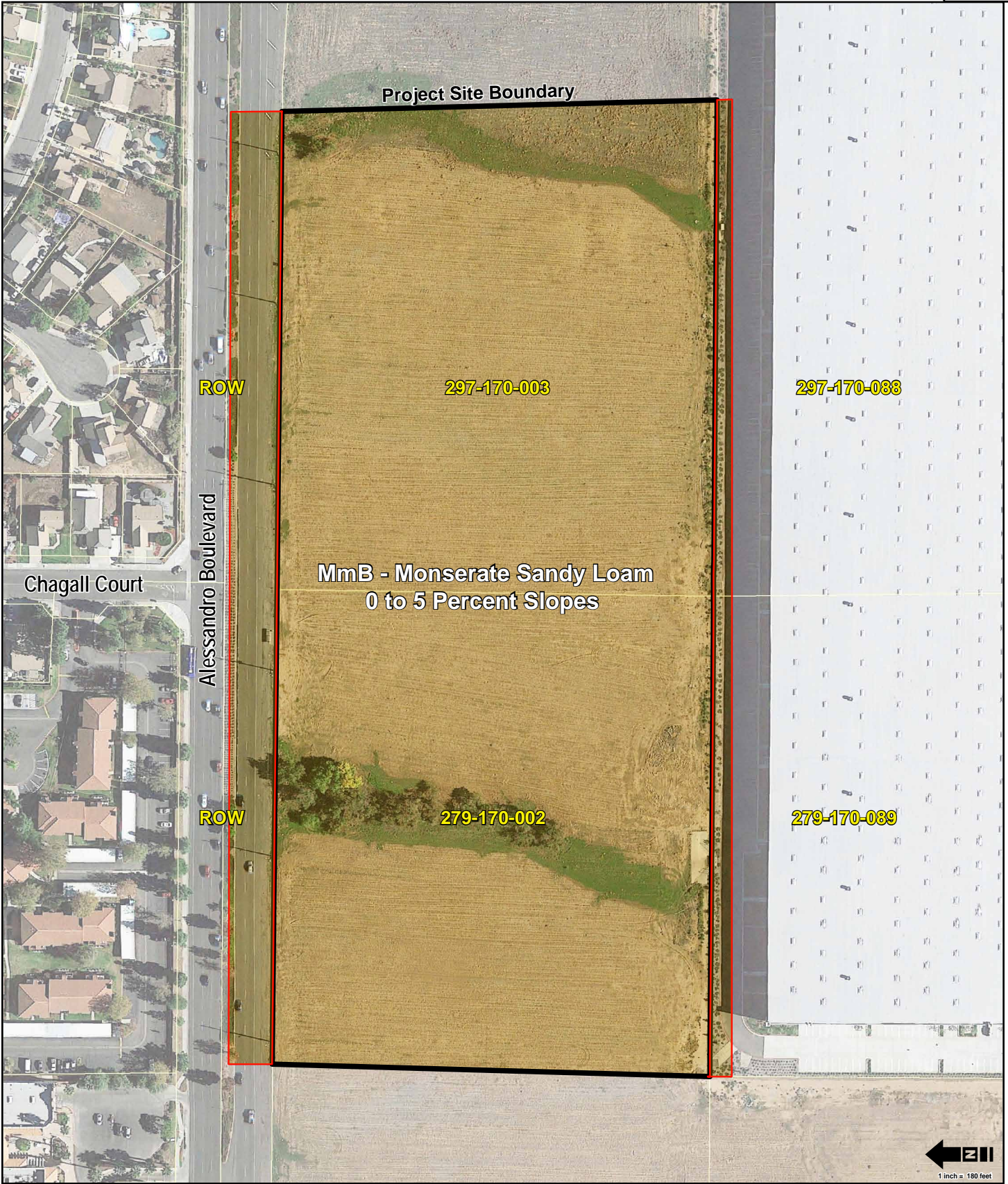
-  Project Site Boundary (17.66 acres)
-  Offsite Assessment Area (2.65 acres)

Source: USGS Riverside East 2018

Figure 3 USGS Map

Alessandro Project Site, City of Moreno Valley, CA





- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- MmB - Monserate Sandy Loam (NRCS 2020)



Figure 4 Soils Associations Map
Alessandro Project Site, City of Modesto, CA



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |
| WM Wet Meadow | | |

Figure 5 Vegetation Communities Map
Alessandro Project Site, City of Modesto, CA



- Wetland Waters of the State (0.02 acre)
- Non-Wetland Waters of the State (0.35 acre, 1,149 LF)
- Concrete Stormdrain, already impacted (0.01 acre, 32 LF)
- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)



Figure 6 RWQCB Jurisdiction
 Alessandro Project Site, City of Mo...
 Packet Pg. 1168

Attachment: Appendix B2-Jurisdictional Delineation Report and Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124



- CDFW Disturbed Wetland (0.02 acre)
- CDFW Riparian (0.39 acre)
- CDFW Wet Meadow (0.81)
- Concrete Stormdrain, already impacted (0.01 acre, 32 LF)
- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)



Figure 7 CDFW Jurisdiction



- MSHCP Aquatic (0.02 acre)
- MSHCP Riparian (0.39 acre)
- MSHCP Riverine (0.81 acre)

- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)



Appendix A: Plants Observed Onsite

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), riggut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding's willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracunculus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

Appendix B: USACE Wetland Determination Forms



Sample Point Locations

Appendix C: Site Photographs



Photo 1: View of Black Willow Woodland along Drainage A.



Photo 2: View of Concrete inlet at terminus of Drainage A.



Photo 3: View of disced field where Drainage B is situated. Taken from SE corner.



Photo 4: View of Drainage B and cattail marsh near Alessandro Blvd.

MSHCP Determination of Biologically Equivalent or Superior Preservation

Alessandro Project Site

City of Moreno Valley, Riverside County, California



Prepared for:

Compass Danbe Real Estate Partners
523 Main St
El Segundo, CA 90245
Attn: Mark Bachli

Prepared by:

MIG, Inc.
1500 Iowa Avenue, Suite 110
Riverside, California 92507
Contact: Jonathan Campbell (310) 903-7876
jcampbell@migcom.com



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Table of Contents

TABLE OF CONTENTS	1
1.0 EXECUTIVE SUMMARY	1
2.0 INTRODUCTION.....	1
2.1 Project Site	1
2.2 Project Description.....	2
2.3 Existing Conditions	2
3.0 RIPARIAN, RIVERINE, VERNAL POOL MITIGATION (SECTION 6.1.2).....	5
3.1 Methods.....	5
3.2 Results/Impacts	8
3.3 Mitigation and Equivalency	9
3.3.1 Direct Effects	9
3.3.2 Indirect Effects.....	10
4.0 NARROW ENDEMIC PLANT SPECIES MITIGATION SECTION (6.1.3).....	10
4.1 Methods.....	11
4.2 Results/Impacts	11
4.3 Mitigation and Equivalency	11
4.3.1 Direct Effects	11
4.3.2 Indirect Effects.....	11
5.0 CRITERIA AREA SPECIES MITIGATION (SECTION 6.3.2).....	11
5.1 Criteria Area Species Survey Area – Plants	11
5.1.1 Methods.....	11
5.1.2 Results/Impacts	11
5.1.3 Mitigation and Equivalency	12
5.2 Criteria Area Species Survey Area – Burrowing Owl.....	12
5.2.1 Methods.....	12
5.2.2 Results/Impacts	13
5.2.3 Mitigation and Equivalency	13
5.3 Criteria Area Species Survey Area – Mammals.....	14
5.3.1 Methods.....	14
5.3.2 Results/Impacts	14
5.3.3 Mitigation and Equivalency	14
5.4 Criteria Area Species Survey Area – Amphibians.....	14
5.4.1 Methods.....	14
5.4.2 Results/Impacts	14
5.4.3 Mitigation and Equivalency	15
6.0 REFERENCES.....	15

List of Figures

Figure 1	Regional Location Map
Figure 2	Project Site Map
Figure 3	Vegetation Communities Map
Figure 4(a-b)	Current Project Site Photographs
Figure 5	Soils Association Photographs
Figure 6	MSHCP Section 6.1.2 Jurisdictional Resources Impact Map

List of Tables

Table 1	Project Site Plant Communities and Land Cover Types
Table 2	MSHCP Section 6.1.2 Riparian and Riverine Impacts

List of Appendices

Appendix A	Burrowing Owl Focused Survey Report, Alessandro Project Site
Appendix B	Least Bell's Vireo Focused Survey Report, Alessandro Project Site
Appendix C	Alessandro and Frederick Project Site Jurisdictional Delineation Report & Impact Analysis

1.0 EXECUTIVE SUMMARY

This following document presents the results of a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis conducted by MIG, Inc. (MIG) for the Compass Danbe Real Estate Partners-owned Alessandro project. The DBESP analysis is based on existing conditions, MSHCP Section 6.1.2 assessments, focused surveys and MSHCP compliance determination outlined in the following documents prepared by MIG:

- Burrowing Owl Focused Survey Report, Alessandro Project Site (MIG, Inc. 2020a).
- Least Bell's Vireo Focused Survey Report, Alessandro Project Site (MIG, Inc. 2020b).
- Alessandro Project Site Jurisdictional Delineation Report & Impact Analysis (MIG, Inc 2021).
- MSHCP General Biological Resources Assessment & Compliance Analysis (MIG, Inc. 2020d)

A total of 1.22-acre of permanent impacts will occur within the two drainages as a result of project initiation. Of this area, 0.41 acre represents MSHCP riparian resources, and 0.81 acres represents MSHCP riverine resources. To meet the criteria of a biologically equivalent or superior alternative, the applicant will offset permanent impacts to all 1.22-acre of MSHCP Section 6.1.2 riparian and riverine resources located within the two (2) unnamed drainages as described below.

To meet the criteria of a biologically equivalent or superior alternative, the applicant will offset permanent impacts to MSHCP Section 6.1.2 Riparian and Riverine resources by:

1. Permanent impacts to 0.41-acre of MSHCP Section 6.1.2 riparian resources would be mitigated at a ratio of 2:1 through purchase of 0.82 acre of rehabilitation credits from the Riverpark Mitigation Bank.
2. Permanent impacts to 0.81-acre of MSHCP Section 6.1.2 riverine resources would be mitigated at a ratio of 1:1 through purchase of 0.81 acre of re-establishment credits from the Riverpark Mitigation Bank.

2.0 INTRODUCTION

This document presents the results of a Determination of Biologically Equivalent or Superior Preservation analysis conducted by MIG, Inc. (MIG) for the Compass Danbe Real Estate Partners-owned Alessandro Project Site located in Moreno Valley, Riverside County, California, as required under Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*, of the Western Riverside County MSHCP (MSHCP 2004).

2.1 Project Site

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley, Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S.

Geological Survey (USGS) 7.5' series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12. The Project Site lies in a mostly developed landscape in Moreno Valley. To the north and south of the Project Site is residential and commercial development. Directly east and west of the Project Site are small parcels of annually disked land, but beyond those parcels the general landscape is developed.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.2 Project Description

The proposed action includes the construction of two industrial warehouse buildings with a combined footprint of 372,309 square feet. Building 1 is 277,181 square feet and Building 2 is 95,128 square feet. Landscaping will be installed around the perimeter of the parcels and the buildings; and interspersed in the parking areas. Both buildings provide parking spaces for automobiles, ADA, Clean Air recharging, and trailer parking spaces according to the City of Moreno Valley parking standards. The entire 17.66 acres will be developed.

2.3 Existing Conditions

The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands. Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below. A summary of the acreages of each mapped vegetation community or land cover type is provided in Table 1.

Table 1. Project Site Plant Communities and Land Cover Types

Plant Communities/Land Cover Type	Onsite Area (acres)	Offsite Area (acres)	TOTAL Impacts (acres)
Disturbed/Non-Native Grassland	16.38	0.00	16.38
Wet Meadow	0.81	0.00	0.81
Black Willow Woodland	0.39	0.00	0.39
Developed	0.05	2.65	2.70
Disturbed Wetland – Cattail	0.02	0.00	0.02
Ornamental (individual tree)	0.01	0.00	0.01
Mule Fat (individual shrub)	0.001	0.00	0.001
Total	17.66	2.65	20.31

Vegetation Communities

Vegetation communities were mapped in the field onto a color aerial photograph (Figure 3) and were evaluated to determine if they are considered sensitive under federal, state, or local regulations or policies. Vegetation communities were classified as sensitive or non-sensitive as defined by CEQA and other applicable laws and regulations. Vegetation community names and hierarchical structure follows the CDFW "List of California Terrestrial Natural Communities" or Holland (1986) classification systems. Distribution of

onsite vegetation communities and representative photographs are provided as Figure 3, and 4 (a-b). The species listed below represent those individuals identified onsite during the field surveys listed in this report.

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Wet Meadow

The seasonally inundated swales associated with Drainage A and B are characterized as wet meadow based on a review of historic aerial photography. Dominant plant species observed within this region are similar to those listed above in disturbed/non-native grassland.

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding's willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracunculus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

Soils

The Natural Resources Conservation Service (NRCS) has identified one soil series within the Project Site (Figure 5), and is described below (NRCS 2020). The National List and California List of Hydric Soils was reviewed to determine if the soil type within the Project Site is hydric. The mapped soil series is not classified as a hydric soil on the National List or California List of Hydric soils (NRCS 2020).

Monserate sandy loam, 0 to 5 percent slopes.

The Monserate series is a member of the fine-loamy, mixed, thermic family of Typic Durixeralfs. This soil type has an impermeable layer (duripan) approximately 28 inches below the surface, which can form a perched water table when water is present, since infiltration through this soil layer is very slow. This may be a strong influence on the Disturbed Wetland–Cattail that are present onsite, and allow for willow and other hydrophytic vegetation to persist in the swales.

The soils formed in alluvium derived principally from granitic rocks. Monserate soils have brown and yellowish red, slightly acid, sandy loam A horizons, reddish brown, neutral, sandy clay loam B2t horizons underlain by a silica-cemented duripan. Monserate soils are found in the interior valleys in the western part of southern California. Monserate soils are moderately well to well drained with slow to rapid runoff. Permeability is moderately slow below 10 to 20 inches and very slow in the duripan.

Drainages

There are two small emergent disturbed cattail wetlands that connect with, and flow into, two ephemeral drainage swales within the Project Site limits (Figure 2). The primary sources of hydrology that support these features are runoff from storm flows, as well as nuisance flows (irrigation overspray, etc.) from surrounding residential and commercial areas. The underlying duripan found within Monserate soils keeps water present in the disturbed wetlands-cattail, and retains moisture sufficient for willows to grow, since the duripan can create a perched water table.

The drainage features are the remnants of natural braided channels that were present prior to urbanization. Evidence of these channels are visible in aerial photography in 1977 (UCSB 2020). The present-day drainage swales convey runoff through overland flow into culverts that terminate at a detention basin, approximately 0.75 mile east of the Project Site, located at Brodiaea Avenue and Gilbert Street.

The drainage swales within the Project Site are not confluent with the Sunnymead or Perris Valley Storm Drain Channels based on stormwater facility maps published by the Riverside County Flood Control and Water Conservation District.

The Sunnymead Storm Drain Channel is the nearest named hydrologic feature and is located offsite, and approximately 0.3 mile west of the Project Site. The Sunnymead Channel is confluent with the Perris Valley Storm Drain Channel which is located approximately 2.4 miles southeast of the Project Site. The Perris Valley Storm Drain Channel is confluent to the San Jacinto River, which flows into Lake Elsinore. Lake Elsinore generally acts as a sink, although high water flows are occasionally diverted through the Elsinore Spillway

Channel to Temescal Creek. Temescal Creek flows to the Santa Ana River (nearest Traditional Navigable Water [TNW]) and finally to the Pacific Ocean.

3.0 RIPARIAN, RIVERINE, VERNAL POOL MITIGATION (SECTION 6.1.2)

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the FESA, as well as a NCCP under the NCCP Act of 2001. The MSHCP is being used to allow the participating jurisdictions to authorize "Take" of covered plant and wildlife species identified within the Plan Area. As projects are proposed within a Western Riverside MSHCP Plan Area, an assessment of the potentially significant effects of those projects on riparian/riverine areas, and vernal pools are required, as currently mandated by the California Environmental Quality Act (CEQA), using available information augmented by project-specific mapping provided to and reviewed by the Permittee's biologist(s).

Riparian/riverine areas and vernal pools are defined for this section as follows in accordance with Section 6.1.2, Vol I, of the Final MSHCP Plan:

"Riparian/Riverine Areas are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year."

Vernal pools are defined as:

"...seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season".

Although not expressly defined, it is assumed that the Army Corps of Engineer's 1987 Manual for delineating wetlands should be used in determining the presence of wetland indicators in vernal pools. With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.

3.1 Methods

MSHCP Riparian, Riverine, and Vernal Pool Resources Assessment

MIG's senior biologist Jonathan Campbell, PhD performed the field investigation on April 21st, 2020 to evaluate the extent of jurisdictional features subject to the MSHCP Section 6.1.2 riparian, riverine and vernal pool resources. The limits of riparian/riverine features were recorded in the field within accessible areas using aerial maps and Google earth

Specifically, habitats were assessed to determine if MSHCP riparian/riverine resources and vernal pools, pursuant to section 6.1.2 of the MSHCP are present onsite. MSHCP riparian/riverine resources are defined as,

"those lands that contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year. Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season" (MSHCP 2004).

In addition, stock ponds, ephemeral pools, and other areas of potential fairy shrimp habitat are identified and mapped, where present.

Focused Riparian Bird Surveys

Low potential habitat for least Bell's vireo (*Vireo bellii pusillus*) was initially identified onsite in the black willow woodland vegetation community (Figure 3, Vegetation Communities Map). Focused protocol surveys were conducted in spring/summer 2020 to determine the presence/absence of this species on the Project Site. The *Least Bell's Vireo Survey Report for the Alessandro Project Site* is provided in Appendix B.

An initial habitat assessment for potential least Bell's vireo habitat was conducted on May 21st, 2020. As described below, all vegetation communities onsite were mapped and assessed for suitability for least Bell's vireo. A single vegetation community including black willow woodland was characterized as representing low potential habitat for the species. Therefore, focused United States Fish and Wildlife Service (USFWS) protocol surveys were initiated. As stated by the USFWS:

"Under normal circumstances, all riparian areas and any other potential vireo habitats should be surveyed at least eight (8) times during the period from April 10 to July 31. However, we may concur, on a case by case basis, with a reduced effort if unusual circumstances dictate that this is a prudent course of action. For instance, intensive surveys of small, marginal or extralimital habitats by experienced personnel may well result in defensible conclusions that eight (or more) individual surveys are unnecessary. Under such unusual circumstances, we will consider requests for reductions in the prescribed number of individual surveys. In any case, site visits should be conducted at least 10 days apart to maximize the detection of, for instance, late and early arrivals, females, particularly "non-vocal" birds of both sexes, and nesting pairs.

- 1) *Although the period from April 10 to July 31 encompasses the period during which most vireo nesting activity occurs, eight surveys are generally sufficient to detect most (if not all) vireo adults in occupied habitats. Precise vireo censuses and estimations of home range likely will not be possible unless surveys are conducted outside of this time window. Although focused surveys conducted in accordance with these guidelines substantially reduce the risk of an unauthorized take* that could potentially occur as a result of land development or other projects, individual project proponents may wish to conduct surveys that are more rigorous than those that would otherwise*

- result from strict adherence to these survey guidelines. If additional information (e.g., extent of occupied habitat, total numbers of adult and juvenile vireos in study area) is desired or necessary, surveys should be extended to August 31 and conducted in such a manner as to collect the data necessary to prepare reports that reflect the methods and standards established in the current scientific literature on this subject. In particular, information collected after July 15 will reflect a broader extent to the riparian habitat and other adjacent habitat types that the vireo typically utilizes during the latter phase of the breeding season, especially when the young become independent of the adults.*
- 2) Surveys should be conducted by a qualified biologist familiar with the songs, whisper songs, calls, scolds, and plumage characteristics of adult and juvenile vireos. These skills are essential to maximize the probability of detecting vireos and to avoid potentially harassing the species in occupied habitats.*
 - 3) Surveys should be conducted between dawn and 11:00 a.m. Surveys should not be conducted during periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather that individually or collectively may reduce the likelihood of detection.*
 - 4) Surveyors should not survey more than 3 linear kilometers or more than 50 hectares of habitat on any given survey day. Although surveyors should generally station themselves in the best possible locations to hear or see vireos, care should be taken not to disturb potential or actual vireo habitats and nests or the habitat of any sensitive or listed riparian species.*
 - 5) All vireo detections (e.g., vocalization points, areas used for foraging, etc.) should be recorded and subsequently plotted to estimate the location and extent of habitats utilized. These data should be mapped on the appropriate USGS quadrangle map.*
 - 6) Data pertaining to vireo status and distribution (e.g., numbers and locations of paired or unpaired territorial males, ages and sexes of all birds encountered) should be noted and recorded during each survey. In addition, surveyors should look for leg bands on vireo adults and juveniles if, in fact, it is possible to do so without disturbing or harassing the birds. If leg bands or other markers are observed, then surveyors should record and report the detection and associated circumstances to us by telephone, facsimile, or electronic mail as soon as possible. Reports should include the colors and relative locations of any and all bands detected, the age and sex of the marked bird, and the precise location of the detection.*
 - 7) The numbers and locations of all brown-headed cowbirds (*Molothrus ater*) detected within vireo territories should be recorded during each survey and subsequently reported to us. In addition, all detections of the State and federally endangered southwestern willow flycatcher (*Empidonax trillii extimus*, flycatcher) and State endangered yellow-billed cuckoo (*Coccyzus americanus*, cuckoo) should be recorded and reported. Any and all cuckoo and flycatcher adults, young, or nests should not be approached, and taped vocalizations of these species should not be used unless*

authorized in advance by scientific permits to take issued by us (if appropriate) and the California Department of Fish and Game. Flycatcher presence/absence surveys require a recovery permit issued by us per section 10(a)(1)(A) of the Endangered Species Act.” (USFWS 2001)*

A total of eight (8) focused least Bell’s vireo surveys were conducted on May 21st, 31st, June 10th, 20th, 30th, July 10th, 20th, and 30th, 2020 by Senior Biologist Jonathan Campbell, PhD and Ruben Ramirez throughout the black willow woodland documented onsite and described below. All surveys were conducted during times and conditions conducive to observing least Bell’s vireo.

No least Bell’s vireo was detected during the 2020 surveys.

3.2 Results/Impacts

The Project Site contain two ephemeral drainages, willow woodland, and two small patches of disturbed wetland–cattail that are subject to the jurisdiction of the MSHCP Section 6.1.2. A total of eight sample points (SP1 to SP8) were examined to identify MSHCP jurisdictional wetland features. Table 2 provides a summary of MSHCP Section 6.1.2 riparian and riverine acreage impacts.

A total of 1.22 acre of MSHCP riparian and riverine were mapped onsite (see Table 2 below).

Table 2. MSHCP Section 6.1.2 Riparian and Riverine Impacts

MSHCP Jurisdictional Resources	Impacts Acres ¹
Riverine	0.81 acre
Riparian/Aquatic	0.41 acre
MSHCP Riparian/Riverine Total	1.22 acre

¹Note: Values are approximate due to rounding.

Disturbed Wetland – Cattail

Two (2) patches of disturbed wetlands-cattail, totaling 0.02 acre, each situated on the north end of the two drainage swales met the definition of MSHCP Section 6.1.2 riparian (aquatic) resources.

Black Willow Woodland

Black willow woodland is found just downstream of the disturbed wetlands-cattail along the western Drainage A and forms a broad woodland habitat. A small patch is also present on the upstream end of Drainage B. These areas constitute 0.39 acre of riparian habitat and is regulated by the MSHCP Section 6.1.2 riparian resources to the outer dripline of the trees.

Drainage A

Directly downstream of the black willow woodland, woody vegetation disappears and is dominated by an array of grasses and forbs. The dominant plant species range from FAC to UPL and do not meet the criteria of hydrophytic vegetation and hydric soil characteristics are absent. These areas remain green for much longer duration than the surrounding area, indicating the presence of soil moisture, resulting from the urban

hydrologic input. Examination of historic aerial photographs confirmed a defined bed and bank under non-disked conditions, indicating that wetland hydrology is present. This drainage would be considered ephemeral in nature and extends for 218 linear feet beyond the willow woodland until it terminates in a concrete drainage inlet (already impacted jurisdictional feature) and exits the Project Site. The total drainage length is 546 feet. The width of jurisdiction was determined by the presence of hydrology and review of historic aerials, for a total of 0.49 acre of jurisdiction. This drainage is regulated by the MSHCP riverine habitat.

Drainage B

Drainage B is located directly downstream and adjacent to the eastern patch of disturbed wetland-cattail. Like Drainage A, woody vegetation is absent and grasses and forbs are dominant. The Project Site limits are regularly disked, so this occurs under highly disturbed conditions. The dominant plant species are mostly FACU, but range from a few FACW to UPL species. This drainage does not meet the criteria of hydrophytic vegetation and hydric soil characteristics are absent. Like Drainage A, these areas remain green for much longer duration than the surrounding area, indicating the presence of soil moisture, resulting from the urban hydrologic input. Examination of historic aerial photographs confirmed a defined bed and bank under non-disked conditions. Wetland hydrology is present. This drainage would be considered ephemeral in nature and extends for 603 linear feet until it terminates off-site in a concrete inlet. The width of jurisdiction was determined by the presence of hydrology and review of historic aerials, for a total of 0.32 acre of jurisdiction. This drainage is regulated by the MSHCP as riverine habitat.

No vernal pool resources, seasonal depressions or associated clay substrates were documented onsite. No vernal pools or suitable resources for the vernal pool fairy shrimp (*Branchinecta lynchi*) and Riverside fairy shrimp (*Streptocephalus woottoni*) were documented onsite. No surveys are required.

No least Bell's vireo was detected during the 2020 surveys. No suitable habitat for the southwestern willow flycatcher (*Empidonax traillii extimus*) or western yellow-billed cuckoo (*Coccyzus americanus*) was detected within or adjacent to the Project Site. These species are not expected to be present. No surveys are required.

3.3 Mitigation and Equivalency

3.3.1 Direct Effects

Direct impacts are considered to be those that involve the loss, modification, or disturbance of natural resources or habitats (i.e., vegetative communities or substrate) that in turn, directly affect plant and wildlife species dependent on that habitat. Direct impacts include the destruction of individual plants or wildlife of low mobility (i.e., plants, amphibians, reptiles, and small mammals). The collective loss of individuals may also directly affect area-wide population numbers or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

A total of 1.22-acre of permanent impacts will occur within the two drainages as a result of project initiation. Of this area, 0.41 acre represents MSHCP riparian resources, and 0.81 acres represents MSHCP riverine resources. To meet the criteria of a biologically equivalent or superior alternative, the applicant will offset permanent impacts to all 1.22-acre of MSHCP Section 6.1.2 riparian and riverine resources located within the two (2) unnamed drainages as described below.

1. Permanent impacts to 0.41-acre of MSHCP Section 6.1.2 riparian resources would be mitigated at a ratio of 2:1 through purchase of 0.82 acre of rehabilitation credits from the Riverpark Mitigation Bank.
2. Permanent impacts to 0.81-acre of MSHCP Section 6.1.2 riverine resources would be mitigated at a ratio of 1:1 through purchase of 0.81 acre of re-establishment credits from the Riverpark Mitigation Bank.

3.2.2 Indirect Effects

Indirect impacts are considered to be those impacts associated with the project that involve the effects of alteration of the existing habitat and an increase in human population and or landuse within the Project Site. These impacts are commonly referred to as “edge effects” and may result in changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to the Project Site.

Indirect impacts also include the effects of increases in ambient levels of sensory stimuli (e.g., noise and light), unnatural predators (e.g., domestic cats and other non-native animals), competitors (e.g., exotic plants and non-native animals), and trampling and unauthorized recreational use due to the increase in human population. Other permanent indirect effects may occur that are related to water quality and storm water management, including trash/debris, toxic materials, and dust.

Initiation of the proposed project will not result in temporary or permanent indirect edge effects to sensitive receptors as a result of noise or lighting levels. The Project Site is located immediately adjacent to developed and disturbed lands and do not provide suitable resources or open space habitat for common or sensitive species.

The ultimate Project Site storm water conveyed and released into the existing concrete drainage inlets will be in compliance with National Pollutant Discharge Elimination System (NPDES) regulations and County of Riverside Water Quality Management Plan (WQMP) as required of the developer of the proposed project and the City of Moreno Valley for treatment of storm water prior to discharge.

4.0 NARROW ENDEMIC PLANT SPECIES MITIGATION SECTION (6.1.3)

This analysis of potential biological resources located on the Project Site includes a review of available background information in and around the vicinity of the Project Site and completion of multiple field and focused surveys conducted from May to August 2020.

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for narrow endemic plants if suitable habitat is documented and the assessment area is located within a predetermined “Survey Area” (MSHCP 2004).

The Project Site does not occur within a predetermined Survey Area for MSHCP narrow endemic plant species. Compliance with Section 6.1.3 respective of MSHCP narrow endemic plants is not applicable to the proposed Project Site.

4.1 Methods

Compliance with Section 6.1.3 respective of MSHCP narrow endemic plants is not applicable to the proposed Project Site.

4.2 Results/Impacts

Compliance with Section 6.1.3 respective of MSHCP narrow endemic plants is not applicable to the proposed Project Site.

4.3 Mitigation and Equivalency

Compliance with Section 6.1.3 respective of MSHCP narrow endemic plants is not applicable to the proposed Project Site.

4.3.1 Direct Effects

Compliance with Section 6.1.3 respective of MSHCP narrow endemic plants is not applicable to the proposed Project Site.

4.3.2 Indirect Effects

Compliance with Section 6.1.3 respective of MSHCP narrow endemic plants is not applicable to the proposed Project Site.

5.0 CRITERIA AREA SPECIES MITIGATION (SECTION 6.3.2)

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for criteria area species if suitable habitat is documented onsite and the assessment areas are located within a predetermined "Survey Area" (MSHCP 2004).

5.1 Criteria Area Species Survey Area – Plants

The Project Site does not occur within a predetermined Survey Area for MSHCP criteria area plant species. Compliance with Section 6.1.3 respective of MSHCP criteria area plants is not applicable to the proposed Project Site.

5.1.1 Methods

Compliance with Section 6.1.3 respective of MSHCP criteria area plants is not applicable to the proposed Project Site.

5.1.2 Results/Impacts



Compliance with Section 6.1.3 respective of MSHCP criteria area plants is not applicable to the proposed P Project Site.

5.1.3 Mitigation and Equivalency

Compliance with Section 6.1.3 respective of MSHCP criteria area plants is not applicable to the proposed Project Site.

5.2 Criteria Area Species Survey Area – Burrowing Owl

The Project Site occurs within a predetermined Survey Area for the burrowing owl. Based on the presence of low potential habitat documented during the May 21st, 2020 habitat assessment within and adjacent to the Project Site, focused surveys for burrowing owl were conducted. The surveys were conducted in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (2006). Survey protocol consists of three steps: Step I – Habitat Assessment; Step II – Locating Burrows and Burrowing Owls; and Step III – Reporting Requirements. Each step conducted during this survey is briefly outlined below. Surveys were conducted during weather that is conducive to observing burrowing owls outside of their burrows and detecting burrowing owl sign. All surveys were conducted from two hours before sunset to one hour after or from one hour before to two hours after sunrise. Surveys were not conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. Surveys were not conducted within five days of measurable precipitation.

5.2.1 Methods

Step I – Habitat Assessment

Step 1 of the burrowing owl focused survey consists of walking the Project Site to determine if suitable habitat is present. This initial habitat assessment was conducted on May 21st, 2020 by MIG Senior Biologist Jonathan Campbell, PhD. Upon arrival at the Project Site and prior to initiating the assessment survey, binoculars were used to scan all suitable habitats on and adjacent to the property, including perch locations, to ascertain owl presence.

All suitable areas of the Project Site were surveyed on foot by walking slowly and methodically across each habitat type while recording/mapping areas that may represent suitable owl habitat onsite. Primary indicators of suitable burrowing owl habitat include, but are not limited to: native and non-native grassland, grassland interspersed with shrubland along ecotonal areas, shrublands with low density shrub cover, concrete rubble, and earthen berms. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels (*Otospermophilus beecheyi*) or badgers (*Taxidea taxus*), but they often utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock or wood debris piles, or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or near man-made structures. A majority of the habitat mapped onsite represents low potential habitat for burrowing owl.

According to the MSHCP (2006) guidelines, if suitable habitat is present, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Project Site boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars.

Step II – Locating Burrows and Burrowing Owls

If any burrows are found during the Part A – Focused Burrow Survey, Part B – Focused Burrowing Owl Surveys are required to determine presence or absence of the species. The Part B effort consists of at least four focused surveys to search for signs of occupation at the burrows, or observations of burrowing owls. Focused surveys are to be conducted within the breeding season between March 1st and August 31st. A review of local documentation suggests that no burrowing owls have been historically identified within the extent of the Project Site boundary. In addition to the breeding season survey conducted on May 21st, 2020, three additional breeding season surveys were conducted throughout the Project Site on June 20th, July 10th, and 30th, 2020. All surveys were conducted during times and conditions conducive to observing burrowing owl. A thorough investigation of the potentially suitable burrows concluded that no evidence of burrowing owl activity was present in any of the onsite burrow complexes.

Part A: Focused Burrow Survey

Due to the presence of low potential burrowing owl habitat, focused burrow surveys, including documentation of appropriately sized natural burrows or suitable man-made structures that may be utilized by burrowing owl, were conducted as part of the protocol on May 21st, 2020.

The systematic surveys for burrows, including burrowing owl signs, were conducted by walking across all potential habitat mapped at the Project Site. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 30 meters (approximately 100 feet) apart. The burrow survey began within two hours prior to sunset. Accordingly, due to the presence of suitable burrowing owl burrows onsite, Step II, Part B – Focused Burrowing Owl Surveys are required.

Part B: Focused Burrowing Owl Surveys

5.2.2 Results/Impacts

Both low potential burrowing owl habitat and burrowing owl burrows were identified within the Project Site during the Step I – Habitat Assessment performed on May 21st, 2020 and the Step II, Part A – Focused Burrow Survey performed on May 21st, 2020. Three additional Step II, Part B – Focused Burrowing Owl Surveys were therefore performed during the breeding season on June 20th, July 10th, and 30th, 2020 throughout the Project Site. No evidence of burrowing owl activity was observed during any of the surveys.

5.2.3 Mitigation and Equivalency

A 30-day preconstruction survey will be required immediately prior to the initiation of construction within the Project Site to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP. If burrowing owls are detected onsite during the 30-day preconstruction survey, during the breeding season (February 1st to August 31st) then construction activities shall be limited to beyond 300 feet of the active burrows until a qualified biologist has confirmed that nesting efforts are completed or not initiated. In addition to monitoring breeding activity, if construction is proposed to be initiated during the breeding season or active relocation is proposed, a burrowing owl mitigation plan will be developed based on the City

of Moreno Valley, CDFW and USFWS requirements for the relocation of individuals to the Lake Mathews Preserve.

Following submittal, review and approval of the 30-day burrowing owl preconstruction survey report by the City of Moreno Valley and compliance with all species-specific conservation goals, if detected within or adjacent to the Project Site, the project will be compliant with MSHCP Section 6.3.2.

5.3 Criteria Area Species Survey Area – Mammals

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required if suitable habitat for mammals is documented onsite and the property is located within a predetermined "Survey Area" (MSHCP 2004).

The Project Site does not occur within a predetermined Survey Area for mammal species. Compliance with Section 6.1.3 respective of MSHCP mammals is not applicable to the proposed Project Site.

5.3.1 Methods

Compliance with Section 6.1.3 respective of MSHCP mammals is not applicable to the proposed Project Site.

5.3.2 Results/Impacts

Compliance with Section 6.1.3 respective of MSHCP mammals is not applicable to the proposed Project Site.

5.3.3 Mitigation and Equivalency

Compliance with Section 6.1.3 respective of MSHCP mammals is not applicable to the proposed Project Site.

5.4 Criteria Area Species Survey Area – Amphibians

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required if suitable habitat for amphibian species is documented onsite and the property is located within a predetermined "Survey Area" (MSHCP 2004).

The Project Site does not occur within a predetermined Survey Area for amphibian species. Compliance with Section 6.1.3 respective of MSHCP amphibians is not applicable to the proposed Project Site.

5.4.1 Methods

Compliance with Section 6.1.3 respective of MSHCP amphibians is not applicable to the proposed Project Site.

5.4.2 Results/Impacts

Compliance with Section 6.1.3 respective of MSHCP amphibians is not applicable to the proposed Project Site.

5.4.3 Mitigation and Equivalency

Compliance with Section 6.1.3 respective of MSHCP amphibians is not applicable to the proposed Project Site.

6.0 REFERENCES

MIG, Inc. 2020a. Burrowing Owl Focused Survey Report, Alessandro Project Site

MIG, Inc. 2020b. Least Bell's Vireo Focused Survey Report, Alessandro Project Site

MIG, Inc. 2020d. MSHCP General Biological Resources Assessment & Compliance Analysis.

MIG, Inc. 2021. Alessandro Project Site Jurisdictional Delineation Report & Impact Analysis.

Regional Conservation Authority. Determination of Biologically Equivalent or Superior Preservation Report Template (April 2019).

Riverside County Integrated Project (RCIP) Multiple Species Habitat Conservation Plan (MSHCP), March 2004.

United States Department of Agriculture. 2020. Custom Soil Resources Report for Western Riverside Area, California. Natural Resources Conservation Service. <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed July 2020.

FIGURES



Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and

Figure 1 Regional Location Map

Alessandro Project Site, City of Moreno Valley, CA



- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- # → Photo Point & Direction



Figure 2 Project Site Map

Alessandro Project Site, City of Modesto, CA

Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |
| WM Wet Meadow | | |



Figure 3 Vegetation Communities Map

Alessandro Project Site, City of Mo...

Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and



Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 4a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.

Figure 4b Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- MmB - Monserate Sandy Loam (NRCS 2020)



Figure 5 Soils Associations Map

Alessandro Project Site, City of Modesto, CA



- MSHCP Aquatic (0.02 acre)
- MSHCP Riparian (0.39 acre)
- MSHCP Riverine (0.81 acre)
- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- Impact Boundary (20.31 acres)

Figure 8 MSHCP Section 6.1.2 Jurisdiction Resources Impact Map

Alessandro Project Site, City of Modesto, CA

APPENDICES

Appendix A
Burrowing Owl Focused Survey Report, Alessandro Project Site

Attachment: Appendix B3-MSHCP Determination of Biologically Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and

Burrowing Owl Focused Survey Report

Alessandro Project Site

City of Moreno Valley, Riverside County, California



Prepared for:

Compass Danbe Real Estate Partners
523 Main St
El Segundo, CA 90245

Prepared by:

MIG
1650 Spruce Street, Suite 102
Riverside, California 92507



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Table of Contents

TABLE OF CONTENTS I

1.0 INTRODUCTION..... 1

 1.1 Project Location..... 1

2.0 METHODS AND RESULTS 1

 2.1 Step 1 – Habitat Assessment..... 1

 2.2 Step II – Locating Burrows and Burrowing Owls..... 3

 2.3 Step III – Reporting Requirements..... 4

 2.4 Preconstruction Surveys..... 4

3.0 CONCLUSIONS AND RECOMMENDATIONS 4

4.0 REFERENCES..... 5

List of Figures

- Figure 1 Regional Location Map
- Figure 2 Project Site Map
- Figure 3 Vegetation Communities Map
- Figure 4 (a-b) Current Project Site Photographs
- Figure 5 Burrowing Owl Survey Area Map

List of Tables

- Table 1 Summary of Focused Survey Weather Conditions during the Breeding Season

1.0 INTRODUCTION

This report presents the results of focused burrowing owl (*Athene cunicularia*) surveys conducted at the 17.66-acre (2.65-acre offsite) Alessandro project site (Project Site) in the City of Moreno Valley, Riverside County, California. The Project Site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) planning area. The MSHCP is a regional multi-jurisdictional habitat conservation program that addresses multiple species' habitat needs in western Riverside County. According to MSHCP guidelines, surveys for the burrowing owl are to be conducted as part of the environmental review process. Specifically, the MSHCP Additional Surveys Needs and Procedures identify a burrowing owl Survey Area within the MSHCP Plan Area. The Project Site occurs within this predetermined Survey Area. Suitable low potential habitat was identified on the Project Site during an initial site reconnaissance conducted in May 21st, 2020. Subsequently, focused burrowing owl surveys were conducted during the breeding season in order to comply with MSHCP requirements. The purpose of this report is to document the results of the burrowing owl habitat assessment and focused burrow and burrowing owl surveys.

1.1 Project Location

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley (City), Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5' series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.0 METHODS AND RESULTS

The survey was conducted in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (2006). Survey protocol consists of three steps: Step I – Habitat Assessment; Step II – Locating Burrows and Burrowing Owls; and Step III – Reporting Requirements. Each step conducted during this survey is briefly outlined below. Surveys were conducted during weather that is conducive to observing burrowing owls outside of their burrows and detecting burrowing owl sign. All surveys were conducted from two hours before sunset to one hour after or from one hour before to two hours after sunrise. Surveys were not conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. Surveys were not conducted within five days of measurable precipitation.

2.1 Step 1 – Habitat Assessment

Step 1 of the burrowing owl focused survey consists of walking the Project Site to determine if suitable habitat is present. This initial habitat assessment was conducted on May 21st, 2020 by MIG Senior Biologist Jonathan Campbell, PhD (Table 1. Summary of Focused Survey Weather Conditions during the Nesting Season). Upon arrival at the Project Site and prior to initiating the assessment survey, binoculars were used to scan all suitable habitats on and adjacent to the property, including perch locations, to ascertain owl presence.

All suitable areas of the Project Site were surveyed on foot by walking slowly and methodically across each habitat type while recording/mapping areas that may represent suitable owl habitat onsite. Primary indicators of suitable burrowing owl habitat include, but are not limited to: native and non-native grassland, grassland interspersed with shrubland along ecotonal areas, shrublands with low density shrub cover, concrete rubble, and earthen berms. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels (*Otospermophilus beecheyi*) or badgers (*Taxidea taxus*), but they often utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock or wood debris piles, or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or near man-made structures. A majority of the habitat mapped onsite represents low potential habitat for burrowing owl.

According to the MSHCP (2006) guidelines, if suitable habitat is present, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Project Site boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars.

The largest area and center of the Project Site is characterized as “disturbed/non-native grassland” and currently offers limited habitat value to plants and wildlife. The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands. Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below. Natural community names and hierarchical structure follows List of Alliances and Associations (CDFW September 2010) which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the classification system. Scientific nomenclature and common names used for plants in this report follows Hickman (1993). Vertebrate taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists’ Union (1998 and supplemental) for birds, and Jones et al. (1992) for mammals. The onsite plant communities are as follows (Figure 3, Vegetation Communities Map, Figures 4a/4b, Current Project Site Photographs):

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), riggut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding’s willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracunculus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

Results from the Step I - Habitat Assessment indicate that the disturbed/non-native grassland (described above) represent low potential habitat for the burrowing owl. Accordingly, due to the presence of potential habitat onsite, Step II – Locating Burrows and Burrowing Owls is required. In addition, due to the presence of potential habitat onsite, a pre-construction survey within 30 days of any project-related or construction-related activities is therefore required.

2.2 Step II – Locating Burrows and Burrowing Owls**Part A – Focused Burrow Survey**

Due to the presence of low potential burrowing owl habitat, focused burrow surveys, including documentation of appropriately sized natural burrows or suitable man-made structures that may be utilized by burrowing owl, were conducted as part of the protocol on May 21st, 2020 (Table 1. Summary of Focused Survey Weather Conditions during the Nesting Season).

The systematic surveys for burrows, including burrowing owl signs, were conducted by walking across all potential habitat mapped at the Project Site. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 30 meters (approximately 100 feet) apart. The burrow survey began within two hours prior to sunset. Accordingly, due to the presence of suitable burrowing owl burrows onsite, Step II, Part B – Focused Burrowing Owl Surveys are required.

General wildlife species documented onsite or within the vicinity of the Project Site include but are not limited to red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaidura macroura*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*),

American crow (*Corvus brachyrhynchos*), western meadowlark (*Sturnella neglecta*) common raven (*Corvus corax*), house sparrow (*Passer domesticus*), American goldfinch (*Spinus tristis*), house finch (*Haemorhous mexicanus*), western tanager (*Piranga ludoviciana*), and desert cottontail (*Sylvilagus audubonii*).

Part B – Focused Burrowing Owl Surveys

If any burrows are found during the Part A – Focused Burrow Survey, Part B – Focused Burrowing Owl Surveys are required to determine presence or absence of the species. The Part B effort consists of at least four focused surveys to search for signs of occupation at the burrows, or observations of burrowing owls. Focused surveys are to be conducted within the breeding season between March 1st and August 31st. A review of local documentation (CNDDDB 2020) suggests that no burrowing owls have been historically identified within the extent of the Project Site boundary. In addition to the breeding season survey conducted on May 21st, 2020, three additional breeding season surveys were conducted throughout the Project Site on June 20th, July 10th, and 30th, 2020 (Figure 5, Burrowing Owl Survey Area Map). All surveys were conducted during times and conditions conducive to observing burrowing owl (Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season). A thorough investigation of the potentially suitable burrows concluded that no evidence of burrowing owl activity was present in any of the onsite burrow complexes.

Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season

Date	Time Start/End	Temperature (°F)	Wind Speed (mph)	Conditions
5/21/2020	6:30AM – 7:30AM	72	2-5	Clear
6/20/2020	6:00AM – 9:00AM	68	0-4	Clear
7/10/2020	6:00AM – 9:00AM	66	4-8	Clear
7/30/2020	6:00AM – 9:00AM	66	2-8	Clear

2.3 Step III – Reporting Requirements

This report represents the third step of the burrowing owl focused survey, the preparation of a report that provides the results of each step of the survey protocol. After completion of appropriate surveys, a final report shall be submitted to the City of Moreno Valley, which discusses the survey methodology, transect width, duration, conditions, and results of the survey.

2.4 Preconstruction Surveys

All project sites containing burrows or suitable habitat (based on Step I/Habitat Assessment), whether owls were found or not, require pre-construction surveys that shall be conducted within 30 days prior to ground disturbance to avoid direct take of burrowing owls (MSHCP Species-Specific Objective 6).

3.0 CONCLUSIONS AND RECOMMENDATIONS

Both low potential burrowing owl habitat and burrowing owl burrows were identified within the Project Site during the Step I – Habitat Assessment performed on May 21st, 2020 and the Step II, Part A – Focused Burrow Survey performed on May 21st, 2020. Three additional Step II, Part B – Focused Burrowing Owl Surveys were therefore performed during the breeding season on June 20th, July 10th, and 30th, 2020 throughout the Project Site. No evidence of burrowing owl activity was observed during any of the surveys.

A pre-construction burrowing owl survey will need to be completed within 30 days prior to any project-related or construction-related disturbances to onsite areas.

4.0 REFERENCES

- American Ornithologist Union (AOU). 1998. Check-list of North American Birds. 8th ed. American Ornithologists' Union, Washington, DC.
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- USFWS. 2020. Threatened and Endangered Species. Pacific Southwest Region. Carlsbad Office. Available online at <http://www.fws.gov/carlsbad/TEspecies.html>. Accessed [July 2020].

FIGURES



Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and

Figure 1 Regional Location Map

Alessandro Project Site, City of Moreno Valley, CA



- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- # → Photo Point & Direction



Figure 2 Project Site Map

Alessandro Project Site, City of Modesto, CA

Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |

Figure 3 Vegetation Communities Map

Alessandro Project Site, City of Mo...

Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and





Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 4a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.

Figure 4b Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Survey Transects

- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)



Appendix B
Least Bell's Vireo Focused Survey Report, Alessandro Project Site

Least Bell's Vireo Focused Survey Report

Alessandro Project Site

City of Moreno Valley, Riverside County, California



Prepared for:

Compass Danbe Real Estate Partners
523 Main St
El Segundo, CA 90245

Prepared by:

MIG
1650 Spruce Street, Suite 102
Riverside, California 92507



October 2020

This document is formatted for double-sided printing



Table of Contents

TABLE OF CONTENTS 1

1.0 INTRODUCTION..... 1

 1.1 Project Location..... 1

2.0 METHODS AND RESULTS 1

3.0 CONCLUSIONS 5

4.0 REFERENCES..... 5

List of Figures

- Figure 1 Regional Location Map
- Figure 2 Project Site Map
- Figure 3 Vegetation Communities Map
- Figure 4 (a-b) Current Project Site Photographs

List of Tables

- Table 1 Summary of Focused Survey Weather Conditions during the Breeding Season

1.0 INTRODUCTION

This report presents the results of focused least Bell's vireo (*Vireo bellii pusillus*) surveys conducted at the 17.66-acre (2.65-acre offsite) Alessandro project site (Project Site) in the City of Moreno Valley, Riverside County, California. The Project Site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) planning area. The MSHCP is a regional multi-jurisdictional habitat conservation program that addresses multiple species' habitat needs in western Riverside County. According to MSHCP Section 6.1.2 guidelines, surveys for riparian birds are to be conducted as part of the environmental review process, if suitable habitat is present. Suitable low potential habitat was identified on the Project Site during an initial site reconnaissance conducted in May 21st, 2020 for the least Bell's vireo. Subsequently, focused surveys were conducted during the breeding season in order to comply with MSHCP Section 6.1.2 requirements. The purpose of this report is to document the results of the least Bell's vireo assessment and focused surveys.

1.1 Project Location

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley (City), Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5' series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.0 METHODS AND RESULTS

An initial habitat assessment for potential least Bell's vireo habitat was conducted on May 21st, 2020. As described below, all vegetation communities onsite were mapped and assessed for suitability for least Bell's vireo. A single vegetation community including black willow woodland was characterized as representing low potential habitat for the species. Therefore, focused United States Fish and Wildlife Service (USFWS) protocol surveys were initiated. As stated by the USFWS:

“Under normal circumstances, all riparian areas and any other potential vireo habitats should be surveyed at least eight (8) times during the period from April 10 to July 31. However, we may concur, on a case by case basis, with a reduced effort if unusual circumstances dictate that this is a prudent course of action. For instance, intensive surveys of small, marginal or extralimital habitats by experienced personnel may well result in defensible conclusions that eight (or more) individual surveys are unnecessary. Under such unusual circumstances, we will consider requests for reductions in the prescribed number of individual surveys. In any case, site visits should be conducted at least 10 days apart to maximize the detection of, for instance, late and early arrivals, females, particularly “non-vocal” birds of both sexes, and nesting pairs.

- 1) *Although the period from April 10 to July 31 encompasses the period during which most vireo nesting activity occurs, eight surveys are generally sufficient to detect most*

- (if not all) vireo adults in occupied habitats. Precise vireo censuses and estimations of home range likely will not be possible unless surveys are conducted outside of this time window. Although focused surveys conducted in accordance with these guidelines substantially reduce the risk of an unauthorized take* that could potentially occur as a result of land development or other projects, individual project proponents may wish to conduct surveys that are more rigorous than those that would otherwise result from strict adherence to these survey guidelines. If additional information (e.g., extent of occupied habitat, total numbers of adult and juvenile vireos in study area) is desired or necessary, surveys should be extended to August 31 and conducted in such a manner as to collect the data necessary to prepare reports that reflect the methods and standards established in the current scientific literature on this subject. In particular, information collected after July 15 will reflect a broader extent to the riparian habitat and other adjacent habitat types that the vireo typically utilizes during the latter phase of the breeding season, especially when the young become independent of the adults.*
- 2) *Surveys should be conducted by a qualified biologist familiar with the songs, whisper songs, calls, scolds, and plumage characteristics of adult and juvenile vireos. These skills are essential to maximize the probability of detecting vireos and to avoid potentially harassing the species in occupied habitats.*
 - 3) *Surveys should be conducted between dawn and 11:00 a.m. Surveys should not be conducted during periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather that individually or collectively may reduce the likelihood of detection.*
 - 4) *Surveyors should not survey more than 3 linear kilometers or more than 50 hectares of habitat on any given survey day. Although surveyors should generally station themselves in the best possible locations to hear or see vireos, care should be taken not to disturb potential or actual vireo habitats and nests or the habitat of any sensitive or listed riparian species.*
 - 5) *All vireo detections (e.g., vocalization points, areas used for foraging, etc.) should be recorded and subsequently plotted to estimate the location and extent of habitats utilized. These data should be mapped on the appropriate USGS quadrangle map.*
 - 6) *Data pertaining to vireo status and distribution (e.g., numbers and locations of paired or unpaired territorial males, ages and sexes of all birds encountered) should be noted and recorded during each survey. In addition, surveyors should look for leg bands on vireo adults and juveniles if, in fact, it is possible to do so without disturbing or harassing the birds. If leg bands or other markers are observed, then surveyors should record and report the detection and associated circumstances to us by telephone, facsimile, or electronic mail as soon as possible. Reports should include the colors and relative locations of any and all bands detected, the age and sex of the marked bird, and the precise location of the detection.*

- 7) *The numbers and locations of all brown-headed cowbirds (Molothrus ater) detected within vireo territories should be recorded during each survey and subsequently reported to us. In addition, all detections of the State and federally endangered southwestern willow flycatcher (Empidonax trallii extimus, flycatcher) and State endangered yellow-billed cuckoo (Coccyzus americanus, cuckoo) should be recorded and reported. Any and all cuckoo and flycatcher adults, young, or nests should not be approached, and taped vocalizations of these species should not be used unless authorized in advance by scientific permits to take* issued by us (if appropriate) and the California Department of Fish and Game. Flycatcher presence/absence surveys require a recovery permit issued by us per section 10(a)(1)(A) of the Endangered Species Act.” (USFWS 2001)*

A total of eight (8) focused least Bell's vireo surveys were conducted on May 21st, 31st, June 10th, 20th, 30th, July 10th, 20th, and 30th, 2020 by Senior Biologist Jonathan Campbell, PhD and Ruben Ramirez throughout the black willow woodland documented onsite and described below. All surveys were conducted during times and conditions conducive to observing least Bell's vireo (Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season).

Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season

Date	Time Start/End	Temperature (°F)	Wind Speed (mph)	Conditions
5/21/2020	7:30AM – 9:00AM	74	0-5	Clear
5/31/2020	8:00AM – 9:30AM	70	3-5	Clear
6/10/2020	6:00AM – 9:00AM	66	2-8	Clear
6/20/2020	6:00AM – 9:00AM	68	0-4	Clear
6/30/2020	6:00AM – 9:00AM	64	0-4	Clear
7/10/2020	6:00AM – 9:00AM	66	4-8	Clear
7/20/2020	6:00AM – 9:00AM	70	2-8	Clear
7/30/2020	6:00AM – 9:00AM	66	2-8	Clear

The largest area and center of the Project Site is characterized as “disturbed/non-native grassland” and currently offers limited habitat value to plants and wildlife. The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands.

Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below. Natural community names and hierarchical structure follows List of Alliances and Associations (CDFW September 2010) which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the classification system. Scientific nomenclature and common names used for plants in this report follows Hickman (1993). Vertebrate taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists' Union (1998 and supplemental) for birds, and Jones et al. (1992) for mammals. The onsite plant communities are as follows (Figure 3, Vegetation Communities Map, Figures 4a/4b, Current Project Site Photographs):

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding's willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracunculus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

General wildlife species documented onsite or within the vicinity of the Project Site include but are not limited to red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), American crow (*Corvus brachyrhynchos*), western meadowlark (*Sturnella neglecta*) common raven (*Corvus corax*), house sparrow (*Passer domesticus*), American goldfinch (*Spinus tristis*), house finch (*Haemorhous mexicanus*), western tanager (*Piranga ludoviciana*), and desert cottontail (*Sylvilagus audubonii*).

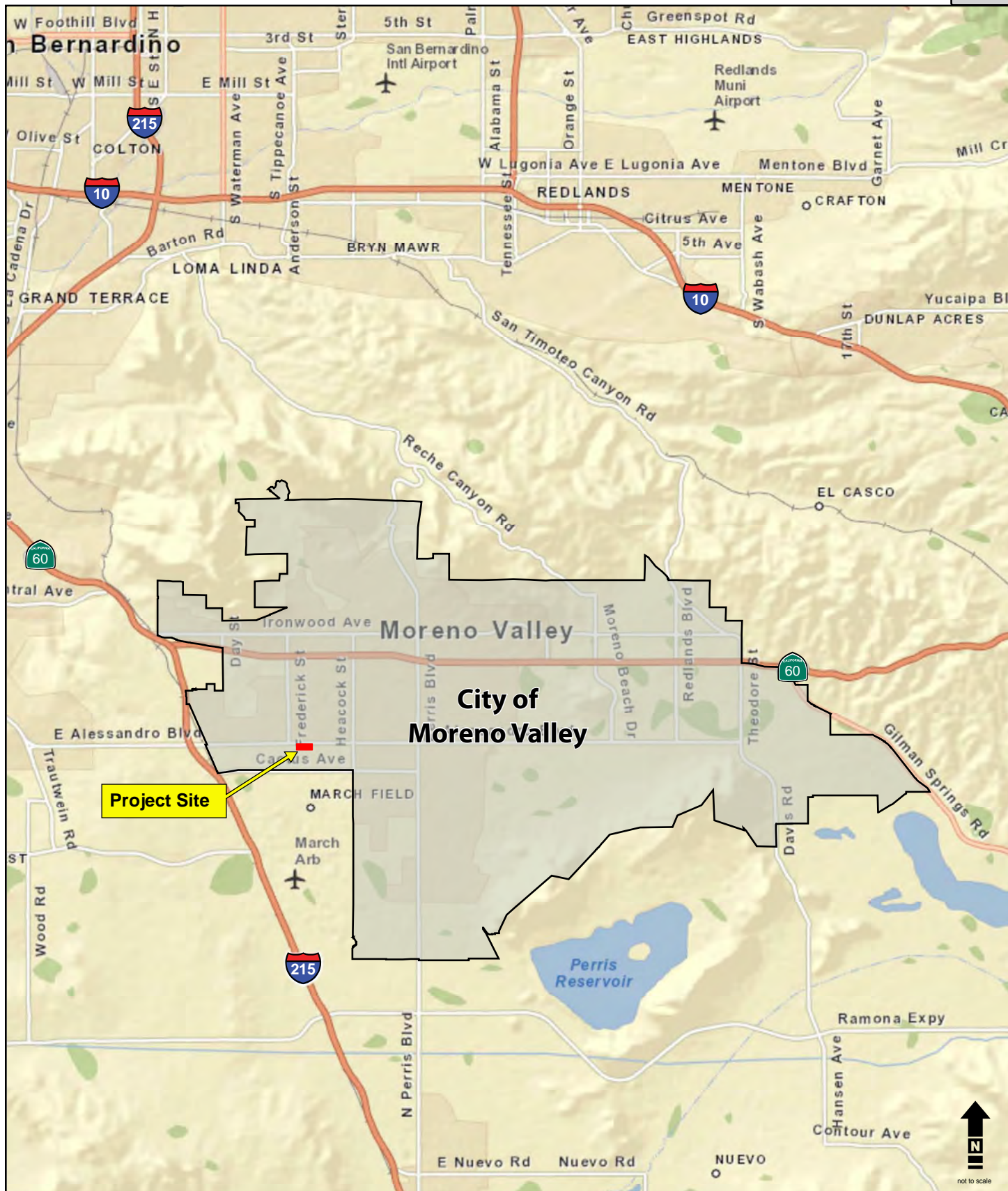
3.0 CONCLUSIONS

No least Bell's vireo were detected onsite during the focused survey efforts conducted during the 2020 breeding season.

4.0 REFERENCES

- American Ornithologist Union (AOU). 1998. Check-list of North American Birds. 8th ed. American Ornithologists' Union, Washington, DC.
- CDFW. 2010. The Vegetation Classification and Mapping Program – List of California Terrestrial Natural Communities Recognized by The California Natural Diversity Database. September 2010.
- CNDDDB. 2020. Sensitive Element Record Search for the Riverside East and Surrounding USGS Quadrangles. California Department of Fish and Wildlife. Sacramento, California. Accessed [July 2020].
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- USFWS. 2020. Threatened and Endangered Species. Pacific Southwest Region. Carlsbad Office. Available online at <http://www.fws.gov/carlsbad/TEspecies.html>. Accessed [July 2020].
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FIGURES



Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and

Figure 1 Regional Location Map

Alessandro Project Site, City of Moreno Valley, CA



- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- # → Photo Point & Direction



Figure 2 Project Site Map

Alessandro Project Site, City of Modesto, CA

Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and



- | | | |
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| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |

Figure 3 Vegetation Communities Map

Alessandro Project Site, City of Mo...

Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and





Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 4a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.

Figure 4b Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Appendix C
Alessandro and Frederick Project Site Jurisdictional Delineation Report & Impact Analysis

Attachment: Appendix B3-MSHCP Determination of Biologically Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and

Alessandro and Frederick Project Site
Jurisdictional Delineation Report & Impact Analysis
City of Moreno Valley, Riverside County, CA



Prepared for:
Compass Danbe Real Estate Partners
523 Main St
El Segundo, CA 90245

Prepared by:
MIG, Inc.
1500 Iowa Avenue, Suite 110
Riverside, California 92507
Contact: Jonathan Campbell (310) 903-7876
jcampbell@migcom.com



March 2021

Contents		Page
1	Introduction	5
1.1	Project Location	5
1.2	Applicant Information	5
1.3	Directions to the Project	5
1.4	Project Description	5
1.5	Adjacent Land Uses	6
1.6	Field Delineator Contact Information	6
2	Summary of Regulations	7
2.1	Waters of the U.S.	7
2.2	California Department of Fish and Wildlife Jurisdiction	9
2.3	Regional and State Water Quality Control Board Jurisdiction	9
2.4	MSHCP Riparian/Riverine and Vernal Pool Habitat	12
3	Jurisdictional Delineation Methodology	13
3.1	Database and Literature Review	13
3.2	Field Surveys	13
3.3	Delineation of Wetland Waters of the US	14
3.4	Delineation of Non-Wetland Waters of the US	15
3.5	Delineation of Wetland and Non-Wetland Waters of the State under RWQCB	16
3.6	Delineation of CDFW Streambed & Riparian Habitat	16
3.7	Delineation of MSHCP Riparian/Riverine and Vernal Pools	16
4	Environmental Setting	18
4.1	Topography	18
4.2	Soils	18
4.3	Precipitation	18
4.4	Hydrologic Unit	18
4.5	Hydrology	19
4.6	Vegetation Communities	19
4.7	U.S. Fish and Wildlife Service National Wetland Inventory	20
4.8	Federal Emergency Management Agency	21
5	Jurisdictional Delineation Results and Discussion	22
5.1	Sample Point Summary	23
5.2	Waters of the US Under the USACE	25
5.3	Waters of the State Under the RWQCB	25
5.4	CDFW Jurisdictional Areas	25
5.5	MSHCP Riparian/Riverine Resources	26
6	Impacts to Jurisdictional Resources & Habitat Mitigation	27
6.1	Impacts to Jurisdictional Resources	27
6.2	Habitat Mitigation	27
7	Conclusions and Summary	28

8 References 29

List of Figures

Figure 1. Vicinity Map	31
Figure 2. Project Site Map	32
Figure 3. USGS Topographic Map	33
Figure 4. NRCS Soils Map	34
Figure 5. Vegetation Communities Map	35
Figure 6. RWQCB Jurisdiction	36
Figure 7. CDFW Jurisdiction	37
Figure 8. MSHCP Riparian/Riverine Habitat Map	38

List of Tables

Table 1: Classification of Wetland-Associated Plant Species	14
Table 2: Vegetation Communities	20
Table 3: Summary of Jurisdictional Waters and Habitats within the Project	21

List of Appendices

Appendix A: Plants Observed Onsite	39
Appendix B: USACE Wetland Determination Forms	40
Appendix C: Photo Locations & Site Photographs	41

List of Abbreviated Terms

APN	Assessor's Parcel Number
AWRS	Arid West Regional Supplement
CCR	California Code of Regulations
CFR	Code of Federal Regulations
CDFW	California Department of Fish and Wildlife
CWA	Clean Water Act
EPA	Environmental Protection Agency
°F	degrees Fahrenheit
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
FEMA	Federal Emergency Management Agency
GPS	Global Positioning System
HUC	Hydrologic Unit Code
LSAA	Lake and Streambed Alteration Agreement
MSCHP	Multiple Species Habitat Conservation Plan
NCDC	National Climatic Data Center
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resource Conservation Service
NTCHS	National Technical Committee for Hydric Soils
NWI	National Wetland Inventory
NWS	National Weather Service
OBL	Obligate
OHWM	Ordinary High Water Mark
RPW	Relatively Permanent Waters
RWQCB	Regional Water Quality Control Board
SP	Sample Point
TNW	Traditional Navigable Water
TOB	Top of Bank
UPL	Upland
US	United States
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1 Introduction

On April 21, 2020, MIG, Inc. (MIG) conducted a routine-level delineation of jurisdictional waters, wetlands, riparian/riverine and vernal pool resources on the Compass Danbe Real Estate Partners-owned Alessandro Project Site (Project) located in Moreno Valley, Riverside County, California. The Project is located in the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Plan Area.

The purpose of this jurisdictional delineation is to identify the extend of local, federal and state wetlands and waters within the Project boundaries to support necessary documentation and analysis under the California Environmental Quality Control Act (CEQA), as well as resource-agency permitting process under Sections 401 and 404 of the Clean Water Act (CWA), Section 13260 of the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), Section 1602 of the California Fish and Game Code and the MSHCP.

Details regarding each of these resource agencies as well as their regulatory authority, jurisdiction, permits, and regulatory processes are provided in Chapter 2, "Summary of Regulations."

The information and results presented herein document the investigation, best professional judgment and conclusions of MIG. It is correct and complete to the best of our knowledge. However, all jurisdictional determinations should be considered preliminary until reviewed and approved by the regulatory agencies.

1.1 Project Location

The 17.66-acre Project is located in the City of Moreno Valley, Riverside County, California and includes Assessor Parcel Numbers (APN): 297-170-002 and -003 (Figure 1 and Figure 2). The Project is south of Alessandro Boulevard, east of Frederick Street, and west of Graham Street. It is situated in the *Riverside East* U.S. Geological Survey (USGS) 7.5-minute quadrangle, Riverside County, Section 13, Township 3 South, Range 4 West (Figure 3). NAD83 Long/Lat is: -117.25391, 33.9151.

1.2 Applicant Information

Compass Danbe Real Estate Partners, LLC
523 Main St
El Segundo, CA 90245
Attn: Mark Bachli

1.3 Directions to the Project

Regional access to the Project is provided by taking the Alessandro Boulevard exit (exit 27-c) from Interstate 215 (I-215). Head east on Alessandro Boulevard and travel for approximately 1.5 miles to Frederick Street. The Project is located south of Alessandro Boulevard between Frederick and Graham Streets.

1.4 Project Description

The proposed Project includes the construction of two industrial warehouse buildings with a combined footprint of 372,309 square feet. Building 1 is 277,181 square feet and Building 2 is 95,128 square feet. Landscaping will be installed around the perimeter of the parcels and the buildings; and interspersed in the parking areas. Both buildings provide parking spaces for automobiles, ADA, Clean Air recharging, and trailer parking spaces according to the City's parking standards. The entire 17.66 acres will be developed.

1.5 Adjacent Land Uses

The Project lies in a mostly developed landscape in Moreno Valley. To the north and south of the Project is residential and commercial development. Directly east and west of the Project are small parcels of annually disced land, but beyond those parcels the general landscape is developed.

1.6 Field Delineator Contact Information

Jonathan Campbell
MIG, Inc.
500 Iowa Avenue, Suite 110
Riverside, California 92507
Contact: (310) 903-7876
jcampbell@migcom.com

2 Summary of Regulations

There are four primary agencies that regulate activities within creeks, wetlands and riparian areas in the City of Moreno Valley.

- 1) The U.S. Army Corps of Engineers Regulatory Program regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA).
- 2) The State Water Resources Control Board (SWRCB), administered by the Regional Water Quality Control Board regulates activities pursuant to Section 401 of the Federal CWA and the California Porter-Cologne Water Quality Control Act of 1969 (California Water Code).
- 3) The California Department of Fish and Wildlife (CDFW) regulates activities within streambeds, lakes, and wetlands pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code.
- 4) Western Riverside Regional Conservation Authority (RCA) regulates activities within riparian areas, riverine areas, and vernal pools pursuant to the Western Riverside MSHCP, Section 6.1.2.

If a proposed project impacts waters, wetlands, riparian/riverine or vernal pool habitat, the project limits must be evaluated to determine the presence of jurisdictional waters and wetlands.

2.1 Waters of the U.S.

The Army Corps of Engineers and the Environmental Protection Agency (EPA) have issued a set of guidance documents detailing the process for determining Clean Water Act (CWA) jurisdiction over waters of the U.S. (including wetlands) under the 2020 USACE Navigable Waters Protection Rule (2020 Rule). This supersedes all previous court decisions and rules. The EPA and USACE issued this Rule in January of 2020 and is in full effect at the time of this report preparation and is utilized for determining the jurisdiction over waters of the United States under the CWA. The complete set of guidance documents, summarized as key points below, were used to collect relevant data for evaluation to determine USACE jurisdiction over the project limits.

The 2020 Rule redefines “Waters of the United States” (WoUS) so that it includes only four simple categories of jurisdictional waters and provides clear exclusions for many water features that traditionally have not been regulated. The significant nexus test is no longer in effect.

These four categories protect the nation’s navigable waters and the core perennial and intermittent tributary systems that flow into those waters.

(1) Territorial seas and traditional navigable waters (TNWs) [Category (a)(1)]

The 2020 Rule regulates territorial seas and traditional navigable waters include large rivers and lakes and tidally-influenced waterbodies used in interstate or foreign commerce.

(2) Tributaries [Category (a)(2)]

The 2020 Rule regulates tributaries and includes perennial and intermittent rivers and streams that contribute surface flow to traditional navigable waters in a typical year. These tributaries must have perennial or intermittent flow. **Ephemeral drainages are no longer regulated under the 2020 Rule.**

Tributaries can connect to a traditional navigable water or territorial sea in a typical year either directly or through other WoUS, through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).

Ditches are to be considered tributaries only where they satisfy the flow conditions of the perennial and intermittent tributary definition and either were constructed in or relocate a tributary or were constructed in an adjacent wetland and contribute perennial or intermittent flow to a traditional navigable water in a typical year.

(3) Lakes, ponds, and impoundments of jurisdictional waters [Category (a)(3)]

Lakes, ponds, and impoundments of jurisdictional waters are jurisdictional where they contribute surface water flow to a traditional navigable water or territorial sea in a typical year either directly or through other WoUS through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways) or through natural features (including debris piles and boulder fields).

Lakes, ponds, and impoundments of jurisdictional waters are also jurisdictional where they are flooded by a WoUS in a typical year.

(4) Adjacent wetlands [Category (a)(4)]

Wetlands that physically touch other jurisdictional waters are "adjacent wetlands". This includes marshland habitats in tidal estuaries.

Wetlands separated from a WoUS by only a natural berm, bank or dune are also "adjacent."

Wetlands inundated by flooding from a WoUS in a typical year are "adjacent."

Wetlands that are physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure are "adjacent" so long as that structure allows for a direct hydrologic surface connection between the wetlands and the jurisdictional water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.

An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

The USACE generally takes jurisdiction within rivers and streams to the "ordinary high water mark (OHWM)," determined by erosion, the deposition of vegetation or debris, and changes in vegetation or soil characteristics.

The 2020 also outlines what are not WoUS. The following waters/features are not jurisdictional under the 2020 Rule:

- Waterbodies that are not included in the four categories of WoUS listed above.

- Groundwater, including groundwater drained through subsurface drainage systems, such as drains in agricultural lands.
- Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools.
- Diffuse stormwater run-off and directional sheet flow over upland.
- Many farm and roadside ditches.
- Prior converted cropland retains its longstanding exclusion, but is defined for the first time in the 2020 Rule. The agencies are clarifying that this exclusion will cease to apply when cropland is abandoned (i.e., not used for, or in support of, agricultural purposes in the immediately preceding five years) and has reverted to wetlands.
- Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease.
- Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters.
- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel.
- Stormwater control features excavated or constructed in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off.
- Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention and infiltration basins and ponds, that are constructed in upland or in non-jurisdictional waters
- Waste treatment systems have been excluded from the definition of WoUS since 1979 and will continue to be excluded under the 2020 Rule.

2.2 California Department of Fish and Wildlife Jurisdiction

Pursuant to Division 2, Chapter 6, Section 1602 of the Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake which supports fish or wildlife. A notification of a Lake or Streambed Alteration Agreement must be submitted to CDFW for “any activity” that may substantially change the bed, channel, or bank of any river, stream, or lake.” In addition, CDFW has jurisdiction over riparian habitats associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of a stream or lake, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. The CDFW reviews proposed actions, and if necessary, submits to the applicant a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement (LSAA).

2.3 Regional and State Water Quality Control Board Jurisdiction

The SWRCB together with the local RWQCB are the principal state agency with primary responsibility for the coordination and control of water quality. In Riverside County, the Santa Ana Regional Water Quality Control Board regulates water quality activities, pursuant to Section 401(a)(1) of the federal CWA as well as the Porter Cologne Water Quality Control Act (Porter-Cologne) (Water Code Section 13260). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable water at the point where the discharge originates or will originate. Any

such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.

In April 2019, the SWRCB adopted a “State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State” (Procedures). The Procedures consist of four major elements for State-regulated wetlands: 1) a wetland definition; 2) wetland delineation procedures; 3) a framework for determining if a feature that meets the wetland definition is a Water of the State; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. In adopting the Procedures, the State Water Board directed staff to develop implementation guidance for potential applicants.

In April 21, 2020 the SWRCB issued the “Implementation Guidance for the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State” , providing guidance for implementing the 2019 Procedures. The wetland definition and delineation methods set forth in the Procedures apply to wetlands only, and not to non-wetland Waters of the State.

Wetland Waters of the State

The Procedures define an area as wetland if, under normal circumstances:

- 1) The area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
- 2) The duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
- 3) The area’s vegetation is dominated by hydrophytes or the area lacks vegetation.

This modified three-parameter definition is similar to the federal definition in that it identifies three wetland characteristics that determine the presence of a wetland: wetland hydrology, hydric soils and hydrophytic vegetation. Unlike the federal definition however, the Procedures’ wetland definition allows for the presence of hydric substrates as a criteria for wetland identification (not just wetland soils) and wetland hydrology for an area devoid of vegetation (less than 5% cover) to be considered a wetland. However, if any vegetation is present then the USACE delineation procedures would apply to the vegetated component (i.e., hydrophytes must dominate). When determining the boundary of wetlands (vegetated or not) applicants can rely on Part II of the 1987 USACE Manual that provides information that is sufficient to determine wetland boundaries for compliance with the Procedures.

The USACE definition refers to “saturated soil conditions,” whereas the Procedures’ definition refers to saturated substrate leading to “anaerobic conditions in the upper substrate” which is a more inclusive term. Both of these descriptions define conditions that would lead to dominance of hydrophytes, if the site is vegetated. The Procedures definition refers to “continuous or recurrent saturation of the upper substrate.” Continuous saturation describes hydrological conditions that are perennial or tend to persist for at least twelve months. Recurrent saturation describes hydrological conditions that persist for less than twelve months. Hydrological conditions may be periodic and sustained regularly (i.e., tidewater) or episodic and intermittent, (i.e., vernal pools). In order for the recurrent saturation to support the development of anaerobic conditions, the substrate must become, and remain, saturated for a duration of 14 days during an annual cycle.

Waters of the State

California Code of Regulations, title 23, section 3831(w) states that "[a]ll Waters of the United States (WoUS) are also 'Waters of the State.'" The regulation reflects the SWRCB intent to include a broad interpretation of Waters of the US into the definition of Waters of the State. Waters of the State includes features that have been determined by the U.S. EPA or the USACE to be WoUS in an approved jurisdictional determination; WoUS identified in an aquatic resource report certified by the USACE upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of WoUS or any current or historic federal regulation defining WoUS. Because the interpretation of waters of the U.S. in place at the time section 3831(w) was adopted was broader than any post-Rapanos or post-SWANCC regulatory definitions that incorporated more limitations into the scope of federal jurisdiction, it is consistent with the SWRCB's intent to include both historic and current definitions of Waters of the US into the SWRCB's wetland jurisdictional framework.

A wetland will continue to be protected when it has been regulated in the past as a WoUS regardless of any subsequent changes in federal regulations. The inclusion of both current and historic definitions of WoUS ensures regulatory stability in an area that has otherwise been in flux. Like the other categories of the SWRCB's wetland jurisdictional framework, the status as a WoUS may only be used to establish that a wetland qualifies as a Water of the State. It cannot be used to exclude a wetland from qualifying as a Water of the State. Thus, wetlands that are categorically excluded from qualifying as a WoUS may nevertheless qualify as Waters of the State under another jurisdictional category.

Jurisdictional Framework

The jurisdictional framework is intended to exclude small (less than an acre) artificially-created, temporary features, such as tire ruts or other transient depressions caused by human activity from regulation, while still capturing smaller, naturally-occurring features, such as seasonal wetlands and small vernal pools that may be outside of federal jurisdiction. All artificial wetlands that are less than an acre in size and do not satisfy the criteria listed in section II.2, II.3.a, II.3.b, or II.3.c are not Waters of the State. Note that this jurisdictional framework applies only to features meeting the technical definition of a wetland.

If an aquatic feature does not meet the definition of a wetland, it may nonetheless be a different type of aquatic feature that may still be regulated as a non-wetland Water of the State (e.g., lakes, streams, and ocean waters). The Procedures do not include guidance for jurisdictional determinations for other Waters of the State. Non-wetland Waters of the State typically follow USACE regulations, however under the 2020 Rule, ephemeral drainages are excluded. No regulatory guidance has been issued by the SWRCB regarding the delineation of ephemeral drainages. However, until further notice the use of the OHWM will be used to delineate such resources.

Porter-Cologne Act

In the Porter-Cologne, the Legislature declared that the "State must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the State from degradation..." (California Water Code Section 13000). Porter-Cologne grants the Boards the authority to implement and enforce the water quality laws, regulations, policies and plans to protect the groundwater and surface waters of the State. It is important to note that enforcement of the State's water quality requirements is not solely the purview of the Boards and their staff. Other agencies [e.g., CDFW] have the ability to enforce certain water quality provisions in state law.

The Porter Cologne Act requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the Waters of the State to file a report of discharge (an application for waste discharge requirements (WDRs))" (Water Code § 13260(a)(1)). Discharge of fill material into Waters of the State which does not fall under the jurisdiction of the USACE pursuant to Section 404 of the CWA may require authorization through application for WDRs or through waiver of WDRs.

2.4 MSHCP Riparian/Riverine and Vernal Pool Habitat

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the FESA, as well as a NCCP under the NCCP Act of 2001. The MSHCP is being used to allow the participating jurisdictions to authorize "Take" of covered plant and wildlife species identified within the Plan Area. As projects are proposed within a Western Riverside MSHCP Plan Area, an assessment of the potentially significant effects of those projects on riparian/riverine areas, and vernal pools are required, as currently mandated by the California Environmental Quality Act (CEQA), using available information augmented by project-specific mapping provided to and reviewed by the Permittee's biologist(s).

Riparian/riverine areas and vernal pools are defined for this section as follows in accordance with Section 6.1.2, Vol I, of the Final MSHCP Plan:

"Riparian/Riverine Areas are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year."

Vernal pools are defined as:

"...seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season".

Although not expressly defined, it is assumed that the Army Corps of Engineer's 1987 Manual for delineating wetlands should be used in determining the presence of wetland indicators in vernal pools. With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.

3 Jurisdictional Delineation Methodology

3.1 Database and Literature Review

Prior to conducting the field survey, MIG reviewed available background information pertaining to wetlands and streams on and in the vicinity of the study area. Available literature and resources reviewed included:

- Regional Climate Data (PRISM Climate Group 2020),
- NOAA Palmer Drought Indices. <https://www.ncdc.noaa.gov/temp-and-precip/drought/historical-palmers/> (NOAA 2020),
- United States Department of Agricultural (USDA) Natural Resource Conservation Service (NRCS) web soil survey (NRCS 2020b),
- Aerial photographs (Google Earth Pro 2020),
- UC Santa Barbara Library's collection of aerial photography (UCSB 2019),
- NWI map data for the *Riverside East* 7.5-minute USGS quadrangle that characterize wetland and waters of the United States according to the Classification of Wetlands and Deepwater Habitats of the United States developed by the United States Fish and Wildlife Service (USFWS) (Cowardin et al. 1979; NWI 2020), and
- Federal Emergency Management Agency (FEMA) Flood Map Service Center (FEMA 2020).

3.2 Field Surveys

MIG's senior biologist Jonathan Campbell, PhD performed the field investigation on April 21, 2020 to evaluate the extent of jurisdictional features subject to the USACE, the RWQCB and the CDFW, as well as riparian, riverine and vernal pool habitat subject to the MSHCP. The limits of WoUS and Waters of the State, as well as riparian/riverine features were recorded in the field within accessible areas using aerial maps and Google earth

The jurisdictional delineation was conducted in accordance with the Corps of Engineers 1987 Wetlands Delineation Manual (Corps Manual; Environmental Laboratory 1987) and the SWQCB 2019 Procedures. Additionally, the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West (Version 2.0) (Regional Supplement) (USACE 2008a) the Arid West Supplement wetland delineation methodology for wetlands (USACE 2008a) and *A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b) were followed to document site conditions relative to hydrophytic vegetation, hydric soils, and wetland hydrology.

During the survey, the Project was examined for topographic features, drainages, alterations to hydrology or vegetation, and recent significant disturbance. A determination was then made as to whether normal environmental conditions were present at the time of the field survey. In the field, the techniques used to identify jurisdictional wetland waters of the US/State included observing the vegetation growing near the soil sample points and characterizing the current surface and subsurface hydrologic features present near the sample points through both wetland indicators and direct observation of hydrology. Features meeting wetland vegetation, soil, and hydrology criteria were then mapped in the field. A Trimble GeoXT geographic positioning system (GPS) unit with sub meter accuracy was used to collect geospatial data in the field. These GPS data, aerial photographic interpretation, and notes were then used in the office to identify jurisdictional boundaries on high resolution, geo-rectified aerial photography.

This report was prepared in accordance with guidance provided in Updated Map and Drawing Standards for the South Pacific Division Regulatory Program (USACE 2016a) and Information Requested for Verification of USACE Jurisdiction (USACE 2016b).

3.3 Delineation of Wetland Waters of the US

Where wetland field characteristics were present, Dr. Campbell examined vegetation, soils, and hydrology using the Routine Determination Method outlined in the Corps Manual (Environmental Laboratory 1987), using the Arid West data forms, vegetation sampling methods, and hydric soil and hydrology indicators developed for the Regional Supplement (USACE 2008a).

Hydrophytic Vegetation. Plant species identified on the Project were assigned a wetland status according to the USFWS list of plant species that occur in wetlands (Lichvar et al. 2016) and the USACE California Wetland Plant list (USACE, 2018). This wetland classification system is based on the expected frequency of occurrence in wetlands as shown in Table 1.

Table 1. Classification of Wetland-Associated Plant Species (Lichvar et al. 2016)

Indicator Category	Symbol	Frequency (Percent) of Occurrence in Wetlands ¹
Obligate	OBL	>99 (Almost always is a hydrophyte, rarely in uplands)
Facultative wetland	FACW	67 – 99 (Usually a hydrophyte but occasionally found in uplands)
Facultative	FAC	34 – 66 (Commonly occurs as either a hydrophyte or non-hydrophyte)
Facultative upland	FACU	1 – 33 (Occasionally is a hydrophyte, but usually occurs in uplands)
Upland ²	UPL	<1% (Rarely is a hydrophyte, almost always in uplands)
Not listed ²	NI	Considered to be an upland species

The USACE Arid West Supplement requires that a three-step process be conducted to determine if hydrophytic vegetation is present. The procedure first requires the delineator to apply the “50/20 rule” (Indicator 1) described in the manual. To apply the “50/20 rule,” dominant species are evaluated within each herb, shrub, and tree stratum of the community. In general, dominants are the most abundant species that individually or collectively account for more than 50 percent of the total coverage of vegetation in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total. If greater than 50 percent of the dominant species can be classified by an OBL, FACW, or FAC wetland indicator status, ignoring + and - qualifiers, hydrophytic vegetation is present.

If the community passes Indicator 1 then the community is hydrophytic. If the community fails Indicator 1 and neither hydric soils nor wetland hydrology is present, then the hydrophytic vegetation criterion is not met, unless the site is a problematic wetland situation due to natural processes or recent disturbances. However, if the plant community fails Indicator 1 but hydric soils and wetland hydrology are both present, the delineator must apply Indicator 2.

¹ Based on information contained in the Corps Manual.

² Plant species that are not listed in the *Arid West 2016 Regional Wetland Plant List* (Lichvar et al. 2016) are considered UPL species

Indicator 2 is known as the Prevalence Index. The prevalence index is a weighted average of the wetland indicator status for all plant species within the sampling plot. Each indicator status is given a numeric code (OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5). Indicator 2 requires the delineator to estimate the percent cover of each species in every stratum of the community and sum the cover estimates for any species that is present in more than one stratum. All species are then organized into groups according to their wetland indicator status and the Prevalence Index is calculated using the following formula:

$$PI = \frac{AOBL + 2AFACW + 3AFAC + 4AFACU + 5AUPL}{AOBL + AFACW + AFAC + AFACU + AUPL}$$

The Prevalence Index will yield a number between 1 and 5. If the Prevalence Index is equal to or less than 3, hydrophytic vegetation is present. However, if the community fails Indicator 2, the delineator must proceed to Indicator 3.

Indicator 3 is known as Morphological Adaptations. Some hydrophytes in the Western Mountain Region develop easily recognized physical characteristics (or morphological adaptations) when they occur in wetland areas. Some of these adaptations may include, but are not necessarily limited to, adventitious roots and shallow root systems developed on or near the soil surface. If more than 50 percent of the individuals of a FACU species exhibit morphological adaptations for life in wetlands, that species is considered to be a hydrophyte and its wetland indicator status should be reassigned to FAC. If such observations are made, the delineator must recalculate Indicator 1 and 2 using a FAC indicator status for this species. The vegetation is hydrophytic if either test is satisfied.

Hydric Soils. The National Technical Committee for Hydric Soils (NTCHS) defines a hydric soil as *a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the in the upper part [top 12 inches of soil]* (NRCS 2010). Hydric soils are listed by the U.S. Department of Agriculture (USDA) on the National Hydric Soils List (NRCS 2020a). Nearly all hydric soils exhibit characteristic morphologies that result from repeated periods of saturation or inundation for more than a few days, including redoximorphic features such as orange oxidized mottles or light-colored (high value, low chroma) reduced matrix or mottle colors.

The Arid West Supplement (USACE 2008b) contains a list of 23 hydric soil indicators that are known to occur in the Arid West region. Soils samples were collected and described according to the methodology provided in the NRCS. Soil chroma and values were determined by utilizing a standard Munsell soil color chart (Kollmorgen Instruments Corporation 2009). Hydric soils were determined to be present if any of the soil samples met the criteria defining wetland soils, as described in the Arid West Supplement (USACE 2008b).

Wetland Hydrology. Wetland hydrology exists in areas that are periodically inundated or have saturated soils at some time during the growing season, and for a sufficient duration to support hydrophytic vegetation (Environmental Laboratory 1987). This condition can either be observed through direct observation of primary indicators (such as ponding, saturation, sediment deposits, algal matting), or through indirect or “secondary” indicators (such as drainage pattern, saturation visible on an aerial photograph, raised ant mounds).

3.4 Delineation of Non-Wetland Waters of the US

Non-wetland waters (“Other waters”) were also identified in the field and mapped. This could include lakes, slough channels, seasonal ponds, tributary waters, non-wetland linear drainages, and salt ponds. Non-wetland waters meet the one or more of the wetland criteria, but not all three. In non-tidal or muted tidal

waters USACE jurisdiction extends to the ordinary high water mark (OHWM) which is defined in 33 CFR Part 328.3 as “the line on the shore established by the fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation or the presence of litter and debris.”

In tidal waters, USACE jurisdiction extends to the landward extent of vegetation associated with salt or brackish water or the high tide line (HTL) (see 33 CFR, Part 328.4). The HTL is defined in 33 CFR, Part 328.3 as “the line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The HTL may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gauges, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other tides that occur with periodic frequency, but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.”

3.5 Delineation of Wetland and Non-Wetland Waters of the State under RWQCB

Evaluation of jurisdiction under the RWQCB was completed, and traditionally follows guidance from Section 401 of the CWA. It generally has the same jurisdictional areas as the USACE. In addition, the wetland delineation procedures were followed per the “State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State” (April 2019).

3.6 Delineation of CDFW Streambed & Riparian Habitat

CDFW jurisdiction was identified, including any unvegetated streambed, aquatic and riparian areas. Evaluation of potentially jurisdictional areas followed the guidance of relevant CDFW materials and standard practices by CDFW personnel. CDFW jurisdiction was delineated by measuring the outer width and length boundaries of potentially jurisdictional areas, consisting of the greater of either the top of bank measurement or the extent of associated riparian or wetland vegetation.

Ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows fall under CDFW jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. Jurisdiction does not include tidal areas such as tidal sloughs unless there is freshwater input. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.

3.7 Delineation of MSHCP Riparian/Riverine and Vernal Pools

Habitats were assessed to determine if MSHCP riparian/riverine resources and vernal pools, pursuant to section 6.1.2 of the MSHCP are present onsite. MSHCP riparian/riverine resources are defined as, “*those lands that contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year. Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season*” (MSHCP 2004).

In addition, stock ponds, ephemeral pools, and other areas of potential fairy shrimp habitat are identified and mapped, where present.

4 Environmental Setting

This chapter describes the topography, land use, hydrology, vegetation characteristics, and soils associated with the Project.

4.1 Topography

Elevation within the Project ranges from 1,562 to 1,574 feet NAVD88, and gently slopes from the north to the south (Google Earth 2020). The site is mostly flat.

4.2 Soils

The NRCS has identified one soil series within the Project (Figure 4), and is described below (NRCS 2020b). The National List and California List of Hydric Soils was reviewed to determine if the soil type within the Project is hydric. The mapped soil series is not classified as a hydric soil on the National List or California List of Hydric soils (NRCS 2020a).

Monserate sandy loam, 0 to 5 percent slopes. The Monserate series is a member of the fine-loamy, mixed, thermic family of Typic Durixeralfs. This soil type has an impermeable layer (duripan) approximately 28 inches below the surface, which can form a perched water table when water is present, since infiltration through this soil layer is very slow. This may be a strong influence on the emergent cattail ponds that are present onsite, and allow for willow and other hydrophytic vegetation to persist in the swales.

The soils formed in alluvium derived principally from granitic rocks. Monserate soils have brown and yellowish red, slightly acid, sandy loam A horizons, reddish brown, neutral, sandy clay loam B2t horizons underlain by a silica-cemented duripan. Monserate soils are found in the interior valleys in the western part of southern California. Monserate soils are moderately well to well drained with slow to rapid runoff. Permeability is moderately slow below 10 to 20 inches and very slow in the duripan.

4.3 Precipitation

In Moreno Valley, the climate is hot-summer Mediterranean, with most rain falling in the winter and spring. Mild cool temperatures are common in the winter and hot to very hot temperatures are common in the summer. Climate conditions include a 30-year average (1986-2015) of approximately 8.7 inches of annual precipitation with an average temperature range from 53°F to 81°F (PRISM Climate Group 2020).

The jurisdictional delineation was conducted during normal conditions that were categorized as Mid-Range on the Palmer Drought Severity Index (NOAA 2020). The jurisdictional delineation field investigation took place during the wet season (April 2020). Relative to the 30-year climate normal, precipitation was normal for the 2019-20 wet season prior to the delineation. Total precipitation recorded in the area from October 2019 through February 2020 was 5.4 inches, which is approximately 87% of the 30-year average (PRISM Climate Group 2020). These normal conditions were taken into account when assessing the jurisdictional features present.

4.4 Hydrologic Unit

The Project is located in the San Jacinto sub-watershed (USGS Hydrologic Unit 18070202), which is part of the larger Santa Ana Watershed (USGS Hydrologic Unit 180702).

4.5 Hydrology

There are two small emergent marshes that connect with, and flow into, two ephemeral drainage swales within the Project limits (Figure 2). The primary sources of hydrology that support these features are runoff from storm flows, as well as nuisance flows (irrigation overspray, etc) from surrounding residential and commercial areas. The underlying duripan found within Monserate soils keeps water present in the marsh, and retains moisture sufficient for willows to grow, since the duripan can create a perched water table.

The drainage features are the remnants of natural braided channels that were present prior to urbanization. Evidence of these channels are visible in aerial photography in 1977 (UCSB 2020). The present day drainage swales convey runoff through overland flow into culverts that terminate at a detention basin, approximately 0.75 mile east of the Project, located at Brodiaea Avenue and Gilbert Street.

The drainage swales within the project are not confluent with the Sunnymead or Perris Valley Storm Drain Channels based on stormwater facility maps published by the Riverside County Flood Control and Water Conservation District.

The Sunnymead Storm Drain Channel is the nearest named hydrologic feature and is located offsite, and approximately 0.3 mile west of the Project. The Sunnymead Channel is confluent with the Perris Valley Storm Drain Channel which is located approximately 2.4 miles southeast of the Project. The Perris Valley Storm Drain Channel is confluent to the San Jacinto River, which flows into Lake Elsinore. Lake Elsinore generally acts as a sink, although high water flows are occasionally diverted through the Elsinore Spillway Channel to Temescal Creek. Temescal Creek flows to the Santa Ana River (nearest Traditional Navigable Water [TNW]) and finally to the Pacific Ocean.

4.6 Vegetation Communities

The Project supports four main vegetation communities, of which two are aquatic/riparian in nature (Figure 5). Vegetation communities were mapped using CDFW's Vegetation Classification and Mapping Program's (VegCAMP) currently accepted list of vegetation alliances and associations (CDFW 2020). Table 2 provides a summary of the main vegetation communities onsite. One mule fat and one palo verde individuals were separately mapped and constitute 0.011 acre, which is not included in the table or discussion below. Appendix A list of plant species recorded onsite.

Riparian or Wetland Habitat

Black Willow Riparian Woodland (0.39 acre). This riparian community is dominated by black willow (*Salix gooddingii*) [FACW] and occurs primarily within the onsite western drainage swale (Drainage A). A small patch of black willow is also found on the eastern swale. One mule fat (*Baccharis salicifolia*) [FACW] individual was also mapped within this vegetation community. Understory plants include rigput brome (*Bromus diandrus*) [UPL], wild raddish (*Rhapanus sativus*) [FAC], chickweed (*Stellaria media*) [FACU], bedstraw (*Galium aparine*) [FACU], small-flowered fiddleneck (*Amsinckia menziesii*) [UPL], and hairy vetch (*Vicia villosa*) [UPL].

Typha Alliance (Disturbed Wetland - Cattail Marsh) (0.02 acre). Cattail marsh occurs at the upstream-most end of both onsite drainages, and form as a result of urban runoff in combination with the hardpan layer below the surface. The dominant specie is southern cattail (*Typha domingensis*) [OBL].

Wet Meadow (0.81 acre). Wet meadow vegetation community includes the seasonally inundated drainage pattern which bisects the non-native grassland. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Rhapanus sativus*),

Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), riggut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Upland Habitat

Non-native Grassland (16.39 acre). Non-native grassland is the dominant vegetation community throughout the property and is a result of annual discing operations. The dominant species is foxtail barley (*Hordeum murinum*) [FACU].

Developed Land (0.05 acre). Developed areas include buildings, impervious surfaces, and areas that are regularly disturbed, or are devoid of substantial vegetation cover. The concrete drainage at a culvert inlet at the terminus of Drainage A is considered developed land.

Table 2 - Vegetation Communities

Vegetation Community	Within Project Limits (acres)
Riparian or Wetland	
Black Willow Riparian Woodland	0.39
Typha Alliance (Disturbed wetland - cattail marsh)	0.02
Wet Meadow	0.81
Upland	
Non-Native Grassland	16.39
Developed (onsite only)	0.05
TOTAL	17.66

4.7 U.S. Fish and Wildlife Service National Wetland Inventory

As part of the evaluation for the presence of jurisdictional resources, USFWS National Wetland Inventory (NWI) map data were reviewed. NWI maps are based on interpretation of aerial photography, limited verification of mapped units, and/or classification of wetland types using the classification system developed by Cowardin et al. (1979). These wetland data are available for general reference purposes and do not necessarily correspond to jurisdictional waters/wetlands as defined in the USACE Arid West Supplement. According to the NWI map no wetlands are mapped within the Project, although the two onsite cattail marshes would be considered emergent wetland (PEM1C).

Nearby offsite wetland features include two intermittent riverine features (R4SBA): one approximately 0.5 mile east, and the other one approximately 0.3 mile west of the Project. The NWI also maps a freshwater emergent wetland (PEM1C) approximately 0.3 mile west of the Project Site.

4.8 Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) produces maps depicting flood zones that are generally associated with rivers, oceans and other water bodies. Like the NWI maps, the FEMA flood zone maps are based predominantly on topography and regional modeling.

Based upon a review of the FEMA flood zone maps, no portion of the Project occurs within the 100-year flood zone. The area is mapped as Zone X – Area of Minimal Flood Hazard (FEMA 2020).

5 Jurisdictional Delineation Results and Discussion

This chapter describes the delineated features, existing conditions and expected jurisdictional status within the Project limits. The information and results included herein document the investigation, best professional judgment, and conclusions of MIG. It is correct and complete to the best of our knowledge. However, all jurisdictional determinations should be considered preliminary until reviewed and approved by the regulatory agencies.

The Project contain two ephemeral drainages, willow woodland, and two emergent cattail marshes that are drainage subject to the jurisdiction of the RWQCB, the CDFW, and the MSHCP. A total of eight sample points (SP1 to SP8) were examined to identify jurisdictional features. See Figures 6 through 8 for a map of each jurisdiction. Table 3 provides a summary of acreage. The Arid Land JD Forms are found in Appendix B. Site photos locations and photographs are depicted are depicted in Appendix C.

A total of 1.22 acres of potentially jurisdictional waters & riparian/riverine habitat regulated by the RWQCB, the CDFW and the MSHCP were mapped onsite (see Table 3 below). The onsite aquatic and drainage swale features are not subject to the jurisdiction of the USACE under the 2020 Rule, since they do not meet any of the definitions of Category (a)(1-4) waters.

Table 3. Summary of Jurisdictional Waters and Habitats within the Project

Jurisdictional Waters	Acres¹
RWQCB Jurisdiction Total	0.38 acre
Section 401 Waters of the State	
Wetland Waters of the State	
Cattail marshes	0.02 acre
Non-Wetland Waters of the State	
Drainages A & B (1,149 linear feet)	0.35 acre
Developed land (concrete drainage inlet, impacted)	0.01 acre
CDFW Jurisdiction Total	1.22 acre
Streambed	0.81 acre
Riparian/Aquatic	0.41 acre
MSHCP Riparian/Riverine Total	1.22 acre
Riverine	0.81 acre
Riparian/Aquatic	0.41 acre

¹Note: Values are approximate due to rounding.

Cattail Marshes

Two cattail marshes, totaling 0.02 acre, each situated on the north end of the two drainage swales met the definition of a Wetland Waters of the State, under the SWQCB 2019 Procedures and are considered Special Aquatic Sites. These two marshes are regulated by the RWQCB, CDFW and MSHCP. They are not jurisdictional under the USACE.

Black Willow Woodland

Black willow woodland is found just downstream of the cattail marsh along the western Drainage A and forms a broad woodland habitat. A small patch is also present on the upstream end of Drainage B. This area constitutes 0.39 acre of riparian habitat and is regulated by the CDFW and under the MSHCP to the outer dripline of the trees.

It did not meet the 3-parameter definition of a Wetland, and therefore it would be considered a non-wetland Water of the State subject to the RWQCB jurisdiction. Hydric soil characteristics were lacking. Examination of historic aerial photographs (Google Earth 1994-present) indicates an OHWM of approximately 20 feet wide in Drainage A and 7 feet wide in Drainage B under the canopy, which the RWQCB would take jurisdiction over. The acreage is included in Drainage A and B below.

Drainage A

Directly downstream of the Black Willow Woodland, woody vegetation disappears and is dominated by an array of grasses and forbs. The dominant plant species range from FAC to UPL and do not meet the criteria of hydrophytic vegetation and hydric soil characteristics are absent. These areas remain green for much longer duration than the surrounding area, indicating the presence of soil moisture, resulting from the urban hydrologic input. Examination of historic aerial photographs confirmed a defined bed and bank under non-discarded conditions, indicating that wetland hydrology is present. This drainage would be considered ephemeral in nature and extends for 218 linear feet beyond the willow woodland until it terminates in a concrete drainage inlet (already impacted jurisdictional feature) and exits the site. The total drainage length is 546 feet. The width of jurisdiction was determined by the presence of hydrology which averages 20 feet wide, for a total of 0.25 acre of jurisdiction. This drainage is regulated by the RWQCB, CDFW and under the MSHCP as non-wetland Waters of the State and Riverine habitat (MSHCP).

Drainage B

Drainage B is located directly downstream and adjacent to the eastern cattail marsh. Like Drainage A, woody vegetation is absent and grasses and forbs are dominant. The Project limits are regularly disced, so this occurs under a highly disturbed conditions. The dominant plant species are mostly FACU, but range from a few FACW to UPL species. This drainage does not meet the criteria of hydrophytic vegetation and hydric soil characteristics are absent. Like Drainage A, these areas remain green for much longer duration than the surrounding area, indicating the presence of soil moisture, resulting from the urban hydrologic input. Examination of historic aerial photographs confirmed a defined bed and bank under non-discarded conditions. Wetland hydrology is present. This drainage would be considered ephemeral in nature and extends for 603 linear feet until it terminates off-site in a concrete inlet. The width of jurisdiction was determined by the presence of hydrology which averages 7 feet wide, for a total of 0.10 acre of jurisdiction. This drainage is regulated by the RWQCB, CDFW and under the MSHCP as non-wetland Waters of the State and Riverine habitat (MSHCP).

5.1 Sample Point Summary

A total of eight (8) Sample Points (SP) were collected during the jurisdictional delineation. Arid West Wetland Determination Data Forms and SP locations are found in Appendix B.

- **SP1** was located just outside the cattail marsh of Drainage A. Dominant species were a mix of grasses and forbs which were FACU to UPL. It did not meet the criteria for hydrophytic vegetation or soils. Soils are regularly disced. Based upon historic aerial photographs this location is outside the OHWM. This Sample Point is not subject to the jurisdiction to any of the authorities that

regulate wetlands and waters.

- **SP2** is situated on the edge of the cattail marsh. Dominant species was southern cattail (*Typha domingensis*) [OBL]. The pond was inundated at the time of the survey. Due to the present of the OBL vegetation with the ponded water, hydric soils were assumed. This Sample Point meets the RWQCB definition of a wetland. It is an aquatic feature also regulated by the CDFW and MSHCP.
- **SP3** is located just downstream of the cattail pond of SP1 and SP2 on the western-most drainage (Drainage A). Overstory is black willow (FACW), with an understory of various invasive grasses and forbs (UPL and FACU plants). Soils did not exhibit hydric characteristic. Hydrology is from upstream sources with the duripan most likely acting as a perched water table. This SP does not meet the RWQCB definition of a wetland, but it would be considered a Waters of the State under the Porter Cologne Act, and Riparian Habitat regulated by the CDFW and the MSHCP.
- **SP4** is situated just outside the dripline of the Black Willow Woodland. It is dominated by forbs and grasses that occur in non-wetland areas, including annual fescue (*Vulpia myuros*) [FACU], wild radish [FAC], sweet clover (*Mellilotus officinalis*) [FACU], chickweed [FACU], hairy vetch [UPL] and bobtail barley (*Hordeum intercedens*) [FAC]. No hydric soils were noted. Normal circumstances do not exist due to annual discing. Examination of historic aerial photographs indicate this sample point is outside any OHWM. This Sample Point is not subject to the jurisdiction to any of the authorities that regulate wetlands and waters.
- **SP5** is downstream of SP1-4 in the same drainage, in the center of the swale where annual grasses and forbs dominate and willows are absent. Dominant plants include annual fescue [FACU], wild radish [FAC], sweet clover [FACU], chickweed [FACU], and Pacific popcorn flower (*Plagiobothrys tenellus*) [FACU]. There was no evidence of hydric soils. Normal circumstances do not exist due to annual discing. Examination of historic aerial photographs indicate a drainage with an OHWM of ~20 feet wide. This Sample Point meets the RWQCB definition of non-wetland waters of the State, is considered streambed by the CDFW and riverine habitat under the MSHCP.
- **SP6** lies at the edge of the eastern cattail marsh upstream of Drainage B. The dominant plant species was southern cattail [OBL], with curly dock (*Rumex crispus*) [FAC] and perennial ryegrass (*Lolium perenne*) [FAC] also present, but comprise a minor component. The pond was inundated. Due to the dominance of the OBL vegetation with the ponded water, hydric soils were assumed. This Sample Point meets the RWQCB definition of a wetland, and would also be regulated by the CDFW and under the MSHCP.
- **SP7** is along the eastern Drainage B with one mule fat [FACW] and black willow [FACW] present, along with a mix of FACW to FACU annual grasses and forbs. It met the Prevalence Index for hydrophytic vegetation, but did not meet the criteria for hydric soils. Examination of historic aerial photographs indicate a drainage with an OHWM of ~7 feet wide. This Sample Point meets the RWQCB definition of non-wetland waters of the State, is considered streambed by the CDFW and riverine habitat under the MSHCP.
- **SP8** is further downstream of SP7 in Drainage B. Dominant plants that are common in upland habitats, and were dominated by FACU species such as annual fescue, sweet clover and storksbill (*Erodium cicutarium*) [FAC]. It did not meet the criteria for hydrophytic vegetation or soils. Examination of historic aerial photographs indicate a drainage with an OHWM of ~7 feet wide. This

Sample Point meets the RWQCB definition of non-wetland waters of the State, is considered streambed by the CDFW and riverine habitat under the MSHCP.

5.2 Waters of the US Under the USACE

The two onsite cattail marshes, the willow woodland, and two drainages swales do not meet the definition of Waters of the US under the 2020 Rule, and thus the USACE will likely not exert jurisdiction, as of the date of this report. It should be noted however, that at least one state (Colorado) has an injunction, thus regulations in Colorado revert back to the pre-2020 Rule. Should a California injunction occur prior to permit application submittal, the USACE might exert jurisdiction over these features.

5.3 Waters of the State Under the RWQCB

Wetland Waters of the State

Both cattail marshes meet the definition of a Wetland under the SWQCB 2019 Procedures. All three wetland parameters are met, and thus these would be considered Wetland Waters of the State, and falls under the category of Special Aquatic Sites (§ 230.41 *Wetlands* in the 2019 Procedures). A total of 0.02 acre of RWQCB jurisdictional wetlands were identified onsite (Figure 6).

Non-Wetland Waters of the State

The OHWM under the black willow riparian woodland, Drainage A and B, and the already impacted concrete stormdrain inlet are considered non-wetland Waters of the State. Because they are not jurisdictional under the CWA, the RWQCB may exert jurisdiction under the California Porter Cologne Act and a Waste Discharge Requirement (WDR) or waiver of WDR would be required, should any waters of the State be impacted.

The RWQCB would take jurisdiction just the OHWM below the canopy in the black willow woodland. This acreage has been included as part of the overall acreage of the two drainage swales. Annual disking of the soil along Drainages A and B, has disturbed any OHWM features, thus historic aerial photographs were examined (Google Earth 1994-present). Evidence of an OHWM was observed and estimated widths extrapolated. Drainage A is estimated at 20 feet wide and is 546 feet long, for a total of 0.25 acre. Drainage B is estimated at 7 feet wide and extends for 603 linear feet, for a total of 0.10 acre. Total length of both drainages sums to 1,149 acres. Drainages A and B are non-wetland Waters of the US due to the presence of hydrology. They would take jurisdiction over 0.35 acre.

The concrete drainage inlet conveying water offsite is a non-wetland Water of the State. However, it is already considered "impacted" and therefore would not be subject to compensatory mitigation requirements over the 0.01 acre.

5.4 CDFW Jurisdictional Areas

All ecological systems associated with drainages (i.e., riparian vegetation) and drainage and pond features with bed and bank topography are regulated by the CDFW under Sections 1600-1616 of the California Fish and Game Code. This includes the 0.02 acre of cattail marshes, 0.39 acre of black willow woodland, and 0.81 acre of wetland meadow along Drainages A and B outside the black willow woodland, (Figure 7). A total of 1.22 acres of CDFW jurisdictional resources were identified onsite.

The cattail marsh and black willow woodland would be considered riparian/aquatic and generally requires higher mitigation ratios (e.g., 2:1) if impacted than the non-native grassland dominated wet meadow (1:1 mitigation ratio).

The concrete drainage inlet where water is conveyed offsite is a unvegetated stream channel by the CDFW since it conveys water. However, it is already considered "impacted" and therefore would not be subject to compensatory mitigation requirements over the 0.01 acre.

5.5 MSHCP Riparian/Riverine Resources

The cattail marshes and black willow woodlands are considered Riparian resources under the MSHCP. Drainages A and B are considered Riverine resources under the MSHCP. Thus, a total of 0.41 acre of riparian habitat and 0.81 acre of riverine habitat is present onsite for a total of 1.22 acres (Figure 8).

The concrete drainage inlet would not be regulated under the MSHCP. No vernal pool habitat occurs onsite.

6 Impacts to Jurisdictional Resources & Habitat Mitigation

6.1 Impacts to Jurisdictional Resources

Impacts to jurisdictional resources listed in this report as a result of the proposed development would trigger the need for regulatory permits. The current design would impact all jurisdictional resources. Impacts to Wetlands under the 2019 Procedures triggers the requirement for an Alternatives Analysis by the RWOCB. The 0.02 acre of cattail marsh would fall under this category.

6.2 Habitat Mitigation

Any permanent impacts to jurisdictional resources require that the resources be mitigated for (aka replaced or preserved). Impacts to 0.81 acre of wet meadow, which are ephemeral in nature and low quality, will be mitigated for by purchasing re-establishment credits at a 1:1 ratio from the Riverpark Mitigation Bank. Impacts to 0.41 acre of cattail marsh and black willow woodland will be mitigated for by purchasing rehabilitation credits at a 2:1 ratio at the Riverpark Mitigation Bank.

Habitat mitigation credits can be purchased either at an approved Habitat Mitigation Bank (privately owned) or via an In-Lieu Fee Program (public agency). Approval to purchase the mitigation credits must be granted in advance by the resource agencies. The Riverpark Mitigation Bank may be the preferred bank for purchase by the resource agencies, due to the approved Service Area that includes Riverside County. .

7 Conclusions and Summary

The Project limits support jurisdictional resources subject to the RWQCB, CDFW and under the MSHCP.

- Wetland habitat (Wetland Waters of the State) includes 0.02 acre of cattail marshes.
- Riparian habitat (non-Wetland Waters of the State & MSHCP habitat) includes 0.39 acre of black willow woodland.
- RWQCB streambed (Non-Wetland Waters of the State) includes Drainages A and B, which extend for 1,149 linear feet, totaling 0.35 acre.
- CDFW and MSHCP streambed totals 0.81 acre, includes Drainages A and B outside the willow woodland. This acreage is included with the total RWQCB jurisdiction.
- The onsite 0.01 acre concrete outlet is also considered jurisdictional by the RWQCB and CDFW but is already an impacted feature thus would not be subject to any mitigation requirement. It is not regulated under the MSHCP.

Under the USACE 2020 Rule, none of the features would be regulated under Section 404 of the CWA, since none meet the definition of Category (a)(1-4) regulated waters. Should there be a California injunction over the new rule, this may be subject to change. Obtaining a letter of non-jurisdiction by the USACE is recommended.

Impacts to 0.81 acre of CDFW and MSHCP streambed, which are ephemeral in nature and low quality, will be mitigated for by purchasing re-establishment credits at a 1:1 ratio from the Riverpark Mitigation Bank. Impacts to 0.41 acre of CDFW and MSHCP riparian areas will be mitigated for by purchasing rehabilitation credits at a 2:1 ratio at the Riverpark Mitigation Bank.

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Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and

Figure 1 Vicinity Map

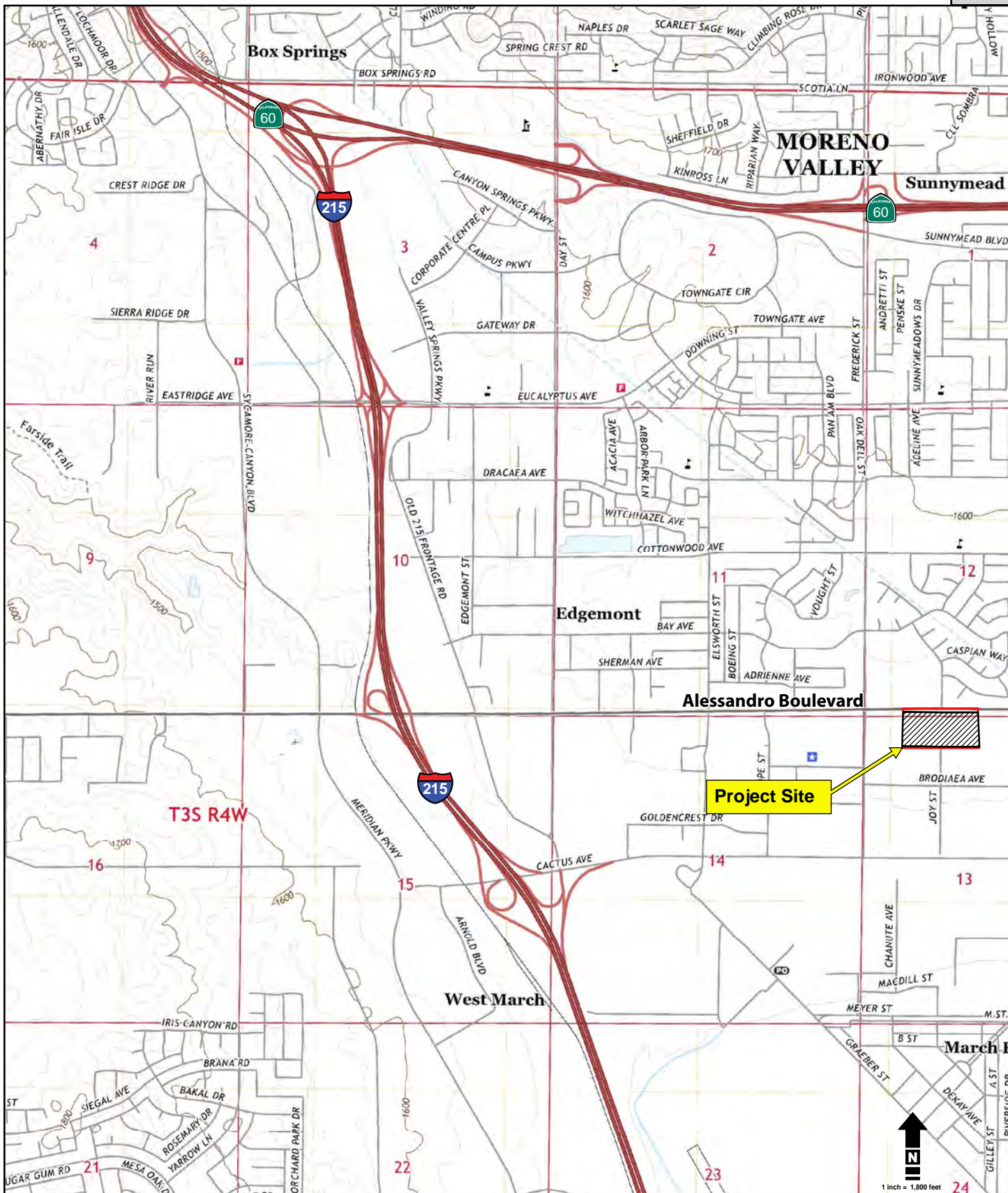
Alessandro Project Site, City of Moreno Valley, CA







- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)

Figure 2 Project Site Map



-  Project Site Boundary (17.66 acres)
-  Offsite Assessment Area (2.65 acres)

Source: USGS Riverside East 2018

Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and

Figure 3 USGS Map

Alessandro Project Site, City of Moreno Valley, CA





- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- MmB - Monserate Sandy Loam (NRCS 2020)

Figure 4 Soils Associations Map



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |
| WM Wet Meadow | | |



Figure 5 Vegetation Communities Map

Alessandro Project Site, City of Modesto

Attachment: Appendix B3-MSHCP Determination of Biological Equivalent or Superior Preservation (4465 : PEN20-0118-0119, PEN20-0122 and



- Wetland Waters of the State (0.02 acre)
- Non-Wetland Waters of the State (0.35 acre, 1,149 LF)
- Concrete Stormdrain, already impacted (0.01 acre, 32 LF)

- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)

Figure 6 RWQCB Jurisdiction



- CDFW Disturbed Wetland (0.02 acre)
- CDFW Riparian (0.39 acre)
- CDFW Wet Meadow (0.81)
- Concrete Stormdrain, already impacted (0.01 acre, 32 LF)

- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)



Figure 7 CDFW Jurisdiction



- MSHCP Aquatic (0.02 acre)
- MSHCP Riparian (0.39 acre)
- MSHCP Riverine (0.81 acre)

- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)



Figure 8 MSHCP Section 6.1.2 Jurisdiction
Alessandro Project Site, City of Mo...

Appendix A: Plants Observed Onsite

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), riggut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding's willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracunculus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

Appendix B: USACE Wetland Determination Forms



Sample Point Locations

Appendix C: Site Photographs



Photo 1: View of Black Willow Woodland along Drainage A.



Photo 2: View of Concrete inlet at terminus of Drainage A.



Photo 3: View of disced field where Drainage B is situated. Taken from SE corner.



Photo 4: View of Drainage B and cattail marsh near Alessandro Blvd.

Burrowing Owl Focused Survey Report

Alessandro Project Site

City of Moreno Valley, Riverside County, California



Prepared for:

Compass Danbe Real Estate Partners

523 Main St

El Segundo, CA 90245

Prepared by:

MIG

1650 Spruce Street, Suite 102

Riverside, California 92507



October 2020

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Table of Contents

TABLE OF CONTENTS I

1.0 INTRODUCTION..... 1

 1.1 Project Location..... 1

2.0 METHODS AND RESULTS 1

 2.1 Step 1 – Habitat Assessment..... 1

 2.2 Step II – Locating Burrows and Burrowing Owls..... 3

 2.3 Step III – Reporting Requirements..... 4

 2.4 Preconstruction Surveys..... 4

3.0 CONCLUSIONS AND RECOMMENDATIONS 4

4.0 REFERENCES..... 5

List of Figures

- Figure 1 Regional Location Map
- Figure 2 Project Site Map
- Figure 3 Vegetation Communities Map
- Figure 4 (a-b) Current Project Site Photographs
- Figure 5 Burrowing Owl Survey Area Map

List of Tables

- Table 1 Summary of Focused Survey Weather Conditions during the Breeding Season

1.0 INTRODUCTION

This report presents the results of focused burrowing owl (*Athene cunicularia*) surveys conducted at the 17.66-acre (2.65-acre offsite) Alessandro project site (Project Site) in the City of Moreno Valley, Riverside County, California. The Project Site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) planning area. The MSHCP is a regional multi-jurisdictional habitat conservation program that addresses multiple species' habitat needs in western Riverside County. According to MSHCP guidelines, surveys for the burrowing owl are to be conducted as part of the environmental review process. Specifically, the MSHCP Additional Surveys Needs and Procedures identify a burrowing owl Survey Area within the MSHCP Plan Area. The Project Site occurs within this predetermined Survey Area. Suitable low potential habitat was identified on the Project Site during an initial site reconnaissance conducted in May 21st, 2020. Subsequently, focused burrowing owl surveys were conducted during the breeding season in order to comply with MSHCP requirements. The purpose of this report is to document the results of the burrowing owl habitat assessment and focused burrow and burrowing owl surveys.

1.1 Project Location

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley (City), Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5' series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.0 METHODS AND RESULTS

The survey was conducted in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (2006). Survey protocol consists of three steps: Step I – Habitat Assessment; Step II – Locating Burrows and Burrowing Owls; and Step III – Reporting Requirements. Each step conducted during this survey is briefly outlined below. Surveys were conducted during weather that is conducive to observing burrowing owls outside of their burrows and detecting burrowing owl sign. All surveys were conducted from two hours before sunset to one hour after or from one hour before to two hours after sunrise. Surveys were not conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. Surveys were not conducted within five days of measurable precipitation.

2.1 Step 1 – Habitat Assessment

Step 1 of the burrowing owl focused survey consists of walking the Project Site to determine if suitable habitat is present. This initial habitat assessment was conducted on May 21st, 2020 by MIG Senior Biologist Jonathan Campbell, PhD (Table 1. Summary of Focused Survey Weather Conditions during the Nesting Season). Upon arrival at the Project Site and prior to initiating the assessment survey, binoculars were used to scan all suitable habitats on and adjacent to the property, including perch locations, to ascertain owl presence.

All suitable areas of the Project Site were surveyed on foot by walking slowly and methodically across each habitat type while recording/mapping areas that may represent suitable owl habitat onsite. Primary indicators of suitable burrowing owl habitat include, but are not limited to: native and non-native grassland, grassland interspersed with shrubland along ecotonal areas, shrublands with low density shrub cover, concrete rubble, and earthen berms. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels (*Otospermophilus beecheyi*) or badgers (*Taxidea taxus*), but they often utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock or wood debris piles, or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or near man-made structures. A majority of the habitat mapped onsite represents low potential habitat for burrowing owl.

According to the MSHCP (2006) guidelines, if suitable habitat is present, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Project Site boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars.

The largest area and center of the Project Site is characterized as “disturbed/non-native grassland” and currently offers limited habitat value to plants and wildlife. The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands. Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below. Natural community names and hierarchical structure follows List of Alliances and Associations (CDFW September 2010) which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the classification system. Scientific nomenclature and common names used for plants in this report follows Hickman (1993). Vertebrate taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists’ Union (1998 and supplemental) for birds, and Jones et al. (1992) for mammals. The onsite plant communities are as follows (Figure 3, Vegetation Communities Map, Figures 4a/4b, Current Project Site Photographs):

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), riggut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding’s willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracuncululus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

Results from the Step I - Habitat Assessment indicate that the disturbed/non-native grassland (described above) represent low potential habitat for the burrowing owl. Accordingly, due to the presence of potential habitat onsite, Step II – Locating Burrows and Burrowing Owls is required. In addition, due to the presence of potential habitat onsite, a pre-construction survey within 30 days of any project-related or construction-related activities is therefore required.

2.2 Step II – Locating Burrows and Burrowing Owls**Part A – Focused Burrow Survey**

Due to the presence of low potential burrowing owl habitat, focused burrow surveys, including documentation of appropriately sized natural burrows or suitable man-made structures that may be utilized by burrowing owl, were conducted as part of the protocol on May 21st, 2020 (Table 1. Summary of Focused Survey Weather Conditions during the Nesting Season).

The systematic surveys for burrows, including burrowing owl signs, were conducted by walking across all potential habitat mapped at the Project Site. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 30 meters (approximately 100 feet) apart. The burrow survey began within two hours prior to sunset. Accordingly, due to the presence of suitable burrowing owl burrows onsite, Step II, Part B – Focused Burrowing Owl Surveys are required.

General wildlife species documented onsite or within the vicinity of the Project Site include but are not limited to red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaidura macroura*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*),

American crow (*Corvus brachyrhynchos*), western meadowlark (*Sturnella neglecta*) common raven (*Corvus corax*), house sparrow (*Passer domesticus*), American goldfinch (*Spinus tristis*), house finch (*Haemorhous mexicanus*), western tanager (*Piranga ludoviciana*), and desert cottontail (*Sylvilagus audubonii*).

Part B – Focused Burrowing Owl Surveys

If any burrows are found during the Part A – Focused Burrow Survey, Part B – Focused Burrowing Owl Surveys are required to determine presence or absence of the species. The Part B effort consists of at least four focused surveys to search for signs of occupation at the burrows, or observations of burrowing owls. Focused surveys are to be conducted within the breeding season between March 1st and August 31st. A review of local documentation (CNDDDB 2020) suggests that no burrowing owls have been historically identified within the extent of the Project Site boundary. In addition to the breeding season survey conducted on May 21st, 2020, three additional breeding season surveys were conducted throughout the Project Site on June 20th, July 10th, and 30th, 2020 (Figure 5, Burrowing Owl Survey Area Map). All surveys were conducted during times and conditions conducive to observing burrowing owl (Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season). A thorough investigation of the potentially suitable burrows concluded that no evidence of burrowing owl activity was present in any of the onsite burrow complexes.

Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season

Date	Time Start/End	Temperature (°F)	Wind Speed (mph)	Conditions
5/21/2020	6:30AM – 7:30AM	72	2-5	Clear
6/20/2020	6:00AM – 9:00AM	68	0-4	Clear
7/10/2020	6:00AM – 9:00AM	66	4-8	Clear
7/30/2020	6:00AM – 9:00AM	66	2-8	Clear

2.3 Step III – Reporting Requirements

This report represents the third step of the burrowing owl focused survey, the preparation of a report that provides the results of each step of the survey protocol. After completion of appropriate surveys, a final report shall be submitted to the City of Moreno Valley, which discusses the survey methodology, transect width, duration, conditions, and results of the survey.

2.4 Preconstruction Surveys

All project sites containing burrows or suitable habitat (based on Step I/Habitat Assessment), whether owls were found or not, require pre-construction surveys that shall be conducted within 30 days prior to ground disturbance to avoid direct take of burrowing owls (MSHCP Species-Specific Objective 6).

3.0 CONCLUSIONS AND RECOMMENDATIONS

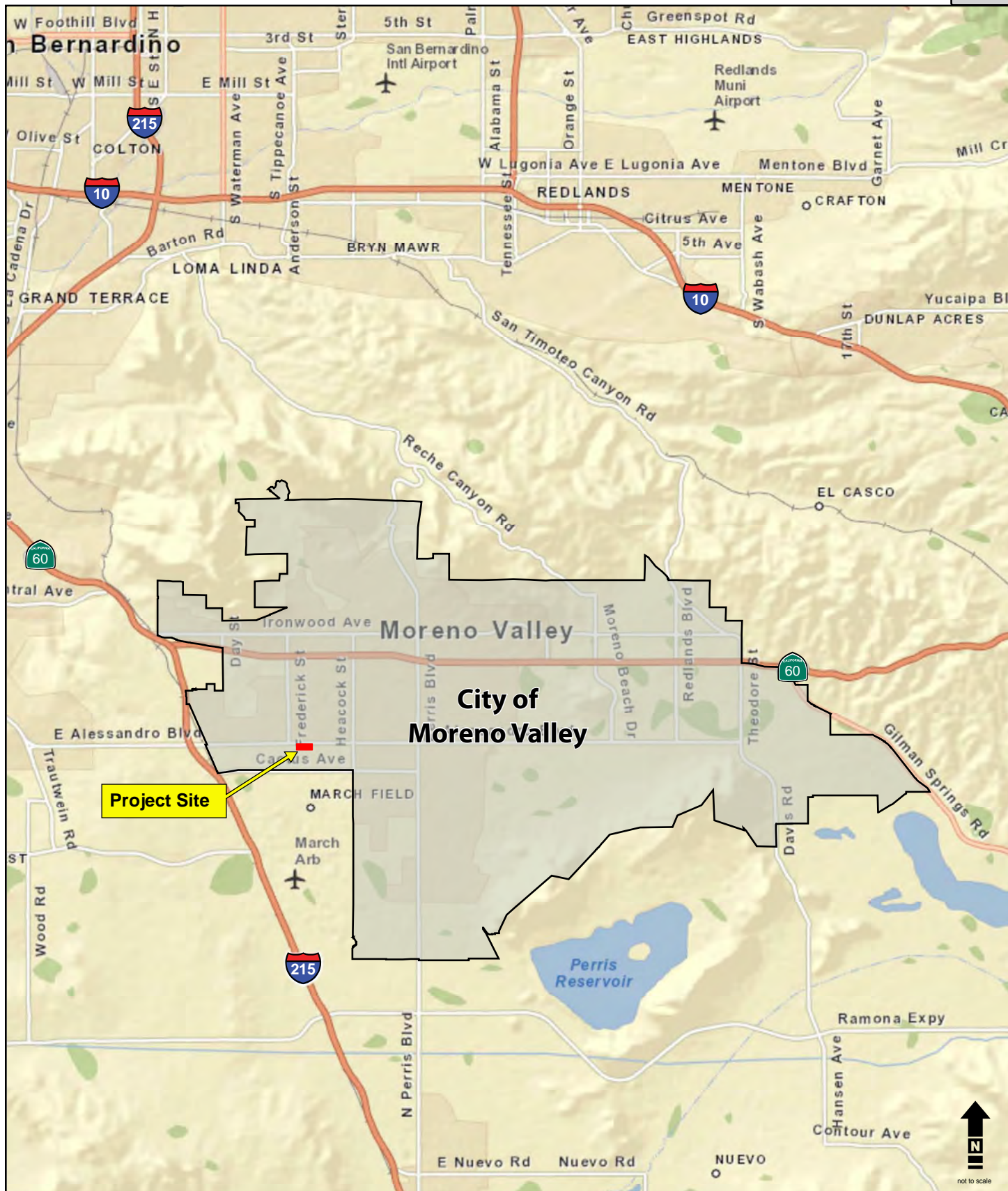
Both low potential burrowing owl habitat and burrowing owl burrows were identified within the Project Site during the Step I – Habitat Assessment performed on May 21st, 2020 and the Step II, Part A – Focused Burrow Survey performed on May 21st, 2020. Three additional Step II, Part B – Focused Burrowing Owl Surveys were therefore performed during the breeding season on June 20th, July 10th, and 30th, 2020 throughout the Project Site. No evidence of burrowing owl activity was observed during any of the surveys.

A pre-construction burrowing owl survey will need to be completed within 30 days prior to any project-related or construction-related disturbances to onsite areas.

4.0 REFERENCES

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FIGURES



Attachment: Appendix B4-Burrowing Owl Focused Survey Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Figure 1 Regional Location Map

Alessandro Project Site, City of Moreno Valley, CA



- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- # → Photo Point & Direction



Figure 2 Project Site Map



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |

Figure 3 Vegetation Communities Map

Alessandro Project Site, City of Mo...

Attachment: Appendix B4-Burrowing Owl Focused Survey Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)





Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 4a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.

Figure 4b Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



--- Survey Transects

- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)



Figure 5 Burrowing Survey Area Map
 Alessandro Project Site, City of Modesto, CA

Least Bell's Vireo Focused Survey Report

Alessandro Project Site

City of Moreno Valley, Riverside County, California



Prepared for:

Compass Danbe Real Estate Partners
523 Main St
El Segundo, CA 90245

Prepared by:

MIG
1650 Spruce Street, Suite 102
Riverside, California 92507



October 2020

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Table of Contents

TABLE OF CONTENTS I

1.0 INTRODUCTION..... 1

 1.1 Project Location..... 1

2.0 METHODS AND RESULTS 1

3.0 CONCLUSIONS 5

4.0 REFERENCES..... 5

List of Figures

- Figure 1 Regional Location Map
- Figure 2 Project Site Map
- Figure 3 Vegetation Communities Map
- Figure 4 (a-b) Current Project Site Photographs

List of Tables

- Table 1 Summary of Focused Survey Weather Conditions during the Breeding Season

1.0 INTRODUCTION

This report presents the results of focused least Bell's vireo (*Vireo bellii pusillus*) surveys conducted at the 17.66-acre (2.65-acre offsite) Alessandro project site (Project Site) in the City of Moreno Valley, Riverside County, California. The Project Site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) planning area. The MSHCP is a regional multi-jurisdictional habitat conservation program that addresses multiple species' habitat needs in western Riverside County. According to MSHCP Section 6.1.2 guidelines, surveys for riparian birds are to be conducted as part of the environmental review process, if suitable habitat is present. Suitable low potential habitat was identified on the Project Site during an initial site reconnaissance conducted in May 21st, 2020 for the least Bell's vireo. Subsequently, focused surveys were conducted during the breeding season in order to comply with MSHCP Section 6.1.2 requirements. The purpose of this report is to document the results of the least Bell's vireo assessment and focused surveys.

1.1 Project Location

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley (City), Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5' series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.0 METHODS AND RESULTS

An initial habitat assessment for potential least Bell's vireo habitat was conducted on May 21st, 2020. As described below, all vegetation communities onsite were mapped and assessed for suitability for least Bell's vireo. A single vegetation community including black willow woodland was characterized as representing low potential habitat for the species. Therefore, focused United States Fish and Wildlife Service (USFWS) protocol surveys were initiated. As stated by the USFWS:

"Under normal circumstances, all riparian areas and any other potential vireo habitats should be surveyed at least eight (8) times during the period from April 10 to July 31. However, we may concur, on a case by case basis, with a reduced effort if unusual circumstances dictate that this is a prudent course of action. For instance, intensive surveys of small, marginal or extralimital habitats by experienced personnel may well result in defensible conclusions that eight (or more) individual surveys are unnecessary. Under such unusual circumstances, we will consider requests for reductions in the prescribed number of individual surveys. In any case, site visits should be conducted at least 10 days apart to maximize the detection of, for instance, late and early arrivals, females, particularly "non-vocal" birds of both sexes, and nesting pairs.

- 1) *Although the period from April 10 to July 31 encompasses the period during which most vireo nesting activity occurs, eight surveys are generally sufficient to detect most*

- (if not all) vireo adults in occupied habitats. Precise vireo censuses and estimations of home range likely will not be possible unless surveys are conducted outside of this time window. Although focused surveys conducted in accordance with these guidelines substantially reduce the risk of an unauthorized take* that could potentially occur as a result of land development or other projects, individual project proponents may wish to conduct surveys that are more rigorous than those that would otherwise result from strict adherence to these survey guidelines. If additional information (e.g., extent of occupied habitat, total numbers of adult and juvenile vireos in study area) is desired or necessary, surveys should be extended to August 31 and conducted in such a manner as to collect the data necessary to prepare reports that reflect the methods and standards established in the current scientific literature on this subject. In particular, information collected after July 15 will reflect a broader extent to the riparian habitat and other adjacent habitat types that the vireo typically utilizes during the latter phase of the breeding season, especially when the young become independent of the adults.*
- 2) *Surveys should be conducted by a qualified biologist familiar with the songs, whisper songs, calls, scolds, and plumage characteristics of adult and juvenile vireos. These skills are essential to maximize the probability of detecting vireos and to avoid potentially harassing the species in occupied habitats.*
 - 3) *Surveys should be conducted between dawn and 11:00 a.m. Surveys should not be conducted during periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather that individually or collectively may reduce the likelihood of detection.*
 - 4) *Surveyors should not survey more than 3 linear kilometers or more than 50 hectares of habitat on any given survey day. Although surveyors should generally station themselves in the best possible locations to hear or see vireos, care should be taken not to disturb potential or actual vireo habitats and nests or the habitat of any sensitive or listed riparian species.*
 - 5) *All vireo detections (e.g., vocalization points, areas used for foraging, etc.) should be recorded and subsequently plotted to estimate the location and extent of habitats utilized. These data should be mapped on the appropriate USGS quadrangle map.*
 - 6) *Data pertaining to vireo status and distribution (e.g., numbers and locations of paired or unpaired territorial males, ages and sexes of all birds encountered) should be noted and recorded during each survey. In addition, surveyors should look for leg bands on vireo adults and juveniles if, in fact, it is possible to do so without disturbing or harassing the birds. If leg bands or other markers are observed, then surveyors should record and report the detection and associated circumstances to us by telephone, facsimile, or electronic mail as soon as possible. Reports should include the colors and relative locations of any and all bands detected, the age and sex of the marked bird, and the precise location of the detection.*

- 7) *The numbers and locations of all brown-headed cowbirds (Molothrus ater) detected within vireo territories should be recorded during each survey and subsequently reported to us. In addition, all detections of the State and federally endangered southwestern willow flycatcher (Empidonax trallii extimus, flycatcher) and State endangered yellow-billed cuckoo (Coccyzus americanus, cuckoo) should be recorded and reported. Any and all cuckoo and flycatcher adults, young, or nests should not be approached, and taped vocalizations of these species should not be used unless authorized in advance by scientific permits to take* issued by us (if appropriate) and the California Department of Fish and Game. Flycatcher presence/absence surveys require a recovery permit issued by us per section 10(a)(1)(A) of the Endangered Species Act.” (USFWS 2001)*

A total of eight (8) focused least Bell's vireo surveys were conducted on May 21st, 31st, June 10th, 20th, 30th, July 10th, 20th, and 30th, 2020 by Senior Biologist Jonathan Campbell, PhD and Ruben Ramirez throughout the black willow woodland documented onsite and described below. All surveys were conducted during times and conditions conducive to observing least Bell's vireo (Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season).

Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season

Date	Time Start/End	Temperature (°F)	Wind Speed (mph)	Conditions
5/21/2020	7:30AM – 9:00AM	74	0-5	Clear
5/31/2020	8:00AM – 9:30AM	70	3-5	Clear
6/10/2020	6:00AM – 9:00AM	66	2-8	Clear
6/20/2020	6:00AM – 9:00AM	68	0-4	Clear
6/30/2020	6:00AM – 9:00AM	64	0-4	Clear
7/10/2020	6:00AM – 9:00AM	66	4-8	Clear
7/20/2020	6:00AM – 9:00AM	70	2-8	Clear
7/30/2020	6:00AM – 9:00AM	66	2-8	Clear

The largest area and center of the Project Site is characterized as “disturbed/non-native grassland” and currently offers limited habitat value to plants and wildlife. The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands.

Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below. Natural community names and hierarchical structure follows List of Alliances and Associations (CDFW September 2010) which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the classification system. Scientific nomenclature and common names used for plants in this report follows Hickman (1993). Vertebrate taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists’ Union (1998 and supplemental) for birds, and Jones et al. (1992) for mammals. The onsite plant communities are as follows (Figure 3, Vegetation Communities Map, Figures 4a/4b, Current Project Site Photographs):

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding's willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracunculus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

General wildlife species documented onsite or within the vicinity of the Project Site include but are not limited to red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), American crow (*Corvus brachyrhynchos*), western meadowlark (*Sturnella neglecta*) common raven (*Corvus corax*), house sparrow (*Passer domesticus*), American goldfinch (*Spinus tristis*), house finch (*Haemorhous mexicanus*), western tanager (*Piranga ludoviciana*), and desert cottontail (*Sylvilagus audubonii*).

3.0 CONCLUSIONS

No least Bell's vireo were detected onsite during the focused survey efforts conducted during the 2020 breeding season.

4.0 REFERENCES

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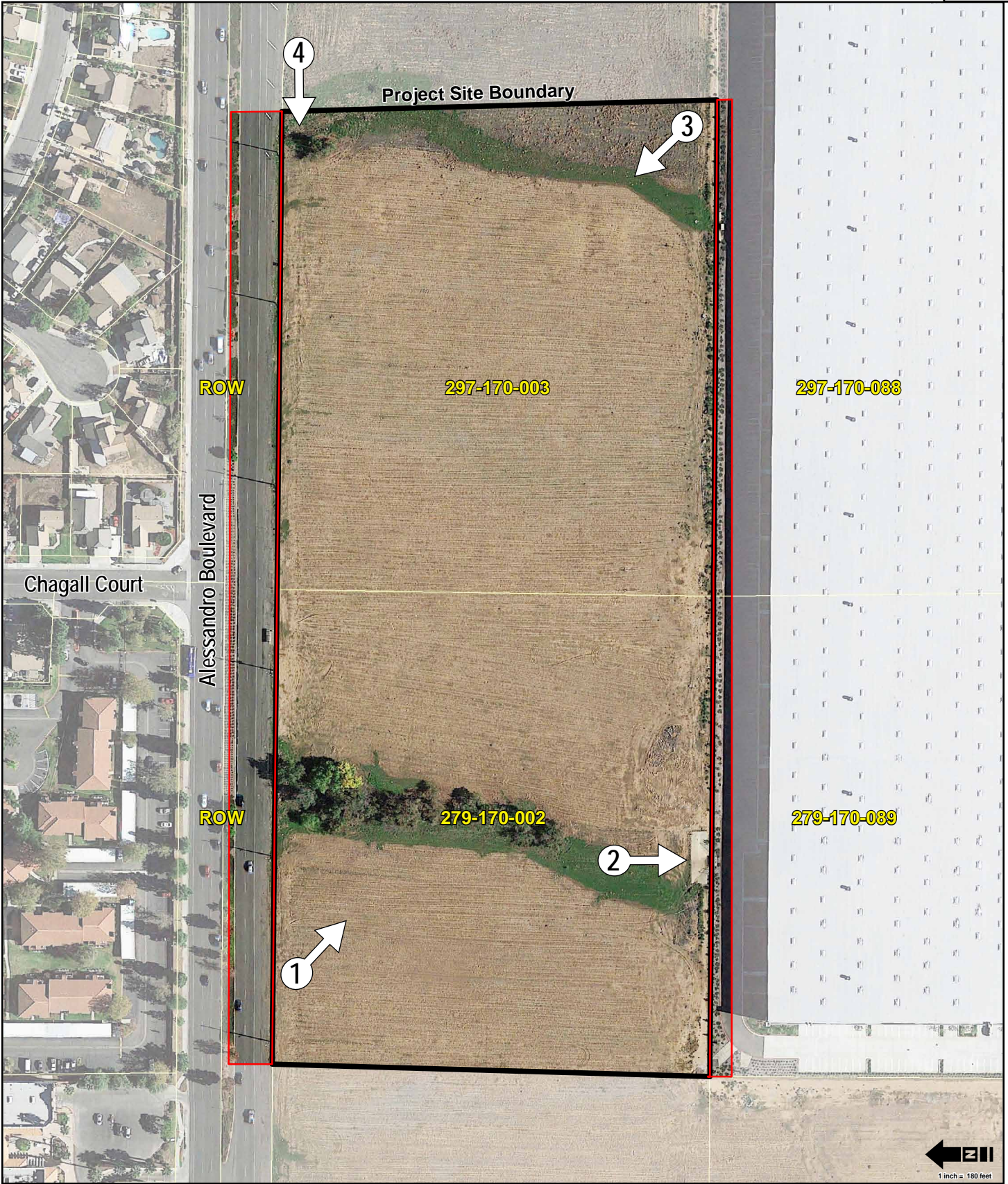
FIGURES



Attachment: Appendix B5-Least Bells Vireo Focused Survey Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

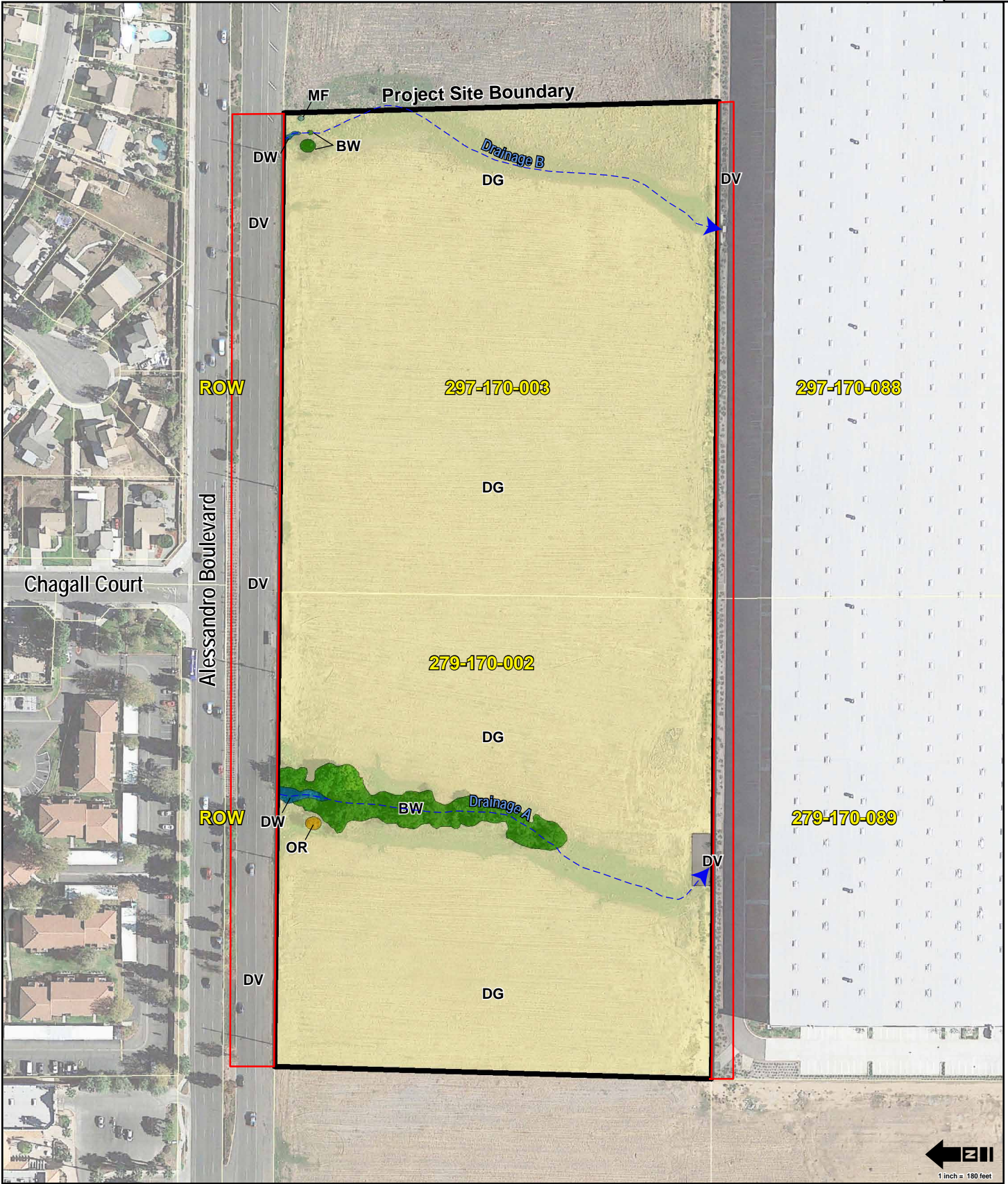
Figure 1 Regional Location Map

Alessandro Project Site, City of Moreno Valley, CA



- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- # → Photo Point & Direction

Figure 2 Project Site Map



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |

Figure 3 Vegetation Communities Map

Alessandro Project Site, City of Mo...





Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 4a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.

Figure 4b Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA

PHASE I CULTURAL RESOURCES SURVEY FOR THE COMPASS DANBE CENTERPOINTE PROJECT

CITY OF MORENO VALLEY,
COUNTY OF RIVERSIDE

APN 297-170-002 and -003

Prepared for:

T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, California 92602

Submitted to:

City of Moreno Valley
Community Development Department
Planning Division
14177 Frederick Street
Moreno Valley, California 92552

Prepared by:

Brian F. Smith and Associates, Inc.
14010 Poway Road, Suite A
Poway, California 92064



September 25, 2020

Archaeological Database Information

Author(s): Andrew J. Garrison and Brian F. Smith

Prepared by: Brian F. Smith and Associates, Inc.
14010 Poway Road, Suite A
Poway, California 92064
(858) 484-0915

Report Date: September 25, 2020

Report Title: Phase I Cultural Resources Survey for the Compass Danbe Centerpointe Project, City of Moreno Valley, County of Riverside

Prepared for: T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, California 92602

Assessor's Parcel Numbers: 297-170-002 and -003

USGS Quadrangle: *Riverside East, California (7.5 minute)*

Study Area: 17.7 acres

Key Words: Cultural resources survey; city of Moreno Valley; negative survey; no mitigation measures recommended.

Table of Contents

<u>Section</u>	<u>Page</u>
1.0 MANAGEMENT SUMMARY / ABSTRACT	1.0-1
2.0 INTRODUCTION	2.0-1
3.0 PROJECT SETTING	3.0-1
3.1 Environmental Setting.....	3.0-1
3.2 Cultural Setting – Archaeological Perspectives.....	3.0-2
3.2.1 Introduction	3.0-3
3.2.2 Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)	3.0-3
3.2.3 Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP)	3.0-3
3.2.4 Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790)	3.0-6
3.2.5 Protohistoric Period (Late Holocene: 1790 to Present)	3.0-7
3.2.6 Ethnohistoric Period (1769 to Present)	3.0-13
3.3 Applicable Regulations.....	3.0-18
3.3.1 California Environmental Quality Act	3.0-18
3.4 Research Design	3.0-21
4.0 METHODOLOGY	4.0-1
4.1 Field Methodology.....	4.0-1
4.2 Records Search	4.0-1
4.3 Report Preparation and Recordation.....	4.0-1
4.4 Native American Consultation.....	4.0-1
5.0 REPORT OF FINDINGS.....	5.0-1
5.1 Results of the Institutional Records Searches.....	5.0-1
5.2 Results of the Field Survey.....	5.0-3
6.0 RECOMMENDATIONS	6.0-1
7.0 CERTIFICATION	7.0-1
8.0 REFERENCES CITED.....	8.0-1

Appendices

- Appendix A – Qualifications of Key Personnel
 Appendix B – Archaeological Records Search Results*
 Appendix C – NAHC Sacred Lands File Search Results*

**Deleted for public review and bound separately in the Confidential Appendix*

List of Figures

<u>Figure</u>	<u>Description</u>	<u>Page</u>
Figure 2.0–1	General Location Map	2.0–2
Figure 2.0–2	Project Location Map	2.0–3
Figure 2.0–3	Site Plan	2.0–4

List of Plates

<u>Plate</u>	<u>Description</u>	<u>Page</u>
Plate 5.2–1	Overview of the project from the southeast corner, facing northwest.....	5.0–3
Plate 5.2–2	Overview of the project from the northwest corner, facing southeast.....	5.0–4
Plate 5.2–3	View of a concrete culvert designed to direct water under Alessandro Boulevard onto the subject property, facing north	5.0–4
PLate 5.2–4	View of a storm drain found along the southern boundary of the subject property, facing south	5.0–5

List of Tables

<u>Table</u>	<u>Description</u>	<u>Page</u>
Table 5.1–1	Cultural Resources Located Within One Mile of the Compass Danbe Centerpointe Project	5.0–1

1.0 MANAGEMENT SUMMARY/ABSTRACT

The following report describes the results of a Phase I cultural resources assessment conducted by Brian F. Smith and Associates, Inc. (BFSA) for the Compass Danbe Centerpointe Project. The survey covered a 17.7-acre property (Assessor's Parcel Numbers [APNs] 297-170-002 and -003) situated north of March Air Reserve Base, south of Alessandro Boulevard, between Fredrick Street and Graham Street. The project, which is located within Section 13 of the USGS 7.5-minute *Riverside East, California* topographic quadrangle (Township 3 South, Range 4 West, San Bernardino Base and Meridian), proposes the construction of two industrial warehouse buildings with associated tractor-trailer loading docks, parking, and infrastructure. In compliance with the California Environmental Quality Act (CEQA) and City of Moreno Valley environmental policies, BFSA conducted the assessment to locate and record any cultural resources present within the project.

The cultural resources investigation of the subject property included a records search performed by BFSA from data obtained from the Eastern Information Center (EIC) at the University of California at Riverside (UCR) in order to identify any previously recorded cultural resources or previous archaeological studies within a one-mile radius of the project. The EIC records search results indicate that 57 cultural resources, all associated with the historic built environment, and 37 cultural resource studies are recorded within a one-mile radius of the project. BFSA also requested Sacred Lands File (SLF) search from the Native American Heritage Commission (NAHC), which indicate that no recorded Native American sacred sites or locations of religious or ceremonial importance are present within the vicinity of the project.

The cultural resources survey of the property was conducted on September 16, 2020. Survey conditions were generally good and ground visibility was good to excellent as much of the property has been impacted by previous agricultural use, vegetation clearing, and disking. No prehistoric or historic cultural resources were identified during the survey and the records search results suggest a low potential for archaeological resources to be present in the project area; therefore, monitoring of grading is not recommended as a condition of approval for the project.

A copy of this report will be permanently filed with the EIC at UCR. All notes, photographs, and other materials related to this project will be curated at the archaeological laboratory of BFSA in Poway, California.

2.0 INTRODUCTION

In response to a request by T&B Planning, Inc., BFSa conducted a cultural resources assessment of the Compass Danbe Centerpointe Project. The cultural resources survey and evaluation program for the project were conducted in order to comply with CEQA and City of Moreno Valley environmental policies. The project is located in an area of low archaeological sensitivity, as suggested by known site density and predictive modeling.

The subject property includes 17.7 acres located in Moreno Valley, Riverside County, California (Figure 2.0–1). The project encompasses two contiguous parcels (APNs 297-170-002 and -003) and is situated north of March Air Reserve Base, south of Alessandro Boulevard, between Fredrick Street and Graham Street within Section 13 of the USGS 7.5-minute *Riverside East, California* topographic quadrangle (Township 3 South, Range 4 West, San Bernardino Base and Meridian) (Figure 2.0–2). As proposed, the project will include the construction of two industrial warehouse buildings with associated tractor-trailer loading docks, parking, and infrastructure (Figure 2.0–3).

Principal Investigator Brian F. Smith and Project Archaeologist Andrew J. Garrison
Principal Investigator Brian F. Smith directed the Phase I archaeological survey program with assistance from Senior Project Archaeologist Andrew J. Garrison. The technical report was prepared by Andrew Garrison and Brian Smith. Courtney Accardy conducted technical editing and report production and the report graphics were generated by Leah Moradi. Qualifications of key personnel are provided in Appendix A.

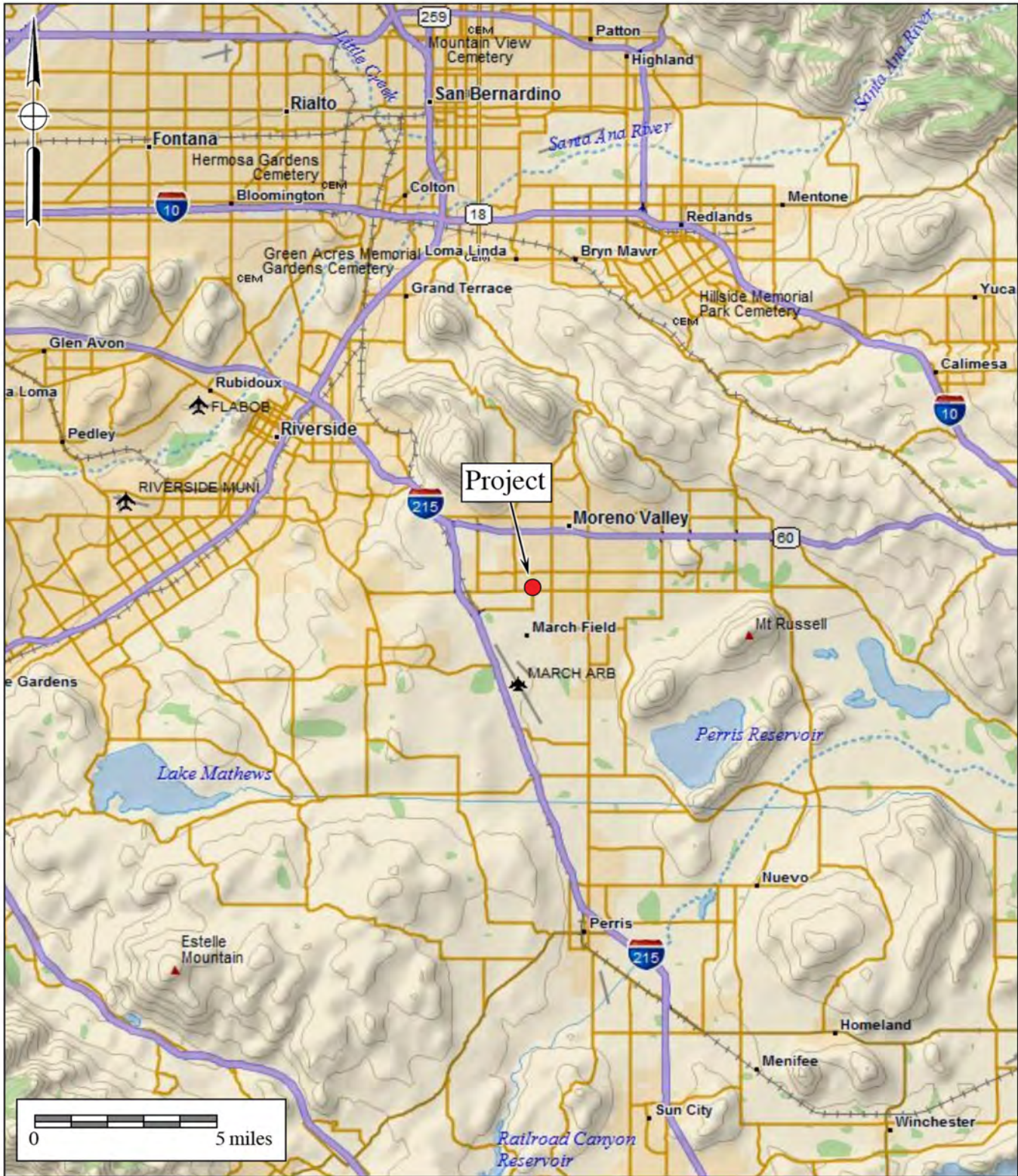


Figure 2.0-1
General Location Map

The Compass Danbe Centerpoint Project
 DeLorme (1:250,000)



Attachment: Appendix C-Phase I Cultural Resources Survey (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

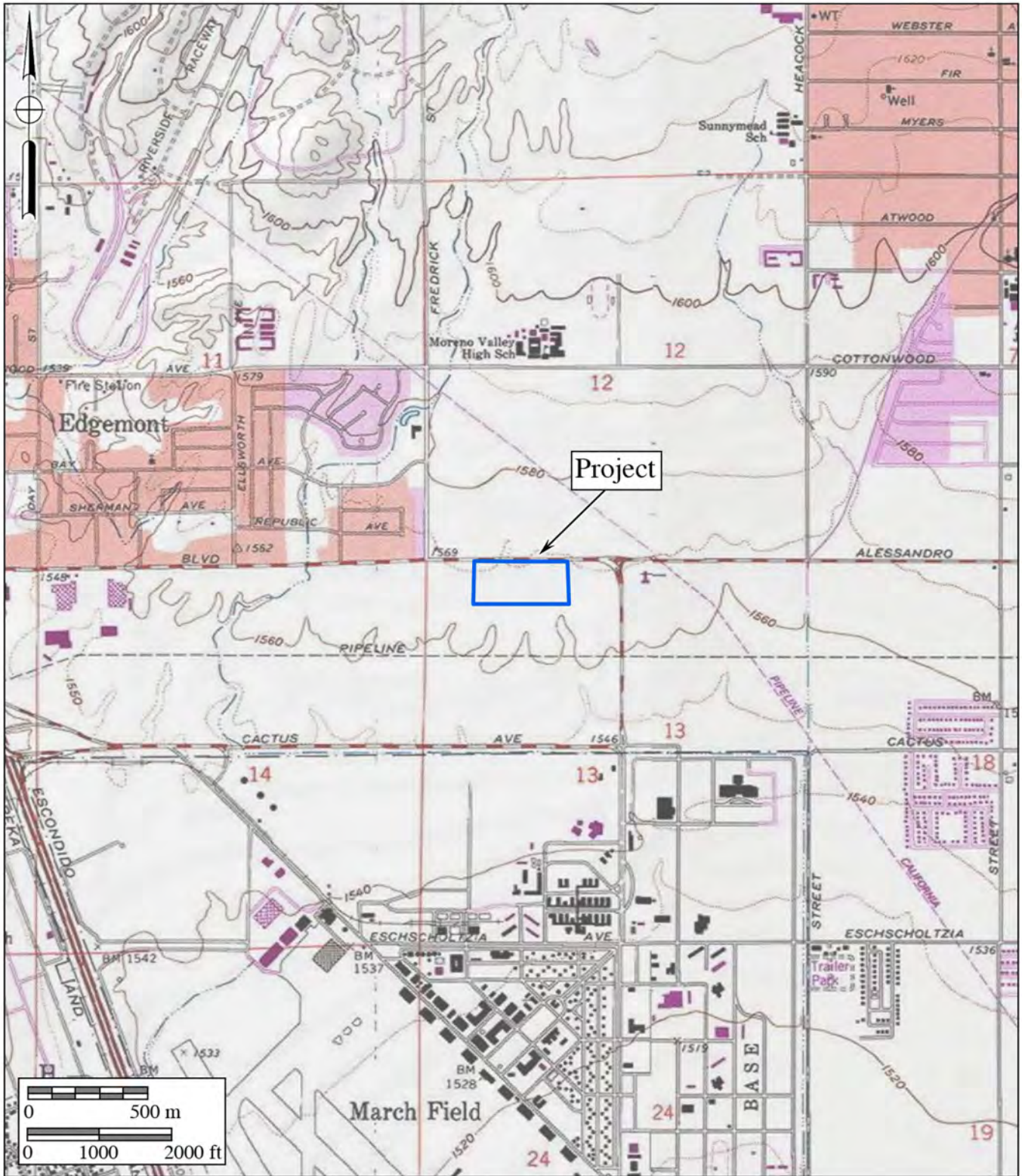


Figure 2.0-2

Project Location Map

The Compass Danbe Centerpoint Project

USGS Riverside East and Sunnymead Quadrangles (7.5-minute series)



Attachment: Appendix C-Phase I Cultural Resources Survey (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

2.0-4

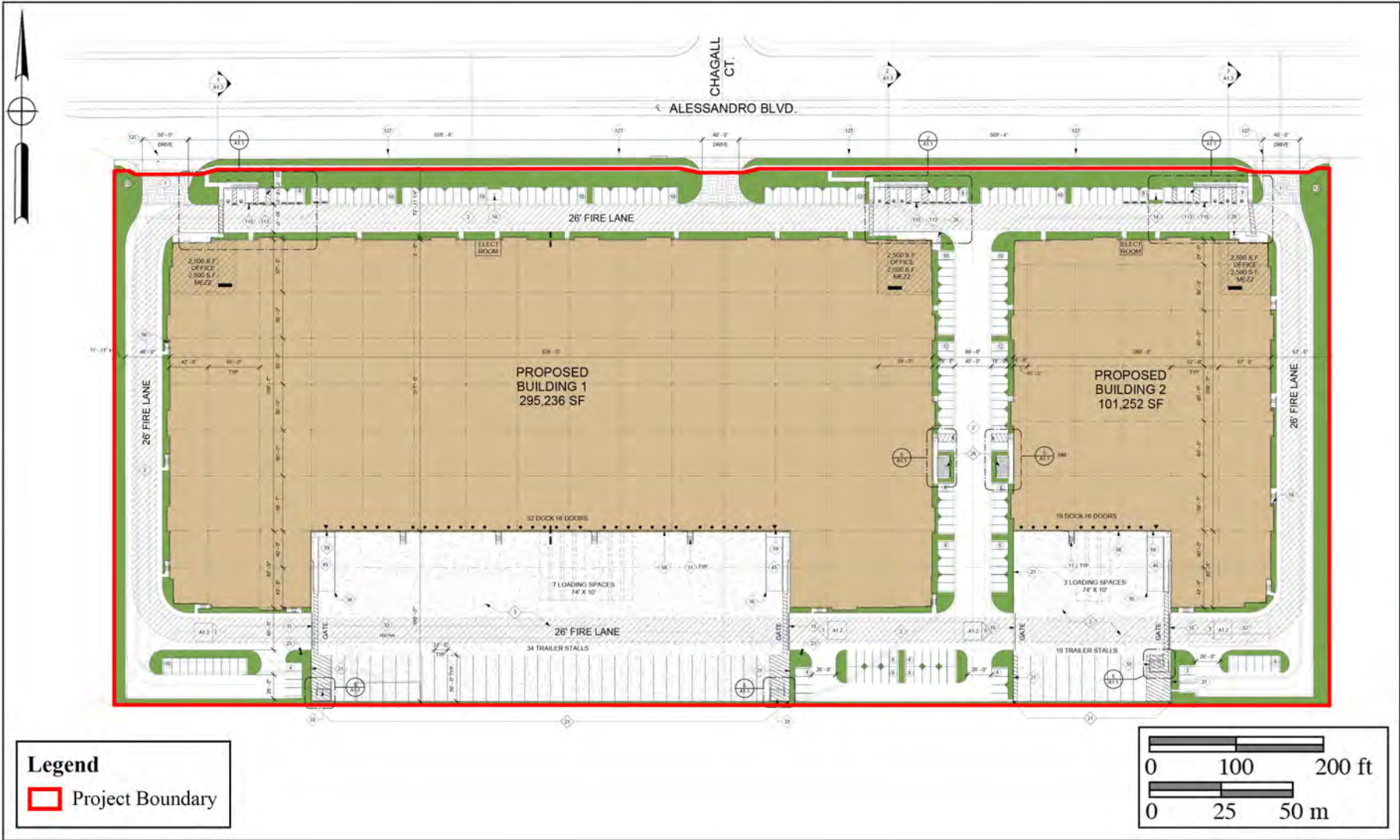


Figure 2.0-3
Site Plan

The Compass Danbe Centerpointe Project



3.0 **PROJECT SETTING**

The project setting includes the natural physical, geological, and biological contexts of the proposed project, as well as the cultural setting of prehistoric and historic human activities in the general area. The following sections discuss the environmental and cultural settings at the subject property, the relationship between the two, and the relevance of that relationship to the project.

3.1 **Environmental Setting**

Riverside County lies in the Peninsular Ranges Geologic Province of southern California. The range, which lies in a northwest to southeast trend through the county, extends some 1,000 miles from the Raymond-Malibu Fault Zone in western Los Angeles County to the southern tip of Baja California. The subject property is located northwest of the Perris Reservoir in Moreno Valley, southeast of the Box Springs Mountains. The project is relatively flat, with an average elevation of approximately 1,565 feet above mean sea level, and has been disked and disturbed by past agricultural activities. Two modern concrete culverts along the northern boundary, which direct water under Alessandro Boulevard, drain into two seasonal drainages on the project. The water from the drainages flows through the property in a southwesterly trajectory into two modern storm drains along the southern boundary.

The geology mapped underlying the project and immediate area indicates that the property is underlain by lower Pleistocene (approximately 1.8 million- to perhaps 200,000- to 300,000-year-old), very old, sandy alluvial fan deposits (Wirths 2020). The specific soils found on the property consist of Monserate sandy loam, 0 to 5 percent slopes (MmB) (Soilweb 2020).

The biological setting in the general area is largely disturbed, and except for small pockets of non-native weeds and grasses is mainly cleared of vegetation although some eucalyptus and peppertrees are situated within the drainage alignments. Mammals within the region include mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), mountain lion (*Puma concolor*), ground squirrel (*Otospermophilus beecheyi*), and quail (*Dipodomys*); birds include hawks and eagles (Falconidae), owls (Tytonidae), mourning dove (*Zenaida macroura*), mockingbird (*Mimus polyglottos*), jay (*Garrulus glandarius*), heron (*Ardeidae*), crow (*Corvus*), finch (*Fringillidae*), and sparrow (*Passer domesticus*).

During the prehistoric period, vegetation near the project provided sufficient food resources to support prehistoric human occupants. Animals that inhabited the project during prehistoric times included mammals such as rabbits, squirrels, gophers, mice, rats, deer, and coyotes, in addition to a variety of reptiles and amphibians. The natural setting of the project during the prehistoric occupation offered a rich nutritional resource base. Fresh water was likely obtainable from drainages and the San Jacinto River located to the southeast of the project. Historically, the property likely contained the same plant and animal species that are present today.

3.2 Cultural Setting – Archaeological Perspectives

The archaeological perspective seeks to reconstruct past cultures based upon the material remains left behind. This is done using a range of scientific methodologies, almost all of which draw from evolutionary theory as the base framework. Archaeology allows one to look deeper into history or prehistory to see where the beginnings of ideas manifest themselves via analysis of material culture, allowing for the understanding of outside forces that shape social change. Thus, the archaeological perspective allows one to better understand the consequences of the history of a given culture upon modern cultures. Archaeologists seek to understand the effects of past contexts of a given culture on this moment in time, not culture in context *in* the moment.

Despite this, a distinction exists between “emic” and “etic” ways of understanding material culture, prehistoric lifeways, and cultural phenomena in general (Harris 1991). While “emic” perspectives serve the subjective ways in which things are perceived and interpreted by the participants within a culture, “etic” perspectives are those of an outsider looking in hopes of attaining a more scientific or “objective” understanding of the given phenomena. Archaeologists, by definition, will almost always serve an etic perspective as a result of the very nature of their work. As indicated by Laylander et al. (2014), it has sometimes been suggested that etic understanding, and therefore an archaeological understanding, is an imperfect and potentially ethnocentric attempt to arrive at emic understanding. In contrast to this, however, an etic understanding of material culture, cultural phenomena, and prehistoric lifeways can address significant dimensions of culture that lie entirely beyond the understanding or interest of those solely utilizing an emic perspective. As Harris (1991:20) appropriately points out, “Etic studies often involve the measurement and juxtaposition of activities and events that native informants find inappropriate or meaningless.” This is also likely true of archaeological comparisons and juxtapositions of material culture. However, culture as a whole does not occur in a vacuum and is the result of several millennia of choices and consequences influencing everything from technology, to religions, to institutions. Archaeology allows for the ability to not only see what came before, but to see how those choices, changes, and consequences affect the present. Where possible, archaeology should seek to address both emic and etic understandings to the extent that they may be recoverable from the archaeological record as manifestations of patterned human behavior (Laylander et al. 2014).

To that point, the culture history offered herein is primarily based upon archaeological (etic) and ethnographic (partially emic and partially etic) information. It is understood that the ethnographic record and early archaeological records were incompletely and imperfectly collected. In addition, in most cases, more than a century of intensive cultural change and cultural evolution had elapsed since the terminus of the prehistoric period. Coupled with the centuries and millennia of prehistoric change separating the “ethnographic present” from the prehistoric past, this has affected the emic and etic understandings of prehistoric cultural settings. Regardless, there remains a need to present the changing cultural setting within the region under investigation. As a result, both archaeological and Native American perspectives are offered when possible.

3.2.1 Introduction

Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric Takic groups are the three general cultural periods represented in Riverside County. The following discussion of the cultural history of Riverside County references the San Dieguito Complex, Encinitas Tradition, Milling Stone Horizon, La Jolla Complex, Pauma Complex, and San Luis Rey Complex, since these culture sequences have been used to describe archaeological manifestations in the region. The Late Prehistoric component present in the Riverside County area was primarily represented by the Cahuilla, Gabrielino, and Luiseño Indians.

Absolute chronological information, where possible, will be incorporated into this archaeological discussion to examine the effectiveness of continuing to interchangeably use these terms. Reference will be made to the geological framework that divides the archaeologically-based culture chronology of the area into four segments: the late Pleistocene (20,000 to 10,000 years before the present [YBP]), the early Holocene (10,000 to 6,650 YBP), the middle Holocene (6,650 to 3,350 YBP), and the late Holocene (3,350 to 200 YBP).

3.2.2 Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)

Archaeologically, the Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands (Moratto 1984). However, by the terminus of the late Pleistocene, the climate became warmer, which caused the glaciers to melt, sea levels to rise, greater coastal erosion, large lakes to recede and evaporate, extinction of Pleistocene megafauna, and major vegetation changes (Moratto 1984; Martin 1967, 1973; Fagan 1991). The coastal shoreline at 10,000 YBP, depending upon the particular area of the coast, was near the 30-meter isobath, or two to six kilometers further west than its present location (Masters 1983).

Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using a more generalized hunting, gathering, and collecting adaptation utilizing a variety of resources including birds, mollusks, and both large and small mammals (Erlandson and Colten 1991; Moratto 1984; Moss and Erlandson 1995).

3.2.3 Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP)

Archaeological data indicates that between 9,000 and 8,000 YBP, a widespread complex was established in the southern California region, primarily along the coast (Warren and True 1961). This complex is locally known as the La Jolla Complex (Rogers 1939; Moriarty 1966), which is regionally associated with the Encinitas Tradition (Warren 1968) and shares cultural components with the widespread Milling Stone Horizon (Wallace 1955). The coastal expression of this complex appeared in southern California coastal areas and focused upon coastal resources and the development of deeply stratified shell middens that were primarily located around bays

and lagoons. The older sites associated with this expression are located at Topanga Canyon, Newport Bay, Agua Hedionda Lagoon, and some of the Channel Islands. Radiocarbon dates from sites attributed to this complex span a period of over 7,000 years in this region, beginning over 9,000 YBP.

The Encinitas Tradition is best recognized for its pattern of large coastal sites characterized by shell middens, grinding tools that are closely associated with the marine resources of the area, cobble-based tools, and flexed human burials (Shumway et al. 1961; Smith and Moriarty 1985). While ground stone tools and scrapers are the most recognized tool types, coastal Encinitas Tradition sites also contain numerous utilized flakes, which may have been used to pry open shellfish. Artifact assemblages at coastal sites indicate a subsistence pattern focused upon shellfish collection and nearshore fishing. This suggests an incipient maritime adaptation with regional similarities to more northern sites of the same period (Koerper et al. 1986). Other artifacts associated with Encinitas Tradition sites include stone bowls, doughnut stones, discoidals, stone balls, and stone, bone, and shell beads.

The coastal lagoons in southern California supported large Milling Stone Horizon populations circa 6,000 YBP, as is shown by numerous radiocarbon dates from the many sites adjacent to the lagoons. The ensuing millennia were not stable environmentally, and by 3,000 YBP, many of the coastal sites in central San Diego County had been abandoned (Gallegos 1987, 1992). The abandonment of the area is usually attributed to the sedimentation of coastal lagoons and the resulting deterioration of fish and mollusk habitat, which is a well-documented situation at Batiquitos Lagoon (Miller 1966; Gallegos 1987). Over a two-thousand-year period at Batiquitos Lagoon, dominant mollusk species occurring in archaeological middens shift from deep-water mollusks (*Argopecten* sp.) to species tolerant of tidal flat conditions (*Chione* sp.), indicating water depth and temperature changes (Miller 1966; Gallegos 1987).

This situation likely occurred for other small drainages (Buena Vista, Agua Hedionda, San Marcos, and Escondido creeks) along the central San Diego coast where low flow rates did not produce sufficient discharge to flush the lagoons they fed (Buena Vista, Agua Hedionda, Batiquitos, and San Elijo lagoons) (Byrd 1998). Drainages along the northern and southern San Diego coastline were larger and flushed the coastal hydrological features they fed, keeping them open to the ocean and allowing for continued human exploitation (Byrd 1998). Peñasquitos Lagoon exhibits dates as late as 2,355 YBP (Smith and Moriarty 1985) and San Diego Bay showed continuous occupation until the close of the Milling Stone Horizon (Gallegos and Kyle 1988). Additionally, data from several drainages in Camp Pendleton indicate a continued occupation of shell midden sites until the close of the period, indicating that coastal sites were not entirely abandoned during this time (Byrd 1998).

By 5,000 YBP, an inland expression of the La Jolla Complex is evident in the archaeological record, exhibiting influences from the Campbell Tradition from the north. These inland Milling Stone Horizon sites have been termed “Pauma Complex” (True 1958; Warren et al. 1961; Meighan 1954). By definition, Pauma Complex sites share a predominance of grinding

implements (manos and metates), lack mollusk remains, have greater tool variety (including atlatl dart points, quarry-based tools, and crescentics), and seem to express a more sedentary lifestyle with a subsistence economy based upon the use of a broad variety of terrestrial resources. Although originally viewed as a separate culture from the coastal La Jolla Complex (True 1980), it appears that these inland sites may be part of a subsistence and settlement system utilized by the coastal peoples. Evidence from the 4S Project in inland San Diego County suggests that these inland sites may represent seasonal components within an annual subsistence round by La Jolla Complex populations (Raven-Jennings et al. 1996). Including both coastal and inland sites of this time period in discussions of the Encinitas Tradition, therefore, provides a more complete appraisal of the settlement and subsistence system exhibited by this cultural complex.

More recent work by Sutton has identified a more localized complex known as the Greven Knoll Complex. The Greven Knoll Complex is a redefined northern inland expression of the Encinitas Tradition first put forth by Mark Sutton and Jill Gardener (2010). Sutton and Gardener (2010:25) state that “[t]he early millingstone archaeological record in the northern portion of the interior southern California was not formally named but was often referred to as ‘Inland Millingstone,’ ‘Encinitas,’ or even ‘Topanga.’” Therefore, they proposed that all expressions of the inland Milling Stone in southern California north of San Diego County be grouped together in the Greven Knoll Complex.

The Greven Knoll Complex, as postulated by Sutton and Gardener (2010), is broken into three phases and obtained its name from the type-site Greven Knoll located in Yucaipa, California. Presently, the Greven Knoll Site is part of the Yucaipa’t Site (SBR-1000) and was combined with the adjacent Simpson Site. Excavations at Greven Knoll recovered manos, metates, projectile points, discoidal coggled stones, and a flexed inhumation with a possible cremation (Kowta 1969:39). It is believed that the Greven Knoll Site was occupied between 5,000 and 3,500 YBP. The Simpson Site contained mortars, pestles, side-notched points, and stone and shell beads. Based upon the data recovered at these sites, Kowta (1969:39) suggested that “coastal Milling Stone Complexes extended to and interdigitated with the desert Pinto Basin Complex in the vicinity of the Cajon Pass.”

Phase I of the Greven Knoll Complex is generally dominated by the presence of manos and metates, core tools, hammerstones, large dart points, flexed inhumations, and occasional cremations. Mortars and pestles are absent from this early phase, and the subsistence economy emphasized hunting. Sutton and Gardener (2010:26) propose that the similarity of the material culture of Greven Knoll Phase I and that found in the Mojave Desert at Pinto Period sites indicates that the Greven Knoll Complex was influenced by neighbors to the north at that time. Accordingly, Sutton and Gardener (2010) believe that Greven Knoll Phase I may have appeared as early as 9,400 YBP and lasted until about 4,000 YBP.

Greven Knoll Phase II is associated with a period between 4,000 and 3,000 YBP. Artifacts common to Greven Knoll Phase II include manos and metates, Elko points, core tools, and discoidals. Pestles and mortars are present; however, they are only represented in small numbers.

Finally, there is an emphasis upon hunting and gathering for subsistence (Sutton and Gardener 2010:8).

Greven Knoll Phase III includes manos, metates, Elko points, scraper planes, choppers, hammerstones, and discoidals. Again, small numbers of mortars and pestles are present. Greven Knoll Phase III spans from approximately 3,000 to 1,000 YBP and shows a reliance upon seeds and yucca. Hunting is still important, but bones seem to have been processed to obtain bone grease more often in this later phase (Sutton and Gardener 2010:8).

The shifts in food processing technologies during each of these phases indicate a change in subsistence strategies; although people were still hunting for large game, plant-based foods eventually became the primary dietary resource (Sutton 2011a). Sutton's (2011b) argument posits that the development of mortars and pestles during the middle Holocene can be attributed to the year-round exploitation of acorns as a main dietary provision. Additionally, the warmer and drier climate may have been responsible for groups from the east moving toward coastal populations, which is archaeologically represented by the interchange of coastal and eastern cultural traits (Sutton 2011a).

3.2.4 Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790)

Many Luiseño hold the world view that as a population they were created in southern California; however, archaeological and anthropological data proposes a scientific/archaeological perspective. Archaeological and anthropological evidence suggests that at approximately 1,350 YBP, Takic-speaking groups from the Great Basin region moved into Riverside County, marking the transition to the Late Prehistoric Period. An analysis of the Takic expansion by Sutton (2009) indicates that inland southern California was occupied by "proto-Yuman" populations before 1,000 YBP. The comprehensive, multi-phase model offered by Sutton (2009) employs linguistic, ethnographic, archaeological, and biological data to solidify a reasonable argument for population replacement of Takic groups to the north by Penutians (Laylander 1985). As a result, it is believed that Takic expansion occurred starting around 3,500 YBP moving toward southern California, with the Gabrielino language diffusing south into neighboring Yuman (Hokan) groups around 1,500 to 1,000 YBP, possibly resulting in the Luiseño dialect.

Based upon Sutton's model, the final Takic expansion would not have occurred until about 1,000 YBP, resulting in Vanyume, Serrano, Cahuilla, and Cupeño dialects. The model suggests that the Luiseño did not simply replace Hokan speakers, but were rather a northern San Diego County/southern Riverside County Yuman population who adopted the Takic language. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl darts were replaced by smaller arrow darts, including

Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far-reaching as the Colorado River Basin and cremation of the dead.

3.2.5 Protohistoric Period (Late Holocene: 1790 to Present)

Ethnohistoric and ethnographic evidence indicates that three Takic-speaking groups occupied portions of Riverside County: the Cahuilla, the Gabrielino, and the Luiseño. The geographic boundaries between these groups in pre- and proto-historic times are difficult to place, but the project is located well within the borders of ethnographic Luiseño territory. This group was a seasonal hunting and gathering people with cultural elements that were very distinct from Archaic Period peoples. These distinctions include cremation of the dead, the use of the bow and arrow, and exploitation of the acorn as a main food staple (Moratto 1984). Along the coast, the Luiseño made use of available marine resources by fishing and collecting mollusks for food. Seasonally available terrestrial resources, including acorns and game, were also sources of nourishment for Luiseño groups. Elaborate kinship and clan systems between the Luiseño and other groups facilitated a wide-reaching trade network that included trade of Obsidian Butte obsidian and other resources from the eastern deserts, as well as steatite from the Channel Islands.

According to Charles Handley (1967), the primary settlements of Late Prehistoric Luiseño Indians in the San Jacinto Plain were represented by Ivah and Soboba near Soboba Springs, Jusipah near the town of San Jacinto, Ararah in Webster's Canyon en route to Idyllwild, Pahsitha near Big Springs Ranch southeast of Hemet, and Corova in Castillo Canyon. These locations share features such as the availability of food and water resources. Features of this land use include petroglyphs and pictographs, as well as widespread milling, which is evident in bedrock and portable implements. Groups in the vicinity of the project, neighboring the Luiseño, include the Cahuilla and the Gabrielino. Ethnographic data for the three groups is presented below.

Luiseño: An Archaeological and Ethnographic Perspective

When contacted by the Spanish in the sixteenth century, the Luiseño occupied a territory bounded on the west by the Pacific Ocean, on the east by the Peninsular Ranges mountains at San Jacinto (including Palomar Mountain to the south and Santiago Peak to the north), on the south by Agua Hedionda Lagoon, and on the north by Aliso Creek in present-day San Juan Capistrano. The Luiseño were a Takic-speaking people more closely related linguistically and ethnographically to the Cahuilla, Gabrielino, and Cupeño to the north and east rather than the Kumeyaay who occupied territory to the south. The Luiseño differed from their neighboring Takic speakers in having an extensive proliferation of social statuses, a system of ruling families that provided ethnic cohesion within the territory, a distinct worldview that stemmed from the use of datura (a hallucinogen), and an elaborate religion that included the creation of sacred sand paintings depicting the deity Chingichngish (Bean and Shipek 1978; Kroeber 1976).

Subsistence and Settlement

The Luiseño occupied sedentary villages most often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching and in areas that offered thermal and defensive protection. Villages were composed of areas that were publicly and privately (by family) owned. Publicly owned areas included trails, temporary campsites, hunting areas, and quarry sites. Inland groups had fishing and gathering sites along the coast that were intensively used from January to March when inland food resources were scarce. During October and November, most of the village would relocate to mountain oak groves to harvest acorns. The Luiseño remained at village sites for the remainder of the year, where food resources were within a day's travel (Bean and Shipek 1978; Kroeber 1976).

The most important food source for the Luiseño was the acorn, six different species of which were used (*Quercus californica*, *Quercus agrifolia*, *Quercus chrysolepis*, *Quercus dumosa*, *Quercus engelmannii*, and *Quercus wislizenii*). Seeds, particularly of grasses, flowering plants, and mints, were also heavily exploited. Seed-bearing species were encouraged through controlled burns, which were conducted at least every third year. A variety of other stems, leaves, shoots, bulbs, roots, and fruits were also collected. Hunting augmented this vegetal diet. Animal species taken included deer, rabbit, hare, woodrat, ground squirrel, antelope, quail, duck, freshwater fish from mountain streams, marine mammals, and other sea creatures such as fish, crustaceans, and mollusks (particularly abalone, or *Haliotis* sp.). In addition, a variety of snakes, small birds, and rodents were eaten (Bean and Shipek 1978; Kroeber 1976).

Social Organization

Social groups within the Luiseño nation consisted of patrilinear families or clans, which were politically and economically autonomous. Several clans comprised a religious party, or nota, which was headed by a chief who organized ceremonies and controlled economics and warfare. The chief had assistants who specialized in particular aspects of ceremonial or environmental knowledge and who, with the chief, were part of a religion-based social group with special access to supernatural power, particularly that of Chingichngish. The positions of chief and assistants were hereditary, and the complexity and multiplicity of these specialists' roles likely increased in coastal and larger inland villages (Bean and Shipek 1978; Kroeber 1976; Strong 1929).

Marriages were arranged by the parents, often made to forge alliances between lineages. Useful alliances included those between groups of differing ecological niches and those that resulted in territorial expansion. Residence was patrilocal (Bean and Shipek 1978; Kroeber 1976). Women were primarily responsible for plant gathering and men principally hunted, although, at times, particularly during acorn and marine mollusk harvests, there was no division of labor. Elderly women cared for children and elderly men participated in rituals, ceremonies, and political affairs. They were also responsible for manufacturing hunting and ritual implements. Children were taught subsistence skills at the earliest age possible (Bean and Shipek 1978; Kroeber 1976).

Material Culture

House structures were conical, partially subterranean, and thatched with reeds, brush, or bark. Ramadas were rectangular, protected workplaces for domestic chores such as cooking. Ceremonial sweathouses were important in purification rituals; these were round and partially subterranean thatched structures covered with a layer of mud. Another ceremonial structure was the wámkis (located in the center of the village, serving as the place of rituals), where sand paintings and other rituals associated with the Chingichngish religious group were performed (Bean and Shipek 1978; Kroeber 1976).

Clothing was minimal; women wore a cedar-bark and netted twine double apron and men wore a waist cord. In cold weather, cloaks or robes of rabbit fur, deerskin, or sea otter fur were worn by both sexes. Footwear included deerskin moccasins and sandals fashioned from yucca fibers. Adornments included bead necklaces and pendants made of bone, clay, stone, shell, bear claw, mica, deer hooves, and abalone shell. Men wore ear and nose piercings made from cane or bone, which were sometimes decorated with beads. Other adornments were commonly decorated with semiprecious stones including quartz, topaz, garnet, opal, opalite, agate, and jasper (Bean and Shipek 1978; Kroeber 1976).

Hunting implements included the bow and arrow. Arrows were tipped with either a carved, fire-hardened wood tip or a lithic point, usually fashioned from locally available metavolcanic material or quartz. Throwing sticks fashioned from wood were used in hunting small game, while deer head decoys were used during deer hunts. Coastal groups fashioned dugout canoes for nearshore fishing and harvested fish with seines, nets, traps, and hooks made of bone or abalone shell (Bean and Shipek 1978; Kroeber 1976).

The Luiseño had a well-developed basket industry. Baskets were used in resource gathering, food preparation, storage, and food serving. Ceramic containers were shaped by paddle and anvil and fired in shallow, open pits to be used for food storage, cooking, and serving. Other utensils included wood implements, steatite bowls, and ground stone manos, metates, mortars, and pestles (Bean and Shipek 1978; Kroeber 1976). Additional tools such as knives, scrapers, choppers, awls, and drills were also used. Shamanistic items include soapstone or clay smoking pipes and crystals made of quartz or tourmaline (Bean and Shipek 1978; Kroeber 1976).

Cahuilla: An Archaeological and Ethnographic Perspective

At the time of Spanish contact in the sixteenth century, the Cahuilla occupied territory that included the San Bernardino Mountains, Orocopia Mountain, and the Chocolate Mountains to the west, Salton Sea and Borrego Springs to the south, Palomar Mountain and Lake Mathews to the west, and the Santa Ana River to the north. The Cahuilla are a Takic-speaking people closely related to their Gabrielino and Luiseño neighbors, although relations with the Gabrielino were more intense than with the Luiseño. They differ from the Luiseño and Gabrielino in that their religion is more similar to the Mohave tribes of the eastern deserts than the Chingichngish religious group of the Luiseño and Gabrielino. The following is a summary of ethnographic data regarding

this group (Bean 1978; Kroeber 1976).

Subsistence and Settlement

Cahuilla villages were typically permanent and located on low terraces within canyons in proximity to water sources. These locations proved to be rich in food resources and also afforded protection from prevailing winds. Villages had areas that were publicly owned and areas that were privately owned by clans, families, or individuals. Each village was associated with a particular lineage and series of sacred sites that included unique petroglyphs and pictographs. Villages were occupied throughout the year; however, during a several-week period in the fall, most of the village members relocated to mountain oak groves to take part in acorn harvesting (Bean 1978; Kroeber 1976).

The Cahuilla's use of plant resources is well documented. Plant foods harvested by the Cahuilla included valley oak acorns and single-leaf pinyon pine nuts. Other important plant species included bean and screw mesquite, agave, Mohave yucca, cacti, palm, chia, quail brush, yellowray goldfield, goosefoot, manzanita, catsclaw, desert lily, mariposa lily, and a number of other species such as grass seed. A number of agricultural domesticates were acquired from the Colorado River tribes including corn, bean, squash, and melon grown in limited amounts. Animal species taken included deer, bighorn sheep, pronghorn antelope, rabbit, hare, rat, quail, dove, duck, roadrunner, and a variety of rodents, reptiles, fish, and insects (Bean 1978; Kroeber 1976).

Social Organization

The Cahuilla was not a political nation, but rather a cultural nationality with a common language. Two non-political, non-territorial patrimoieties were recognized: the Wildcats (túktem) and the Coyotes (?ístam). Lineage and kinship were memorized at a young age among the Cahuilla, providing a backdrop for political relationships. Clans were composed of three to 10 lineages; each lineage owned a village site and specific resource areas. Lineages within a clan cooperated in subsistence activities, defense, and rituals (Bean 1978; Kroeber 1976).

A system of ceremonial hierarchy operated within each lineage. The hierarchy included the lineage leader, who was responsible for leading subsistence activities, guarding the sacred bundle, and negotiating with other lineage leaders in matters concerning land use, boundary disputes, marriage arrangements, trade, warfare, and ceremonies. The ceremonial assistant to the lineage leader was responsible for organizing ceremonies. A ceremonial singer possessed and performed songs at rituals and trained assistant singers. The shaman cured illnesses through supernatural powers, controlled natural phenomena, and was the guardian of ceremonies, keeping evil spirits away. The diviner was responsible for finding lost objects, telling future events, and locating game and other food resources. Doctors were usually older women who cured various ailments and illnesses with their knowledge of medicinal herbs. Finally, certain Cahuilla specialized as traders, who ranged as far west as Santa Catalina and as far east as the Gila River (Bean 1978; Kroeber 1976).

Marriages were arranged by parents from opposite moieties. When a child was born, an alliance formed between the families, which included frequent reciprocal exchanges. The Cahuilla kinship system extended to relatives within five generations. Important economic decisions, primarily the distribution of goods, operated within this kinship system (Bean 1978; Kroeber 1976).

Material Culture

Cahuilla houses were dome-shaped or rectangular, thatched structures. The home of the lineage leader was the largest, located near the ceremonial house with the best access to water. Other structures within the village included the men's sweathouse and granaries (Bean 1978; Kroeber 1976).

Cahuilla clothing, like other groups in the area, was minimal. Men typically wore a loincloth and sandals; women wore skirts made from mesquite bark, animal skin, or tules. Babies wore mesquite bark diapers. Rabbit skin cloaks were worn in cold weather (Bean 1978; Kroeber 1976).

Hunting implements included the bow and arrow, throwing sticks, and clubs. Grinding tools used in food processing included manos, metates, and wood mortars. The Cahuilla were known to use long grinding implements made from wood to process mesquite beans; the mortar was typically a hollowed log buried in the ground. Other tools included steatite arrow shaft straighteners (Bean 1978; Kroeber 1976).

Baskets were made from rush, deer grass, and skunkbrush. Different species and leaves were chosen for different colors in the basket design. Coiled-ware baskets were either flat (for plates, trays, or winnowing), bowl-shaped (for food serving), deep, inverted, and cone-shaped (for transporting), or rounded and flat-bottomed for storing utensils and personal items (Bean 1978; Kroeber 1976).

Cahuilla pottery was made from a thin, red-colored ceramic ware that was often painted and incised. Four basic vessel types are known for the Cahuilla: small-mouthed jars, cooking pots, bowls, and dishes. Additionally, smoking pipes and flutes were fashioned from ceramic (Bean 1978; Kroeber 1976).

Gabrielino: An Archaeological and Ethnographic Perspective

The territory of the Gabrielino at the time of Spanish contact covers much of present-day Los Angeles and Orange counties. The southern extent of this culture area is bounded by Aliso Creek, the eastern extent is located east of present-day San Bernardino along the Santa Ana River, the northern extent includes the San Fernando Valley, and the western extent includes portions of the Santa Monica Mountains. The Gabrielino also occupied several Channel Islands including Santa Barbara Island, Santa Catalina Island, San Nicholas Island, and San Clemente Island. Because of their access to certain resources, including a steatite source from Santa Catalina Island, this group was among the wealthiest and most populous aboriginal groups in all of southern

California. Trade of materials and resources controlled by the Gabrielino extended as far north as the San Joaquin Valley, as far east as the Colorado River, and as far south as Baja California (Bean and Smith 1978; Kroeber 1976).

Subsistence and Settlement

The Gabrielino lived in permanent villages and occupied smaller resource-gathering camps at various times of the year depending upon the seasonality of the resource. Larger villages were comprised of several families or clans, while smaller, seasonal camps typically housed smaller family units. The coastal area between San Pedro and Topanga Canyon was the location of primary subsistence villages, while secondary sites were located near inland sage stands, oak groves, and pine forests. Permanent villages were located along rivers and streams and in sheltered areas along the coast. As previously mentioned, the Channel Islands were also the locations of relatively large settlements (Bean and Smith 1978; Kroeber 1976).

Resources procured along the coast and on the islands were primarily marine in nature and included tuna, swordfish, ray and shark, California sea lion, Stellar sea lion, harbor seal, northern elephant seal, sea otter, dolphin and porpoise, various waterfowl species, numerous fish species, purple sea urchin, and mollusks, such as rock scallop, California mussel, and limpet. Inland resources included oak acorn, pine nut, Mohave yucca, cacti, sage, grass nut, deer, rabbit, hare, rodent, quail, duck, and a variety of reptiles such as western pond turtle and numerous snake species (Bean and Smith 1978; Kroeber 1976).

Social Organization

The social structure of the Gabrielino is little known; however, there appears to have been at least three social classes: 1) the elite, which included the rich, chiefs, and their immediate family; 2) a middle class, which included people of relatively high economic status or long-established lineages; and 3) a class of people that included most other individuals in the society. Villages were politically autonomous units comprised of several lineages. During times of the year when certain seasonal resources were available, the village would divide into lineage groups and move out to exploit them, returning to the village between forays (Bean and Smith 1978; Kroeber 1976).

Each lineage had its own leader, with the village chief coming from the dominant lineage. Several villages might be allied under a paramount chief. Chiefly positions were of an ascribed status, most often passed to the eldest son. Chiefly duties included providing village cohesion, leading warfare and peace negotiations with other groups, collecting tribute from the village(s) under his jurisdiction, and arbitrating disputes within the village(s). The status of the chief was legitimized by his safekeeping of the sacred bundle, a representation of the link between the material and spiritual realms and the embodiment of power (Bean and Smith 1978; Kroeber 1976).

Shamans were leaders in the spirit realm. The duties of the shaman included conducting healing and curing ceremonies, guarding the sacred bundle, locating lost items, identifying and collecting poisons for arrows, and making rain (Bean and Smith 1978; Kroeber 1976).

Marriages were made between individuals of equal social status and, in the case of powerful lineages, marriages were arranged to establish political ties between the lineages (Bean and Smith 1978; Kroeber 1976).

Men conducted the majority of the heavy labor, hunting, fishing, and trading with other groups. Women's duties included gathering and preparing plant and animal resources, and making baskets, pots, and clothing (Bean and Smith 1978; Kroeber 1976).

Material Culture

Gabrielino houses were domed, circular structures made of thatched vegetation. Houses varied in size and could house from one to several families. Sweathouses (semicircular, earth-covered buildings) were public structures used in male social ceremonies. Other structures included menstrual huts and a ceremonial structure called a yuvar, an open-air structure built near the chief's house (Bean and Smith 1978; Kroeber 1976).

Clothing was minimal; men and children most often went naked, while women wore deerskin or bark aprons. In cold weather, deerskin, rabbit fur, or bird skin (with feathers intact) cloaks were worn. Island and coastal groups used sea otter fur for cloaks. In areas of rough terrain, yucca fiber sandals were worn. Women often used red ochre on their faces and skin for adornment or protection from the sun. Adornment items included feathers, fur, shells, and beads (Bean and Smith 1978; Kroeber 1976).

Hunting implements included wood clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hook and line, and nets. A variety of other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, metates, mullers, manos, shell spoons, bark platters, and wood paddles and bowls. Baskets were made from rush, deer grass, and skunkbush. Baskets were fashioned for hoppers, plates, trays, and winnowers for leaching, straining, and gathering. Baskets were also used for storing, preparing, and serving food, and for keeping personal and ceremonial items (Bean and Smith 1978; Kroeber 1976).

The Gabrielino had exclusive access to soapstone, or steatite, procured from Santa Catalina Island quarries. This highly prized material was used for making pipes, animal carvings, ritual objects, ornaments, and cooking utensils. The Gabrielino profited well from trading steatite since it was valued so much by groups throughout southern California (Bean and Smith 1978; Kroeber 1976).

3.2.6 Ethnohistoric Period (1769 to Present)

Traditionally, the history of the state of California has been divided into three general periods: the Spanish Period (1769 to 1821), the Mexican Period (1822 to 1846), and the American Period (1848 to present) (Caughey 1970). The American Period is often further subdivided into additional phases: the nineteenth century (1848 to 1900), the early twentieth century (1900 to 1950), and the Modern Period (1950 to present). From an archaeological standpoint, all of these

phases can be referred to together as the Ethnohistoric Period. This provides a valuable tool for archaeologists, as ethnohistory is directly concerned with the study of indigenous or non-Western peoples from a combined historical/anthropological viewpoint, which employs written documents, oral narrative, material culture, and ethnographic data for analysis.

European exploration along the California coast began in 1542 with the landing of Juan Rodriguez Cabrillo and his men at San Diego Bay. Sixty years after the Cabrillo expeditions, an expedition under Sebastian Viscaíno made an extensive and thorough exploration of the Pacific coast. Although the voyage did not extend beyond the northern limits of the Cabrillo track, Viscaíno had the most lasting effect upon the nomenclature of the coast. Many of his place names have survived, whereas practically every one of the names created by Cabrillo have faded from use. For instance, Cabrillo named the first (now) United States port he stopped at “San Miguel”; 60 years later, Viscaíno changed it to “San Diego” (Rolle 1969). The early European voyages observed Native Americans living in villages along the coast but did not make any substantial, long-lasting impact. At the time of contact, the Luiseño population was estimated to have ranged from 4,000 to as many as 10,000 individuals (Bean and Shipek 1978; Kroeber 1976).

The historic background of the project area began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations, as well as expanding the knowledge of and access to new resources in the region (Brigandi 1998). As a result, by the late eighteenth century, a large portion of southern California was overseen by Mission San Luis Rey (San Diego County), Mission San Juan Capistrano (Orange County), and Mission San Gabriel (Los Angeles County), who began colonization the region and surrounding areas (Chapman 1921).

Up until this time, the only known way to feasibly travel from Sonora to Alta California was by sea. In 1774, Juan Bautista de Anza, an army captain at Tubac, requested and was given permission by the governor of the Mexican State of Sonora to establish an overland route from Sonora to Monterey (Chapman 1921). In doing so, Juan Bautista de Anza passed through Riverside County and described the area in writing for the first time (Caughey 1970; Chapman 1921). In 1797, Father Presidente Lausen (of Mission San Diego de Alcalá), Father Norberto de Santiago, and Corporal Pedro Lisalde (of Mission San Juan Capistrano) led an expedition through southwestern Riverside County in search of a new mission site to establish a presence between San Diego and San Juan Capistrano (Engelhardt 1921). Their efforts ultimately resulted in the establishment of Mission San Luis Rey in Oceanside, California.

Each mission gained power through the support of a large, subjugated Native American workforce. As the missions grew, livestock holdings increased and became increasingly vulnerable to theft. In order to protect their interests, the southern California missions began to expand inland to try and provide additional security (Beattie and Beattie 1939; Caughey 1970). In order to meet their needs, the Spaniards embarked on a formal expedition in 1806 to find potential locations within what is now the San Bernardino Valley. As a result, by 1810, Father Francisco Dumetz of Mission San Gabriel had succeeded in establishing a religious site, or capilla, at a

Cahuilla rancheria called Guachama (Beattie and Beattie 1939). San Bernardino Valley received its name from this site, which was dedicated to San Bernardino de Siena by Father Dumetz. The Guachama rancheria was located in present-day Bryn Mawr in San Bernardino County.

These early colonization efforts were followed by the establishment of estancias at Puente (circa 1816) and San Bernardino (circa 1819) near Guachama (Beattie and Beattie 1939). These efforts were soon mirrored by the Spaniards from Mission San Luis Rey, who in turn established a presence in what is now Lake Elsinore, Temecula, and Murrieta (Chapman 1921). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1961). Throughout this period, the Native American populations were decimated by introduced diseases, a drastic shift in diet resulting in poor nutrition, and social conflicts due to the introduction of an entirely new social order (Cook 1976).

Mexico achieved independence from Spain in 1822 and became a federal republic in 1824. As a result, both Baja and Alta California became classified as territories (Rolle 1969). Shortly thereafter, the Mexican Republic sought to grant large tracts of private land to its citizens to begin to encourage immigration to California and to establish its presence in the region. Part of the establishment of power and control included the desecularization of the missions circa 1832. These same missions were also located on some of the most fertile land in California and, as a result, were considered highly valuable. The resulting land grants, known as “ranchos,” covered expansive portions of California and by 1846, more than 600 land grants had been issued by the Mexican government. Rancho Jurupa was the first rancho to be established and was issued to Juan Bandini in 1838. Although Bandini primarily resided in San Diego, Rancho Jurupa was located in what is now Riverside County (Pourade 1963). A review of Riverside County place names quickly illustrates that many of the ranchos in Riverside County lent their names to present-day locations, including Jurupa, El Rincon, La Sierra, El Sobrante de San Jacinto, La Laguna (Lake Elsinore), Santa Rosa, Temecula, Pauba, San Jacinto Nuevo y Potrero, and San Jacinto Viejo (Gunther 1984). As was typical of many ranchos, these were all located in the valley environments within western Riverside County.

The treatment of Native Americans grew worse during the Rancho Period. Most of the Native Americans were forced off of their land or put to work on the now privately-owned ranchos, most often as slave labor. In light of the brutal ranchos, the degree to which Native Americans had become dependent upon the mission system is evident when, in 1838, a group of Native Americans from Mission San Luis Rey petitioned government officials in San Diego to relieve suffering at the hands of the rancheros:

We have suffered incalculable losses, for some of which we are in part to be blamed for because many of us have abandoned the Mission ... We plead and beseech you ... to grant us a Rev. Father for this place. We have been accustomed to the Rev. Fathers and to their manner of managing the duties. We labored under their intelligent directions, and we were obedient to the Fathers according to the

regulations, because we considered it as good for us. (Brigandi 1998:21)

Native American culture had been disrupted to the point where they could no longer rely upon prehistoric subsistence and social patterns. Not only does this illustrate how dependent the Native Americans had become upon the missionaries, but it also indicates a marked contrast in the way the Spanish treated the Native Americans compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The Mexican and American ranchers did not accept Native Americans into their social order and used them specifically for the extraction of labor, resources, and profit. Rather than being incorporated, they were either subjugated or exterminated (Cook 1976).

By 1846, tensions between the United States and Mexico had escalated to the point of war (Rolle 1969). In order to reach a peaceful agreement, the Treaty of Guadalupe Hidalgo was put into effect in 1848, which resulted in the annexation of California to the United States. Once California opened to the United States, waves of settlers moved in searching for gold mines, business opportunities, political opportunities, religious freedom, and adventure (Rolle 1969; Caughey 1970). By 1850, California had become a state and was eventually divided into 27 separate counties. While a much larger population was now settling in California, this was primarily in the central valley, San Francisco, and the Gold Rush region of the Sierra Nevada mountain range (Rolle 1969; Caughey 1970). During this time, southern California grew at a much slower pace than northern California and was still dominated by the cattle industry established during the earlier rancho period. However, by 1859, the first United States Post Office in what would eventually become Riverside County was set up at John Magee's store on the Temecula Rancho (Gunther 1984).

During the same decade, circa 1852, the Native Americans of southern Riverside County, including the Luiseño and the Cahuilla, thought they had signed a treaty resulting in their ownership of all lands from Temecula to Aguanga east to the desert, including the San Jacinto Valley and the San Gorgonio Pass. The Temecula Treaty also included food and clothing provisions for the Native Americans. However, Congress never ratified these treaties, and the promise of one large reservation was rescinded (Brigandi 1998).

With the completion of the Southern Pacific Railroad in 1869, southern California saw its first major population expansion. The population boom continued circa 1874 with the completion of connections between the Southern Pacific Railroad in Sacramento to the transcontinental Central Pacific Railroad in Los Angeles (Rolle 1969; Caughey 1970). The population influx brought farmers, land speculators, and prospective developers to the region. As the Jurupa area became more and more populated, circa 1870, Judge John Wesley North and a group of associates founded the city of Riverside on part of the former rancho.

Although the first orange trees were planted in Riverside County circa 1871, it was not until a few years later when a small number of Brazilian navel orange trees were established that

the citrus industry truly began in the region (Patterson 1971). The Brazilian naval orange was well suited to the climate of Riverside County and thrived with assistance from several extensive irrigation projects. At the close of 1882, an estimated half a million citrus trees were present in California. It is estimated that nearly half of that population was in Riverside County. Population growth and 1880s tax revenue from the booming citrus industry prompted the official formation of Riverside County in 1893 out of portions of what was once San Bernardino County (Patterson 1971).

Shortly thereafter, with the start of World War I, the United States began to develop a military presence in Riverside County with the construction of March Air Reserve Base. During World War II, Camp Haan and Camp Anza were constructed in the what is now the current location (of the National Veteran's Cemetery). In the decades that followed, populations spread throughout the county into Lake Elsinore, Corona, Norco, Murrieta, and Wildomar. However, a significant portion of the county remained largely agricultural well into the 1970s. Following the 1970s, Riverside saw a period of dramatic population increase as the result of new development, more than doubling the population of the county with a population of over 1.3 million residents (Patterson 1971).

History of the City of Moreno Valley

The project is situated near the convergence of the Moreno and Perris valleys, which, historically, was influenced by agriculture and irrigation. In 1883, pioneer Frank E. Brown formed the Bear Valley Land and Water Company (City of Moreno Valley 2019). Brown constructed a dam at Bear Valley in the San Bernardino Mountains in order to provide water for new communities. On December 3, 1884, the three communities of Moreno, Edgemont, and Sunnymead were merged, officially becoming the City of Moreno Valley ("Moreno" meaning "Brown" in Spanish after Frank E. Brown). In 1891, the formation of the Perris and Alessandro Irrigation District increased demands upon Bear Valley water, resulting in a lawsuit with the City of Redlands. The litigation caused a drought, which severely affected farmers who developed an agricultural base of deciduous and citrus fruit trees. Residents of Moreno Valley were forced to leave the area for a more habitable environment. By 1901, few people remained in the city of Moreno Valley; those who stayed turned to dry farming hay, grain, and grapes. The city maintained the name of "Moreno," serving as a reminder of an empire's vulnerability to such simple needs as water (City of Moreno Valley 2019).

In addition to agriculture, the area was also influenced by the development of March Field during the twentieth century. March Field was originally established March 1, 1918 as the Alessandro Flying Training Field following the United States' entry into World War I (Gunther 1984). The name was officially changed to March Field on March 20, 1918 in honor of Peyton C. March, Jr., who had been killed in a training plane crash in Fort Worth, Texas earlier that year. The air field changed names many times throughout the 1940s. In 1941, the name was changed to March Army Air Field; in 1942, to March Army Air Base; in 1947, to March Army Air Force Base

to reflect the establishment of the United States Air Force; and finally to March ARB in 1996 (March Field Air Museum 2020). Although the name changed multiple times, residents have continued to refer to it as “March Field” (Gunther 1984).

The establishment of March Field was important to the region for many reasons associated with the role the local inhabitants and region would contribute to World War I and World War II. However, farming continued to be important to the region. During the mid- to late twentieth century the Riverside County Flood Control and the Metropolitan Water District (MWD) began the establishment of the storm drains and new modern water conveyance systems. The establishment of these modern water conveyance systems allowed farmers to better manage water on their land (City of Perris n.d.; Environmental Science Associates 2016; MWD n.d.).

Although properties within this area of the Moreno and Perris valleys generally remained agricultural throughout the twentieth century, in recent years, the area has seen a growth in residential and industrial development. Today, many of the large agricultural fields have been developed into large logistics centers and warehouses servicing the greater Southern California region.

3.3 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of Riverside County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, criteria outlined in CEQA provide the guidance for making such a determination. The following sections detail the CEQA criteria that a resource must meet in order to be determined important.

3.3.1 California Environmental Quality Act

According to CEQA (§15064.5a), the term “historical resource” includes the following:

- 1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing on the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] SS5024.1, Title 14 CCR. Section 4850 et seq.).
- 2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3) Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military,

or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC SS5024.1, Title 14, Section 4852) including the following:

- a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - b) Is associated with the lives of persons important in our past;
 - c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - d) Has yielded, or may be likely to yield, information important in prehistory or history.
- 4) The fact that a resource is not listed on, or determined eligible for listing on, the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1[k] of the PRC), or identified in a historical resources survey (meeting the criteria in Section 5024.1[g] of the PRC) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Section 5020.1(j) or 5024.1.

According to CEQA (§15064.5b), a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect upon the environment. CEQA defines a substantial adverse change as:

- 1) Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.
- 2) The significance of a historical resource is materially impaired when a project:
 - a) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR;
 - b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project

- establishes by a preponderance of evidence that the resource is not historically or culturally significant;
- c) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects upon archaeological sites and contains the following additional provisions regarding archaeological sites:

1. When a project will impact an archaeological site, a lead agency shall first determine whether the site is a historical resource, as defined in subsection (a).
2. If a lead agency determines that the archaeological site is a historical resource, it shall refer to the provisions of Section 21084.1 of the PRC, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the PRC do not apply.
3. If an archaeological site does not meet the criteria defined in subsection (a) but does meet the definition of a unique archaeological resource in Section 21083.2 of the PRC, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in PRC Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
4. If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project upon those resources shall not be considered a significant effect upon the environment. It shall be sufficient that both the resource and the effect upon it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 15064.5 (d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

- (d) When an initial study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC, as provided in PRC SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

- 1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
- 2) The requirements of CEQA and the Coastal Act.

3.4 Research Design

The primary goal of the research design is to attempt to understand the way in which humans have used the land and resources within the project area through time, as well as to aid in the determination of resource significance. For the current project, the study area under investigation is the city of Moreno Valley in western Riverside County. The scope of work for the archaeological program conducted for the project included the survey of an approximately two-acre property. Given the area involved, the research design for the project was limited and general in nature. Since the main objective of the investigation was to identify the presence of and potential impacts to cultural resources, the goal here is not necessarily to answer wide-reaching theories regarding the development of early southern California, but to investigate the role and importance of the identified resources. Nevertheless, the assessment of the significance of a resource must take into consideration a variety of characteristics, as well as the ability of the resource to address regional research topics and issues.

Although survey-level investigations are limited in terms of the amount of information available, several specific research questions were developed that could be used to guide the initial investigations of any observed cultural resources. The following research questions take into account the size and location of the project area discussed above.

Research Questions:

- Can located cultural resources be situated with a specific time period, population, or individual?
- Do the types of located cultural resources allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site function? What resources were exploited?
- How do the located sites compare to others reported from different surveys conducted in the area?
- How do the located sites fit existing models of settlement and subsistence for valley environments of the region?

Data Needs

At the survey level, the principal research objective is a generalized investigation of changing settlement patterns in both the prehistoric and historic periods within the study area. The overall goal is to understand settlement and resource procurement patterns of the project area occupants. Therefore, adequate information on site function, context, and chronology from an

archaeological perspective is essential for the investigation. The fieldwork and archival research were undertaken with these primary research goals in mind:

- 1) To identify cultural resources occurring within the project;
- 2) To determine, if possible, site type and function, context of the deposit, and chronological placement of each cultural resource identified;
- 3) To place each cultural resource identified within a regional perspective; and
- 4) To provide recommendations for the treatment of each of the cultural resources identified.

4.0 METHODOLOGY

The cultural resources assessment conducted for the Compass Danbe Centerpointe Project consisted of a reconnaissance-level survey of the property by a qualified archaeologist and an institutional records search. This archaeological study conformed to City of Moreno Valley environmental guidelines and the statutory requirements of CEQA were followed in evaluating potential impacts.

4.1 Field Methodology

The cultural resources survey of the project was conducted on September 16, 2019. The intensive pedestrian reconnaissance of the property consisted of a series of parallel transects spaced at approximately 15-meter intervals, which covered all areas of the project. Ground visibility was good to excellent and was only limited by sporadic pockets of non-native weeds, grasses, and trees. The entire property was accessible and no constraints were encountered. Photographs were taken to document project conditions during the survey (see Section 5.2).

4.2 Records Search

The records search conducted from data obtained from the EIC at UCR for an area of one-mile surrounding the project in order to determine the presence of any previously recorded cultural resources. Results of the records search are provided in Appendix B and discussed in Section 5.1. During the EIC records search, a standard review of the National Register of Historic Places (NRHP) and the Office of Historic Preservation (OHP) records was completed. Land patent records held by the Bureau of Land Management (BLM) and accessible through the BLM General Land Office (GLO) website were also reviewed for pertinent project information. In addition, the BFSa research library and historic aerial photographs were also consulted.

4.3 Report Preparation and Recordation

This report contains information regarding previous studies, statutory requirements for the project, and a brief description of the setting, research methods employed, overall results, and recommendations. The report includes all appropriate illustrations and tabular information needed to make a complete and comprehensive presentation of these activities, including the methodologies employed and the personnel involved. A copy of this report will be placed at the EIC at UCR. Any newly recorded sites or sites requiring updated information will be recorded on the appropriate Department of Parks and Recreation forms, which will be filed with the EIC.

4.4 Native American Consultation

BFSa requested a SLF search from the NAHC, which was negative for Native American sacred sites or locations of religious or ceremonial importance within the general area of the subject property. All correspondence is provided in Appendix C.

5.0 REPORT OF FINDINGS

5.1 Results of the Institutional Records Searches

A records search was conducted by BFSa from data obtained from the EIC at UCR. The EIC records search indicates that 57 cultural resources are present within a one-mile radius of the project, none of which are located within the project boundaries. All of the resources identified during the records search consist of structures associated with the historic March Air Reserve Base, including the NRHP-eligible March Field Historic District, 50 World War II (WWII)-era buildings and one stone drainage canal that contribute to the district, two ancillary buildings, the former main entrance/security checkpoint to the military base, the March Village medical campus buildings, and a segment of a Works Progress Administration (WPA) stone lined canal within the March Village Medical campus (Table 5.1–1).

Table 5.1–1
Cultural Resources Located Within One
Mile of the Compass Danbe Centerpointe Project

Site	Description
P-33-009191	March Field Historic District
P-33-009204, P-33-009208, P-33-009213, P-33-009214, P-33-009215, P-33-009216, P-33-009223, P-33-009224, P-33-009225, P-33-009226, P-33-009230, P-33-009231, P-33-009236, P-33-009238, P-33-009243, P-33-009264, P-33-009279, P-33-009280, P-33-009284, P-33-009286, P-33-009288, P-33-009289, P-33-009290, P-33-009291, P-33-009292, P-33-009293, P-33-009294, P-33-009295, P-33-009296, P-33-009297, P-33-009298, P-33-009300, P-33-009301, P-33-009302, P-33-009303, P-33-009304, P-33-009305, P-33-009306, P-33-009308, P-33-009309, P-33-009315, P-33-009422, P-33-009423, P-33-009424, P-33-009426, P-33-009427, P-33-009437, P-33-009440, P-33-009441, and P-33-009443	Historic March Air Reserve Base WWII-era military buildings (March Field Historic District contributing buildings)
P-33-009444	Historic March Air Reserve Base WWII-era stone drainage canal (March Field Historic District contributing structure)
P-33-017971 and P-33-017972	Historic March Air Reserve Base ancillary building
P-33-018039	Historic former March Air Reserve Base main entrance/security checkpoint

Site	Description
P-33-017968	Historic March Village medical campus WPA canal
P-33-017969	Historic March Village medical campus ancillary building

The records search also indicates that 37 cultural resource studies conducted have been conducted within a one-mile radius of the project, two of which are mapped within the project; however, neither directly address the subject property (McCarthy 1987; Duff 2017). The archaeological assessment by McCarthy (1987) was conducted for the entirety of the city of Moreno Valley with many portions of the city, including the Compass Danbe Centerpointe Project, studied through a “judgmental survey” and not systematically surveyed. The Duff (2017) study is primarily focused on improvements to the intersection of Graham Street and Alessandro Boulevard east of the current project acreage.

For the current project, the following historic sources were also reviewed:

- The NRHP Index
- The OHP, Archaeological Determinations of Eligibility
- The OHP Built Environment Resources Directory (BERD)

However, none of these sources identified any cultural resources within the project. The complete records search results are provided in Appendix B.

A search of online BLM GLO records as well as an assessment of historic maps and aerial photographs was also conducted. The online BLM GLO records indicate that a patent (BLM serial number CACAAA 082784) was issued to William B. Bourn on September 20, 1870 under the authority of April 24, 1820: Sale-Cash Entry (3 Stat. 566). Under the patent, Bourn acquired 10,500.6 acres spanning across Township 3 South, Range 4 West, San Bernardino Base and Meridian. According to the 1901 and 1943 15' USGS *Riverside* topographic quadrangles, the 1953 7.5' USGS *Riverside East* topographic quadrangle, and aerial photographs from 1966 to 2020, no structures have ever been located within the property. Further, the aerial photographs show that the subject and adjacent properties were likely utilized for agriculture since at least 1966.

BFSA requested a SLF search from the NAHC, which was negative for Native American sacred sites or locations of religious or ceremonial importance within the general area of the subject property. All correspondence is provided in Appendix C.

5.2 Results of the Field Survey

The cultural resources survey took place on September 16, 2020. The survey was directed by Principal Investigator Brian F. Smith and conducted by Senior Project Archaeologist Andrew Garrison. The intensive reconnaissance consisted of a series of parallel survey transects spaced at approximately 15-meter intervals. The entire property was accessible and no constraints were encountered.

The survey indicated that the entirety of the project has been disturbed by agricultural uses, repeated episodes of vegetation clearing, and disking (Plate 5.2–1). Ground visibility was generally good to excellent, and except for small pockets of non-native weeds and grasses, the property is cleared of most vegetation, although some eucalyptus and pepper trees are situated within two southwest trending seasonal drainages that traverse the property (Plate 5.2–2). Other noted disturbances to the property included modern garbage and piles of concrete primarily situated along the southern and northern boundaries of the property. In addition, two concrete culverts were noted along the northern boundary, which direct water under Alessandro Boulevard, into the drainages on the project before emptying into two storm drains situated along the southern boundary (Plates 5.2–3 and 5.2–4). The survey did not result in the identification of any cultural resources within the subject property.



Plate 5.2–1: Overview of the project from the southeast corner, facing northwest.



Plate 5.2-2: Overview of the project from the northwest corner, facing southeast.



Plate 5.2-3: View of a concrete culvert designed to direct water under Alessandro Boulevard onto the subject property, facing north.



Plate 5.2–4: View of a storm drain found along the southern boundary of the subject property, facing south.

6.0 RECOMMENDATIONS

The cultural resources survey for the Compass Danbe Centerpoint Project was negative for the presence of archaeological sites. The EIC records search also indicates that, while 57 cultural resources are recorded within one mile of the project, none are located within the project boundaries. Property research indicates the project has been historically used for agriculture activities and no structures could be identified on historic maps or aerial photographs. Despite the presence of two small seasonal drainages, the property does not contain bedrock outcrops or any other landforms that are typically associated with prehistoric use areas. Therefore, as a result of the research findings, the documented land use of the property, and the current survey, it is very unlikely that any cultural resources exist within the project.

Given that no archaeological sites, features, or artifacts have been identified within or adjacent to the project, no potential impacts to cultural resources are associated with the proposed development. The archaeological study was completed in accordance with the City of Moreno Valley environmental policies and CEQA significance evaluation criteria. Based upon the absence of any cultural resources within the subject property, site-specific mitigation measures will not be required for this project. Further, as a result of previous ground-disturbing activities and the absence of recorded cultural resources within the project boundaries, there is little potential for cultural resources to be present or disturbed by the proposed development. No further archaeological study or mitigation measures are recommended as a condition of permit approval based upon the records search and the results of the field survey.

7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



Brian F. Smith
Principal Investigator

September 25, 2020

Date

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APPENDIX A

Qualifications of Key Personnel

Brian F. Smith, MA

Owner, Principal Investigator

Brian F. Smith and Associates, Inc.
 14010 Poway Road • Suite A •
 Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: bsmith@bfsa-ca.com



Education

Master of Arts, History, University of San Diego, California	1982
Bachelor of Arts, History, and Anthropology, University of San Diego, California	1975

Professional Memberships

Society for California Archaeology

Experience

Principal Investigator Brian F. Smith and Associates, Inc.	1977–Present Poway, California
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Brian F. Smith is the owner and principal historical and archaeological consultant for Brian F. Smith and Associates. Over the past 32 years, he has conducted over 2,500 cultural resource studies in California, Arizona, Nevada, Montana, and Texas. These studies include every possible aspect of archaeology from literature searches and large-scale surveys to intensive data recovery excavations. Reports prepared by Mr. Smith have been submitted to all facets of local, state, and federal review agencies, including the US Army Corps of Engineers, the Bureau of Land Management, the Bureau of Reclamation, the Department of Defense, and the Department of Homeland Security. In addition, Mr. Smith has conducted studies for utility companies (Sempra Energy) and state highway departments (CalTrans).

Professional Accomplishments

These selected major professional accomplishments represent research efforts that have added significantly to the body of knowledge concerning the prehistoric life ways of cultures once present in the Southern California area and historic settlement since the late 18th century. Mr. Smith has been principal investigator on the following select projects, except where noted.

Downtown San Diego Mitigation and Monitoring Reporting Programs: Large numbers of downtown San Diego mitigation and monitoring projects, some of which included Broadway Block (2019), 915 Grape Street (2019), 1919 Pacific Highway (2018), Moxy Hotel (2018), Makers Quarter Block D (2017), Ballpark Village (2017), 460 16th Street (2017), Kettner and Ash (2017), Bayside Fire Station (2017), Pinnacle on the Park (2017), IDEA1 (2016), Blue Sky San Diego (2016), Pacific Gate (2016), Pendry Hotel (2015), Cisterra Sempra Office Tower (2014), 15th and Island (2014), Park and G (2014), Comm 22 (2014), 7th and F Street Parking (2013), Ariel Suites (2013), 13th and Marker (2012), Strata (2008), Hotel Indigo (2008), Lofts at 707 10th Avenue Project (2007), Breeza (2007), Bayside at the Embarcadero (2007), Aria (2007), Icon (2007), Vantage Pointe (2007), Aperture (2007), Sapphire Tower (2007), Lofts at 655 Sixth Avenue (2007), Metrowork (2007), The Legend (2006), The Mark (2006), Smart Corner (2006), Lofts at 677 7th Avenue (2005), Aloft on Cortez Hill (2005), Front and Beech Apartments (2003), Bella Via Condominiums (2003), Acqua Vista Residential Tower (2003), Northblock Lofts (2003), Westin Park Place Hotel (2001), Parkloft

Apartment Complex (2001), Renaissance Park (2001), and Laurel Bay Apartments (2001).

1900 and 1912 Spindrift Drive: An extensive data recovery and mitigation monitoring program at the Spindrift Site, an important prehistoric archaeological habitation site stretching across the La Jolla area. The project resulted in the discovery of over 20,000 artifacts and nearly 100,000 grams of bulk faunal remains and marine shell, indicating a substantial occupation area (2013-2014).

Emerald Acres: Archaeological survey and testing program of 14 archaeological sites across 333 acres in the Winchester area of Riverside County (2000-2018).

San Diego Airport Development Project: An extensive historic assessment of multiple buildings at the San Diego International Airport and included the preparation of Historic American Buildings Survey documentation to preserve significant elements of the airport prior to demolition (2017-2018).

Citracado Parkway Extension: A still-ongoing project in the city of Escondido to mitigate impacts to an important archaeological occupation site. Various archaeological studies have been conducted by BFSA resulting in the identification of a significant cultural deposit within the project area.

Westin Hotel and Timeshare (Grand Pacific Resorts): Data recovery and mitigation monitoring program in the city of Carlsbad consisted of the excavation of 176 one-square-meter archaeological data recovery units which produced thousands of prehistoric artifacts and ecofacts, and resulted in the preservation of a significant prehistoric habitation site. The artifacts recovered from the site presented important new data about the prehistory of the region and Native American occupation in the area (2017).

Citracado Business Park West: An archaeological survey and testing program at a significant prehistoric archaeological site and historic building assessment for a 17-acre project in the city of Escondido. The project resulted in the identification of 82 bedrock milling features, two previously recorded loci and two additional and distinct loci, and approximately 2,000 artifacts (2018).

The Everly Subdivision Project: Data recovery and mitigation monitoring program in the city of El Cajon resulted in the identification of a significant prehistoric occupation site from both the Late Prehistoric and Archaic Periods, as well as producing historic artifacts that correspond to the use of the property since 1886. The project produced an unprecedented quantity of artifacts in comparison to the area encompassed by the site, but lacked characteristics that typically reflect intense occupation, indicating that the site was used intensively for food processing (2014-2015).

Ballpark Village: A mitigation and monitoring program within three city blocks in the East Village area of San Diego resulting in the discovery of a significant historic deposit. Nearly 5,000 historic artifacts and over 500,000 grams of bulk historic building fragments, food waste, and other materials representing an occupation period between 1880 and 1917 were recovered (2015-2017).

Archaeology at the Padres Ballpark: Involved the analysis of historic resources within a seven-block area of the "East Village" area of San Diego, where occupation spanned a period from the 1870s to the 1940s. Over a period of two years, BFSA recovered over 200,000 artifacts and hundreds of pounds of metal, construction debris, unidentified broken glass, and wood. Collectively, the Ballpark Project and the other downtown mitigation and monitoring projects represent the largest historical archaeological program anywhere in the country in the past decade (2000-2007).

4S Ranch Archaeological and Historical Cultural Resources Study: Data recovery program consisted of the excavation of over 2,000 square meters of archaeological deposits that produced over one million artifacts, containing primarily prehistoric materials. The archaeological program at 4S Ranch is the largest archaeological study ever undertaken in the San Diego County area and has produced data that has exceeded expectations regarding the resolution of long-standing research questions and regional prehistoric settlement patterns.

Charles H. Brown Site: Attracted international attention to the discovery of evidence of the antiquity of man in North America. Site located in Mission Valley, in the city of San Diego.

Del Mar Man Site: Study of the now famous Early Man Site in Del Mar, California, for the San Diego Science Foundation and the San Diego Museum of Man, under the direction of Dr. Spencer Rogers and Dr. James R. Moriarty.

Old Town State Park Projects: Consulting Historical Archaeologist. Projects completed in the Old Town State Park involved development of individual lots for commercial enterprises. The projects completed in Old Town include Archaeological and Historical Site Assessment for the Great Wall Cafe (1992), Archaeological Study for the Old Town Commercial Project (1991), and Cultural Resources Site Survey at the Old San Diego Inn (1988).

Site W-20, Del Mar, California: A two-year-long investigation of a major prehistoric site in the Del Mar area of the city of San Diego. This research effort documented the earliest practice of religious/ceremonial activities in San Diego County (circa 6,000 years ago), facilitated the projection of major non-material aspects of the La Jolla Complex, and revealed the pattern of civilization at this site over a continuous period of 5,000 years. The report for the investigation included over 600 pages, with nearly 500,000 words of text, illustrations, maps, and photographs documenting this major study.

City of San Diego Reclaimed Water Distribution System: A cultural resource study of nearly 400 miles of pipeline in the city and county of San Diego.

Master Environmental Assessment Project, City of Poway: Conducted for the City of Poway to produce a complete inventory of all recorded historic and prehistoric properties within the city. The information was used in conjunction with the City's General Plan Update to produce a map matrix of the city showing areas of high, moderate, and low potential for the presence of cultural resources. The effort also included the development of the City's Cultural Resource Guidelines, which were adopted as City policy.

Draft of the City of Carlsbad Historical and Archaeological Guidelines: Contracted by the City of Carlsbad to produce the draft of the City's historical and archaeological guidelines for use by the Planning Department of the City.

The Mid-Bayfront Project for the City of Chula Vista: Involved a large expanse of undeveloped agricultural land situated between the railroad and San Diego Bay in the northwestern portion of the city. The study included the analysis of some potentially historic features and numerous prehistoric

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Audie Murphy Ranch, Riverside County, California: Project manager/director of the investigation of 1,113.4 acres and 43 sites, both prehistoric and historic—including project coordination; direction of field crews; evaluation of sites for significance based on County of Riverside and CEQA guidelines; assessment of cupule, pictograph, and rock shelter sites, co-authoring of cultural resources project report. February- September 2002.

Cultural Resources Evaluation of Sites Within the Proposed Development of the Otay Ranch Village 13 Project, San Diego County, California: Project manager/director of the investigation of 1,947 acres and 76 sites, both prehistoric and historic—including project coordination and budgeting; direction of field crews; assessment of sites for significance based on County of San Diego and CEQA guidelines; co-authoring of cultural resources project report. May-November 2002.

Cultural Resources Survey for the Remote Video Surveillance Project, El Centro Sector, Imperial County: Project manager/director for a survey of 29 individual sites near the U.S./Mexico Border for proposed video surveillance camera locations associated with the San Diego Border barrier Project—project coordination and budgeting; direction of field crews; site identification and recordation; assessment of

potential impacts to cultural resources; meeting and coordinating with U.S. Army Corps of Engineers, U.S. Border Patrol, and other government agencies involved; co-authoring of cultural resources project report. January, February, and July 2002.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee West GPA, Riverside County, California: Project manager/director of the investigation of nine sites, both prehistoric and historic—included project coordination and budgeting; direction of field crews; assessment of sites for significance based on County of Riverside and CEQA guidelines; historic research; co-authoring of cultural resources project report. January-March 2002.

Mitigation of An Archaic Cultural Resource for the Eastlake III Woods Project for the City of Chula Vista, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program including collection of material for specialized faunal and botanical analyses; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; co-authoring of cultural resources project report, in prep. September 2001-March 2002.

Cultural Resources Survey and Test of Sites Within the Proposed French Valley Specific Plan/EIR, Riverside County, California: Project manager/director of the investigation of two prehistoric and three historic sites—included project coordination and budgeting; survey of project area; Native American consultation; direction of field crews; assessment of sites for significance based on CEQA guidelines; cultural resources project report in prep. July-August 2000.

Cultural Resources Survey and Test of Sites Within the Proposed Lawson Valley Project, San Diego County, California: Project manager/director of the investigation of 28 prehistoric and two historic sites— included project coordination; direction of field crews; assessment of sites for significance based on CEQA guidelines; cultural resources project report in prep. July-August 2000.

Cultural Resource Survey and Geotechnical Monitoring for the Mohyi Residence Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; field survey; assessment of parcel for potentially buried cultural deposits; monitoring of geotechnical borings; authoring of cultural resources project report. Brian F. Smith and Associates, San Diego, California. June 2000.

Enhanced Cultural Resource Survey and Evaluation for the Prewitt/Schmucker/Cavadias Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; direction of field crews; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. June 2000.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee Ranch, Riverside County, California: Project manager/director of the investigation of one prehistoric and five historic sites—included project coordination and budgeting; direction of field crews; feature recordation; historic structure assessments; assessment of sites for significance based on CEQA guidelines; historic research; co-authoring of cultural resources project report. February-June 2000.

Salvage Mitigation of a Portion of the San Diego Presidio Identified During Water Pipe Construction for the City of San Diego, California: Project archaeologist/director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Tyrian 3 Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Lamont 5 Project, Pacific Beach, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Reiss Residence Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. March-April 2000.

Salvage Mitigation of a Portion of Site SDM-W-95 (CA-SDI-211) for the Poinsettia Shores Santalina Development Project and Caltrans, Carlsbad, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. December 1999-January 2000.

Survey and Testing of Two Prehistoric Cultural Resources for the Airway Truck Parking Project, Otay Mesa, California: Project archaeologist/director—included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; authoring of cultural resources project report, in prep. December 1999-January 2000.

Cultural Resources Phase I and II Investigations for the Tin Can Hill Segment of the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for a survey and testing of a prehistoric quarry site along the border—NRHP eligibility assessment; project coordination and budgeting; direction of field crews; feature recordation; meeting and coordinating with U.S. Army Corps of Engineers; co-authoring of cultural resources project report. December 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Westview High School Project for the City of San Diego, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program including collection of material for specialized faunal and botanical analyses; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; co-authoring of cultural resources project report, in prep. October 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Otay Ranch SPA-One West Project for the City of Chula Vista, California: Project archaeologist/director—included direction of field crews; development of data recovery program; management of artifact collections cataloging and curation; assessment of site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report, in prep. September 1999-January 2000.

Monitoring of Grading for the Herschel Place Project, La Jolla, California: Project archaeologist/ monitor—included monitoring of grading activities associated with the development of a single- dwelling parcel. September 1999.

Survey and Testing of a Historic Resource for the Osterkamp Development Project, Valley Center, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; budget development; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Testing of a Prehistoric Cultural Resource for the Proposed College Boulevard Alignment Project, Carlsbad, California: Project manager/director —included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis;

authoring of cultural resources project report, in prep. July-August 1999.

Survey and Evaluation of Cultural Resources for the Palomar Christian Conference Center Project, Palomar Mountain, California: Project archaeologist—included direction of field crews; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Evaluation of Cultural Resources at the Village 2 High School Site, Olay Ranch, City of Chula Vista, California: Project manager/director —management of artifact collections cataloging and curation; assessment of site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report. July 1999.

Cultural Resources Phase I, II, and III Investigations for the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for the survey, testing, and mitigation of sites along border—supervision of multiple field crews, NRHP eligibility assessments, Native American consultation, contribution to Environmental Assessment document, lithic and marine shell analysis, authoring of cultural resources project report. August 1997- January 2000.

Phase I, II, and III Investigations for the Scripps Poway Parkway East Project, Poway California: Project archaeologist/project director—included recordation and assessment of multicomponent prehistoric and historic sites; direction of Phase II and III investigations; direction of laboratory analyses including prehistoric and historic collections; curation of collections; data synthesis; coauthorship of final cultural resources report. February 1994; March-September 1994; September-December 1995.

Archaeological Evaluation of Cultural Resources Within the Proposed Corridor for the San Elijo Water Reclamation System Project, San Elijo, California: Project manager/director —test excavations; direction of artifact identification and analysis; graphics production; coauthorship of final cultural resources report. December 1994-July 1995.

Evaluation of Cultural Resources for the Environmental Impact Report for the Rose Canyon Trunk Sewer Project, San Diego, California: Project manager/Director —direction of test excavations; identification and analysis of prehistoric and historic artifact collections; data synthesis; co-authorship of final cultural resources report, San Diego, California. June 1991-March 1992.

Reports/Papers

Author, coauthor, or contributor to over 2,500 cultural resources management publications, a selection of which are presented below.

- 2019 Final Archaeological Data Recovery and Mitigation Monitoring Program for the Westin Hotel and Timeshare Project, City of Carlsbad, California.
- 2019 A Phase I and II Cultural Resources Assessment for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California.
- 2019 A Section 106 (NHPA) Historic Resources Study for the Altair Project, City of Temecula, California.
- 2019 Phase II Cultural Resource Study for the McElwain Project, City of Murrieta, California.
- 2019 Cultural Resources Mitigation Monitoring Report for the Family Dollar Mecca Project, Riverside County, California.

- 2019 A Cultural Resources Assessment for TR 37177, City of Riverside, Riverside County, California.
- 2019 Cultural Resources Monitoring Report for the Westlake Project (TM 33267), City of Lake Elsinore, Riverside County, California.
- 2019 A Phase I Cultural Resources Survey for the Go Fresh Gas Project, Perris, California.
- 2019 Cultural Resources Monitoring Report for the South Milliken Distribution Center Project, City of Eastvale, Riverside County, California.
- 2019 A Class III Section 106 (NHPA) Study for the Perris Valley Storm Drain Channel Widening Project, Perris, Riverside County, California.
- 2019 A Section 106 (NHPA) Historic Resources Study for the Twin Channel Project, City of San Bernardino, San Bernardino County, California.
- 2019 A Class III Archaeological Study for the Tuscany Valley (TM 33725) Project National Historic Preservation Act Section 106 Compliance, Lake Elsinore, Riverside County, California.
- 2019 A Phase I Cultural Resources Survey for the IPT Perris DC III Western/Nandina Project, Perris, California.
- 2019 A Phase I Cultural Resources Assessment for the Menifee Gateway Project, City of Menifee, Riverside County, California.
- 2019 Results of Archaeological Monitoring at the Atwell Phase 1A Project (formerly Butterfield Specific Plan), City of Banning, Riverside County, California.
- 2019 A Phase I Cultural Resource Study for the Eastvale Self Storage Project, Eastvale, California.
- 2019 A Phase I Cultural Resources Survey Report for the Commercial/Retail NWC Mountain and Lake Streets Project, City of Lake Elsinore, Riverside County, California.
- 2019 A Phase I Cultural Resources Assessment for the Anza Baptist Church Project, Riverside County, California.
- 2019 A Phase I Cultural Resources Assessment for the Inland Propane Project, Riverside County, California.
- 2019 A Phase I and II Cultural Resources Assessment for the Seaton Commerce Center Project, Riverside County, California.
- 2019 A Phase I Cultural Resources Assessment for the Val Verde Logistics Center Project, Riverside County, California.
- 2019 A Phase I Cultural Resources Assessment for the Santa Gertrudis Creek Pedestrian/Bicycle Trail Extension and Interconnect Project, City of Temecula, Riverside County, California.
- 2019 Cultural Resource Report for the U.S. Allied Carriers Project, City of Riverside, Riverside County, California.
- 2018 A Section 106 (NHPA) Historical Resources Study for the Otoy Ranch Village 13 Project, County of San Diego.
- 2018 An Archaeological/Historical Study for the Citracado Business Park West Project, City of Escondido.

- 2018 Cultural Resources Monitoring Report for the Uptown Bressi Ranch Project, Carlsbad.
- 2018 A Phase I Cultural Resources Assessment for the South Pointe Banning Project, CUP 180010, Riverside County, California.
- 2018 Mitigation Monitoring Report for the Stedman Residence Project, 9030 La Jolla Shores Lane, La Jolla, California 92037.
- 2018 Historic Resources Interim Monitoring Reports No. 1 through 4 for the LADOT Bus Maintenance and CNG Fueling Facility, Los Angeles.
- 2018 A Phase I and II Cultural Resources Assessment for the Emerald Acres Project, Winchester, Riverside County.
- 2018 Mitigation Monitoring Report for the Green Dragon Project, City of San Diego.
- 2017 Cultural Resource Monitoring Report for the Moxy Hotel Project, San Diego, California.
- 2017 Mitigation Monitoring Report for the Bayside Fire Station, City of San Diego.
- 2017 Mitigation Monitoring Program for the Ballpark Village Project, City of San Diego.
- 2017 Historical Resource Research Report for the Herbert and Alexina Childs/Thomas L. Shepherd House, 210 Westbourne Street, La Jolla, California 92037.
- 2017 A Phase I and II Cultural Resources Assessment for the Alberhill Ranch Specific Plan Amendment No. 3.1 Project, City of Lake Elsinore, Riverside County, California.
- 2017 A Cultural Resources Mitigation Monitoring Report for the Golden City Project, Tracts 28532-1, -2, -3, -4, and -5, and Tract 34445, City of Murrieta, California.
- 2016 Mitigation Monitoring Report for the Blue Sky San Diego Project, City of San Diego.
- 2016 Historic Resource Research Report for the Midway Postal Service and Distribution Center, 2535 Midway Drive, San Diego, California 92138.
- 2016 Results of the Mitigation Monitoring Program for the Amitai Residence Project, 2514 Ellentown Road, La Jolla, California 92037.
- 2016 Historic American Buildings Survey, Los Angeles Memorial Sports Arena.
- 2015 An Archaeological/Historical Study for the Safari Highlands Ranch Project, City of Escondido, County of San Diego.
- 2015 A Phase I and II Cultural Resources Assessment for the Decker Parcels II Project, Planning Case No. 36962, Riverside County, California.
- 2015 A Phase I and II Cultural Resources Assessment for the Decker Parcels I Project, Planning Case No. 36950, Riverside County, California.
- 2015 Cultural Resource Data Recovery and Mitigation Monitoring Program for Site SDI-10,237 Locus F, Everly Subdivision Project, El Cajon, California.
- 2015 Phase I Cultural Resource Survey for the Woodward Street Senior Housing Project, City of San Marcos, California (APN 218-120-31).

- 2015 An Updated Cultural Resource Survey for the Box Springs Project (TR 33410), APNs 255-230-010, 255-240-005, 255-240-006, and Portions of 257-180-004, 257-180-005, and 257-180-006.
- 2015 A Phase I and II Cultural Resource Report for the Lake Ranch Project, TR 36730, Riverside County, California.
- 2015 A Phase II Cultural Resource Assessment for the Munro Valley Solar Project, Inyo County, California.
- 2014 Cultural Resources Monitoring Report for the Diamond Valley Solar Project, Community of Winchester, County of Riverside.
- 2014 National Historic Preservation Act Section 106 Compliance for the Proposed Saddleback Estates Project, Riverside County, California.
- 2014 A Phase II Cultural Resource Evaluation Report for RIV-8137 at the Toscana Project, TR 36593, Riverside County, California.
- 2014 Cultural Resources Study for the Estates at Del Mar Project, City of Del Mar, San Diego, California (TTM 14-001).
- 2014 Cultural Resources Study for the Aliso Canyon Major Subdivision Project, Rancho Santa Fe, San Diego County, California.
- 2014 Cultural Resources Due Diligence Assessment of the Ocean Colony Project, City of Encinitas.
- 2014 A Phase I and Phase II Cultural Resource Assessment for the Citrus Heights II Project, TTM 36475, Riverside County, California.
- 2013 A Phase I Cultural Resource Assessment for the Modular Logistics Center, Moreno Valley, Riverside County, California.
- 2013 A Phase I Cultural Resources Survey of the Ivey Ranch Project, Thousand Palms, Riverside County, California.
- 2013 Cultural Resources Report for the Emerald Acres Project, Riverside County, California.
- 2013 A Cultural Resources Records Search and Review for the Pala Del Norte Conservation Bank Project, San Diego County, California.
- 2013 An Updated Phase I Cultural Resources Assessment for Tentative Tract Maps 36484 and 36485, Audie Murphy Ranch, City of Menifee, County of Riverside.
- 2013 El Centro Town Center Industrial Development Project (EDA Grant No. 07-01-06386); Result of Cultural Resource Monitoring.
- 2013 Cultural Resources Survey Report for the Renda Residence Project, 9521 La Jolla Farms Road, La Jolla, California.
- 2013 A Phase I Cultural Resource Study for the Ballpark Village Project, San Diego, California.
- 2013 Archaeological Monitoring and Mitigation Program, San Clemente Senior Housing Project, 2350 South El Camino Real, City of San Clemente, Orange County, California (CUP No. 06-065; APN-060-032-04).
- 2012 Mitigation Monitoring Report for the Los Peñasquitos Recycled Water Pipeline.

- 2012 Cultural Resources Report for Menifee Heights (Tract 32277).
- 2012 A Phase I Cultural Resource Study for the Altman Residence at 9696 La Jolla Farms Road, La Jolla, California 92037.
- 2012 Mission Ranch Project (TM 5290-1/MUP P87-036W3): Results of Cultural Resources Monitoring During Mass Grading.
- 2012 A Phase I Cultural Resource Study for the Payan Property Project, San Diego, California.
- 2012 Phase I Archaeological Survey of the Rieger Residence, 13707 Durango Drive, Del Mar, California 92014, APN 300-369-49.
- 2011 Mission Ranch Project (TM 5290-1/MUP P87-036W3): Results of Cultural Resources Monitoring During Mass Grading.
- 2011 Mitigation Monitoring Report for the 1887 Viking Way Project, La Jolla, California.
- 2011 Cultural Resource Monitoring Report for the Sewer Group 714 Project.
- 2011 Results of Archaeological Monitoring at the 10th Avenue Parking Lot Project, City of San Diego, California (APNs 534-194-02 and 03).
- 2011 Archaeological Survey of the Pelberg Residence for a Bulletin 560 Permit Application; 8335 Camino Del Oro; La Jolla, California 92037 APN 346-162-01-00.
- 2011 A Cultural Resources Survey Update and Evaluation for the Robertson Ranch West Project and an Evaluation of National Register Eligibility of Archaeological sites for Sites for Section 106 Review (NHPA).
- 2011 Mitigation Monitoring Report for the 43rd and Logan Project.
- 2011 Mitigation Monitoring Report for the Sewer Group 682 M Project, City of San Diego Project #174116.
- 2011 A Phase I Cultural Resource Study for the Nooren Residence Project, 8001 Calle de la Plata, La Jolla, California, Project No. 226965.
- 2011 A Phase I Cultural Resource Study for the Keating Residence Project, 9633 La Jolla Farms Road, La Jolla, California 92037.
- 2010 Mitigation Monitoring Report for the 15th & Island Project, City of San Diego; APNs 535-365-01, 535-365-02 and 535-392-05 through 535-392-07.
- 2010 Archaeological Resource Report Form: Mitigation Monitoring of the Sewer and Water Group 772 Project, San Diego, California, W.O. Nos. 187861 and 178351.
- 2010 Pottery Canyon Site Archaeological Evaluation Project, City of San Diego, California, Contract No. H105126.
- 2010 Archaeological Resource Report Form: Mitigation Monitoring of the Racetrack View Drive Project, San Diego, California; Project No. 163216.
- 2010 A Historical Evaluation of Structures on the Butterfield Trails Property.
- 2010 Historic Archaeological Significance Evaluation of 1761 Haydn Drive, Encinitas, California (APN

- 260-276-07-00).
- 2010 Results of Archaeological Monitoring of the Heller/Nguyen Project, TPM 06-01, Poway, California.
 - 2010 Cultural Resource Survey and Evaluation Program for the Sunday Drive Parcel Project, San Diego County, California, APN 189-281-14.
 - 2010 Archaeological Resource Report Form: Mitigation Monitoring of the Emergency Garnet Avenue Storm Drain Replacement Project, San Diego, California, Project No. B10062
 - 2010 An Archaeological Study for the 1912 Spindrift Drive Project
 - 2009 Cultural Resource Assessment of the North Ocean Beach Gateway Project City of San Diego #64A-003A; Project #154116.
 - 2009 Archaeological Constraints Study of the Morgan Valley Wind Assessment Project, Lake County, California.
 - 2008 Results of an Archaeological Review of the Helen Park Lane 3.1-acre Property (APN 314-561-31), Poway, California.
 - 2008 Archaeological Letter Report for a Phase I Archaeological Assessment of the Valley Park Condominium Project, Ramona, California; APN 282-262-75-00.
 - 2007 Archaeology at the Ballpark. Brian F. Smith and Associates, San Diego, California. Submitted to the Centre City Development Corporation.
 - 2007 Result of an Archaeological Survey for the Villages at Promenade Project (APNs 115-180-007-3, 115-180-049-1, 115-180-042-4, 115-180-047-9) in the City of Corona, Riverside County.
 - 2007 Monitoring Results for the Capping of Site CA-SDI-6038/SDM-W-5517 within the Katzer Jamul Center Project; P00-017.
 - 2006 Archaeological Assessment for The Johnson Project (APN 322-011-10), Poway, California.
 - 2005 Results of Archaeological Monitoring at the El Camino Del Teatro Accelerated Sewer Replacement Project (Bid No. K041364; WO # 177741; CIP # 46-610.6.
 - 2005 Results of Archaeological Monitoring at the Baltazar Draper Avenue Project (Project No. 15857; APN: 351-040-09).
 - 2004 TM 5325 ER #03-14-043 Cultural Resources.
 - 2004 An Archaeological Survey and an Evaluation of Cultural Resources at the Salt Creek Project. Report on file at Brian F. Smith and Associates.
 - 2003 An Archaeological Assessment for the Hidden Meadows Project, San Diego County, TM 5174, Log No. 99-08-033. Report on file at Brian F. Smith and Associates.
 - 2003 An Archaeological Survey for the Manchester Estates Project, Coastal Development Permit #02-009, Encinitas, California. Report on file at Brian F. Smith and Associates.
 - 2003 Archaeological Investigations at the Manchester Estates Project, Coastal Development Permit #02-009, Encinitas, California. Report on file at Brian F. Smith and Associates.
 - 2003 Archaeological Monitoring of Geological Testing Cores at the Pacific Beach Christian Church Project. Report on file at Brian F. Smith and Associates.

- 2003 San Juan Creek Drilling Archaeological Monitoring. Report on file at Brian F. Smith and Associates.
- 2003 Evaluation of Archaeological Resources Within the Spring Canyon Biological Mitigation Area, Otay Mesa, San Diego County, California. Brian F. Smith and Associates, San Diego, California.
- 2002 An Archaeological/Historical Study for the Otay Ranch Village 13 Project (et al.). Brian F. Smith and Associates, San Diego, California.
- 2002 An Archaeological/Historical Study for the Audie Murphy Ranch Project (et al.). Brian F. Smith and Associates, San Diego, California.
- 2002 Results of an Archaeological Survey for the Remote Video Surveillance Project, El Centro Sector, Imperial County, California. Brian F. Smith and Associates, San Diego, California.
- 2002 A Cultural Resources Survey and Evaluation for the Proposed Robertson Ranch Project, City of Carlsbad. Brian F. Smith and Associates, San Diego, California.
- 2002 Archaeological Mitigation of Impacts to Prehistoric Site SDI-7976 for the Eastlake III Woods Project, Chula Vista, California. Brian F. Smith and Associates, San Diego, California.
- 2002 An Archaeological/Historical Study for Tract No. 29777, Menifee West GPA Project, Perris Valley, Riverside County. Brian F. Smith and Associates, San Diego, California.
- 2002 An Archaeological/Historical Study for Tract No. 29835, Menifee West GPA Project, Perris Valley, Riverside County. Brian F. Smith and Associates, San Diego, California.
- 2001 An Archaeological Survey and Evaluation of a Cultural Resource for the Moore Property, Poway. Brian F. Smith and Associates, San Diego, California.
- 2001 An Archaeological Report for the Mitigation, Monitoring, and Reporting Program at the Water and Sewer Group Job 530A, Old Town San Diego. Brian F. Smith and Associates, San Diego, California.
- 2001 A Cultural Resources Impact Survey for the High Desert Water District Recharge Site 6 Project, Yucca Valley. Brian F. Smith and Associates, San Diego, California.
- 2001 Archaeological Mitigation of Impacts to Prehistoric Site SDI-13,864 at the Otay Ranch SPA-One West Project. Brian F. Smith and Associates, San Diego, California.
- 2001 A Cultural Resources Survey and Site Evaluations at the Stewart Subdivision Project, Moreno Valley, County of San Diego. Brian F. Smith and Associates, San Diego, California.
- 2000 An Archaeological/Historical Study for the French Valley Specific Plan/EIR, French Valley, County of Riverside. Brian F. Smith and Associates, San Diego, California.
- 2000 Results of an Archaeological Survey and the Evaluation of Cultural Resources at The TPM#24003–Lawson Valley Project. Brian F. Smith and Associates, San Diego, California.
- 2000 Archaeological Mitigation of Impacts to Prehistoric Site SDI-5326 at the Westview High School Project for the Poway Unified School District. Brian F. Smith and Associates, San Diego, California.
- 2000 An Archaeological/Historical Study for the Menifee Ranch Project. Brian F. Smith and Associates, San Diego, California.
- 2000 An Archaeological Survey and Evaluation of Cultural Resources for the Bernardo Mountain Project, Escondido, California. Brian F. Smith and Associates, San Diego, California.

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- 1999 An Archaeological Survey and Evaluation of Cultural Resources for the Palomar Christian Conference Center Project, Palomar Mountain, California. Brian F. Smith and Associates, San Diego, California.
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- 1999 Results of an Archaeological Evaluation for the Anthony's Pizza Acquisition Project in Ocean Beach, City of San Diego (with L. Pierson and B. Smith). Brian F. Smith and Associates, San Diego, California.
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- 1991 The Results of an Archaeological Study for the Walton Development Group Project. Brian F. Smith and Associates, San Diego, California.

Andrew J. Garrison, M.A., RPA

Senior Project Archaeologist

Brian F. Smith and Associates, Inc.

14010 Poway Road • Suite A •

Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: agarrison@bfsa-ca.com



Education

Master of Arts, Public History, University of California, Riverside	2009
Bachelor of Science, Anthropology, University of California, Riverside	2005
Bachelor of Arts, History, University of California, Riverside	2005

Professional Memberships

Register of Professional Archaeologists	Society of Primitive Technology
Society for California Archaeology	Lithic Studies Society
Society for American Archaeology	California Preservation Foundation
California Council for the Promotion of History	Pacific Coast Archaeological Society

Experience

Senior Project Archaeologist Brian F. Smith and Associates, Inc.	June 2017–Present Poway, California
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Project management of all phases of archaeological investigations for local, state, and federal agencies including National Register of Historic Places (NRHP) and California Environmental Quality Act (CEQA) level projects interacting with clients, sub-consultants, and lead agencies. Supervise and perform fieldwork including archaeological survey, monitoring, site testing, comprehensive site records checks, and historic building assessments. Perform and oversee technological analysis of prehistoric lithic assemblages. Author or co-author cultural resource management reports submitted to private clients and lead agencies.

Senior Archaeologist and GIS Specialist Scientific Resource Surveys, Inc.	2009–2017 Orange, California
--	---------------------------------

Served as Project Archaeologist or Principal Investigator on multiple projects, including archaeological monitoring, cultural resource surveys, test excavations, and historic building assessments. Directed projects from start to finish, including budget and personnel hours proposals, field and laboratory direction, report writing, technical editing, Native American consultation, and final report submittal. Oversaw all GIS projects including data collection, spatial analysis, and map creation.

Preservation Researcher City of Riverside Modernism Survey	2009 Riverside, California
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Completed DPR Primary, District, and Building, Structure and Object Forms for five sites for a grant-funded project to survey designated modern architectural resources within the City of Riverside.

Information Officer
Eastern Information Center (EIC), University of California, Riverside

2005, 2008–2009
Riverside, California

Processed and catalogued restricted and unrestricted archaeological and historical site record forms. Conducted research projects and records searches for government agencies and private cultural resource firms.

Reports/Papers

- 2019 Cultural Resource Monitoring Report for the Pipeline Rehabilitation AP-1 Project, City of San Diego, California. Brian F. Smith and Associates, Inc.
- 2019 Cultural Resources Study for the Pioneer Redlands Project, San Bernardino County, California. Brian F. Smith and Associates, Inc.
- 2019 Cultural Resource Report for the U.S. Allied Carriers Project, City of Riverside, Riverside County, California. Brian F. Smith and Associates, Inc.
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- 2019 A Phase I Cultural Resources Survey for the IDI Rider 2 & 4 High Cube Warehouses and PVSD Channel Improvement Project, Perris, California. Brian F. Smith and Associates, Inc.
- 2019 Cultural Resources Study for the County Road and East End Avenue Project, City of Chino, San Bernardino County, California. Brian F. Smith and Associates, Inc.

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- 2019 A Section 106 (NHPA) Historic Resources Study for the McElwain Project, City of Murrieta, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Survey Report for the Commercial/Retail NWC Mountain and Lake Streets Project, City of Lake Elsinore, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2019 A Section 106 (NHPA) Historic Resources Study for the Twin Channel Project, City of San Bernardino, San Bernardino County, California. Brian F. Smith and Associates, Inc.
- 2019 Cultural Resources Study for the 10407 Elm Avenue Project, City of Fontana, San Bernardino County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resource Study for the Olivenhain Apartments Project, Encinitas, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resource Study for the Sanctuary Project, Encinitas, California. Brian F. Smith and Associates, Inc.
- 2019 A Cultural Resources Survey Report for the Borrego Springs 141 Project, San Diego County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Survey for the Natwar Project, Perris, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Survey for the Morningstar Marguerite Project, Mission Viejo, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Assessment for the Anza Baptist Church Project, Riverside County. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Assessment for the Inland Propane Project, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Survey for the First Industrial Wilson Avenue Project, Perris, California. Brian F. Smith and Associates, Inc.
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- 2018 Cultural Resource Monitoring Report for the Sewer Group 818 Project, City of San Diego. Brian F. Smith and Associates, Inc.
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- 2009 Riverside Modernism Context Survey, contributing author. Available online at the City of Riverside.

Presentations

- 2017 "Repair and Replace: Lithic Production Behavior as Indicated by the Debitage Assemblage from CA-MRP-283 the Hackney Site." Presented at the Society for California Archaeology Annual Meeting, Fish Camp, California.
- 2016 "Bones, Stones, and Shell at Bolsa Chica: A Ceremonial Relationship?" Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2016 "Markers of Time: Exploring Transitions in the Bolsa Chica Assemblage." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2016 "Dating Duress: Understanding Prehistoric Climate Change at Bolsa Chica." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2015 "Successive Cultural Phasing Of Prehistoric Northern Orange County, California." Presented at the Society for California Archaeology Annual Meeting, Redding, California.
- 2015 "Southern California Cogged Stone Replication: Experimentation and Results." Presented at the Society for California Archaeology Annual Meeting, Redding, California.

- 2015 "Prehistoric House Keeping: Lithic Analysis of an Intermediate Horizon House Pit." Presented at the Society for California Archaeology Annual Meeting, Redding, California.
- 2015 "Pits and Privies: The Use and Disposal of Artifacts from Historic Los Angeles." Presented at the Society for California Archaeology Annual Meeting, Redding, California.
- 2015 "Grooving in the Past: A Demonstration of the Manufacturing of OGR beads and a look at Past SRS, Inc. Replicative Studies." Demonstration of experimental manufacturing techniques at the January meeting of The Pacific Coast Archaeological Society, Irvine, California.
- 2014 "From Artifact to Replication: Examining Olivella Grooved Bead Manufacturing." Presented at the Society for California Archaeology Annual Meeting, Visalia, California.
- 2014 "New Discoveries from an Old Collection: Comparing Recently Identified OGR Beads to Those Previously Analyzed from the Encino Village Site." Presented at the Society for California Archaeology Annual Meeting, Visalia, California.
- 2012 Bolsa Chica Archaeology: Part Seven: Culture and Chronology. Lithic demonstration of experimental manufacturing techniques at the April meeting of The Pacific Coast Archaeological Society, Irvine, California.
- 2012 "Expedient Flaked Tools from Bolsa Chica: Exploring the Lithic Technological Organization." Presented at the Society for California Archaeology Annual Meeting, San Diego, California.
- 2012 "Utilitarian and Ceremonial Ground Stone Production at Bolsa Chica Identified Through Production Tools." Presented at the Society for California Archaeology Annual Meeting, San Diego, California.
- 2012 "Connecting Production Industries at Bolsa Chica: Lithic Reduction and Bead Manufacturing." Presented at the Society for California Archaeology Annual Meeting, San Diego, California.
- 2011 Bolsa Chica Archaeology: Part Four: Mesa Production Industries. Co-presenter at the April meeting of The Pacific Coast Archaeological Society, Irvine, California.
- 2011 "Hammerstones from Bolsa Chica and Their Relationship towards Site Interpretation." Presented at the Society for California Archaeology Annual Meeting, Rohnert Park, California.
- 2011 "Exploring Bipolar Reduction at Bolsa Chica: Debitage Analysis and Replication." Presented at the Society for California Archaeology Annual Meeting, Rohnert Park, California.

APPENDIX B**Archaeological Records Search Results**

(Deleted for Public Review; Bound Separately)

APPENDIX C

NAHC Sacred Lands File Search Results

(Deleted for Public Review; Bound Separately)



Compass Danbe Centerpointe

ENERGY ANALYSIS

CITY OF MORENO VALLEY

PREPARED BY:

Haseeb Qureshi
hqureshi@urbanxroads.com

Alyssa Tamase
atamase@urbanxroads.com

NOVEMBER 12, 2020

13661-02 EA Report

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE OF CONTENTS

TABLE OF CONTENTS	I
APPENDICES	II
LIST OF EXHIBITS	II
LIST OF TABLES	II
LIST OF ABBREVIATED TERMS	III
EXECUTIVE SUMMARY	1
ES.1 Summary of Findings	1
ES.2 Project Requirements	1
1 INTRODUCTION	4
1.1 Site Location	4
1.2 Project Description	4
2 EXISTING CONDITIONS	8
2.1 Overview	8
2.2 Electricity	10
2.3 Natural Gas	12
2.4 Transportation Energy Resources	15
3 REGULATORY BACKGROUND	17
3.1 Federal Regulations	17
3.2 California Regulations	17
4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES	21
4.1 Evaluation Criteria	21
4.2 Methodology	21
4.3 Construction Energy Demands	22
4.4 Operational Energy Demands	32
4.5 Summary	36
4.6 Energy Findings and Recommendations	38
5 REFERENCES	42
6 CERTIFICATIONS	45

APPENDICES

- APPENDIX 4.1: CALEEMOD PROJECT ANNUAL CONSTRUCTION EMISSIONS MODEL OUTPUTS
 APPENDIX 4.2: CALEEMOD PROJECT ANNUAL OPERATIONS (PASSENGER CARS) EMISSIONS MODEL OUTPUTS
 APPENDIX 4.3: CALEEMOD PROJECT ANNUAL OPERATIONS (TRUCKS) EMISSIONS MODEL OUTPUTS
 APPENDIX 4.4: EMFAC2017

LIST OF EXHIBITS

EXHIBIT 1-A: LOCATION MAP	5
EXHIBIT 1-B: SITE PLAN	6

LIST OF TABLES

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS	1
TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2019)	9
TABLE 2-2: MVU 2019 POWER CONTENT MIX.....	11
TABLE 4-1: CONSTRUCTION DURATION.....	22
TABLE 4-2: CONSTRUCTION POWER COST	23
TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE (1 OF 2).....	23
TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE (1 OF 2).....	24
TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS (1 OF 2)	24
TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS (1 OF 2)	25
TABLE 4-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES.....	26
TABLE 4-6: CONSTRUCTION TRIPS AND VMT	27
TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDA).....	28
TABLE 4-8: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDT1)	28
TABLE 4-9: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDT2)	29
TABLE 4-10: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (MHDT).....	30
TABLE 4-11: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (HHDT).....	30
TABLE 4-12: PROJECT-GENERATED LDA VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION	32
TABLE 4-13: PROJECT-GENERATED LDT1 VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION	32
TABLE 4-14: PROJECT-GENERATED LDT2 VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION	33
TABLE 4-15: PROJECT-GENERATED MDV TRAFFIC ANNUAL FUEL CONSUMPTION	33
TABLE 4-16: PROJECT-GENERATED LHDT VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION	33
TABLE 4-17: PROJECT-GENERATED MHDT VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION	34
TABLE 4-18: PROJECT-GENERATED HHDT VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION	34
TABLE 4-19: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION (ALL VEHICLES)	34
TABLE 4-20: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY	35

LIST OF ABBREVIATED TERMS

%	Percent
(1)	Reference
AQIA	<i>Compass Danbe Centerpointe Air Quality Impact Analysis</i>
BACM	Best Available Control Measures
BTU	British Thermal Units
CaIEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
<i>CEQA Guidelines</i>	<i>2019 California Environmental Quality Act Guidelines</i>
City	City of Moreno Valley
CPEP	Clean Power and Electrification Pathway
CPUC	California Public Utilities Commission
DMV	Department of Motor Vehicles
EIA	Energy Information Administration
EPA	Environmental Protection Agency
EMFAC	EMissions FACtor
FERC	Federal Energy Regulatory Commission
GHG	Greenhouse Gas
GWh	Gigawatt Hour
HHDT	Heavy-Heavy Duty Trucks
hp-hr-gal	Horsepower Hours Per Gallon
IEPR	Integrated Energy Policy Report
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
kBTU	Thousand-British Thermal Units
kWh	Kilowatt Hour
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT1	Light-Heavy Duty Trucks
MARB/IPA	March Air Reserve Base and Inland Port Airport
MDV	Medium Duty Trucks

MHDT	Medium-Heavy Duty Trucks
MMcfd	Million Cubic Feet Per Day
mpg	Miles Per Gallon
MPO	Metropolitan Planning Organization
MVU	Moreno Valley Utility
PG&E	Pacific Gas and Electric
Project	Compass Danbe Centerpointe
PV	Photovoltaic
SCAB	South Coast Air Basin
SDAB	San Diego Air Basin
SoCalGas	Southern California Gas
sf	Square Feet
TEA-21	Transportation Equity Act for the 21 st Century
U.S.	United States
VMT	Vehicle Miles Traveled
ZC	Zone Change

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Compass Danbe Centerpointe Energy Analysis* is summarized below based on the significance criteria in Section 4.6 of this report consistent with Appendix G of the *2019 California Environmental Quality Act (CEQA) Guidelines (CEQA Guidelines)* (1). Table ES-1 shows the findings of significance for potential energy impacts under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Energy Impact #1: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	4.6	<i>Less Than Significant</i>	<i>n/a</i>
Energy Impact #2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	4.6	<i>Less Than Significant</i>	<i>n/a</i>
Energy Impact #3: Would the Project achieve the goal of energy conservation by: <ul style="list-style-type: none"> • Decreasing overall per capita energy consumption. • Decreasing reliance on fossil fuels such as coal, natural gas and oil. • Increasing reliance on renewable energy sources. 	4.6	<i>Less Than Significant</i>	<i>n/a</i>

ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the federal and state agencies that regulate energy use and consumption through various means and programs. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of energy usage include:

- Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)
- The Transportation Equity Act for the 21st Century (TEA-21)
- Integrated Energy Policy Report (IEPR)
- State of California Energy Plan
- California Code Title 24, Part 6, Energy Efficiency Standards

- AB 1493 Pavley Regulations and Fuel Efficiency Standards
- California's Renewable Portfolio Standard (RPS)
- Clean Energy and Pollution Reduction Act of 2015 (SB 350)

Consistency with the above regulations are discussed in detail in Section 4.6 of this EA.

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed Compass Danbe Centerpointe Project (Project). The purpose of this report is to ensure that energy implication is considered by the City of Moreno Valley (City), as the lead agency, and to quantify anticipated energy usage associated with construction and operation of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

1.1 SITE LOCATION

The proposed project is located south of Alessandro Boulevard on either side of Chagall Court in the City of Moreno Valley as shown on Exhibit 1-A. The March Air Reserve Base/Inland Port Airport (MARB/IPA) is located approximately 0.9 miles south of the Project site. The Project site is bordered to the west by vacant land, to the east by vacant land, to the north by commercial and residential uses, and to the south are existing industrial buildings.

This proposed Project includes a General Plan Amendment (GPA) and a Zone Change (ZC). The site is currently designated as Commercial in the City's General Plan, which would require a land use and zoning change to Light Industrial use. The proposed changes are consistent with the zones to the west, south and east of the subject site and adjacent properties. The amendment is in keeping with the uses surrounding the project site.

1.2 PROJECT DESCRIPTION

Exhibit 1-B illustrates a preliminary site plan for the Project. The Project is anticipated to be developed within a single phase with an anticipated opening year of 2022. The proposed Project consists of the following uses:

- Building 1: 206,665 square feet (sf) of warehousing (70% of total building sf) and 88,571 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 295,236 sf for Building 1
- Building 2: 70,876 sf of warehousing (70% of total building sf) and 30,376 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 101,252 sf for Building 2

This analysis is intended to describe energy usage associated with the expected construction and operational activities at the Project site. This report assumes the Project will operate 24-hours daily for seven days per week. At the time this energy analysis was prepared, the future tenants of the proposed Project were unknown however any tenant would operate consistent with a high-cube warehouse.

EXHIBIT 1-A: LOCATION MAP

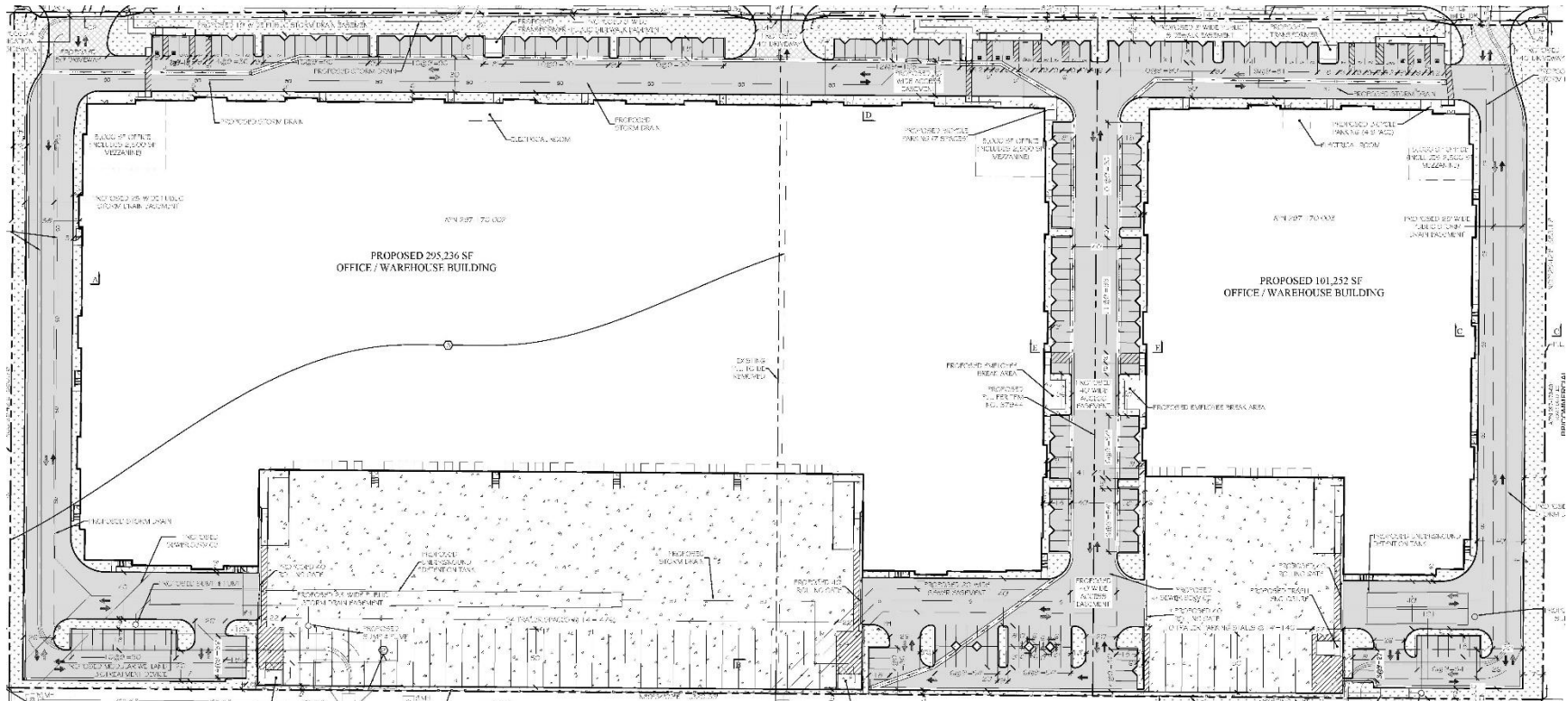


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS



Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

EXHIBIT 1-B: SITE PLAN



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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

2 EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the Project region.

2.1 OVERVIEW

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2018, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2020 and included (2):

- Approximately 7,967 trillion British Thermal Unit (BTU) of energy was consumed
- Approximately 681 million barrels of petroleum
- Approximately 2,137 billion cubic feet of natural gas
- Approximately 1 million short tons of coal

The California Energy Commission's (CEC) Transportation Energy Demand Forecast 2018-2030 was released in order to support the 2017 Integrated Energy Policy Report. The Transportation energy Demand Forecast 2018-2030 lays out graphs and data supporting their projections of California's future transportation energy demand. The projected inputs consider expected variable changes in fuel prices, income, population, and other variables. Predictions regarding fuel demand included:

- Gasoline demand in the transportation sector is expected to decline from approximately 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030 (3)
- Diesel demand in the transportation sector is expected to rise, increasing from approximately 3.7 billion diesel gallons in 2015 to approximately 4.7 billion in 2030 (3)
- Data from the Department of Energy states that approximately 3.9 billion gallons of diesel fuel were consumed in 2017 (4)

The most recent data provided by the EIA for energy use in California by demand sector is from 2017 and is reported as follows:

- Approximately 40.3% transportation;
- Approximately 23.1% industrial;
- Approximately 18.0% residential; and
- Approximately 18.7% commercial (5)

In 2019, total system electric generation for California was 277,704 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 200,475 GWh which accounted for approximately 72% of the electricity it uses; the rest was imported from the Pacific Northwest (9%) and the U.S. Southwest (19%) (6). Natural gas is the main source for electricity generation at 47% of the total in-state electric generation system power as shown in Table 2-1.

TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2019)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Percent of Imports	Total California Energy Mix	Total California Power Mix
Coal	248	0.12%	219	7,765	7,985	10.34%	8,233	2.96%
Natural Gas	86,136	42.97%	46	8,859	8,906	11.53%	95,042	34.22%
Oil	36	0.02%	0	0	0	0.00%	36	0.01%
Other (Waste Heat/Petroleum Coke)	411	0.20%	0	11	11	0.01%	422	0.15%
Nuclear	16,163	8.06%	0	8,743	8,743	11.32%	24,906	8.97%
Large Hydro	33,145	16.53%	5,071	1,071	6,142	7.95%	39,287	14.15%
Unspecified	0	0.00%	7,979	13,767	21,746	28.16%	21,746	7.83%
Non-Renewable and Unspecified Totals	136,139	67.91%	13,315	40,218	53,533	69.32%	189,672	68.30%
Biomass	5,851	2.92%	903	33	936	1.21%	6,787	2.44%
Geothermal	10,943	5.46%	99	2,218	2,318	3.00%	13,260	4.77%
Small Hydro	5,349	2.67%	292	4	296	0.38%	5,646	2.03%
Solar	28,513	14.22%	282	5,295	5,577	7.22%	34,090	12.28%
Wind	13,680	6.82%	9,038	5,531	14,569	18.87%	28,249	10.17%
Renewable Totals	64,336	32.09%	10,615	13,081	23,696	30.68%	88,032	31.70%
System Totals	200,475	100.00%	23,930	53,299	77,229	100.00%	277,704	100.00%

Source: California Energy Commission's 2019 Total System Electric Generation

An updated summary of, and context for energy consumption and energy demands within the State is presented in “U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts” excerpted below:

- California was the seventh-largest producer of crude oil among the 50 states in 2018, and, as of January 2019, it ranked third in oil refining capacity.
- California is the largest consumer of jet fuel among the 50 states and accounted for one-fifth of the nation’s jet fuel consumption in 2018. (7)
- California's total energy consumption is second highest in the nation, but, in 2018, the state's per capita energy consumption was the fourth-lowest, due in part to its mild climate and its energy efficiency programs. (8)
- In 2018, California ranked first in the nation as a producer of electricity from solar, geothermal, and biomass resources and fourth in the nation in conventional hydroelectric power generation.
- In 2018, large- and small-scale solar photovoltaic (PV) and solar thermal installations provided 19% of California’s net electricity generation (9).

As indicated above, California is one of the nation’s leading energy-producing states, and California’s per capita energy use is among the nation’s most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project.

2.2 ELECTRICITY

The usage associated with electricity use were calculated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2. The Southern California region’s electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board’s once-through cooling policy, the retirement of San Onofre complicated the situation. California ISO studies revealed the extent to which the South Coast Air Basin (SCAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts (10). Similarly, the subsequent 2018 and 2019 IEPR’s identify broad strategies that are aimed at maintaining electricity system reliability.

Electricity is currently provided to the Project by Moreno Valley Utility (MVU). MVU provides electric power to over 6,500 customers within its service area. MVU provides customer service, meter reading, billing, emergency response and other services to new commercial and residential developments . Based on MVU’s 2019 Power Content Label Mix, MVU derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms (11).

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California Independent Service Operator (ISO) is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities (12).

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, transmission file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Tables 2-2 identifies MVU's specific proportional shares of electricity sources in 2019. As indicated in Table 2-2, the 2019 MVU Power Mix has renewable energy at 33.4% of the overall energy resources (13).

TABLE 2-2: MVU 2019 POWER CONTENT MIX

Energy Resources	2019 MVU Power Mix
<i>Eligible Renewable</i>	33.4%
Biomass & Waste	0%
Geothermal	9.3%
Eligible Hydroelectric	6.8%
Solar	9.5%
Wind	7.8%
<i>Coal</i>	0%
<i>Large Hydroelectric</i>	0%
<i>Natural Gas</i>	0%
<i>Nuclear</i>	0%
<i>Other</i>	0%
Unspecified Sources of power*	66.6%
Total	100%

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources

2.3 NATURAL GAS

The following summary of natural gas customers & volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the California Public Utilities Commission (CPUC).

"The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800, 000 customers. In 2018, California gas utilities forecasted that they would deliver about 4740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.

The overwhelming majority of natural gas utility customers in California are residential and small commercial customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

A significant amount of gas (about 19%, or 1131 MMcfd, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e. they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area.) Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California gas utilities are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja - Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border, and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that

service, the California Public Utilities Commission may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.

The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities' distribution pipeline systems. The state's natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.

Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production

PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements .

Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility-provided services.

The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called "core transport agents" (CTA). Contact information for core transport agents can be found on the utilities' web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.

Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities' storage service responsibility for noncore customers, along with the cost of this service from noncore customers' transportation rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were

established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.

In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's backbone and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).

In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights (FAR) system in 2008, and it is now referred to as the backbone transmission system (BTS) framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas system. A certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.

Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.

In order properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts are then returned to customers as a whole. If the utilities find that they are

unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California .” (14)

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

Based on information provided by the Project applicant, no natural gas will be used as a result of the project, and as such use of natural gas is not considered in the analysis.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. In March 2019, the Department of Motor Vehicles (DMV) identified 36.4 million registered vehicles in California (15), and those vehicles consume an estimated 17.8 billion gallons of fuel each year¹. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

California’s on-road transportation system includes 394,383 land miles, more than 27.5 million passenger vehicles and light trucks, and almost 8.1 million medium- and heavy-duty vehicles (15). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. Petroleum comprises about 91% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels (16). Nearly 17.8 billion gallons of on-highway fuel are burned each year, including 14.6 billion gallons of gasoline (including ethanol) and 3.2 billion gallons of diesel fuel (including biodiesel and renewable diesel). In 2019, Californians also used 194 million cubic feet of natural gas as a transportation fuel (17), or the equivalent of 183 billion gallons of gasoline.

¹ Fuel consumptions estimated utilizing information from EMFAC2017.

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

3 REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency (EPA) are three federal agencies with substantial influence over energy policies and programs. On the state level, the CPUC and the CEC are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

3.1 FEDERAL REGULATIONS

3.1.1 INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991 (ISTEA)

The ISTEA promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

3.1.2 THE TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY (TEA-21)

The TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

3.2 CALIFORNIA REGULATIONS

3.2.1 INTEGRATED ENERGY POLICY REPORT (IEPR)

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301a). The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2019 IEPR was adopted January 31, 2020, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2019 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast (18). The 2020 IEPR Update is currently in progress but is not anticipated to be adopted until February 2021.

3.2.2 STATE OF CALIFORNIA ENERGY PLAN

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

3.2.3 CALIFORNIA CODE TITLE 24, PART 6, ENERGY EFFICIENCY STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas (GHG) emissions. The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020. The 2019 Title are applicable to building permit applications submitted on or after January 1, 2020. The 2019 Title 24 standards require solar PV systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, and update indoor and outdoor lighting standards for nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar PV systems, homes built under the 2019 standards will about 53% less energy than homes built under the 2016 standards. Nonresidential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code (19).

3.2.4 AB 1493 PAVLEY REGULATIONS AND FUEL EFFICIENCY STANDARDS

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions, specifically, a co-benefit

of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

3.2.5 CALIFORNIA'S RENEWABLE PORTFOLIO STANDARD (RPS)

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable resources to 33% of total retail sales by 2020 (20).

3.2.6 CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (California Leginfo 2015).

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

4.1 EVALUATION CRITERIA

In compliance with Appendix G of the *State CEQA Guidelines* (1), this report analyzes the project's anticipated energy use during construction and operations to determine if the Project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

In addition, Appendix F of the *State CEQA Guidelines* (21), states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

4.2 METHODOLOGY

Information from the CalEEMod Version 2016.3.2 outputs for the *Compass Danbe Centerpointe Air Quality Impact Analysis* (AQIA) (22) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands.

4.2.1 CAL EEMOD

On October 17, 2017, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod Version 2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources as well as energy usage. (23). Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's anticipated transportation and facility energy demands. Output from the annual construction model runs are provided in Appendix 4.1 and Appendices 4.2 through 4.3 for annual operational emissions.

4.2.2 EMISSION FACTORS MODEL

On August 19, 2019, the EPA approved the 2017 version of the EMISSIONS FACTOR model (EMFAC) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2017 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (24). This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2017 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of

analysis, the 2021 through 2022 analysis years were utilized to determine the average vehicle fuel economy used throughout the duration of the Project.

4.3 CONSTRUCTION ENERGY DEMANDS

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project.

4.3.1 CONSTRUCTION POWER COST

The total Project construction power costs is the summation of the products of the area (sf) by the construction duration and the typical power cost.

PROJECT PROPOSED LAND USE

The proposed Project includes the development of 206,665 sf of warehousing (70% of total building sf) and 88,571 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 295,236 sf for Building 1, 70,876 sf of warehousing (70% of total building sf) and 30,376 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 101,252 sf for Building 2, associated landscape and parking area. Based on information provided in the AQIA, construction activities are anticipated to occur over the course of 8 months (22).

CONSTRUCTION DURATION

Construction is expected to commence in October 2021 and will last through June 2022. The construction schedule utilized in the analysis, shown in Table 4-1, represents a “worst-case” analysis scenario. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (25). The duration of construction activity was based on the 2022 opening year and information provided by the Project Applicant. As shown on Table 4-1, construction activities are anticipated to occur over the course of 8 months (22).

TABLE 4-1: CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Site Preparation	10/04/2021	10/15/2021	10
Grading	10/16/2021	11/26/2021	30
Building Construction	11/27/2021	06/24/2022	150
Paving	05/28/2022	06/24/2022	20
Architectural Coating	05/01/2022	06/24/2022	40

PROJECT CONSTRUCTION POWER COST

The *2020 National Construction Estimator* identifies a typical power cost per 1,000 sf of construction per month of \$2.38, which was used to calculate the Project’s total construction power cost. (26)

As shown on Table 4-2, the total power cost of the on-site electricity usage during the construction of the Project is estimated to be approximately \$14,527.38.

TABLE 4-2: CONSTRUCTION POWER COST

Land Use	Power Cost (per 1,000 SF of construction per month)	Size (1,000 SF)	Construction Duration (months)	Project Construction Power Cost
Building 1				
Warehouse	\$2.38	206.665	8	\$3,934.90
High-Cube Cold Storage Warehouse	\$2.38	88.571	8	\$1,686.39
Parking	\$2.38	202.767	8	\$3,860.68
Landscape	\$2.38	45.032	8	\$857.41
Building 2				
Warehouse	\$2.32	70.876	8	\$1,315.46
High-Cube Cold Storage Warehouse	\$2.32	30.376	8	\$563.78
Parking	\$2.32	95.454	8	\$1,771.63
Landscape	\$2.32	28.940	8	\$537.13
CONSTRUCTION POWER COST				\$14,527.38

4.3.2 CONSTRUCTION ELECTRICITY USAGE

The total Project construction electricity usage is the summation of the products of the power cost (estimated in Table 4-2) by the utility provider cost per kilowatt hour (kWh) of electricity.

PROJECT CONSTRUCTION ELECTRICITY USAGE

The MVU's general service rate schedule was used to determine the Project's electrical usage. As of December 17, 2019, MVU's general service rate is on average \$0.17 per kilowatt hours (kWh) of electricity for industrial services (27). As shown on Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 85,609 kWh.

TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE (1 OF 2)

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
Building 1		
Warehouse	\$0.17	23,188
High-Cube Cold Storage Warehouse	\$0.17	9,938
Parking	\$0.17	22,751
Landscape	\$0.17	5,053

TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE (1 OF 2)

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
Building 2		
Warehouse	\$0.17	7,752
High-Cube Cold Storage Warehouse	\$0.17	3,322
Parking	\$0.17	10,440
Landscape	\$0.17	3,165
CONSTRUCTION ELECTRICITY USAGE (kWh)		85,609

4.3.3 CONSTRUCTION EQUIPMENT FUEL ESTIMATES

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction.

CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 4-4 will operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the code. It should be noted that most pieces of equipment would likely operate for fewer hours per day. A summary of construction equipment assumptions by phase is provided at Table 4-4.

TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS (1 OF 2)

Phase Name	Equipment ^A	Amount	Hours Per Day
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
	Water Trucks	1	4
Grading	Crawler Tractors	2	8
	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
	Water Trucks	1	4
Building Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
	Water Trucks	1	4

TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS (1 OF 2)

Phase Name	Equipment ^A	Amount	Hours Per Day
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
	Water Trucks	1	4
Architectural Coating	Air Compressors	1	8

^A As Water Trucks are driven on-road, emissions associated with the operations of Water Trucks have been modeled as additional trips (two 2-way trips per Water Truck).

PROJECT CONSTRUCTION EQUIPMENT FUEL CONSUMPTION

Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4-5. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hour per gallon (hp-hr-gal.), obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines (28). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the City and region². As presented in Table 4-5, Project construction activities would consume an estimated 36,736 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

² Based on Appendix A of the CalEEMod User’s Guide, Construction consists of several types of off-road equipment. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel.

TABLE 4-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Phase Name	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Site Preparation	10	Crawler Tractors	212	4	8	0.43	2,917	1,577
		Rubber Tired Dozers	247	3	8	0.40	2,371	1,282
Grading	30	Crawler Tractors	212	2	8	0.43	1,459	2,365
		Excavators	158	2	8	0.38	961	1,558
		Graders	187	1	8	0.41	613	995
		Rubber Tired Dozers	247	1	8	0.40	790	1,282
		Scrapers	367	2	8	0.48	2,819	4,571
Building Construction	150	Cranes	231	1	8	0.29	536	4,345
		Forklifts	89	3	8	0.20	427	3,464
		Generator Sets	84	1	8	0.74	497	4,032
		Tractors/Loaders/Backhoes	97	3	8	0.37	861	6,984
		Welders	46	1	8	0.45	166	1,343
Paving	20	Pavers	130	2	8	0.42	874	944
		Paving Equipment	132	2	8	0.36	760	822
		Rollers	80	2	8	0.38	486	526
Architectural Coating	40	Air Compressors	78	1	8	0.48	300	648
CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)								36,736

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

4.3.3 CONSTRUCTION TRIPS AND VMT

Based on the CalEEMod, the Trip and VMT are the number and length (in terms VMT³) of on-road vehicle trips for workers, vendors, and hauling for each construction phase. The trips identified in Table 4-6 are based on the CalEEMod default parameters, with the exception of trips during demolition which have been adjusted based on information provided by the Project Applicant.

TABLE 4-6: CONSTRUCTION TRIPS AND VMT

Phase Name	Worker Trips / Day	Vendor Trips / Day	Total Hauling Trips	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
Site Preparation	18	2	0	14.7	6.9	20
Grading	20	2	0	14.7	6.9	20
Building Construction	323	128	0	14.7	6.9	20
Paving	15	2	0	14.7	6.9	20
Architectural Coating	65	0	0	14.7	6.9	20

4.3.4 CONSTRUCTION WORKER FUEL ESTIMATES

With respect to estimated VMT for the Project, the construction worker trips would generate an estimated 770,133 VMT during the 8 months of construction (22). Based on CalEEMod methodology, it is assumed that 50% of all vendor trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT1⁴), and 25% are from light-duty-trucks (LDT2⁵). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the AQIA.

Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated within the 2017 version of the EMFAC developed by CARB. EMFAC2017 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (24). EMFAC2017 was run for the LDA, LDT1, and LDT2 vehicle class within the California sub-area for the 2021 and 2022 calendar years. Data from EMFAC2017 is shown in Appendix 4.5.

As generated by EMFAC2017, an aggregated fuel economy of LDAs ranging from model year 1974 to model years 2021 and 2022 are estimated to have fuel efficiencies of 31.83 miles per gallon (mpg) and 32.77 mpg, respectively. Table 4-7 provides an estimated annual fuel consumption resulting from LDAs related to the Project construction worker trips. Based on Table 4-7, it is estimated that 11,798 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

³ For purposes of analysis, VMT is calculated by multiplying to number of trips by the trip length.

⁴ Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

⁵ Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDA)

Phase Name	Duration (Days)	Worker Trips / Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2021						
Site Preparation	10	9	14.7	1,323	31.83	42
Grading	30	10	14.7	4,410	31.83	139
Building Construction	25	162	14.7	59,535	31.83	1,870
2022						
Building Construction	125	162	14.7	297,675	32.77	9,084
Paving	20	8	14.7	2,352	32.77	72
Architectural Coating	40	33	14.7	19,404	32.77	592
PROJECT CONSTRUCTION WORKER (LDA) FUEL CONSUMPTION						11,798

The EMFAC2017 aggregated fuel economy of LDT1s ranging from model year 1974 to model years 2021 and 2022 are estimated to have fuel efficiencies of 26.78 mpg and 27.55 mpg, respectively. Table 4-8 provides an estimated annual fuel consumption resulting from LDT1s related to the Project construction worker trips. Based on Table 4-8, it is estimated that 7,029 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

TABLE 4-8: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDT1)

Phase Name	Duration (Days)	Worker Trips / Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2021						
Site Preparation	10	5	14.7	735	26.78	27
Grading	30	5	14.7	2,205	26.78	82
Building Construction	25	81	14.7	29,768	26.78	1,112
2022						
Building Construction	125	81	14.7	148,838	27.55	5,402
Paving	20	4	14.7	1,176	27.55	43
Architectural Coating	40	17	14.7	9,996	27.55	363
PROJECT CONSTRUCTION WORKER (LDT1) FUEL CONSUMPTION						7,029

The EMFAC2017 aggregated fuel economy of LDT2s ranging from model year 1974 to model years 2021 and 2022 are estimated to have fuel efficiencies of 25.09 mpg and 26.03 mpg, respectively. Table 4-9 provides an estimated annual fuel consumption resulting from LDT2s related to the

Project construction worker trips. Based on Table 4-9, it is estimated that 7,451 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

TABLE 4-9: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDT2)

Phase Name	Duration (Days)	Worker Trips / Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2021						
Site Preparation	10	5	14.7	735	25.09	29
Grading	30	5	14.7	2,205	25.09	88
Building Construction	25	81	14.7	29,768	25.09	1,187
2022						
Building Construction	125	81	14.7	148,838	26.03	5,718
Paving	20	4	14.7	1,176	26.03	45
Architectural Coating	40	17	14.7	9,996	26.03	384
PROJECT CONSTRUCTION WORKER (LDT2) FUEL CONSUMPTION						7,451

It should be noted that construction worker trips would represent a “single-event” gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

4.3.5 CONSTRUCTION VENDOR FUEL ESTIMATES

With respect to estimated VMT, the construction vendor trips (vehicles that deliver materials to the site during construction) would generate an estimated 2,495,137 VMT along area roadways for the Project over the duration of construction activity (22). It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHDT) and 50% are from heavy-heavy duty trucks (HHDT). These assumptions are consistent with the CalEEMod defaults utilized within the within the AQIA (22). Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2017. EMFAC2017 was run for the MHDT and HHDT vehicle classes within the California sub-area for the 2021 and 2022 calendar years. Data from EMFAC2017 is shown in Appendix 4.5.

As generated by EMFAC2017, an aggregated fuel economy of MHDTs ranging from model year 1974 to model years 2021 and 2022 are estimated to have fuel efficiencies of 10.05 mpg and 10.37 mpg, respectively. Based on Table 4-10, it is estimated that 57,887 gallons of fuel will be consumed related to construction vendor trips (MHDTs) during full construction of the Project.

TABLE 4-10: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (MHDT)

Phase Name	Duration (Days)	Vendor Trips / Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2021						
Site Preparation	10	1	6.9	69	10.05	7
Grading	30	1	6.9	207	10.05	21
Building Construction	25	64	6.9	11,040	10.05	1,098
2022						
Building Construction	125	64	6.9	55,200	10.37	5,322
Paving	20	1	6.9	138	10.37	13
PROJECT CONSTRUCTION VENDOR (MHDT) FUEL CONSUMPTION						6,462

Tables 4-11 shows the estimated fuel economy of HHDTs accessing the Project site. As generated by EMFAC2017, an aggregated fuel economy of HHDTs ranging from model year 1974 to model years 2021 and 2022 are estimated to have fuel efficiencies of 6.89 mpg and 7.06 mpg, respectively. Based on Tables 4-11, fuel consumption from construction vendor trips (HHDTs) will total approximately 9,479 gallons.

TABLE 4-11: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (HHDT)

Phase Name	Duration (Days)	Vendor Trips / Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2021						
Site Preparation	10	1	6.9	69	6.89	10
Grading	30	1	6.9	207	6.89	30
Building Construction	25	64	6.9	11,040	6.89	1,603
2022						
Building Construction	125	64	6.9	55,200	7.06	7,816
Paving	20	1	6.9	138	7.06	20
PROJECT CONSTRUCTION VENDOR (HHDT) FUEL CONSUMPTION						9,479

It should be noted that Project construction vendor trips would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

4.3.6 CONSTRUCTION ENERGY EFFICIENCY/CONSERVATION MEASURES

Starting in 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures (BACM). For example, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Section 2449(d)(3) requires that "grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling." In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared.

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

4.4 OPERATIONAL ENERGY DEMANDS

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by passenger car and truck vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

4.4.1 TRANSPORTATION ENERGY DEMANDS

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site.

LIGHT-DUTY AUTOS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's AQIA, the Project would generate an estimated 1,577,511 annual VMT along area roadways for all LDAs with full build-out of the Project (22). Table 4-12 provides an estimated range of annual fuel consumption resulting from Project generated LDAs. Based on Table 4-12, it is estimated that 48,140 gallons of fuel will be consumed from Project generated LDA trips.

TABLE 4-12: PROJECT-GENERATED LDA VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
1,577,511	32.77	48,140

LIGHT-DUTY TRUCKS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's AQIA, the Project would generate an estimated 106,564 annual VMT along area roadways for all LDT1 vehicles with full build-out of the Project (22). Table 4-13 provides an estimated range of annual fuel consumption resulting from Project generated LDT1s. Based on Table 4-13, it is estimated that 3,868 gallons of fuel will be consumed from Project generated LDT1 trips.

TABLE 4-13: PROJECT-GENERATED LDT1 VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
106,564	27.55	3,868

Additionally, the Project would generate an estimated 537,933 annual VMT along area roadways for all LDT2 vehicles with full build-out of the Project (22). Table 4-14 provides an estimated range of annual fuel consumption resulting from Project generated LDT2s. Based on Table 4-14, it is estimated that 20,665 gallons of fuel will be consumed from Project generated LDT2 trips.

TABLE 4-14: PROJECT-GENERATED LDT2 VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
537,933	26.03	20,665

MEDIUM-DUTY TRUCKS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's AQIA, the Project would generate an estimated 333,493 annual VMT along area roadways for all Medium-Duty Trucks (MDV) vehicles with full build-out of the Project (22). Table 4-15 provides an estimated range of annual fuel consumption resulting from Project generated MDVs. Based on Table 4-15, it is estimated that 16,082 gallons of fuel will be consumed from Project generated MDV trips.

TABLE 4-15: PROJECT-GENERATED MDV TRAFFIC ANNUAL FUEL CONSUMPTION

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
333,493	20.74	16,082

LIGHT-HEAVY DUTY TRUCKS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's AQIA, the Project would generate an estimated 700,067 annual VMT along area roadways for all LHDTs with full build-out of the Project (22). Table 4-16 provides an estimated range of annual fuel consumption resulting from Project generated HHDTs. Based on Table 4-16, it is estimated that 48,645 gallons of fuel will be consumed from Project generated LHDT trips.

TABLE 4-16: PROJECT-GENERATED LHDT VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
700,067	14.39	48,645

MEDIUM-HEAVY DUTY TRUCKS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's AQIA, the Project would generate an estimated 443,584 annual VMT along area roadways for all MHDTs with full build-out of the Project (22). Table 4-17 provides an estimated range of annual fuel consumption resulting from Project generated HHDTs. Based on Table 4-17, it is estimated that 42,771 gallons of fuel will be consumed from Project generated MHDT trips.

TABLE 4-17: PROJECT-GENERATED MHDT VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
443,584	10.37	42,771

HEAVY-HEAVY DUTY TRUCKS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's AQIA, the Project would generate an estimated 1,593,025 annual VMT along area roadways for all HHDTs with full build-out of the Project (22). Table 4-18 provides an estimated range of annual fuel consumption resulting from Project generated HHDTs. Based on Table 4-18, it is estimated that 225,573 gallons of fuel will be consumed from Project generated HHDT trips.

TABLE 4-18: PROJECT-GENERATED HHDT VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
1,593,025	7.06	225,573

As summarized on Table 4-19 the Project will result in 5,292,178 annual VMT and an estimated annual fuel consumption of 405,743 gallons of fuel.

TABLE 4-19: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION (ALL VEHICLES)

Vehicle Type	Annual VMT	Estimated Annual Fuel Consumption (gallons)
LDA	1,577,511	48,140
LDT1	106,564	3,868
LDT2	537,933	20,665
MDV	333,493	16,082
LHDT	700,067	48,645
MHDT	443,584	42,771
HHDT	1,593,025	225,573
TOTAL (ALL VEHICLES)	5,292,178	405,743

4.4.2 FACILITY ENERGY DEMANDS

Project building operations activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied to the Project by MVU. As previously stated, the analysis herein assumes compliance with the 2019 Title 24 Standards. As such, the CalEEMod defaults for Title 24 – Electricity and Lighting Energy were reduced by 30% in order to reflect consistency with the 2019 Title 24

standard. Annual natural gas and electricity demands of the Project are summarized in Table 4-20 and provided in Appendices 4.2 through 4.3.

TABLE 4-20: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY

Natural Gas Demand	kBTU/year
Building 1	
Warehouse	295,531
High-Cube Cold Storage Warehouse	4,498,520
Parking	0
Landscape	0
Building 2	
Warehouse	101,353
High-Cube Cold Storage Warehouse	1,542,800
Parking	0
Landscape	0
TOTAL PROJECT NATURAL GAS DEMAND	6,438,204
Electricity Demand	kWh/year
Building 1	
Warehouse	392,664
High-Cube Cold Storage Warehouse	3,447,180
Parking	70,968
Landscape	0
Building 2	
Warehouse	134,664
High-Cube Cold Storage Warehouse	1,182,230
Parking	33,409
Landscape	0
TOTAL PROJECT ELECTRICITY DEMAND	5,261,115

kBTU – kilo-British Thermal Units

4.4.3 OPERATIONAL ENERGY EFFICIENCY/CONSERVATION MEASURES

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title24, California Green Building Standards Code).

ENHANCED VEHICLE FUEL EFFICIENCIES

Project annual fuel consumption estimates presented previously in Table 4-19 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands.

The Property Owner/Developer would comply with the City's transportation demand management ordinance.

4.5 SUMMARY

4.5.1 CONSTRUCTION ENERGY DEMANDS

The estimated power cost of on-site electricity usage during the construction of the Project is assumed to be approximately \$14,527.38. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction, after full Project build-out, is calculated to be approximately 85,609 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 36,736 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. BACMs inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 26,278 gallons of fuel. Additionally, fuel consumption from construction vendor trips (MHDTs and HHDTs) will total approximately 15,941 gallons. Diesel fuel would be supplied by City and regional commercial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2019 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (18). As

supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.5.2 OPERATIONAL ENERGY DEMANDS

TRANSPORTATION ENERGY DEMANDS

Annual vehicular trips and related VMT generated by the operation of the Project would result in a fuel demand of 405,743 gallons of fuel.

Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other industrial uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Ed., 2017); and CalEEMod. As such, Project operations would not result in excessive and wasteful vehicle trips and VMT, nor excess and wasteful vehicle energy consumption compared to other industrial land uses.

It should be noted that the state strategy for the transportation sector for medium and heavy-duty trucks is focused on making trucks more efficient and expediting truck turnover rather than reducing VMT from trucks. This is in contrast to the passenger vehicle component of the transportation sector where both per-capita VMT reductions and an increase in vehicle efficiency are forecasted to be needed to achieve the overall state emissions reductions goals.

Heavy duty trucks involved in goods movements are generally controlled on the technology side and through fleet turnover of older trucks and engines to newer and cleaner trucks and engines. The first battery-electric heavy-heavy duty trucks are being tested this year and SCAQMD is looking to integrate this new technology into large-scale truck operations. The following state strategies reduce GHG emissions from the medium and heavy-duty trucks:

- CARB's Mobile Source Strategy focuses on reducing GHGs through the transition to zero and low emission vehicles and from medium-duty and heavy-duty trucks.
- CARB's Sustainable Freight Action Plan establishes a goal to improve freight efficiency by 25 percent by 2030, deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.
- CARB's Emissions Reduction Plan for Ports and Goods Movement (Goods Movement Plan) in California focuses on reducing heavy-duty truck-related emissions focus on establishment of emissions standards for trucks, fleet turnover, truck retrofits, and restriction on truck idling (CARB 2006). While the focus of Goods Movement Plan is to reduce criteria air pollutant and air toxic emissions, the strategies to reduce these pollutants would also generally have a beneficial effect in reducing GHG emissions.
- CARB's On-Road Truck and Bus Regulation (2010) requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023 nearly all trucks and buses will need to have 2010 model year engines or equivalent (29).

- CARB's Heavy-Duty (Tractor-Trailer) GHG Regulation requires SmartWay tractor trailers that include idle-reduction technologies, aerodynamic technologies, and low-rolling resistant tires that would reduce fuel consumption and associated GHG emissions.

The proposed Project would implement project design features that would facilitate the accessibility, parking, and loading of trucks on site.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code and City requirements, the Project would promote the use of bicycles as an alternative mean of transportation by providing short-term and/or long-term bicycle parking accommodations. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

FACILITY ENERGY DEMANDS

Project facility operational energy demands are estimated at: 6,438,204 kBTU/year of natural gas; and 5,261,115 kWh/year of electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied by MVU. The Project proposes conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other industrial land use projects of similar scale and configuration.

Lastly, the Project will comply with the applicable Title 24 standards. Compliance itself with applicable Title 24 standards will ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary.

4.6 ENERGY FINDINGS AND RECOMMENDATIONS

4.6.1 ENERGY IMPACT 1

Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

As supported by the preceding analyses, a Project construction and operations would not result in the inefficient, wasteful or unnecessary consumption of energy. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California.

4.6.2 ENERGY IMPACT 2

Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The Project's consistency with the applicable state and local plans is discussed below.

CONSISTENCY WITH ISTE A

Transportation and access to the Project site is provided by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTE A because Southern California Association of Governments (SCAG) is not planning for intermodal facilities on or through the Project site.

CONSISTENCY WITH TEA-21

The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access, acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.

CONSISTENCY WITH IEPR

Electricity will be provided to the Project by MVU while natural gas is provided by SoCalGas. MVU's *Integrated Resource Plan* and SoCalGas's *2020 California Gas Report* builds on existing state programs and policies. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the IEPR.

CONSISTENCY WITH STATE OF CALIFORNIA ENERGY PLAN

The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access and takes advantage of existing infrastructure systems. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.

CONSISTENCY WITH CALIFORNIA CODE TITLE 24, PART 6, ENERGY EFFICIENCY STANDARDS

The 2019 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on January 1, 2020. It should be noted that the analysis herein assumes compliance with the 2019 Title 24 Standards. It should be noted that the CEC anticipates that nonresidential buildings will use approximately 30% less energy compared to the prior code (19). As such, the CalEEMod defaults for Title 24 – Electricity and Lighting Energy were reduced by 30% in order to reflect consistency with the 2019 Title 24 standard.

CONSISTENCY WITH AB 1493

AB 1493 is not applicable to the Project as it is a statewide measure establishing vehicle emissions standards. No feature of the Project would interfere with implementation of the requirements under AB 1493.

CONSISTENCY WITH RPS

California's Renewable Portfolio Standard is not applicable to the Project as it is a statewide measure that establishes a renewable energy mix. No feature of the Project would interfere with implementation of the requirements under RPS.

CONSISTENCY WITH SB 350

The proposed Project would use energy from MVU, which have committed to diversify their portfolio of energy sources by increasing energy from wind and solar sources. No feature of the Project would interfere with implementation of SB 350. Additionally, the Project would be designed and constructed to implement the energy efficiency measures for new industrial developments and would include several measures designed to reduce energy consumption.

As shown above, the Project would not conflict with any of the state or local plans. As such, a less than significant impact is expected.

4.6.3 ENERGY IMPACT 3

Would the Project achieve the goal of energy conservation by:

- *Decreasing overall per capita energy consumption.*
- *Decreasing reliance on fossil fuels such as coal, natural gas and oil.*
- *Increasing reliance on renewable energy sources.*

As previously stated, the proposed Project is subject to California Building Code requirements. New buildings must achieve compliance with 2019 Building and Energy Efficiency Standards and the 2019 California Green Building Standards requirements. The CEC anticipates that nonresidential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code (19). It should be noted that though the Project will comply with the applicable Title 24 standards which would ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary.

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

5 REFERENCES

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

6 CERTIFICATIONS

The contents of this energy analysis report represent an accurate depiction of the environmental impacts associated with the proposed Compass Danbe Centerpointe. The information contained in this energy analysis report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

Haseeb Qureshi
Associate Principal
Urban Crossroads, Inc.
hqureshi@urbanxroads.com

EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 4.1:

CALEEMOD PROJECT ANNUAL CONSTRUCTION EMISSIONS MODEL OUTPUTS

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Compass Danbe Centerpointe (Construction - Unmitigated)
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	118.95	1000sqft	2.73	118,947.00	0
Unrefrigerated Warehouse-No Rail	277.54	1000sqft	6.37	277,541.00	0
Other Non-Asphalt Surfaces	73.97	1000sqft	1.70	73,972.00	0
Parking Lot	298.22	1000sqft	6.85	298,221.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use -

Construction Phase - Construction is anticipated to occur over an 8-month timeframe.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment -

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Trips and VMT - Vendor Trips have been adjusted to account for Water Trucks.

Grading - This analysis conservatively assumes that up to 10 acres will be disturbed per day.

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation - Rule 403

Table Name	Column Name	Default Value	New Value
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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblEnergyUse	LightingElect	1.17	0.00
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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

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tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.68	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	27,507,187.50	0.00
tblWater	IndoorWaterUseRate	64,181,125.00	0.00

2.0 Emissions Summary

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1487	1.5522	0.9674	2.5700e-003	0.4518	0.0609	0.5127	0.1381	0.0563	0.1944	0.0000	229.6927	229.6927	0.0502	0.0000	230.9479
2022	1.2143	1.9575	2.0456	6.1800e-003	0.2885	0.0645	0.3530	0.0778	0.0606	0.1384	0.0000	561.3195	561.3195	0.0631	0.0000	562.8979
Maximum	1.2143	1.9575	2.0456	6.1800e-003	0.4518	0.0645	0.5127	0.1381	0.0606	0.1944	0.0000	561.3195	561.3195	0.0631	0.0000	562.8979

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1487	1.5522	0.9674	2.5700e-003	0.2122	0.0609	0.2731	0.0636	0.0563	0.1199	0.0000	229.6925	229.6925	0.0502	0.0000	230.9477
2022	1.2143	1.9575	2.0456	6.1800e-003	0.2885	0.0645	0.3530	0.0778	0.0606	0.1384	0.0000	561.3193	561.3193	0.0631	0.0000	562.8977
Maximum	1.2143	1.9575	2.0456	6.1800e-003	0.2885	0.0645	0.3530	0.0778	0.0606	0.1384	0.0000	561.3193	561.3193	0.0631	0.0000	562.8977

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	32.36	0.00	27.68	34.53	0.00	22.40	0.00	0.00	0.00	0.00	0.00	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-4-2021	1-3-2022	1.6867	1.6867
2	1-4-2022	4-3-2022	1.0339	1.0339
3	4-4-2022	7-3-2022	2.0829	2.0829
		Highest	2.0829	2.0829

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.6466	9.0000e-005	9.8300e-003	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.6466	9.0000e-005	9.8300e-003	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/4/2021	10/15/2021	5	10	
2	Grading	Grading	10/16/2021	11/26/2021	5	30	
3	Building Construction	Building Construction	11/27/2021	6/24/2022	5	150	
4	Paving	Paving	5/28/2022	6/24/2022	5	20	
5	Architectural Coating	Architectural Coating	5/1/2022	6/24/2022	5	40	

Acres of Grading (Site Preparation Phase): 100

Acres of Grading (Grading Phase): 300

Acres of Paving: 8.55

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 594,732; Non-Residential Outdoor: 198,244; Striped Parking Area: 22,332 (Architectural Coating – sqft)

OffRoad Equipment

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	323.00	128.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	65.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1434	0.0000	0.1434	0.0554	0.0000	0.0554	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0267	0.3039	0.1093	2.8000e-004		0.0132	0.0132		0.0122	0.0122	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2568
Total	0.0267	0.3039	0.1093	2.8000e-004	0.1434	0.0132	0.1566	0.0554	0.0122	0.0676	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2568

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	9.3000e-004	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2440	0.2440	2.0000e-005	0.0000	0.2444
Worker	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004
Total	4.1000e-004	1.1900e-003	3.0100e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0439	1.0439	4.0000e-005	0.0000	1.0449

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0559	0.0000	0.0559	0.0216	0.0000	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0267	0.3039	0.1093	2.8000e-004		0.0132	0.0132		0.0122	0.0122	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2567
Total	0.0267	0.3039	0.1093	2.8000e-004	0.0559	0.0132	0.0691	0.0216	0.0122	0.0338	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2567

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	9.3000e-004	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2440	0.2440	2.0000e-005	0.0000	0.2444
Worker	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004
Total	4.1000e-004	1.1900e-003	3.0100e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0439	1.0439	4.0000e-005	0.0000	1.0449

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2494	0.0000	0.2494	0.0668	0.0000	0.0668	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0738	0.8482	0.4684	1.0700e-003		0.0343	0.0343		0.0316	0.0316	0.0000	94.2470	94.2470	0.0305	0.0000	95.0090
Total	0.0738	0.8482	0.4684	1.0700e-003	0.2494	0.0343	0.2837	0.0668	0.0316	0.0984	0.0000	94.2470	94.2470	0.0305	0.0000	95.0090

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Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	2.8000e-003	5.4000e-004	1.0000e-005	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7319	0.7319	6.0000e-005	0.0000	0.7333
Worker	1.2900e-003	8.7000e-004	9.4400e-003	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.6665	2.6665	6.0000e-005	0.0000	2.6681
Total	1.3600e-003	3.6700e-003	9.9800e-003	4.0000e-005	3.4900e-003	3.0000e-005	3.5100e-003	9.3000e-004	3.0000e-005	9.5000e-004	0.0000	3.3985	3.3985	1.2000e-004	0.0000	3.4014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0973	0.0000	0.0973	0.0261	0.0000	0.0261	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0738	0.8482	0.4684	1.0700e-003		0.0343	0.0343		0.0316	0.0316	0.0000	94.2469	94.2469	0.0305	0.0000	95.0089
Total	0.0738	0.8482	0.4684	1.0700e-003	0.0973	0.0343	0.1316	0.0261	0.0316	0.0576	0.0000	94.2469	94.2469	0.0305	0.0000	95.0089

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	2.8000e-003	5.4000e-004	1.0000e-005	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7319	0.7319	6.0000e-005	0.0000	0.7333
Worker	1.2900e-003	8.7000e-004	9.4400e-003	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.6665	2.6665	6.0000e-005	0.0000	2.6681
Total	1.3600e-003	3.6700e-003	9.9800e-003	4.0000e-005	3.4900e-003	3.0000e-005	3.5100e-003	9.3000e-004	3.0000e-005	9.5000e-004	0.0000	3.3985	3.3985	1.2000e-004	0.0000	3.4014

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0253	0.2344	0.2209	3.6000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	31.0262	31.0262	7.6600e-003	0.0000	31.2176
Total	0.0253	0.2344	0.2209	3.6000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	31.0262	31.0262	7.6600e-003	0.0000	31.2176

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8200e-003	0.1492	0.0287	4.1000e-004	0.0101	2.9000e-004	0.0104	2.9200e-003	2.7000e-004	3.1900e-003	0.0000	39.0357	39.0357	2.9800e-003	0.0000	39.1102
Worker	0.0173	0.0117	0.1271	4.0000e-004	0.0444	2.7000e-004	0.0446	0.0118	2.4000e-004	0.0120	0.0000	35.8872	35.8872	8.4000e-004	0.0000	35.9081
Total	0.0211	0.1609	0.1558	8.1000e-004	0.0545	5.6000e-004	0.0550	0.0147	5.1000e-004	0.0152	0.0000	74.9229	74.9229	3.8200e-003	0.0000	75.0182

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0253	0.2344	0.2209	3.6000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	31.0262	31.0262	7.6600e-003	0.0000	31.2176
Total	0.0253	0.2344	0.2209	3.6000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	31.0262	31.0262	7.6600e-003	0.0000	31.2176

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8200e-003	0.1492	0.0287	4.1000e-004	0.0101	2.9000e-004	0.0104	2.9200e-003	2.7000e-004	3.1900e-003	0.0000	39.0357	39.0357	2.9800e-003	0.0000	39.1102
Worker	0.0173	0.0117	0.1271	4.0000e-004	0.0444	2.7000e-004	0.0446	0.0118	2.4000e-004	0.0120	0.0000	35.8872	35.8872	8.4000e-004	0.0000	35.9081
Total	0.0211	0.1609	0.1558	8.1000e-004	0.0545	5.6000e-004	0.0550	0.0147	5.1000e-004	0.0152	0.0000	74.9229	74.9229	3.8200e-003	0.0000	75.0182

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1134	1.0479	1.0900	1.8000e-003		0.0540	0.0540		0.0508	0.0508	0.0000	155.1939	155.1939	0.0381	0.0000	156.1451
Total	0.1134	1.0479	1.0900	1.8000e-003		0.0540	0.0540		0.0508	0.0508	0.0000	155.1939	155.1939	0.0381	0.0000	156.1451

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0178	0.7028	0.1337	2.0200e-003	0.0505	1.2000e-003	0.0517	0.0146	1.1500e-003	0.0157	0.0000	193.4997	193.4997	0.0141	0.0000	193.8523
Worker	0.0811	0.0525	0.5854	1.9100e-003	0.2219	1.2900e-003	0.2232	0.0589	1.1900e-003	0.0601	0.0000	172.8880	172.8880	3.7600e-003	0.0000	172.9819
Total	0.0989	0.7552	0.7191	3.9300e-003	0.2724	2.4900e-003	0.2749	0.0735	2.3400e-003	0.0758	0.0000	366.3876	366.3876	0.0179	0.0000	366.8342

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1134	1.0479	1.0900	1.8000e-003		0.0540	0.0540		0.0508	0.0508	0.0000	155.1937	155.1937	0.0381	0.0000	156.1450
Total	0.1134	1.0479	1.0900	1.8000e-003		0.0540	0.0540		0.0508	0.0508	0.0000	155.1937	155.1937	0.0381	0.0000	156.1450

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0178	0.7028	0.1337	2.0200e-003	0.0505	1.2000e-003	0.0517	0.0146	1.1500e-003	0.0157	0.0000	193.4997	193.4997	0.0141	0.0000	193.8523
Worker	0.0811	0.0525	0.5854	1.9100e-003	0.2219	1.2900e-003	0.2232	0.0589	1.1900e-003	0.0601	0.0000	172.8880	172.8880	3.7600e-003	0.0000	172.9819
Total	0.0989	0.7552	0.7191	3.9300e-003	0.2724	2.4900e-003	0.2749	0.0735	2.3400e-003	0.0758	0.0000	366.3876	366.3876	0.0179	0.0000	366.8342

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	8.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0200	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.7600e-003	3.3000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.4838	0.4838	4.0000e-005	0.0000	0.4846
Worker	6.0000e-004	3.9000e-004	4.3500e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2846	1.2846	3.0000e-005	0.0000	1.2853
Total	6.4000e-004	2.1500e-003	4.6800e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.7684	1.7684	7.0000e-005	0.0000	1.7699

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	8.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0200	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.7600e-003	3.3000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.4838	0.4838	4.0000e-005	0.0000	0.4846
Worker	6.0000e-004	3.9000e-004	4.3500e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2846	1.2846	3.0000e-005	0.0000	1.2853
Total	6.4000e-004	2.1500e-003	4.6800e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.7684	1.7684	7.0000e-005	0.0000	1.7699

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9706					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4500e-003	0.0376	0.0484	8.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	6.8087	6.8087	4.4000e-004	0.0000	6.8198
Total	0.9761	0.0376	0.0484	8.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	6.8087	6.8087	4.4000e-004	0.0000	6.8198

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2200e-003	3.3800e-003	0.0377	1.2000e-004	0.0143	8.0000e-005	0.0144	3.7900e-003	8.0000e-005	3.8700e-003	0.0000	11.1333	11.1333	2.4000e-004	0.0000	11.1394
Total	5.2200e-003	3.3800e-003	0.0377	1.2000e-004	0.0143	8.0000e-005	0.0144	3.7900e-003	8.0000e-005	3.8700e-003	0.0000	11.1333	11.1333	2.4000e-004	0.0000	11.1394

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9706					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4500e-003	0.0376	0.0484	8.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	6.8087	6.8087	4.4000e-004	0.0000	6.8198
Total	0.9761	0.0376	0.0484	8.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	6.8087	6.8087	4.4000e-004	0.0000	6.8198

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2200e-003	3.3800e-003	0.0377	1.2000e-004	0.0143	8.0000e-005	0.0144	3.7900e-003	8.0000e-005	3.8700e-003	0.0000	11.1333	11.1333	2.4000e-004	0.0000	11.1394
Total	5.2200e-003	3.3800e-003	0.0377	1.2000e-004	0.0143	8.0000e-005	0.0144	3.7900e-003	8.0000e-005	3.8700e-003	0.0000	11.1333	11.1333	2.4000e-004	0.0000	11.1394

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Unrefrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203
Unmitigated	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1890					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4568					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203
Total	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1890					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4568					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203
Total	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203

7.0 Water Detail

7.1 Mitigation Measures Water

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

Land Use	Waste Disposed tons	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Equipment Type	Number
----------------	--------

11.0 Vegetation

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 4.2:

CALEEMOD PROJECT ANNUAL OPERATIONS (PASSENGER CARS) EMISSIONS MODEL OUTPUTS

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Compass Danbe Center (Building 1 Operations - Passenger Cars)
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	88.57	1000sqft	2.03	88,571.00	0
Unrefrigerated Warehouse-No Rail	206.67	1000sqft	4.75	206,665.00	0
Other Non-Asphalt Surfaces	45.03	1000sqft	1.03	45,032.00	0
Parking Lot	202.77	1000sqft	4.66	202,767.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Total Building 1 Area is 12.47 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Passenger Car Fleet Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, and MDV).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.19	0.21

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LotAcreage	4.74	4.75
tblLandUse	LotAcreage	4.65	4.66
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.03	2.2560e-003
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.38
tblVehicleTrips	ST_TR	1.68	0.11
tblVehicleTrips	SU_TR	1.68	1.38
tblVehicleTrips	SU_TR	1.68	0.04
tblVehicleTrips	WD_TR	1.68	1.38
tblVehicleTrips	WD_TR	1.68	1.28

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Energy	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	1,501.898 ₄	1,501.898 ₄	0.0564	0.0153	1,507.876 ₅
Mobile	0.1276	0.1441	1.8448	6.1200e-003	0.7111	3.2200e-003	0.7144	0.1888	2.9700e-003	0.1917	0.0000	565.1798	565.1798	0.0123	0.0000	565.4882
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	56.3341	0.0000	56.3341	3.3293	0.0000	139.5652
Water						0.0000	0.0000		0.0000	0.0000	21.6595	283.2445	304.9041	2.2363	0.0550	377.1870
Total	1.3995	0.6105	2.1875	8.1100e-003	0.7111	0.0291	0.7402	0.1888	0.0282	0.2169	77.9936	2,401.128₄	2,479.122₀	5.6508	0.0703	2,641.334₁

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Energy	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	1,501.8984	1,501.8984	0.0564	0.0153	1,507.8765
Mobile	0.1276	0.1441	1.8448	6.1200e-003	0.7111	3.2200e-003	0.7144	0.1888	2.9700e-003	0.1917	0.0000	565.1798	565.1798	0.0123	0.0000	565.4882
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	56.3341	0.0000	56.3341	3.3293	0.0000	139.5652
Water						0.0000	0.0000		0.0000	0.0000	21.6595	283.2445	304.9041	2.2363	0.0550	377.1870
Total	1.3995	0.6105	2.1875	8.1100e-003	0.7111	0.0291	0.7402	0.1888	0.0282	0.2169	77.9936	2,401.1284	2,479.1220	5.6508	0.0703	2,641.3341

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/29/2021	5	20	

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1276	0.1441	1.8448	6.1200e-003	0.7111	3.2200e-003	0.7144	0.1888	2.9700e-003	0.1917	0.0000	565.1798	565.1798	0.0123	0.0000	565.4882
Unmitigated	0.1276	0.1441	1.8448	6.1200e-003	0.7111	3.2200e-003	0.7144	0.1888	2.9700e-003	0.1917	0.0000	565.1798	565.1798	0.0123	0.0000	565.4882

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	122.00	122.00	122.00	737,159	737,159
Unrefrigerated Warehouse-No Rail	263.99	22.63	9.05	1,166,745	1,166,745
Total	385.99	144.63	131.05	1,903,904	1,903,904

4.3 Trip Type Information

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,246.0695	1,246.0695	0.0514	0.0106	1,250.5274
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,246.0695	1,246.0695	0.0514	0.0106	1,250.5274
NaturalGas Mitigated	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491
NaturalGas Unmitigated	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.49852e+006	0.0243	0.2205	0.1852	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	240.0582	240.0582	4.6000e-003	4.4000e-003	241.4848
Unrefrigerated Warehouse-No Rail	295531	1.5900e-003	0.0145	0.0122	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	15.7707	15.7707	3.0000e-004	2.9000e-004	15.8644
Total		0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.49852e+006	0.0243	0.2205	0.1852	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	240.0582	240.0582	4.6000e-003	4.4000e-003	241.4848
Unrefrigerated Warehouse-No Rail	295531	1.5900e-003	0.0145	0.0122	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	15.7707	15.7707	3.0000e-004	2.9000e-004	15.8644
Total		0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	70968.4	22.6121	9.3000e-004	1.9000e-004	22.6930
Refrigerated Warehouse-No Rail	3.44718e+006	1,098.3465	0.0453	9.3800e-003	1,102.2758
Unrefrigerated Warehouse-No Rail	392664	125.1110	5.1700e-003	1.0700e-003	125.5586
Total		1,246.0695	0.0514	0.0106	1,250.5274

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	70968.4	22.6121	9.3000e-004	1.9000e-004	22.6930
Refrigerated Warehouse-No Rail	3.44718e+006	1,098.3465	0.0453	9.3800e-003	1,102.2758
Unrefrigerated Warehouse-No Rail	392664	125.1110	5.1700e-003	1.0700e-003	125.5586
Total		1,246.0695	0.0514	0.0106	1,250.5274

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Unmitigated	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.5000e-004	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Total	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.5000e-004	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Total	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

7.0 Water Detail

7.1 Mitigation Measures Water

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	304.9041	2.2363	0.0550	377.1870
Unmitigated	304.9041	2.2363	0.0550	377.1870

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	20.4818 / 0	91.4723	0.6709	0.0165	113.1574
Unrefrigerated Warehouse-No Rail	47.7901 / 0	213.4318	1.5654	0.0385	264.0296
Total		304.9041	2.2363	0.0549	377.1870

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	20.4818 / 0	91.4723	0.6709	0.0165	113.1574
Unrefrigerated Warehouse-No Rail	47.7901 / 0	213.4318	1.5654	0.0385	264.0296
Total		304.9041	2.2363	0.0549	377.1870

8.0 Waste Detail

8.1 Mitigation Measures Waste

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	56.3341	3.3293	0.0000	139.5652
Unmitigated	56.3341	3.3293	0.0000	139.5652

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	83.26	16.9010	0.9988	0.0000	41.8716
Unrefrigerated Warehouse-No Rail	194.26	39.4330	2.3304	0.0000	97.6937
Total		56.3341	3.3292	0.0000	139.5652

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	83.26	16.9010	0.9988	0.0000	41.8716
Unrefrigerated Warehouse-No Rail	194.26	39.4330	2.3304	0.0000	97.6937
Total		56.3341	3.3292	0.0000	139.5652

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/Backhoes	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Total	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars)
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	30.38	1000sqft	0.70	30,376.00	0
Unrefrigerated Warehouse-No Rail	70.88	1000sqft	1.63	70,876.00	0
Other Non-Asphalt Surfaces	28.94	1000sqft	0.66	28,940.00	0
Parking Lot	95.45	1000sqft	2.19	95,454.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Total Building 2 Area is 5.18 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Passenger Car Fleet Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, and MDV).

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.38
tblVehicleTrips	ST_TR	1.68	0.11
tblVehicleTrips	SU_TR	1.68	1.38
tblVehicleTrips	SU_TR	1.68	0.04
tblVehicleTrips	WD_TR	1.68	1.38
tblVehicleTrips	WD_TR	1.68	1.27

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Energy	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	517.9749	517.9749	0.0194	5.2800e-003	520.0355
Mobile	0.0437	0.0493	0.6314	2.1000e-003	0.2434	1.1000e-003	0.2445	0.0646	1.0200e-003	0.0656	0.0000	193.4289	193.4289	4.2200e-003	0.0000	193.5344
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	19.3227	0.0000	19.3227	1.1419	0.0000	47.8712
Water						0.0000	0.0000		0.0000	0.0000	7.4289	97.1491	104.5781	0.7670	0.0189	129.3702
Total	0.4977	0.3613	0.8404	3.1600e-003	0.2434	0.0152	0.2586	0.0646	0.0145	0.0791	26.7517	859.3507	886.1023	1.9491	0.0241	942.0200

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Energy	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	517.9749	517.9749	0.0194	5.2800e-003	520.0355
Mobile	0.0437	0.0493	0.6314	2.1000e-003	0.2434	1.1000e-003	0.2445	0.0646	1.0200e-003	0.0656	0.0000	193.4289	193.4289	4.2200e-003	0.0000	193.5344
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	19.3227	0.0000	19.3227	1.1419	0.0000	47.8712
Water						0.0000	0.0000		0.0000	0.0000	7.4289	97.1491	104.5781	0.7670	0.0189	129.3702
Total	0.4977	0.3613	0.8404	3.1600e-003	0.2434	0.0152	0.2586	0.0646	0.0145	0.0791	26.7517	859.3507	886.1023	1.9491	0.0241	942.0200

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0437	0.0493	0.6314	2.1000e-003	0.2434	1.1000e-003	0.2445	0.0646	1.0200e-003	0.0656	0.0000	193.4289	193.4289	4.2200e-003	0.0000	193.5344
Unmitigated	0.0437	0.0493	0.6314	2.1000e-003	0.2434	1.1000e-003	0.2445	0.0646	1.0200e-003	0.0656	0.0000	193.4289	193.4289	4.2200e-003	0.0000	193.5344

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	42.00	42.00	42.00	253,786	253,786
Unrefrigerated Warehouse-No Rail	90.00	7.76	3.10	397,812	397,812
Total	132.00	49.76	45.11	651,598	651,598

4.3 Trip Type Information

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.2368	430.2368	0.0178	3.6700e-003	431.7760
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.2368	430.2368	0.0178	3.6700e-003	431.7760
NaturalGas Mitigated	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595
NaturalGas Unmitigated	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.5428e+006	8.3200e-003	0.0756	0.0635	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003	0.0000	82.3295	82.3295	1.5800e-003	1.5100e-003	82.8188
Unrefrigerated Warehouse-No Rail	101353	5.5000e-004	4.9700e-003	4.1700e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4086	5.4086	1.0000e-004	1.0000e-004	5.4407
Total		8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.5428e+006	8.3200e-003	0.0756	0.0635	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003	0.0000	82.3295	82.3295	1.5800e-003	1.5100e-003	82.8188
Unrefrigerated Warehouse-No Rail	101353	5.5000e-004	4.9700e-003	4.1700e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4086	5.4086	1.0000e-004	1.0000e-004	5.4407
Total		8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33408.9	10.6448	4.4000e-004	9.0000e-005	10.6829
Refrigerated Warehouse-No Rail	1.18223e+006	376.6851	0.0156	3.2200e-003	378.0327
Unrefrigerated Warehouse-No Rail	134664	42.9070	1.7700e-003	3.7000e-004	43.0605
Total		430.2368	0.0178	3.6800e-003	431.7760

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33408.9	10.6448	4.4000e-004	9.0000e-005	10.6829
Refrigerated Warehouse-No Rail	1.18223e+006	376.6851	0.0156	3.2200e-003	378.0327
Unrefrigerated Warehouse-No Rail	134664	42.9070	1.7700e-003	3.7000e-004	43.0605
Total		430.2368	0.0178	3.6800e-003	431.7760

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Unmitigated	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Total	0.4229	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Total	0.4229	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	104.5781	0.7670	0.0189	129.3702
Unmitigated	104.5781	0.7670	0.0189	129.3702

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	7.02538 / 0	31.3755	0.2301	5.6500e-003	38.8136
Unrefrigerated Warehouse-No Rail	16.391 / 0	73.2026	0.5369	0.0132	90.5566
Total		104.5781	0.7670	0.0188	129.3702

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	7.02538 / 0	31.3755	0.2301	5.6500e-003	38.8136
Unrefrigerated Warehouse-No Rail	16.391 / 0	73.2026	0.5369	0.0132	90.5566
Total		104.5781	0.7670	0.0188	129.3702

8.0 Waste Detail

8.1 Mitigation Measures Waste

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.3227	1.1419	0.0000	47.8712
Unmitigated	19.3227	1.1419	0.0000	47.8712

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	28.56	5.7974	0.3426	0.0000	14.3629
Unrefrigerated Warehouse-No Rail	66.63	13.5253	0.7993	0.0000	33.5083
Total		19.3227	1.1419	0.0000	47.8712

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	28.56	5.7974	0.3426	0.0000	14.3629
Unrefrigerated Warehouse-No Rail	66.63	13.5253	0.7993	0.0000	33.5083
Total		19.3227	1.1419	0.0000	47.8712

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/Backhoes	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Total	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 4.3:

CALEEMOD PROJECT ANNUAL OPERATIONS (TRUCKS) EMISSIONS MODEL OUTPUTS

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

**Compass Danbe Center (Building 1 Operations - Trucks)
Riverside-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	88.57	1000sqft	2.03	88,571.00	0
Unrefrigerated Warehouse-No Rail	206.67	1000sqft	4.75	206,665.00	0
Other Non-Asphalt Surfaces	45.03	1000sqft	1.03	45,032.00	0
Parking Lot	202.77	1000sqft	4.66	202,767.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Total Building 1 Area is 12.47 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Truck Fleet Mix estimated by rationing the Trip Rates for each truck type based on information provided in the Traffic Analysis.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.53
tblFleetMix	HHD	0.07	0.63
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.35
tblFleetMix	LHD1	0.02	0.16
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.12
tblFleetMix	MHD	0.02	0.20
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LotAcreage	4.74	4.75
tblLandUse	LotAcreage	4.65	4.66
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.77
tblVehicleTrips	ST_TR	1.68	0.04
tblVehicleTrips	SU_TR	1.68	0.77

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleTrips	SU_TR	1.68	0.02
tblVehicleTrips	WD_TR	1.68	0.77
tblVehicleTrips	WD_TR	1.68	0.47

2.0 Emissions Summary

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Energy	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	1,501.8984	1,501.8984	0.0564	0.0153	1,507.8765
Mobile	0.1420	5.4039	1.1064	0.0234	0.8854	0.0659	0.9513	0.2487	0.0630	0.3117	0.0000	2,257.9895	2,257.9895	0.0369	0.0000	2,258.9110
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	56.3341	0.0000	56.3341	3.3293	0.0000	139.5652
Water						0.0000	0.0000		0.0000	0.0000	21.6595	283.2445	304.9041	2.2363	0.0550	377.1870
Total	1.4139	5.8703	1.4492	0.0254	0.8854	0.0917	0.9771	0.2487	0.0882	0.3369	77.9936	4,093.9381	4,171.9317	5.6753	0.0703	4,334.7569

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Energy	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	1,501.8984	1,501.8984	0.0564	0.0153	1,507.8765
Mobile	0.1420	5.4039	1.1064	0.0234	0.8854	0.0659	0.9513	0.2487	0.0630	0.3117	0.0000	2,257.9895	2,257.9895	0.0369	0.0000	2,258.9110
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	56.3341	0.0000	56.3341	3.3293	0.0000	139.5652
Water						0.0000	0.0000		0.0000	0.0000	21.6595	283.2445	304.9041	2.2363	0.0550	377.1870
Total	1.4139	5.8703	1.4492	0.0254	0.8854	0.0917	0.9771	0.2487	0.0882	0.3369	77.9936	4,093.9381	4,171.9317	5.6753	0.0703	4,334.7569

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1420	5.4039	1.1064	0.0234	0.8854	0.0659	0.9513	0.2487	0.0630	0.3117	0.0000	2,257.9895	2,257.9895	0.0369	0.0000	2,258.9110
Unmitigated	0.1420	5.4039	1.1064	0.0234	0.8854	0.0659	0.9513	0.2487	0.0630	0.3117	0.0000	2,257.9895	2,257.9895	0.0369	0.0000	2,258.9110

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	68.00	68.00	68.00	990,021	990,021
Unrefrigerated Warehouse-No Rail	98.00	8.37	3.35	1,043,579	1,043,579
Total	166.00	76.37	71.34	2,033,600	2,033,600

4.3 Trip Type Information

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.353000	0.000000	0.117600	0.529400	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.163200	0.000000	0.204100	0.632700	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,246.0695	1,246.0695	0.0514	0.0106	1,250.5274
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,246.0695	1,246.0695	0.0514	0.0106	1,250.5274
NaturalGas Mitigated	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491
NaturalGas Unmitigated	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.49852e+006	0.0243	0.2205	0.1852	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	240.0582	240.0582	4.6000e-003	4.4000e-003	241.4848
Unrefrigerated Warehouse-No Rail	295531	1.5900e-003	0.0145	0.0122	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	15.7707	15.7707	3.0000e-004	2.9000e-004	15.8644
Total		0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.49852e+006	0.0243	0.2205	0.1852	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	240.0582	240.0582	4.6000e-003	4.4000e-003	241.4848
Unrefrigerated Warehouse-No Rail	295531	1.5900e-003	0.0145	0.0122	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	15.7707	15.7707	3.0000e-004	2.9000e-004	15.8644
Total		0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	70968.4	22.6121	9.3000e-004	1.9000e-004	22.6930
Refrigerated Warehouse-No Rail	3.44718e+006	1,098.3465	0.0453	9.3800e-003	1,102.2758
Unrefrigerated Warehouse-No Rail	392664	125.1110	5.1700e-003	1.0700e-003	125.5586
Total		1,246.0695	0.0514	0.0106	1,250.5274

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	70968.4	22.6121	9.3000e-004	1.9000e-004	22.6930
Refrigerated Warehouse-No Rail	3.44718e+006	1,098.3465	0.0453	9.3800e-003	1,102.2758
Unrefrigerated Warehouse-No Rail	392664	125.1110	5.1700e-003	1.0700e-003	125.5586
Total		1,246.0695	0.0514	0.0106	1,250.5274

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Unmitigated	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.5000e-004	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Total	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.5000e-004	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Total	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

7.0 Water Detail

7.1 Mitigation Measures Water

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	304.9041	2.2363	0.0550	377.1870
Unmitigated	304.9041	2.2363	0.0550	377.1870

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	20.4818 / 0	91.4723	0.6709	0.0165	113.1574
Unrefrigerated Warehouse-No Rail	47.7901 / 0	213.4318	1.5654	0.0385	264.0296
Total		304.9041	2.2363	0.0549	377.1870

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	20.4818 / 0	91.4723	0.6709	0.0165	113.1574
Unrefrigerated Warehouse-No Rail	47.7901 / 0	213.4318	1.5654	0.0385	264.0296
Total		304.9041	2.2363	0.0549	377.1870

8.0 Waste Detail

8.1 Mitigation Measures Waste

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	56.3341	3.3293	0.0000	139.5652
Unmitigated	56.3341	3.3293	0.0000	139.5652

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	83.26	16.9010	0.9988	0.0000	41.8716
Unrefrigerated Warehouse-No Rail	194.26	39.4330	2.3304	0.0000	97.6937
Total		56.3341	3.3292	0.0000	139.5652

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	83.26	16.9010	0.9988	0.0000	41.8716
Unrefrigerated Warehouse-No Rail	194.26	39.4330	2.3304	0.0000	97.6937
Total		56.3341	3.3292	0.0000	139.5652

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/Backhoes	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Total	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

Compass Danbe Centerpointe (Building 2 Operations - Trucks)
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	30.38	1000sqft	0.70	30,376.00	0
Unrefrigerated Warehouse-No Rail	70.88	1000sqft	1.63	70,876.00	0
Other Non-Asphalt Surfaces	28.94	1000sqft	0.66	28,940.00	0
Parking Lot	95.45	1000sqft	2.19	95,454.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Total Building 2 Area is 5.18 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Truck Fleet Mix estimated by rationing the Trip Rates for each truck type based on information provided in the Traffic Analysis.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.55
tblFleetMix	HHD	0.07	0.61
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.36
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.09
tblFleetMix	MHD	0.02	0.22
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.72
tblVehicleTrips	ST_TR	1.68	0.04
tblVehicleTrips	SU_TR	1.68	0.72
tblVehicleTrips	SU_TR	1.68	0.02
tblVehicleTrips	WD_TR	1.68	0.72

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleTrips	WD_TR	1.68	0.51
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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Energy	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	517.9749	517.9749	0.0194	5.2800e-003	520.0355
Mobile	0.0491	1.8670	0.3826	8.0900e-003	0.3061	0.0228	0.3289	0.0860	0.0218	0.1078	0.0000	780.1183	780.1183	0.0127	0.0000	780.4364
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	19.3227	0.0000	19.3227	1.1419	0.0000	47.8712
Water						0.0000	0.0000		0.0000	0.0000	7.4289	97.1491	104.5781	0.7670	0.0189	129.3702
Total	0.5031	2.1789	0.5917	9.1500e-003	0.3061	0.0369	0.3430	0.0860	0.0353	0.1213	26.7517	1,446.0401	1,472.7917	1.9576	0.0241	1,528.9221

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Energy	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	517.9749	517.9749	0.0194	5.2800e-003	520.0355
Mobile	0.0491	1.8670	0.3826	8.0900e-003	0.3061	0.0228	0.3289	0.0860	0.0218	0.1078	0.0000	780.1183	780.1183	0.0127	0.0000	780.4364
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	19.3227	0.0000	19.3227	1.1419	0.0000	47.8712
Water						0.0000	0.0000		0.0000	0.0000	7.4289	97.1491	104.5781	0.7670	0.0189	129.3702
Total	0.5031	2.1789	0.5917	9.1500e-003	0.3061	0.0369	0.3430	0.0860	0.0353	0.1213	26.7517	1,446.0401	1,472.7917	1.9576	0.0241	1,528.9221

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0491	1.8670	0.3826	8.0900e-003	0.3061	0.0228	0.3289	0.0860	0.0218	0.1078	0.0000	780.1183	780.1183	0.0127	0.0000	780.4364
Unmitigated	0.0491	1.8670	0.3826	8.0900e-003	0.3061	0.0228	0.3289	0.0860	0.0218	0.1078	0.0000	780.1183	780.1183	0.0127	0.0000	780.4364

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	22.00	22.00	22.00	320,339	320,339
Unrefrigerated Warehouse-No Rail	36.00	2.87	1.15	382,737	382,737
Total	58.00	24.87	23.15	703,077	703,077

4.3 Trip Type Information

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.363600	0.000000	0.090900	0.545500	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.166700	0.000000	0.222200	0.611100	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.2368	430.2368	0.0178	3.6700e-003	431.7760
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.2368	430.2368	0.0178	3.6700e-003	431.7760
NaturalGas Mitigated	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595
NaturalGas Unmitigated	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.5428e+006	8.3200e-003	0.0756	0.0635	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003	0.0000	82.3295	82.3295	1.5800e-003	1.5100e-003	82.8188
Unrefrigerated Warehouse-No Rail	101353	5.5000e-004	4.9700e-003	4.1700e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4086	5.4086	1.0000e-004	1.0000e-004	5.4407
Total		8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.5428e+006	8.3200e-003	0.0756	0.0635	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003	0.0000	82.3295	82.3295	1.5800e-003	1.5100e-003	82.8188
Unrefrigerated Warehouse-No Rail	101353	5.5000e-004	4.9700e-003	4.1700e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4086	5.4086	1.0000e-004	1.0000e-004	5.4407
Total		8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33408.9	10.6448	4.4000e-004	9.0000e-005	10.6829
Refrigerated Warehouse-No Rail	1.18223e+006	376.6851	0.0156	3.2200e-003	378.0327
Unrefrigerated Warehouse-No Rail	134664	42.9070	1.7700e-003	3.7000e-004	43.0605
Total		430.2368	0.0178	3.6800e-003	431.7760

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33408.9	10.6448	4.4000e-004	9.0000e-005	10.6829
Refrigerated Warehouse-No Rail	1.18223e+006	376.6851	0.0156	3.2200e-003	378.0327
Unrefrigerated Warehouse-No Rail	134664	42.9070	1.7700e-003	3.7000e-004	43.0605
Total		430.2368	0.0178	3.6800e-003	431.7760

6.0 Area Detail

6.1 Mitigation Measures Area

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Unmitigated	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Total	0.4229	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Total	0.4229	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	104.5781	0.7670	0.0189	129.3702
Unmitigated	104.5781	0.7670	0.0189	129.3702

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	7.02538 / 0	31.3755	0.2301	5.6500e-003	38.8136
Unrefrigerated Warehouse-No Rail	16.391 / 0	73.2026	0.5369	0.0132	90.5566
Total		104.5781	0.7670	0.0188	129.3702

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	7.02538 / 0	31.3755	0.2301	5.6500e-003	38.8136
Unrefrigerated Warehouse-No Rail	16.391 / 0	73.2026	0.5369	0.0132	90.5566
Total		104.5781	0.7670	0.0188	129.3702

8.0 Waste Detail

8.1 Mitigation Measures Waste

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.3227	1.1419	0.0000	47.8712
Unmitigated	19.3227	1.1419	0.0000	47.8712

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	28.56	5.7974	0.3426	0.0000	14.3629
Unrefrigerated Warehouse-No Rail	66.63	13.5253	0.7993	0.0000	33.5083
Total		19.3227	1.1419	0.0000	47.8712

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	28.56	5.7974	0.3426	0.0000	14.3629
Unrefrigerated Warehouse-No Rail	66.63	13.5253	0.7993	0.0000	33.5083
Total		19.3227	1.1419	0.0000	47.8712

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/Backhoes	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Total	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 4.4:**EMFAC2017**

Source: EMFAC2017 (v1.0.3) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2021

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	Mdlyr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2021	HHDT	Aggregate	Aggregate	Gasoline	7.215312711	478.7902746	0.116984003	116.9840031	277046.8507	478.7902746	1907778.79	6.89	HHDT
Riverside (SC)	2021	HHDT	Aggregate	Aggregate	Diesel	15357.01372	1897939.939	272.9190782	272919.0782					
Riverside (SC)	2021	HHDT	Aggregate	Aggregate	Natural Gas	230.6715024	9360.06032	4.010788503	4010.788503		9360.06032			
Riverside (SC)	2021	LDA	Aggregate	Aggregate	Gasoline	563361.5495	23296504.67	743.7333054	743733.3054	748186.7602	23296504.67	23815537.74	31.83	LDA
Riverside (SC)	2021	LDA	Aggregate	Aggregate	Diesel	5219.69302	226458.8046	4.453454804	4453.454804		226458.8046			
Riverside (SC)	2021	LDA	Aggregate	Aggregate	Electricity	7550.910561	292574.2633	0	0		292574.2633			
Riverside (SC)	2021	LDT1	Aggregate	Aggregate	Gasoline	58475.42768	2219909.251	83.25302578	83253.02578	83278.6274	2219909.251	2229816.247	26.78	LDT1
Riverside (SC)	2021	LDT1	Aggregate	Aggregate	Diesel	30.15411229	650.1856866	0.025601613	25.60161339		650.1856866			
Riverside (SC)	2021	LDT1	Aggregate	Aggregate	Electricity	231.4028554	9256.810891	0	0		9256.810891			
Riverside (SC)	2021	LDT2	Aggregate	Aggregate	Gasoline	177423.7963	7067860.432	283.8610373	283861.0373	285001.2247	7067860.432	7150158.923	25.09	LDT2
Riverside (SC)	2021	LDT2	Aggregate	Aggregate	Diesel	927.6206127	43422.04823	1.140187376	1140.187376		43422.04823			
Riverside (SC)	2021	LDT2	Aggregate	Aggregate	Electricity	1222.520063	38876.44228	0	0		38876.44228			
Riverside (SC)	2021	LHDT1	Aggregate	Aggregate	Gasoline	15655.58333	510348.3794	47.71514013	47715.14013	73701.04381	510348.3794	1048308.962	14.22	LHDT1
Riverside (SC)	2021	LHDT1	Aggregate	Aggregate	Diesel	15786.61692	537960.5827	25.98590368	25985.90368		537960.5827			
Riverside (SC)	2021	LHDT2	Aggregate	Aggregate	Gasoline	2249.730422	74170.48849	7.924831239	7924.831239	18893.21821	74170.48849	281950.7642	14.92	LHDT2
Riverside (SC)	2021	LHDT2	Aggregate	Aggregate	Diesel	6056.795838	207780.2758	10.96838698	10968.38698		207780.2758			
Riverside (SC)	2021	MCY	Aggregate	Aggregate	Gasoline	27861.54696	183348.9736	4.828544708	4828.544708	4828.544708	183348.9736	183348.9736	37.97	MCY
Riverside (SC)	2021	MDV	Aggregate	Aggregate	Gasoline	154248.8417	5679894.563	285.6582866	285658.2866	290319.8938	5679894.563	5828882.689	20.08	MDV
Riverside (SC)	2021	MDV	Aggregate	Aggregate	Diesel	3020.678509	130330.5709	4.661607229	4661.607229		130330.5709			
Riverside (SC)	2021	MDV	Aggregate	Aggregate	Electricity	571.2528957	18657.55493	0	0		18657.55493			
Riverside (SC)	2021	MH	Aggregate	Aggregate	Gasoline	5071.35352	40199.38943	7.865862736	7865.862736	9356.598839	40199.38943	56300.53982	6.02	MH
Riverside (SC)	2021	MH	Aggregate	Aggregate	Diesel	1991.436876	16101.15039	1.490736104	1490.736104		16101.15039			
Riverside (SC)	2021	MHDT	Aggregate	Aggregate	Gasoline	1296.813166	52658.61531	10.17367434	10173.67434	78070.76178	52658.61531	784698.039	10.05	MHDT
Riverside (SC)	2021	MHDT	Aggregate	Aggregate	Diesel	12035.08457	732039.4237	67.89708744	67897.08744		732039.4237			
Riverside (SC)	2021	OBUS	Aggregate	Aggregate	Gasoline	440.9352614	15660.94555	3.076575652	3076.575652	4863.106605	15660.94555	31127.14567	6.40	OBUS
Riverside (SC)	2021	OBUS	Aggregate	Aggregate	Diesel	224.3920222	15466.20012	1.786530954	1786.530954		15466.20012			
Riverside (SC)	2021	SBUS	Aggregate	Aggregate	Gasoline	406.9191801	14544.86274	1.649581397	1649.581397	5165.645339	14544.86274	40891.79265	7.92	SBUS
Riverside (SC)	2021	SBUS	Aggregate	Aggregate	Diesel	832.5656654	26346.9299	3.516063942	3516.063942		26346.9299			
Riverside (SC)	2021	UBUS	Aggregate	Aggregate	Gasoline	163.4848401	23017.81637	3.736316018	3736.316018	10057.72142	23017.81637	49774.56312	4.95	UBUS
Riverside (SC)	2021	UBUS	Aggregate	Aggregate	Diesel	1.105797941	58.57190354	0.006566346	6.56634569		58.57190354			
Riverside (SC)	2021	UBUS	Aggregate	Aggregate	Electricity	0.058469431	1.251702935	0	0		1.251702935			
Riverside (SC)	2021	UBUS	Aggregate	Aggregate	Natural Gas	202.9076535	26696.92315	6.314839053	6314.839053		26696.92315			

Source: EMFAC2017 (v1.0.3) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	Mdlyr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2022	HHDT	Aggregate	Aggregate	Gasoline	6.576938112	469.290096	0.111263246	111.263246	276720.944	469.290096	1954241.273	7.06	HHDT
Riverside (SC)	2022	HHDT	Aggregate	Aggregate	Diesel	15714.36952	1943053.846	272.0962785	272096.2785			1943053.846		
Riverside (SC)	2022	HHDT	Aggregate	Aggregate	Natural Gas	263.7933161	10718.13672	4.513402274	4513.402274			10718.13672		
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Gasoline	581991.6725	23700815.4	737.3963282	737396.3282	741995.8718	23700815.4	24314627.74	32.77	LDA
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Diesel	5627.648407	239612.1354	4.599543626	4599.543626			239612.1354		
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Electricity	9519.079074	374200.2044	0	0			374200.2044		
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Gasoline	60037.51621	2261929.707	82.62273159	82622.73159	82646.09985	2261929.707	2277084.362	27.55	LDT1
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Diesel	27.76404389	601.6680241	0.023368267	23.36826688			601.6680241		
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Electricity	356.2042589	14552.98677	0	0			14552.98677		
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Gasoline	182118.8677	7165411.096	277.8915039	277891.5039	279116.8158	7165411.096	7265624.392	26.03	LDT2
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Diesel	1054.483634	48028.55818	1.225311901	1225.311901			48028.55818		
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Electricity	1677.633962	52184.73813	0	0			52184.73813		
Riverside (SC)	2022	LHDT1	Aggregate	Aggregate	Gasoline	15417.55767	499086.0807	46.20219857	46202.19857	71521.2169	499086.0807	1029280.982	14.39	LHDT1
Riverside (SC)	2022	LHDT1	Aggregate	Aggregate	Diesel	15837.49513	530194.9018	25.31901832	25319.01832			530194.9018		
Riverside (SC)	2022	LHDT2	Aggregate	Aggregate	Gasoline	2252.42518	73474.64451	7.77372894	7773.72894	18506.82986	73474.64451	279062.9473	15.08	LHDT2
Riverside (SC)	2022	LHDT2	Aggregate	Aggregate	Diesel	6123.275766	205588.3028	10.73310092	10733.10092			205588.3028		
Riverside (SC)	2022	MCY	Aggregate	Aggregate	Gasoline	28171.90267	180969.5918	4.77114182	4771.14182	4771.14182	180969.5918	180969.5918	37.93	MCY
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Gasoline	154199.5457	5597389.871	273.1677758	273167.7758	277942.5828	5597389.871	5763801.187	20.74	MDV
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Diesel	3261.4865	137165.9419	4.774807066	4774.807066			137165.9419		
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Electricity	916.717804	29245.37498	0	0			29245.37498		
Riverside (SC)	2022	MH	Aggregate	Aggregate	Gasoline	4849.122996	37965.37359	7.358586255	7358.586255	8794.495605	37965.37359	53583.34508	6.09	MH
Riverside (SC)	2022	MH	Aggregate	Aggregate	Diesel	1986.085476	15617.97149	1.43590935	1435.90935			15617.97149		
Riverside (SC)	2022	MHDT	Aggregate	Aggregate	Gasoline	1326.926938	54049.91102	10.27353802	10273.53802	76587.82765	54049.91102	794309.7864	10.37	MHDT
Riverside (SC)	2022	MHDT	Aggregate	Aggregate	Diesel	11907.6705	740259.8754	66.31428963	66314.28963			740259.8754		
Riverside (SC)	2022	OBUS	Aggregate	Aggregate	Gasoline	438.8357563	15270.69972	2.9578564	2957.8564	4724.84948	15270.69972	31059.30019	6.57	OBUS
Riverside (SC)	2022	OBUS	Aggregate	Aggregate	Diesel	222.2197269	15788.60048	1.766993079	1766.993079			15788.60048		
Riverside (SC)	2022	SBUS	Aggregate	Aggregate	Gasoline	417.9532809	14725.72528	1.664498557	1664.498557	5223.410044	14725.72528	41715.56692	7.99	SBUS
Riverside (SC)	2022	SBUS	Aggregate	Aggregate	Diesel	852.548169	26989.84164	3.558911487	3558.911487			26989.84164		
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Gasoline	164.4551683	23154.43353	3.756059553	3756.059553	10115.00541	23154.43353	50069.98905	4.95	UBUS
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Diesel	1.105797941	58.57190354	0.006566346	6.56634569			58.57190354		
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Electricity	0.058469431	1.251702935	0	0			1.251702935		
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Natural Gas	204.1188773	26855.73191	6.35237951	6352.37951			26855.73191		

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Attachment: Appendix D-Energy Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Geotechnical Engineering Investigation

**Proposed Industrial Warehouse Development
SE and SW Corners of Alessandro Blvd and Chagall Ct
Moreno Valley, California**

**CDREP LLC
523 Main Street
El Segundo, California 90245**

Attn: Mr. Mark Bachli

**Project Number 21631-20
January 31, 2019**

NorCal Engineering

NorCal Engineering
Soils and Geotechnical Consultants
10641 Humbolt Street Los Alamitos, CA 90720
(562) 799-9469 Fax (562) 799-9459

January 31, 2020

Project Number 21631-20

CDREP LLC
523 Main Street
El Segundo, California 90245

Attn: Mr. Mark Bachli

RE: Geotechnical Engineering Investigation - Proposed Industrial Warehouse Development - Located at the Southeast and Southwest Corners of Alessandro Boulevard and Chagall Court, in the City of Moreno Valley, California

Dear Mr. Bachli:

Pursuant to your request, this firm has performed a Geotechnical Engineering Investigation for the above referenced project in accordance with your approval of our proposal dated January 13, 2020. The purpose of this investigation is to evaluate the geotechnical conditions of the subject site and to provide recommendations for the proposed industrial warehouse development.

The scope of work included the following: 1) site reconnaissance; 2) subsurface geotechnical exploration and sampling; 3) laboratory testing; 4) soil infiltration testing; 5) engineering analysis of field and laboratory data; 5) preparation of a geotechnical engineering report. It is the opinion of this firm that the proposed development is feasible from a geotechnical standpoint provided that the recommendations presented in this report are followed in the design and construction of the project.

1.0 Project Description

It is proposed to construct an industrial warehouse development consisting of a 102,669 and 295,470 square feet buildings as shown on the attached Site Plan by Herdman Architecture + Design dated December 18, 2019. The proposed concrete tilt-up buildings will be supported by a conventional slab-on-grade foundation system with perimeter-spread footings and isolated interior footings. Other improvements will include asphalt and concrete pavement areas, hardscape and landscaping.

It is assumed that the proposed grading for the development will include cut and fill procedures on the order of a few feet to achieve finished grade elevations. Final building plans shall be reviewed by this firm prior to submittal for city approval to determine the need for any additional study and revised recommendations pertinent to the proposed development, if necessary.

2.0 Site Description

The 18.05-acre subject property is located at the southeast and southwest corners of Alessandro Boulevard and Chagall Court, in the City of Moreno Valley. The generally rectangular-shaped parcel is elongated in an east to west direction with topography of the relatively level descending slightly from a north to south direction on the order of a few feet. The site is undeveloped parcel covered with a low vegetation growth of natural grasses and weeds.

3.0 Site Exploration

The investigation consisted of the placement of ten (10) subsurface exploratory trenches by a backhoe to depths ranging between 5 and 15 feet and two (2) exploratory borings by a truck mounted drill rig both to a depth of 50 feet below current ground elevations. The explorations were visually classified and logged by a field engineer with locations of the subsurface explorations shown on the attached plan. The exploratory trenches/borings revealed the existing earth materials to consist of fill and natural soil. Detailed descriptions of the subsurface conditions are listed on the trench and boring logs in Appendix A.

It should be noted that the transition from one soil type to another as shown on the trench logs is approximate and may in fact be a gradual transition. The soils encountered are described as follows:

Fill: A fill soil classifying as a brown, fine to medium grained, silty to clayey SAND was encountered across the site to depths ranging from 1 to 1½ feet below ground surface. These soils were noted to be loose and moist.

Natural: A natural undisturbed soil classifying as a brown, fine to medium grained, clayey to silty SAND to sandy CLAY was encountered beneath the upper fill soils. The native soils as encountered were observed to be dense/stiff to very dense/stiff and moist.

The overall engineering characteristics of the earth material were relatively uniform with each excavation. Groundwater was encountered to the depth of 33 and 39 feet ground surface in Borings B-1 and B-2 respectively, and no caving occurred.

4.0 Laboratory Tests

Relatively undisturbed samples of the subsurface soils were obtained to perform laboratory testing and analysis for direct shear, consolidation tests, and to determine in-place moisture/densities. These relatively undisturbed ring samples were obtained by driving a thin-walled steel sampler lined with one-inch long brass rings with an inside diameter of 2.42 inches into the undisturbed soils. Bulk bag samples were obtained in the upper soils for expansion index tests and maximum density tests. All test results are included in Appendix B, unless otherwise noted.

- 4.1 **Field Moisture Content** (ASTM: D 2216) and the dry density of the ring samples were determined in the laboratory. This data is listed on the logs of explorations.
- 4.2 **Maximum Density tests** (ASTM: D 1557) were performed on typical samples of the upper soils. Results of these tests are shown on Table I.

- 4.3 **Expansion Index tests** (ASTM: D 4829) were performed on remolded samples of the upper soils to determine expansive characteristics. Results of these tests are provided on Table II.
- 4.4 **Atterberg Limits** (ASTM: D 4318) consisting of liquid limit, plastic limit and plasticity index were performed on representative soil samples. Results are shown on Table III.
- 4.5 **Corrosion tests** consisting of sulfate, pH, resistivity and chloride analysis to determine potential corrosive effects of soils on concrete and underground utilities. Test results are provided on Table IV.
- 4.6 **R-Value test** per California Test Method 301 was performed on a representative sample, which may be anticipated to be near subgrade to determine pavement design. Results are provided within the pavement design section of the report.
- 4.7 **Direct Shear tests** (ASTM: D 3080) were performed on undisturbed and/or remolded samples of the subsurface soils. The test is performed under saturated conditions at loads of 1,000 lbs./sq.ft., 2,000 lbs./sq.ft., and 3,000 lbs./sq.ft. with results shown on Plates A and B.
- 4.8 **Consolidation tests** (ASTM: D 2435) were performed on undisturbed samples to determine the differential and total settlement which may be anticipated based upon the proposed loads. Water was added to the samples at a surcharge of one KSF and the settlement curves are plotted on Plates C to E.

5.0 Seismicity Evaluation

The proposed development lies outside of any Alquist Priolo Special Studies Zone and the potential for damage due to direct fault rupture is considered unlikely. The site is situated in an area of high regional seismicity and the San Jacinto (San Jacinto Valley) fault is located about 6 kilometers from the site. Ground shaking originating from earthquakes along other active faults in the region is expected to induce lower horizontal accelerations due to smaller anticipated earthquakes and/or greater distances to other faults.

The seismic design parameters are provided below and are based on the 2019 California Building Code (CBC) Standard ASCE/SEI 7-16. The data was obtained from the American Society of Civil Engineers (ASCE) website, <https://asce7hazardtool.online/>. The ASCE 7 Hazards Report is attached in Appendix C.

Seismic Design Acceleration Parameters

Latitude	33.916
Longitude	-117.257
Site Class	D
Risk Category	I/II/III
Mapped Spectral Response Acceleration	$S_s = 1.500$ $S_1 = 0.600$
Adjusted Maximum Acceleration	$S_{MS} = 1.500$
Design Spectral Response Acceleration Parameters	$S_{DS} = 1.000$
Peak Ground Acceleration	$PGA_M = 0.674$

6.0 Liquefaction Evaluation

The site is expected to experience ground shaking and earthquake activity that is typical of Southern California area. It is during severe ground shaking that loose, granular soils below the groundwater table can liquefy. A review of the exploratory boring log and the laboratory test results on selected soil samples obtained indicate the following soil classifications, field blowcounts and amounts of fines passing through the No. 200 sieve.

Field Blowcount and Gradation Data

Boring No.	Classification	Blowcounts (blows/ft)	Relative Density	% Passing No. 200 Sieve
B-1 @ 5'	SC	>50	Very Dense	47
B-1 @ 10'	ML/CL	>50	Very Stiff	62
B-1 @ 15'	SC	82	Very Dense	45
B-1 @ 20'	SC	76	Very Dense	44
B-1 @ 25'	SC	>50	Very Dense	42
B-1 @ 30'	SC	34	Dense	42
B-1 @ 35'	SM	32	Dense	37
B-1 @ 40'	CL	65	Very Stiff	60
B-1 @ 45'	CL	42	Dense	61
B-1 @ 50'	CL	36	Stiff	56

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Boring No.	Classification	Blowcounts (blows/ft)	Relative Density	% Passing No. 200 Sieve
B-2 @ 5'	SM	>50	Very Dense	21
B-2 @ 10'	SC	36	Very Dense	47
B-2 @ 15'	SM	52	Very Dense	33
B-2 @ 20'	SM	30	Dense	14
B-2 @ 25'	SC	>50	Very Dense	46
B-2 @ 30'	SC	41	Very Dense	45
B-2 @ 35'	SC	42	Very Dense	40
B-2 @ 40'	SC	56	Very Dense	48
B-2 @ 45'	SC	46	Very Dense	47
B-2 @ 50'	SM	37	Dense	29

The analysis indicates the potential for liquefaction at this site to be low based on the density of the subsurface soils. The associated seismic-induced settlements would be on the order of less than 3/4 inch and would occur rather uniformly across the site. Differential settlements would be on the order of 1/2 inch over a 50-foot (horizontal) distance. Thus, the design of the proposed construction in conformance with the latest Building Code provisions for earthquake design is expected to provide mitigation of ground shaking hazards that are typical to Southern California.

7.0 Infiltration Characteristics

Infiltration tests within the site were performed to provide preliminary infiltration rates for the purpose of planning and design of an on-site water disposal system. The infiltration tests consisted of the double ring infiltration test per ASTM Method D 3385. The field infiltration rate was computed using a reduction factor – R_f based on the field measurements with our calculations given in Appendix D. Based upon the results of our testing, the soils encountered in the planned on-site drainage disposal system area exhibit the following infiltration rates.

Test No.	Depth	Soil Classification	Infiltration Rate
T-1	5'	Silty SAND	26.8 in/hr
T-2	7.5'	Sandy CLAY	0.1 in/hr
T-3	10'	Sandy CLAY	0.7 in/hr

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The correction factors CF_t , CF_v and CF_s are given below based on soils at 5 to 10 feet from our field tests.

- a) $CF_t = R_f = 1.0$ for our double ring infiltration test holes.
- b) $CF_v = 1.0$ based on uniform soils encountered in three (3) trenches for infiltration tests.
- c) $CF_s = 3.0$ for long-term siltation, plugging and maintenance. The subsurface soils are likely to have some plugging and regular maintenance of storm water discharge devices is required.

Based on the results of our field testing, the subsurface soils encountered in the proposed on-site drainage disposal system at 5 feet below ground surface and into sandy soils shall utilize a design infiltration rate of 8 in/hr. The infiltration rate at a depth below 5 feet to 10 feet indicates the very stiff fine-grained clayey soils which are not suitable for seepage pits at the site. All systems must meet the latest county specifications and the California Regional Water Quality Control Board (CRWQCB) requirements.

It is recommended that foundations shall be setback a minimum distance of 10 feet from the drainage disposal system and the bottom of footing shall be a minimum of 10 feet from the expected zone of saturation. The boundary of the zone of saturation may be assumed to project downward from the top of the permeable portion of the disposal system at an inclination of 1 to 1 or flatter, as determined by the geotechnical engineer.

8.0 Conclusions and Recommendations

Based upon our evaluations, the proposed development is acceptable from a geotechnical engineering standpoint. By following the recommendations and guidelines set forth in our report, the structures will be safe from excessive settlements under the anticipated design loadings and conditions. The proposed development shall meet all requirements of the City Building Ordinance and will not impose any adverse effect on existing adjacent structures.

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The following recommendations are based upon soil conditions encountered in our field investigation; these near-surface soil conditions could vary across the site. Variations in the soil conditions may not become evident until the commencement of grading operations for the proposed development and revised recommendations from the soils engineer may be necessary based upon the conditions encountered.

It is recommended that site inspections be performed by a representative of this firm during all grading and construction of the development to verify the findings and recommendations documented in this report. Any unusual conditions which may be encountered in the course of the project development may require the need for additional study and revised recommendations.

8.1 **Site Grading Recommendations**

Any vegetation and/or demolition debris shall be removed and hauled from proposed grading areas prior to the start of grading operations. Existing vegetation shall not be mixed or disced into the soils. Any removed soils may be reutilized as compacted fill once any deleterious material or oversized materials (in excess of eight inches) is removed. Grading operations shall be performed in accordance with the attached *Specifications for Placement of Compacted Fill*.

8.1.1 **Removal and Recomaction Recommendations**

All disturbed soils and/or fill (about 1 to 1½ feet below ground surface) shall be removed to competent native material, the exposed surface scarified to a depth of 12 inches, brought to within 2% of optimum moisture content and compacted to a minimum of 90% of the laboratory standard (ASTM: D 1557) prior to placement of any additional compacted fill soils, foundations, slabs-on-grade and pavement. Grading shall extend a minimum of five horizontal feet outside the edges of foundations or equidistant to the depth of fill placed, whichever is greater.

It is possible that isolated areas of undiscovered fill not described in this report are present on site; if found, these areas should be treated as discussed earlier. A diligent search shall also be conducted during grading operations in an effort to uncover any underground structures, irrigation or utility lines. If encountered, these structures and lines shall be either removed or properly abandoned prior to the proposed construction.

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Any imported fill material should be preferably soil similar to the upper soils encountered at the subject site. All soils shall be approved by this firm prior to importing at the site and will be subjected to additional laboratory testing to assure concurrence with the recommendations stated in this report.

If placement of slabs-on-grade and pavement is not completed immediately upon completion of grading operations, additional testing and grading of the areas may be necessary prior to continuation of construction operations. Likewise, if adverse weather conditions occur which may damage the subgrade soils, additional assessment by the soils engineer as to the suitability of the supporting soils may be needed.

Care should be taken to provide or maintain adequate lateral support for all adjacent improvements and structures at all times during the grading operations and construction phase. Adequate drainage away from the structures, pavement and slopes should be provided at all times.

8.1.2 **Fill Blanket Recommendations**

Due to the potential for differential settlement of foundations placed on compacted fill and native materials, it is recommended that all foundations including floor slab areas be underlain by a uniform compacted fill blanket at least two feet in thickness. This fill blanket shall extend a minimum of five horizontal feet outside the edges of foundations or equidistant to the depth of fill placed, whichever is greater.

8.2 **Shrinkage and Subsidence**

Results of our in-place density tests reveal that the soil shrinkage will be less than 5% due to excavation and recompaction, based upon the assumption that the fill is compacted to 92% of the maximum dry density per ASTM standards. Subsidence should be 0.2 feet due to earthwork operations. The volume change does not include any allowance for vegetation or organic stripping, removal of subsurface improvements, or topographic approximations.

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Although these values are only approximate, they represent our best estimate of lost yardage, which will likely occur during grading. If more accurate shrinkage and subsidence factors are needed, it is recommended that field testing the actual equipment and grading techniques should be conducted.

8.3 Temporary Excavations

Temporary unsurcharged excavations in the existing site materials may be made at vertical inclinations up to 4 feet in height unless cohesionless soils are encountered. In areas where soils with little or no binder are encountered, where adverse geological conditions are exposed, or where excavations are adjacent to existing structures, shoring or flatter excavations may be required. The temporary cut slope gradients given above do not preclude local raveling and sloughing. All excavations shall be made in accordance with the requirements of the soils engineer, CAL-OSHA and other public agencies having jurisdiction. Care should be taken to provide or maintain adequate lateral support for all adjacent improvements and structures at all times during the grading operations and construction phase.

8.4 Foundation Design

All foundations may be designed utilizing the following allowable bearing capacities for an embedded depth of 24 inches into approved engineered fill with the corresponding widths:

Allowable Bearing Capacity (psf)		
Width (feet)	Continuous Foundation	Isolated Foundation
1.5	2000	2500
2.0	2075	2575
4.0	2375	2875
6.0	2500	3000

The bearing value may be increased by 500 psf for each additional foot of depth in excess of the 18-inch minimum depth, up to a maximum of 4,000 psf. A one-third increase may be used when considering short-term loading and seismic forces. Any foundations located along property line may utilize an allowable bearing capacity of 1,500 psf and embedded into competent native soils. All foundations shall be reinforced a minimum of one, No. 4 bar, top and bottom. A representative of this firm shall inspect all foundation excavations prior to pouring concrete.

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8.5 Settlement Analysis

Resultant pressure curves for the consolidation tests are shown on Plates C and D. Computations utilizing these curves and the recommended allowable soil bearing capacities reveal that the foundations will experience settlements on the order of $\frac{3}{4}$ inch and differential settlements of less than $\frac{1}{4}$ inch.

8.6 Lateral Resistance

The following values may be utilized in resisting lateral loads imposed on the structure. Requirements of the California Building Code should be adhered to when the coefficient of friction and passive pressures are combined.

Coefficient of Friction - 0.35

Equivalent Passive Fluid Pressure = 200 lbs./cu.ft.

Maximum Passive Pressure = 2,000 lbs./cu.ft.

The passive pressure recommendations are valid only for approved compacted fill soils or competent native materials.

8.7 Retaining Wall Design Parameters

Active earth pressures against retaining walls will be equal to the pressures developed by the following fluid densities. These values are for **approved granular backfill material** placed behind the walls at various ground slopes above the walls.

Surface Slope of Retained Materials (Horizontal to Vertical)	Equivalent Fluid Density (lb./cu.ft.)
Level	30
5 to 1	35
4 to 1	38
3 to 1	40
2 to 1	45

Any applicable short-term construction surcharges and seismic forces should be added to the above lateral pressure values. An equivalent fluid pressure of 45 pcf may be utilized for the restrained wall condition with a level grade behind the wall.

The seismic-induced lateral soil pressure for walls greater than 6 feet may be computed using a triangular pressure distribution with the maximum value at the top of the wall. The maximum lateral pressure of $(20 \text{ pcf}) H$ where H is the height of the retained soils above the wall footing should be used in final design of retaining walls. Sliding resistance values and passive fluid pressure values may be increased by $1/3$ during short-term wind and seismic loading conditions.

All walls shall be waterproofed as needed and protected from hydrostatic pressure by a reliable permanent subdrain system. The granular backfill to be utilized immediately adjacent to retaining walls shall consist of an approved select granular soil with a sand equivalency greater than 30. This backfill zone of free draining material shall consist of a wedge beginning a minimum of one horizontal foot from the base of the wall extending upward at an inclination of no less than $3/4$ to 1 (horizontal to vertical).

8.8 Slab Design

All concrete slabs shall be a minimum of six inches in thickness in the proposed warehouse areas and four inches in office and hardscape both reinforced a minimum of No. 3 bars, sixteen inches in each direction and positioned in the center of slab and placed on approved subgrade soils. Additional reinforcement requirements and an increase in thickness of the slabs-on-grade may be necessary based upon soils expansion potential and proposed loading conditions in the structures and should be evaluated further by the project engineers and/or architect. All subgrade soils shall be moisture conditioned to 3% over optimum moisture content to a depth eighteen inches.

A vapor retarder (10-mil minimum thickness) should be utilized in areas which would be sensitive to the infiltration of moisture. This retarder shall meet requirements of ASTM E 96, *Water Vapor Transmission of Materials* and ASTM E 1745, *Standard Specification for Water Vapor Retarders used in Contact with Soil or Granular Fill Under Concrete Slabs*. The vapor retarder shall be installed in accordance with procedures stated in ASTM E 1643, *Standard practice for Installation of Water Vapor Retarders used in Contact with Earth or Granular Fill Under Concrete Slabs*.

The moisture retarder may be placed directly upon compacted subgrade soils conditioned to near optimum moisture levels, although one to two inches of sand beneath the membrane is desirable. The subgrade upon which the retarder is placed shall be smooth and free of rocks, gravel or other protrusions which may damage the retarder. Use of sand above the retarder is under the purview of the structural engineer; if sand is used over the retarder, it should be placed in a dry condition.

8.9 Pavement Section Design

The table on the following page provides a preliminary pavement design based upon an R-Value of 16 for the subgrade soils for the proposed pavement areas. Final pavement design may need to be based on R-Value testing of the subgrade soils near the conclusion of site grading to assure that these soils are consistent with those assumed in this preliminary design.

The recommendations are based upon estimated traffic loads. Client should submit any other anticipated traffic loadings to the geotechnical engineer, if necessary, so that pavement sections may be reviewed to determine adequacy to support the proposed loadings.

Type of Traffic	Traffic Index	Asphalt (in.)	Base Material (in.)
Automobile Parking Stalls	4.0	3.0	6.0
Light Vehicle Circulation Areas	5.5	3.5	9.5
Heavy Truck Access Areas	7.0	4.0	14.0

Any concrete slab-on-grade in pavement areas shall be a minimum of seven inches in thickness and may be placed on approved subgrade soils. All pavement areas shall have positive drainage toward an approved outlet from the site. Drain lines behind curbs and/or adjacent to landscape areas should be considered by client and the appropriate design engineers to prevent water from infiltrating beneath pavement. If such infiltration occurs, damage to pavement, curbs and flow lines, especially on sites with expansive soils, may occur during the life of the project.

Any approved base material shall consist of a Class II aggregate or equivalent and should be compacted to a minimum of 95% relative compaction. All pavement materials shall conform to the requirements set forth by the City of Moreno Valley. The base material; and asphaltic concrete should be tested prior to delivery to the site and during placement to determine conformance with the project specifications. A pavement engineer shall designate the specific asphalt mix design to meet the required project specifications.

8.10 Utility Trench and Excavation Backfill

Trenches from installation of utility lines and other excavations may be backfilled with on-site soils or approved imported soils compacted to a minimum of 90% relative compaction. All utility lines shall be properly bedded with clean sand having a sand equivalency rating of 30 or more. This bedding material shall be thoroughly water jetted around the pipe structure prior to placement of compacted backfill soils.

8.11 Corrosion Design Criteria

Representative samples of the surficial soils, typical of the subgrade soils expected to be encountered within foundation excavations and underground utilities were tested for corrosion potential. The minimum resistivity value obtained for the samples tested is representative of an environment that may be severely corrosive to metals. The soil pH value was considered mildly alkaline and may not have a significant effect on soil corrosivity. Consideration should be given to corrosion protection systems for buried metal such as protective coatings, wrappings or the use of PVC where permitted by local building codes.

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According to Table 4.3.1 of ACI 318 Building Code and Commentary, these contents revealed negligible sulfate concentrations. Therefore, a Type II cement according to latest CBC specifications may be utilized for building foundations at this time. It is recommended that additional sulfate tests be performed at the completion of site grading to assure that the as graded conditions are consistent with the recommendations stated in this design. Corrosion test results may be found on the attached Table IV.

8.12 Expansive Soil

Since expansive soils were encountered, special attention should be given to the project design and maintenance. The attached *Expansive Soil Guidelines* should be reviewed by the engineers, architects, owner, maintenance personnel and other interested parties and considered during the design of the project and future property maintenance.

9.0 Closure

The recommendations and conclusions contained in this report are based upon the soil conditions uncovered in our test excavations. No warranty of the soil condition between our excavations is implied. NorCal Engineering should be notified for possible further recommendations if unexpected to unfavorable conditions are encountered during construction phase. It is the responsibility of the owner to ensure that all information within this report is submitted to the Architect and appropriate Engineers for the project.

A preconstruction conference should be held between the developer, general contractor, grading contractor, city inspector, architect, and geotechnical engineer to clarify any questions relating to the grading operations and subsequent construction. Our representative should be present during the grading operations and construction phase to certify that such recommendations are complied within the field.

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This geotechnical investigation has been conducted in a manner consistent with the level of care and skill exercised by members of our profession currently practicing under similar conditions in the Southern California area. No other warranty, expressed or implied is made.

We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

Keith D. Tucker
Project Engineer
R.G.E. 841



Scott D. Spensiero
Project Manager

NorCal Engineering

Attachment: Appendix E-Geotechnical Engineering Investigation (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

SPECIFICATIONS FOR PLACEMENT OF COMPACTED FILL

Excavation

Any existing low-density soils and/or saturated soils shall be removed to competent natural soil under the inspection of the Geotechnical Engineering Firm. After the exposed surface has been cleansed of debris and/or vegetation, it shall be scarified until it is uniform in consistency, brought to the proper moisture content and compacted to a minimum of 90% relative compaction (in accordance with ASTM: D 1557).

In any area where a transition between fill and native soil or between bedrock and soil are encountered, additional excavation beneath foundations and slabs will be necessary in order to provide uniform support and avoid differential settlement of the structure.

Material for Fill

The on-site soils or approved import soils may be utilized for the compacted fill provided they are free of any deleterious materials and shall not contain any rocks, brick, asphaltic concrete, concrete or other hard materials greater than eight inches in maximum dimensions. Any import soil must be approved by the Geotechnical Engineering firm a minimum of 72 hours prior to importation of site.

Placement of Compacted Fill Soils

The approved fill soils shall be placed in layers not excess of six inches in thickness. Each lift shall be uniform in thickness and thoroughly blended. The fill soils shall be brought to within 2% of the optimum moisture content, unless otherwise specified by the Soils Engineering firm. Each lift shall be compacted to a minimum of 90% relative compaction (in accordance with ASTM: D 1557) and approved prior to the placement of the next layer of soil. Compaction tests shall be obtained at the discretion of the Geotechnical Engineering firm but to a minimum of one test for every 500 cubic yards placed and/or for every 2 feet of compacted fill placed.

The minimum relative compaction shall be obtained in accordance with accepted methods in the construction industry. The final grade of the structural areas shall be in a dense and smooth condition prior to placement of slabs-on-grade or pavement areas. No fill soils shall be placed, spread or compacted during unfavorable weather conditions. When the grading is interrupted by heavy rains, compaction operations shall not be resumed until approved by the Geotechnical Engineering firm.

Grading Observations

The controlling governmental agencies should be notified prior to commencement of any grading operations. This firm recommends that the grading operations be conducted under the observation of a Soils Engineering firm as deemed necessary. A 24-hour notice must be provided to this firm prior to the time of our initial inspection.

Observation shall include the clearing and grubbing operations to assure that all unsuitable materials have been properly removed; approve the exposed subgrade in areas to receive fill and in areas where excavation has resulted in the desired finished grade and designate areas of overexcavation; and perform field compaction tests to determine relative compaction achieved during fill placement. In addition, all foundation excavations shall be observed by the Geotechnical Engineering firm to confirm that appropriate bearing materials are present at the design grades and recommend any modifications to construct footings.

EXPANSIVE SOIL GUIDELINES

The following expansive soil guidelines are provided for your project. The intent of these guidelines is to inform you, the client, of the importance of proper design and maintenance of projects supported on expansive soils. ***You, as the owner or other interested party, should be warned that you have a duty to provide the information contained in the soil report including these guidelines to your design engineers, architects, landscapers and other design parties in order to enable them to provide a design that takes into consideration expansive soils.***

In addition, you should provide the soil report with these guidelines to any property manager, lessee, property purchaser or other interested party that will have or assume the responsibility of maintaining the development in the future.

Expansive soils are fine-grained silts and clays which are subject to swelling and contracting. The amount of this swelling and contracting is subject to the amount of fine-grained clay materials present in the soils and the amount of moisture either introduced or extracted from the soils. Expansive soils are divided into five categories ranging from “very low” to “very high”. Expansion indices are assigned to each classification and are included in the laboratory testing section of this report. *If the expansion index of the soils on your site, as stated in this report, is 21 or higher, you have expansive soils.* The classifications of expansive soils are as follows:

Classification of Expansive Soil*

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
Above 130	Very High

*From Table 18A-I-B of California Building Code (1988)

When expansive soils are compacted during site grading operations, care is taken to place the materials at or slightly above optimum moisture levels and perform proper compaction operations. Any subsequent excessive wetting and/or drying of expansive soils will cause the soil materials to expand and/or contract. These actions are likely to cause distress of foundations, structures, slabs-on-grade, sidewalks and pavement over the life of the structure. ***It is therefore imperative that even after construction of improvements, the moisture contents are maintained at relatively constant levels, allowing neither excessive wetting or drying of soils.***

Evidence of excessive wetting of expansive soils may be seen in concrete slabs, both interior and exterior. Slabs may lift at construction joints producing a trip hazard or may crack from the pressure of soil expansion. Wet clays in foundation areas may result in lifting of the structure causing difficulty in the opening and closing of doors and windows, as well as cracking in exterior and interior wall surfaces. In extreme wetting of soils to depth, settlement of the structure may eventually result. Excessive wetting of soils in landscape areas adjacent to concrete or asphaltic pavement areas may also result in expansion of soils beneath pavement and resultant distress to the pavement surface.

Excessive drying of expansive soils is initially evidenced by cracking in the surface of the soils due to contraction. Settlement of structures and on-grade slabs may also eventually result along with problems in the operation of doors and windows.

Projects located in areas of expansive clay soils will be subject to more movement and "hairline" cracking of walls and slabs than similar projects situated on non-expansive sandy soils. There are, however, measures that developers and property owners may take to reduce the amount of movement over the life the development. The following guidelines are provided to assist you in both design and maintenance of projects on expansive soils:

- Drainage away from structures and pavement is essential to prevent excessive wetting of expansive soils. Grades should be designed to the latest building code and maintained to allow flow of irrigation and rain water to approved drainage devices or to the street. Any “ponding” of water adjacent to buildings, slabs and pavement after rains is evidence of poor drainage; the installation of drainage devices or regrading of the area may be required to assure proper drainage. Installation of rain gutters is also recommended to control the introduction of moisture next to buildings. Gutters should discharge into a drainage device or onto pavement which drains to roadways.
- Irrigation should be strictly controlled around building foundations, slabs and pavement and may need to be adjusted depending upon season. This control is essential to maintain a relatively uniform moisture content in the expansive soils and to prevent swelling and contracting. Over-watering adjacent to improvements may result in damage to those improvements. NorCal Engineering makes no specific recommendations regarding landscape irrigation schedules.
- Planting schemes for landscaping around structures and pavement should be analyzed carefully. Plants (including sod) requiring high amounts of water may result in excessive wetting of soils. Trees and large shrubs may actually extract moisture from the expansive soils, thus causing contraction of the fine-grained soils.
- Thickened edges on exterior slabs will assist in keeping excessive moisture from entering directly beneath the concrete. A six-inch thick or greater deepened edge on slabs may be considered. Underlying interior and exterior slabs with 6 to 12 inches or more of non-expansive soils and providing presaturation of the underlying clayey soils as recommended in the soil report will improve the overall performance of on-grade slabs.

- Increase the amount of steel reinforcing in concrete slabs, foundations and other structures to resist the forces of expansive soils. The precise amount of reinforcing should be determined by the appropriate design engineers and/or architects.
- Recommendations of the soil report should always be followed in the development of the project. Any recommendations regarding presaturation of the upper subgrade soils in slab areas should be performed in the field and verified by the Soil Engineer.

List of Appendices **(in order of appearance)**

Appendix A – Log of Excavations

Log of Trenches T-1 to T-10

Log of Borings B-1 and B-2

Appendix B – Laboratory Tests

Table I – Maximum Dry Density

Table II – Expansion

Table III – Atterberg Limits

Table IV - Corrosion

Plates A and B – Direct Shear

Plates C and D - Consolidation

Appendix C –ASCE Seismic Hazards Report and Maps

ASCE Seismic Hazards Report

USGS – Riverside East Quadrangle

Moreno Valley Geology and Seismic Hazards Maps

Liquefaction Calculations

Appendix D – Soil Infiltration Data

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Appendix A

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MAJOR DIVISION			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS		
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL, SAND MIXTURES, LITTLE OR NO FINES		
		MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES	
			CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES		GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES	
		SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE		POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES		SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	
			SANDS WITH FINE (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND-SILT MIXTURES	
	CLAYEY SANDS, SAND-CLAY MIXTURES			SC	CLAYEY SANDS, SAND-CLAY MIXTURES		
	FINE GRAINED SOILS		SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
						CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
					OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	
SILTS AND CLAYS		LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS		
				CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS		
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS		
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS		

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

UNIFIED SOIL CLASSIFICATION SYSTEM

KEY:

- Indicates 2.5-inch Inside Diameter. Ring Sample.
- ☒ Indicates 2-inch OD Split Spoon Sample (SPT).
- ☐ Indicates Shelby Tube Sample.
- Indicates No Recovery.
- ▣ Indicates SPT with 140# Hammer 30 in. Drop.
- ☑ Indicates Bulk Sample.
- ▤ Indicates Small Bag Sample.
- ▥ Indicates Non-Standard
- ☒ Indicates Core Run.

COMPONENT DEFINITIONS

COMPONENT	SIZE RANGE
Boulders	Larger than 12 in
Cobbles	3 in to 12 in
Gravel	3 in to No 4 (4.5mm)
Coarse gravel	3 in to 3/4 in
Fine gravel	3/4 in to No 4 (4.5mm)
Sand	No. 4 (4.5mm) to No. 200 (0.074mm)
Coarse sand	No. 4 (4.5 mm) to No. 10 (2.0 mm)
Medium sand	No. 10 (2.0 mm) to No. 40 (0.42 mm)
Fine sand	No. 40 (0.42 mm) to No. 200 (0.074 mm)
Silt and Clay	Smaller than No. 200 (0.074 mm)

COMPONENT PROPORTIONS

DESCRIPTIVE TERMS	RANGE OF PROPORTION
Trace	1 - 5%
Few	5 - 10%
Little	10 - 20%
Some	20 - 35%
And	35 - 50%

MOISTURE CONTENT

DRY	Absence of moisture, dusty, dry to the touch.
DAMP	Some perceptible moisture; below optimum
MOIST	No visible water; near optimum moisture content
WET	Visible free water, usually soil is below water table.

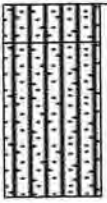
RELATIVE DENSITY OR CONSISTENCY VERSUS SPT N -VALUE

COHESIONLESS SOILS		COHESIVE SOILS		
Density	N (blows/ft)	Consistency	N (blows/ft)	Approximate Undrained Shear Strength (psf)
Very Loose	0 to 4	Very Soft	0 to 2	< 250
Loose	4 to 10	Soft	2 to 4	250 - 500
Medium Dense	10 to 30	Medium Stiff	4 to 8	500 - 1000
Dense	30 to 50	Stiff	8 to 15	1000 - 2000
Very Dense	over 50	Very Stiff	15 to 30	2000 - 4000
		Hard	over 30	> 4000

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Log of Trench T-1

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Silty SAND Brown, loose, moist					
5		NATURAL Silty SAND Brown, dense to very dense, moist Trench completed at depth of 5'					
10							
15							
20							
25							
30							
35							

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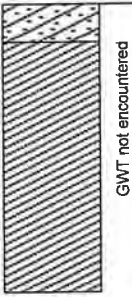
Attachment: Appendix E-Geotechnical Engineering Investigation (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Log of Trench T-2

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist					
5		NATURAL Clayey SAND to Sandy CLAY Brown, dense to very dense, moist					
Trench completed at depth of 7.5'							
10							
15							
20							
25							
30							
35							

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Log of Trench T-3

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

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Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist					
5		NATURAL Clayey SAND Brown, dense, moist Silty SAND Brown, dense, moist					
10		Sandy CLAY Brown, stiff, moist Trench completed at depth of 10'					
35	NorCal Engineering						3

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Log of Trench T-4

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist	☐		11.6	119.0	
5		NATURAL Silty SAND Brown, dense to very dense, moist Silty (fine to coarse grained) SAND Brown, dense, moist	☐		13.2	117.6	
10		Trench completed at depth of 10'	☐		9.7	118.8	
15							
20							
25							
30							
35							

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4

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Log of Trench T-5

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist	☐		12.1	117.2	
5		NATURAL Sandy CLAY Brown, stiff, moist	■		11.7	120.4	
10		Clayey SAND Brown, very dense, moist	■		9.4	122.6	
15		Trench completed at depth of 15'	■		10.3	119.6	

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5

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Log of Trench T-6

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist					
5		NATURAL Sandy CLAY Brown, stiff, moist	■		8.4	115.7	
		Clayey SAND Brown, dense, moist					
		Silty SAND Brown, dense, moist	■		7.0	117.8	
10	Trench completed at depth of 10'						

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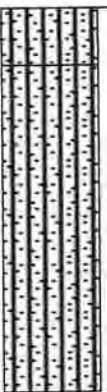
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Log of Trench T-7

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0	 GWT not encountered	FILL Clayey SAND Brown, loose, moist	■		7.4	115.9	
5		NATURAL Clayey SAND Brown, dense to very dense, moist	■		8.3	117.8	
10		Trench completed at depth of 10'	■		11.0	118.8	
15							
20							
25							
30							
35							
NorCal Engineering			7				

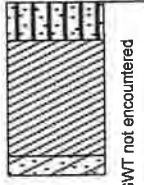
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Log of Trench T-8

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist	■		11.0	117.5	
5		NATURAL Sandy CLAY Brown, stiff, moist Clayey SAND Brown, dense, moist Trench completed at depth of 4.5'					
10							
15							
20							
25							
30							
35							
NorCal Engineering			8				

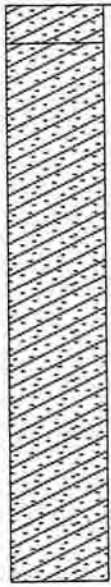




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Log of Trench T-9

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0	 GWT not encountered	FILL Clayey SAND Brown, loose, moist			10.6	115.5	
5		NATURAL Clayey SAND Brown, dense to very dense, moist			11.1	119.5	
10					9.8	116.1	
15						11.4	116.8
Trench completed at depth of 15'							

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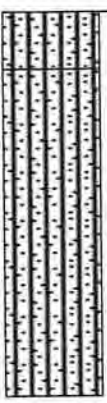
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Log of Trench T-10

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0	 GWT not encountered	FILL Silty SAND Brown, loose, moist					
5		NATURAL Silty SAND Brown, dense to very dense, moist	■		6.1	114.2	
10		Trench completed at depth of 10'	■		7.4	117.0	

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10

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Log of Boring B-1

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/22/2020	Groundwater Depth: 39'
Drilling Method: Simco 2800HS	
Hammer Weight: 140 lbs	Drop: 30"
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0	[Diagonal Hatching]	FILL Clayey SAND Brown, loose, moist					
5		NATURAL Clayey SAND Brown, dense to very dense, moist	⊗	32/50-4"	12.3		4'
10	[Vertical Hatching]	Sandy SILT Brown, very stiff, moist	⊗	19/50-5"	11.8		6'
15	[Diagonal Hatching]	Clayey (fine to coarse grained) SAND Red-brown, very dense, moist	⊗	24/37/45	14.0		4'
20			⊗	17/26/50	14.5		4'
25			⊗	23/50-5"	14.7		4'
30			⊗	15/18/16	18.3		4'
35	[Vertical Hatching]	Silty SAND Brown, dense, moist					

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Log of Boring B-1

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/22/2020	Groundwater Depth: 39'
Drilling Method: Simco 2800HS	
Hammer Weight: 140 lbs	Drop: 30"
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
35		Silty SAND Brown, dense, moist	☒	10/15/17	19.6		3%
40		Sandy CLAY Red-brown, stiff, wet	☒	18/27/38	21.0		6%
45			☒	13/19/23	20.0		6%
50			☒	10/13/23	19.3		5%
Boring completed at depth of 51.5'							
55							
60							
65							
70							

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Log of Boring B-2

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/22/2020	Groundwater Depth: 33'
Drilling Method: Simco 2800HS	
Hammer Weight: 140 lbs	Drop: 30"
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Silty SAND Brown, loose, moist					
5		NATURAL Silty SAND Brown, dense to very dense, moist	⊗	38/50-5"	11.9		2
10		Clayey (fine to coarse grained) SAND Red-brown, very dense, moist	⊗	8/17/19	8.2		4
15		Silty SAND Brown, dense, wet	⊗	10/17/35	12.9		3
20			⊗	10/11/19	6.0		1
25		Clayey SAND Brown, dense, wet	⊗	25/50-4"	11.3		4
30			⊗	18/21/20	15.2		4
35							

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13


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Log of Boring B-2

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/22/2020	Groundwater Depth: 33'
Drilling Method: Simco 2800HS	
Hammer Weight: 140 lbs	Drop: 30"
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
35		Clayey SAND Brown, dense, wet	☒	14/16/26	16.2		4%
40			☒	18/25/31	19.5		4%
45			☒	13/21/25	16.7		4%
50			☒	10/15/22	13.8		2%
		Boring completed at depth of 51.5'					

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Appendix B

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TABLE I
MAXIMUM DENSITY TESTS

Sample	Classification	Optimum Moisture (%)	Maximum Dry Density (lbs/cu.ft)
T-4 @ 2'	Silty SAND	9.0	130.0
T-5 @ 2'	Sandy CLAY	13.5	125.0
T-9 @ 2'	Clayey SAND	12.0	128.0

TABLE II
EXPANSION TESTS

Sample	Classification	Expansion Index
T-4 @ 2'	Silty SAND	3
T-5 @ 2'	Sandy CLAY	65
T-9 @ 2'	Clayey SAND	25

TABLE III
ATTERBERG LIMITS

Sample	Liquid Limit	Plastic Limit	Plasticity Index
T-5 @ 2-5'	32	19	13
T-5 @ 8-10'	25	19	6

TABLE IV
CORROSION TESTS

Sample	pH	Electrical Resistivity	Sulfate (%)	Chloride (ppm)
T-5 @ 2'	7.2	1,820	0.008	257
T-9 @ 2'	7.1	2,540	0.007	285

% by weight
ppm – mg/kg

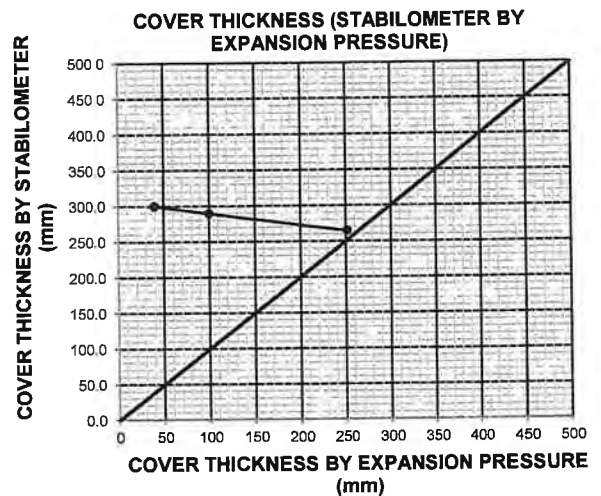
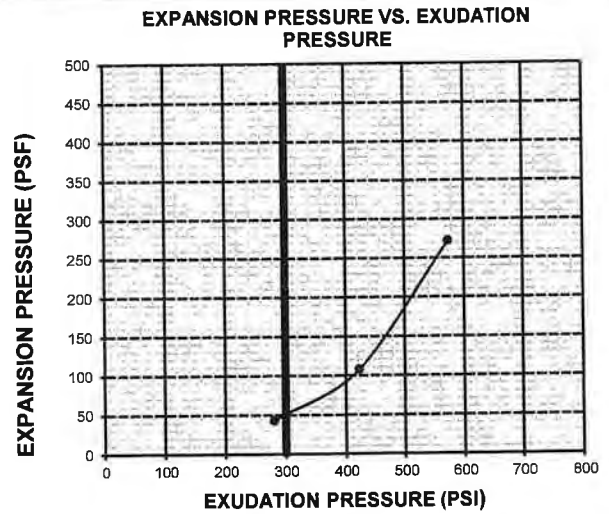
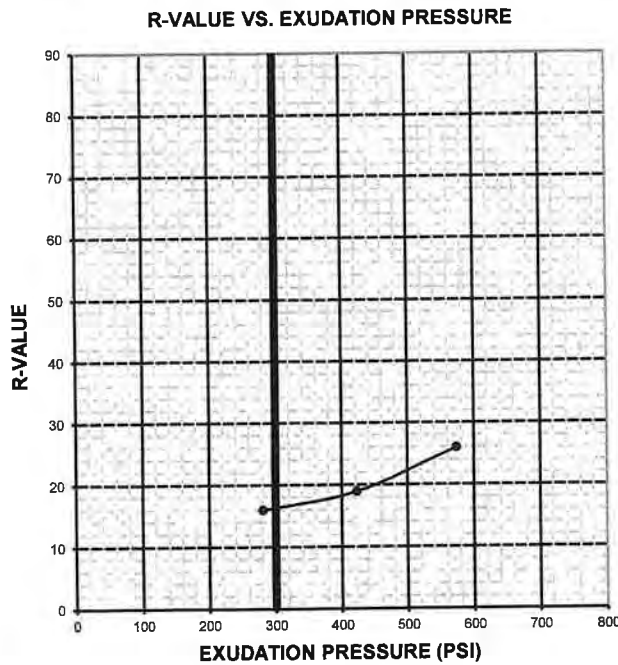


R-VALUE TEST REPORT

CT-301 ASTM-D2844

PROJECT NAME: Norcal (CDREP LLC) PROJECT NUMBER: L-200101
 SAMPLE LOCATION: SEC of SWC of Alessandro Blvd and Chega II CT. Moreno Valley SAMPLE NUMBER: T3
 SAMPLE DESCRIPTION: Sandy Lean Clay (CL-CH) SAMPLE DEPTH: 1.0'
 SAMPLED BY: Norcal TESTED BY: CC/ER
 DATE TESTED: 1/24/2020

TEST SPECIMEN	A	B	C
MOISTURE AT COMPACTION %	14.4	15.5	16.9
WEIGHT OF SAMPLE, grams	1117	1191	1227
HEIGHT OF SAMPLE, Inches	2.30	2.48	2.67
DRY DENSITY, pcf	128.7	126.1	119.3
COMPACTOR AIR PRESSURE, psi	250	200	100
EXUDATION PRESSURE, psi	573	423	281
EXPANSION, Inches x 10 ^{exp-4}	63	25	10
STABILITY Ph 2,000 lbs (160 psi)	100	119	125
TURNS DISPLACEMENT	3.51	3.76	4.19
R-VALUE UNCORRECTED	30	19	14
R-VALUE CORRECTED	26	19	16
EXPANSION PRESSURE (psf)	272.2	108.0	43.2

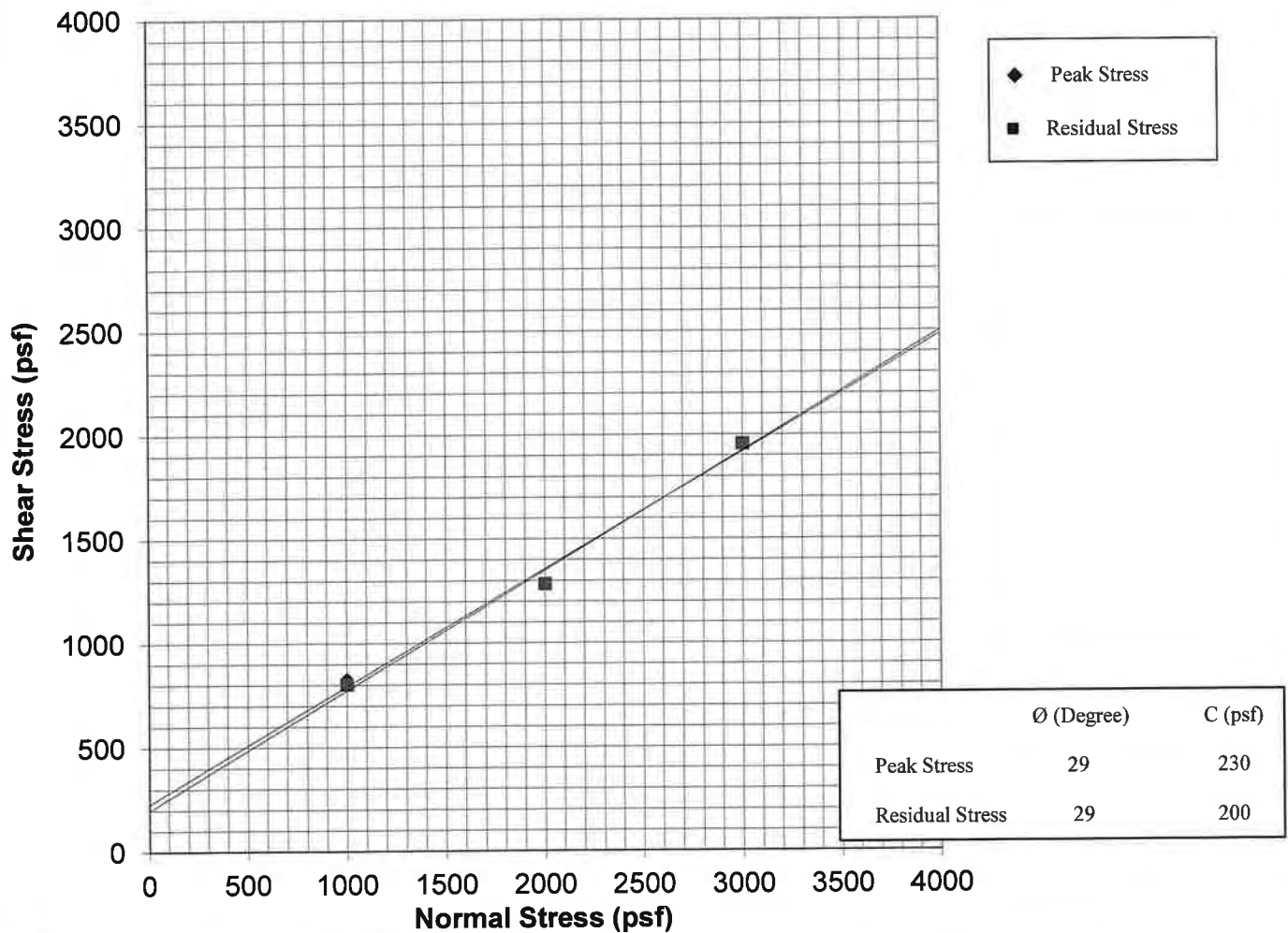
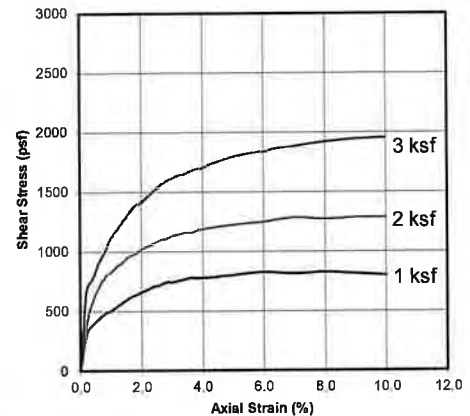


R-VALUE AT EQUILIBRIUM:	16
R-VALUE BY EXUDATION PRESSURE:	16
R-VALUE BY EXPANSION PRESSURE:	N.A.
EXPANSION PRESSURE AT 300 PSI EXUDATION:	52
TRAFFIC INDEX (Assumed):	5.5
GRAVEL FACTOR (Assumed):	1.5
UNIT MASS OF COVER MATERIAL, kg/m³ (Assumed):	2100.0

Attachment: Appendix E-Geotechnical Engineering Investigation (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Sample No. T5@2'
 Sample Type: Undisturbed/Saturated
 Soil Description: Silty Clay

		1	2	3
Normal Stress	(psf)	1000	2000	3000
Peak Stress	(psf)	828	1284	1956
Displacement	(in)	0.150	0.175	0.250
Residual Stress	(psf)	804	1284	1956
Displacement	(in.)	0.250	0.250	0.250
In Situ Dry Density	(pcf)	117.2	117.2	117.2
In Situ Water Content	(%)	12.1	12.1	12.1
Saturated Water Content	(%)	16.1	16.1	16.1
Strain Rate	(in/min)	0.020	0.020	0.020



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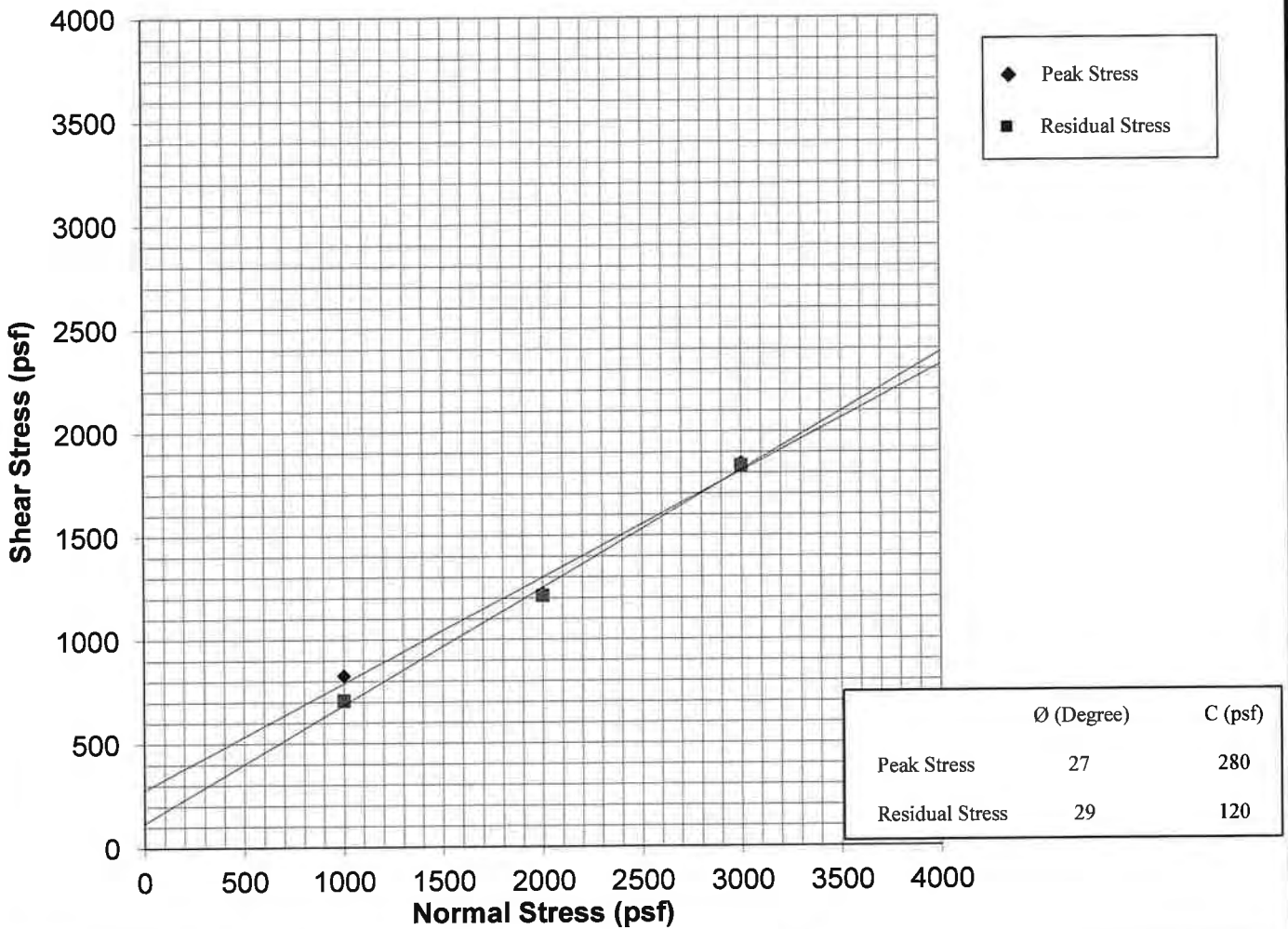
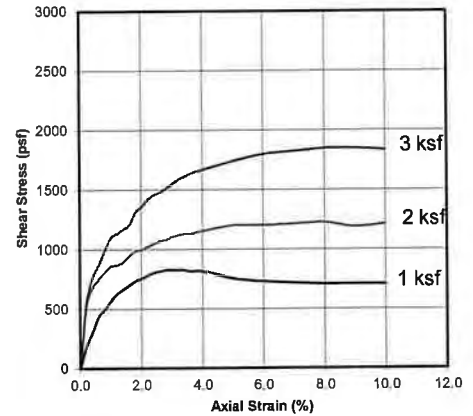
DIRECT SHEAR TEST
ASTM D3080
Plate A

PROJECT NUMBER: 21631-20

DATE: 1/30/2020

Sample No. T9@2'
 Sample Type: Undisturbed/Saturated
 Soil Description: Silty Clay w/ Some Sand

		1	2	3
Normal Stress	(psf)	1000	2000	3000
Peak Stress	(psf)	828	1224	1848
Displacement	(in.)	0.070	0.200	0.200
Residual Stress	(psf)	708	1212	1836
Displacement	(in.)	0.250	0.250	0.250
In Situ Dry Density	(pcf)	115.5	115.5	115.5
In Situ Water Content	(%)	10.6	10.6	10.6
Saturated Water Content	(%)	16.9	16.9	16.9
Strain Rate	(in/min)	0.020	0.020	0.020



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PROJECT NUMBER: 21631-20 DATE: 1/30/2020

DIRECT SHEAR TEST
 ASTM D3080
Plate B

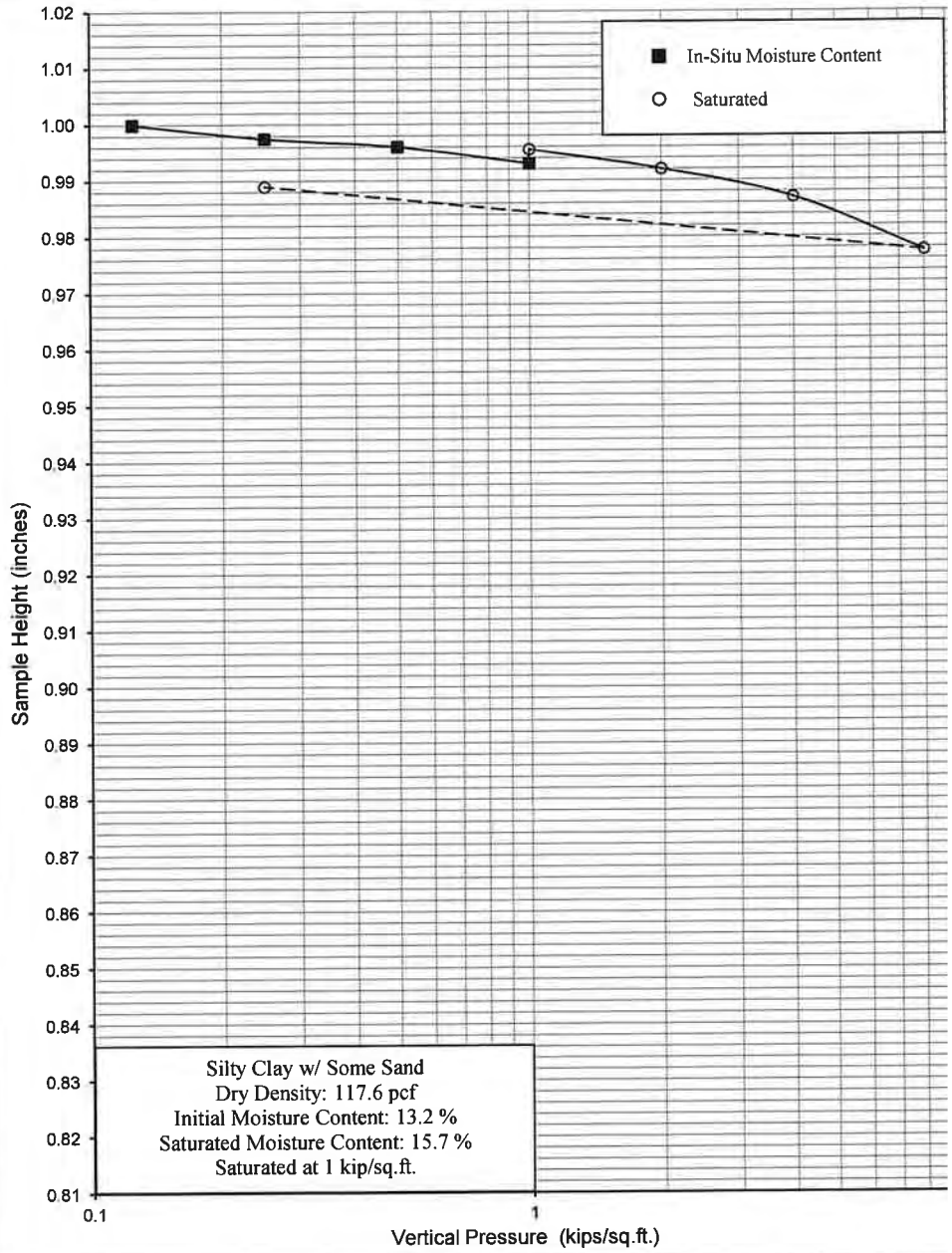
Attachment: Appendix E-Geotechnical Engineering Investigation (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Vertical Pressure (kips/sq.ft.)	Sample Height (inches)	Consolidation (percent)	Sample No.	T4	Depth	4'	Date	1/30/2020
---------------------------------	------------------------	-------------------------	------------	----	-------	----	------	-----------

0.125	1.0000	0.0
0.25	0.9975	0.2
0.5	0.9960	0.4
1	0.9930	0.7
1	0.9955	0.4
2	0.9920	0.8
4	0.9870	1.3
8	0.9775	2.3
0.25	0.9890	1.1

Saturated

Date Tested: 1/29/2020
 Sample: T4
 Depth: 4'



NorCal Engineering

SOILS AND GEOTECHNICAL CONSULTANTS

CDREP, LLC

PROJECT NUMBER: 21631-20

DATE: 1/30/2020

CONSOLIDATION TEST

ASTM D2435

Plate C

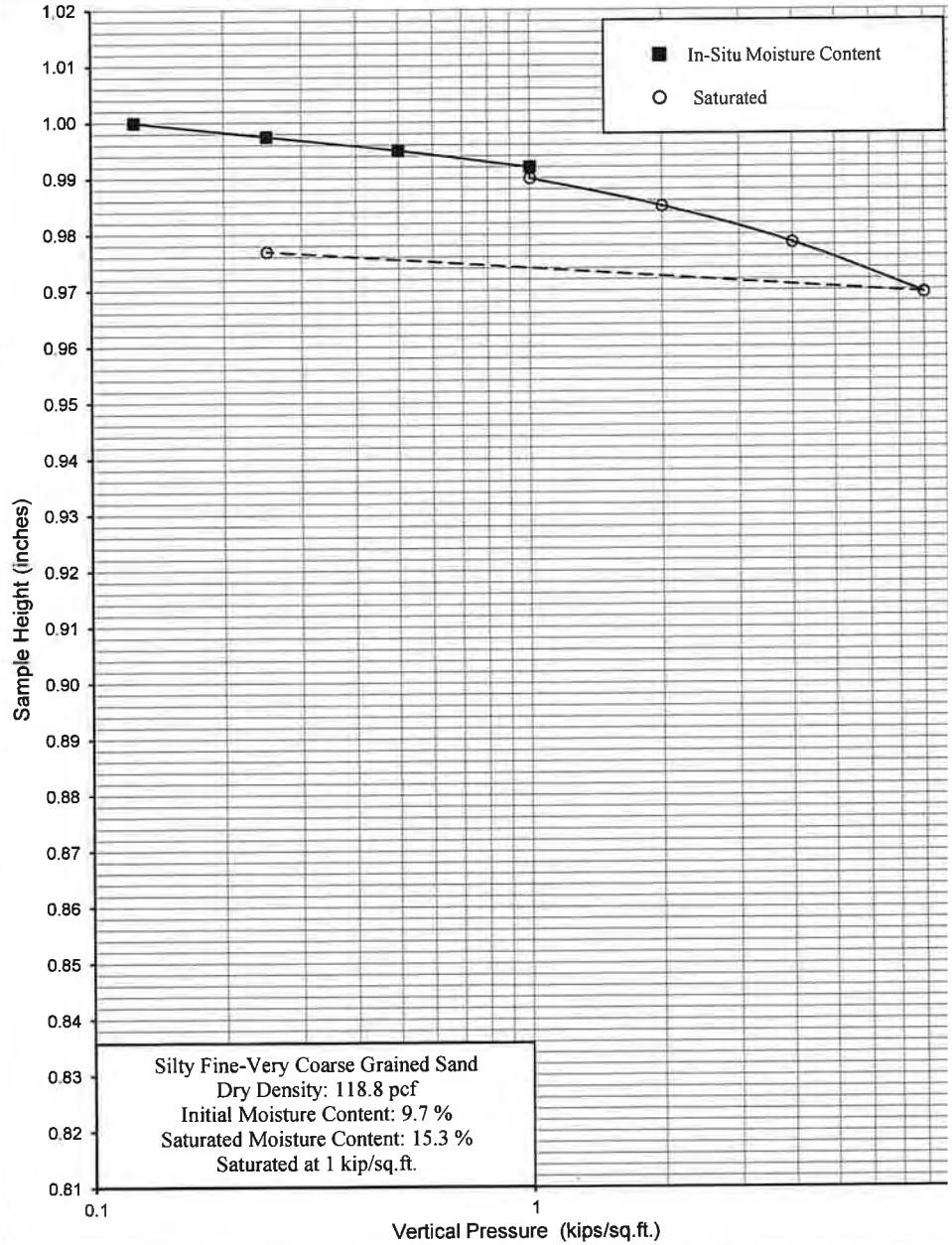
Attachment: Appendix E-Geotechnical Engineering Investigation (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Vertical Pressure (kips/sq.ft.)	Sample Height (inches)	Consolidation (percent)	Sample No.	T4	Depth	8'	Date	1/30/2020
---------------------------------	------------------------	-------------------------	------------	----	-------	----	------	-----------

0.125	1.0000	0.0
0.25	0.9975	0.2
0.5	0.9950	0.5
1	0.9920	0.8
1	0.9900	1.0
2	0.9850	1.5
4	0.9785	2.2
8	0.9695	3.1
0.25	0.9770	2.3

Saturated

Date Tested: 1/29/2020
 Sample: T4
 Depth: 8'



NorCal Engineering

SOILS AND GEOTECHNICAL CONSULTANTS

CDREP, LLC

PROJECT NUMBER: 21631-20

DATE: 1/30/2020

CONSOLIDATION TEST

ASTM D2435

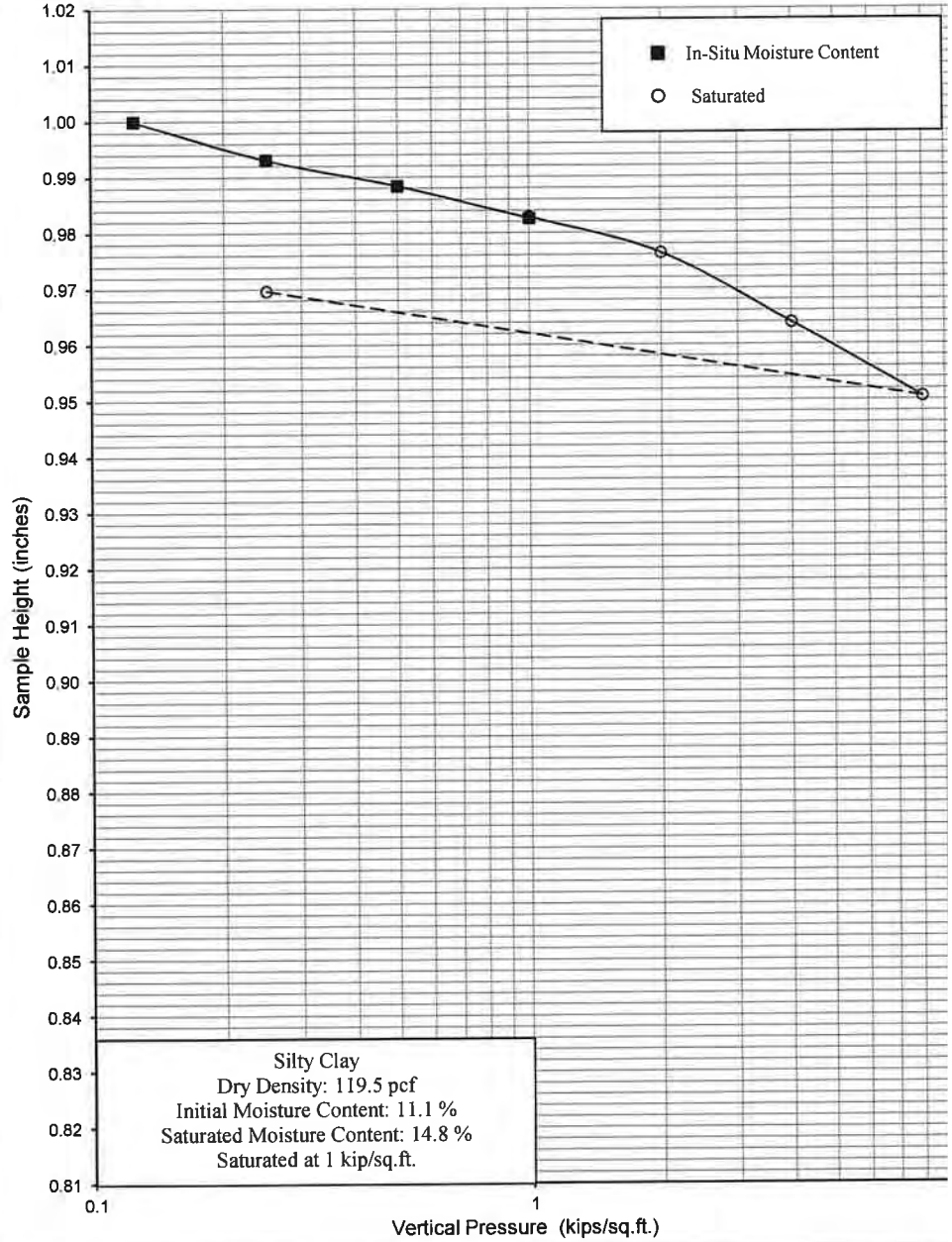
Plate D

Attachment: Appendix E-Geotechnical Engineering Investigation (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Vertical Pressure (kips/sq.ft.)	Sample Height (inches)	Consolidation (percent)	Sample No.	T9	Depth	5'	Date	1/30/2020
---------------------------------	------------------------	-------------------------	------------	----	-------	----	------	-----------

0.125	1.0000	0.0
0.25	0.9931	0.7
0.5	0.9884	1.2
1	0.9826	1.7
1	0.9829	1.7
2	0.9764	2.4
4	0.9639	3.6
8	0.9506	4.9
0.25	0.9697	3.0

Date Tested: 1/29/2020
 Sample: T9
 Depth: 5'



NorCal Engineering

SOILS AND GEOTECHNICAL CONSULTANTS

CDREP, LLC

PROJECT NUMBER: 21631-20

DATE: 1/30/2020

CONSOLIDATION TEST

ASTM D2435

Plate E

Appendix C

NorCal Engineering

Site Soil Class: D - Stiff Soil

Results:

S_s :	1.5	S_{D1} :	N/A
S_1 :	0.6	T_L :	8
F_a :	1	PGA :	0.612
F_v :	N/A	PGA _M :	0.674
S_{MS} :	1.5	F_{PGA} :	1.1
S_{M1} :	N/A	I_e :	1.25
S_{DS} :	1	C_v :	1.4

Ground motion hazard analysis may be required. See ASCE/SEI 7-16 Section 11.4.8.

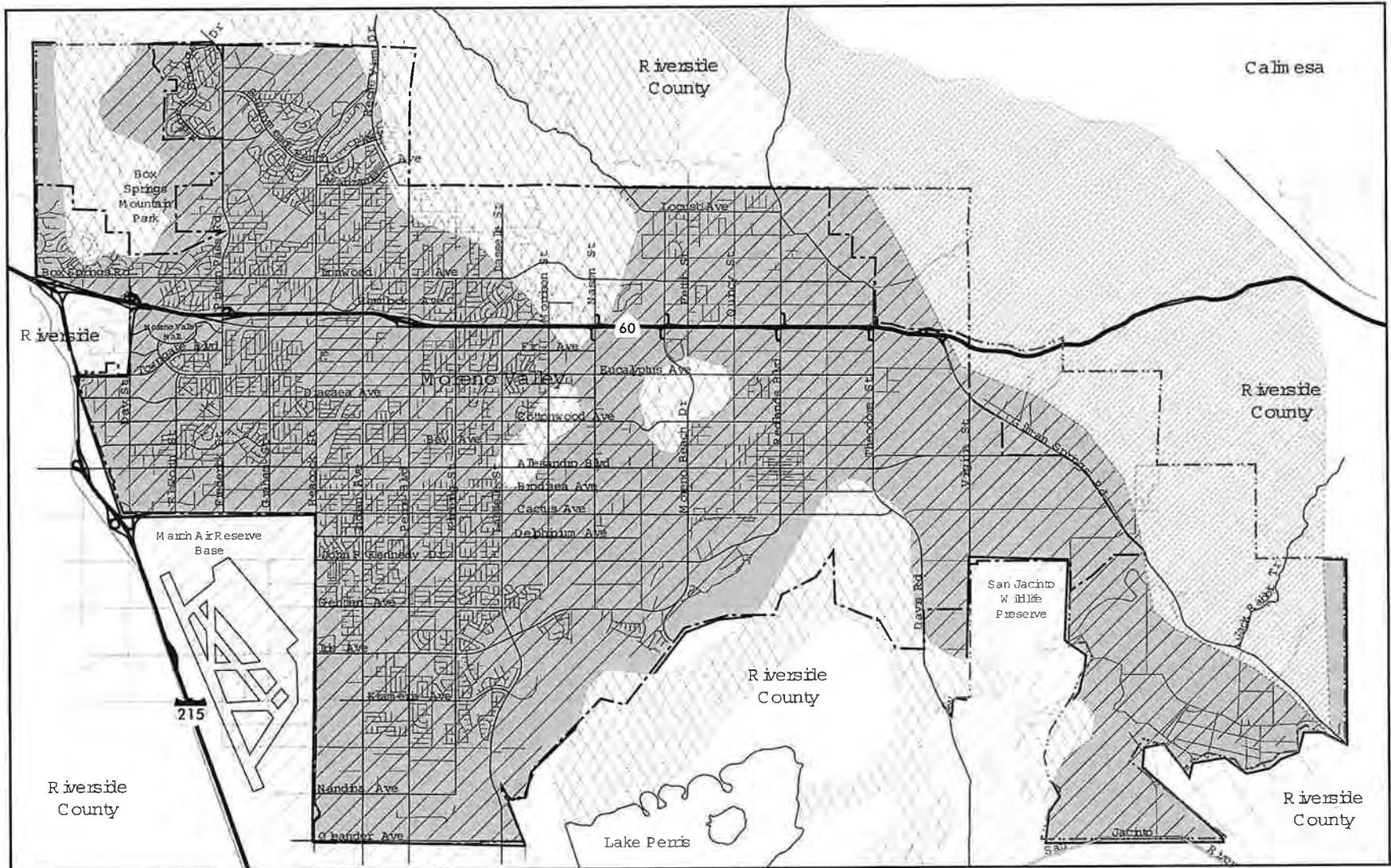
Data Accessed: Tue Jan 28 2020

Date Source: [USGS Seismic Design Maps](#)

The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

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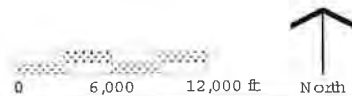


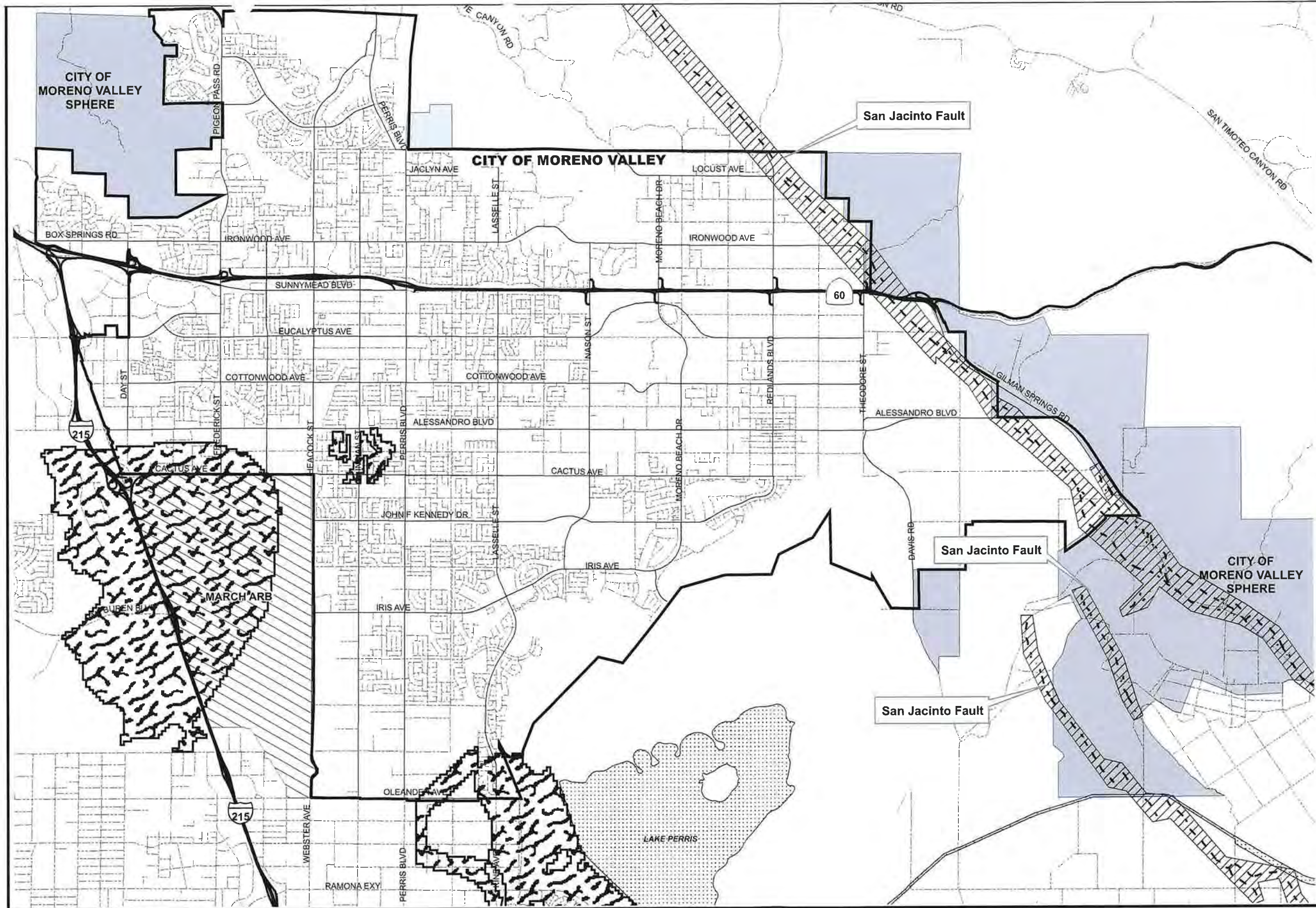
Source: Generalized Geologic Map of Part of the Northern Peninsular Ranges, 1985
 University of California Riverside, Campus Museum Contributions No. 1, page 64.

Note: This map is not a substitute for detailed Alquist-Priolo Special Studies Maps
 or Riverside County Hazard Management Zone Maps. For Accurate findings refer
 to California State and Riverside County Geologists.

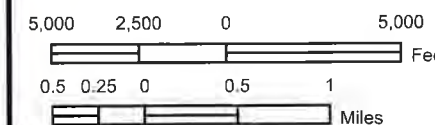
- Perris Bedrock
- Quaternary Alluvium
- Semi Consolidated Sandstone, Siltstone and beds of gravel
- Granite Rocks of the Southern California Batholith

**Figure 5.6-1
 Geology**





- Streets
- Major Streets
- Highways
- - - Faults
- [Hatched Box] Fault Zones
- [Wavy Box] Potential Liquefaction
- [White Box] Moreno Valley
- [Light Blue Box] Moreno Valley Sphere
- [Diagonal Line Box] March ARB
- [Dotted Box] Waterbodies



Date: March 24, 2006
 State Plane NAD83 Zone 6
 File: G:\arcmap\planning\gen_plan_update\geologic.mxd

GEOGRAPHIC INFORMATION SYSTEM:

The information shown on this map was compiled from the Riverside County GIS and the City of Moreno Valley GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map.



**Figure 5.6-2
 Seismic Hazard:**

Appendix D

NorCal Engineering

Attachment: Appendix E-Geotechnical Engineering Investigation (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 1/20/2020
Test No. 1
Depth: 5'
Tested By: J.S. Jr.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
7:10			105.3			46.4					
7:15	5	5	111.5	6.2		52.8	6.4				
7:15			100.3			41.2					
7:20	5	10	106.4	6.1		47.3	6.1				
7:20			102.6			43.5					
7:25	5	15	108.6	6.0		49.7	6.2				
7:25			103.2			44.2					
7:30	5	20	109.1	5.9		50.3	6.1				
7:30			104.4			45.1					
7:35	5	25	110.4	6.0		51.2	6.1				
7:35			104.1			44.3					
7:40	5	30	109.9	5.8		50.3	6.0				
7:40			103.8			43.9					
7:45	5	35	109.8	6.0		49.9	6.0		72.0	72.0	
7:45			104.3			45.5					
7:50	5	40	110.1	5.8		51.0	5.5		69.6	66.0	
7:50			103.6			44.7					
7:55	5	45	109.3	5.7		50.3	5.6		68.4	67.2	
7:55			103.3			44.1					
8:00	5	50	108.5	5.2		49.4	5.3		62.4	63.6	
8:00			103.1			44.2					
8:05	5	55	108.6	5.5		47.8	5.6		66.0	67.2	
8:05			102.9			43.2					
8:10	5	60	108.2	5.3		48.7	5.5		63.6	66.0	

Average = 67.0 / 67.0 cm/hr



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 1/20/2020
Test No. 2
Depth: 7.5'
Tested By: J.S. Jr.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
8:15			73.0			45.6					
8:30	15	15	74.4	1.4		46.6	1.0				
8:30			74.4			46.6					
8:45	15	30	75.2	0.8		46.6	0.0				
8:45			75.2			46.6					
9:00	15	45	75.7	0.5		46.7	0.1				
9:00			75.7			46.7					
9:15	15	60	76.1	0.4		46.7	0.0				
9:15			76.1			46.7					
9:30	15	75	76.2	0.1		46.7	0.0				
9:30			76.2			46.7					
9:45	15	90	76.3	0.1		46.8	0.1		0.4	0.4	
9:45			76.3			46.8					
10:00	15	105	76.3	0.0		46.8	0.0		0.0	0.0	
10:00			76.3			46.8					
10:15	15	120	76.3	0.0		46.8	0.0		0.0	0.0	
10:15			76.3			46.8					
10:30	15	135	76.3	0.0		46.8	0.0		0.0	0.0	
10:30			76.3			46.8					
10:45	15	150	76.4	0.1		46.8	0.0		0.4	0.0	
10:45			76.4			46.8					
11:00	15	165	76.5	0.1		46.9	0.1		0.4	0.4	
11:00			76.5			46.9					
11:15	15	180	76.5	0.0		46.9	0.0		0.0	0.0	

Average = 0.17 / 0.11 cm/hr



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 1/20/2020
Test No. 3
Depth: 10'
Tested By: D.L.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
9:06			100.0			42.5					
9:16	10	10	101.2	1.2		46.4	3.9				
9:16			99.9			37.9					
9:26	10	20	100.5	0.6		39.2	1.3				
9:26			100.5			39.2					
9:36	10	30	101.0	0.5		40.3	1.1				
9:36			101.0			40.3					
9:46	10	40	101.7	0.7		41.4	1.1				
9:46			101.7			41.4					
9:56	10	50	102.1	0.4		42.1	0.7				
9:56			102.1			42.1					
10:06	10	60	102.6	0.5		42.8	0.7				
10:06			102.6			42.8					
10:16	10	70	102.8	0.2		43.5	0.7		1.2	4.2	
10:16			102.8			43.5					
10:26	10	80	103.0	0.2		44.5	1.0		1.2	6.0	
10:26			103.0			44.5					
10:36	10	90	103.4	0.4		45.2	0.7		2.4	4.2	
10:36			103.4			45.2					
10:46	10	100	103.8	0.4		45.7	0.5		2.4	3.0	
10:46			103.8			45.7					
10:56	10	110	104.2	0.4		46.3	0.6		2.4	3.6	
10:56			104.2			46.3					
11:06	10	120	104.4	0.2		46.7	0.4		1.2	2.4	

Average = 1.8 / 3.9 cm/hr

SITE LOCATION: _____
 GEOTECHNICAL REPORT: _____
 GEOLOGY REPORT: _____

DEPTH TO WATER TABLE = 30'
 EARTHQUAKE MAGNITUDE = 7.0
 PEAK GROUND ACCELERATION = 0.67g

DEPTH BELOW FINAL GRADE (FEET)	MOIST DENSITY (PCF)	σ_o TOTAL STRESS (PSF)	$\bar{\sigma}_o$ EFFECTIVE STRESS (PSF)	$\sigma_v/\bar{\sigma}_o$ (-)	r_d (-)	$\tau_{h/\bar{\sigma}_o}$ (-)	N VALUE (BLOWS/FT)	RELATIVE DENSITY (%)	C_N (-)	C_E (-)	C_B (-)	C_R (-)	C_S (-)	$(N_1)_{60}$ (BLOWS/FT)	FINES (%)	CRR M=7.5	MSF (-)	CRR M=7.0	Liq. F.S.
5	120	600	Same	1.00	0.99	0.44	>50	>90	>1.6	1.00	1.05	0.70	1.20	>70	21	>0.50	1.25	>0.63	>1.4
10	125	1225			0.96	0.42	36		1.2			0.75		41	47				>1.5
15	130	1875			0.92	0.40	52		1.0			0.85		56	33				>1.6
20		2525			0.87	0.38	30	85	0.9			0.90		31	14				>1.6
25		3175			0.80	0.35	>50	>90	0.82			0.95		49	46				>1.6
30		3825			0.74	0.32	41	85	0.77			1.00		40	45				>1.5
35		4475	4163	1.07	0.68	0.32	42	85	0.74					39	40				>1.5
40		5125	4501	1.14	0.64	0.32	56	>90	0.71					50	48				>1.5
45		5775	4839	1.19	0.61	0.32	46	85	0.68					39	47				>1.5
50		6425	5177	1.24	0.58	0.32	37	70	0.65					30	29				>1.5

① INDUCED CYCLIC STRESS RATIO = $\tau_{ave}/\bar{\sigma}_o = 0.65 \cdot \frac{\alpha_{max}}{g} \cdot \frac{\sigma_o}{\bar{\sigma}_o} \cdot r_d$
 • C_E = Corr. - Energy Ratio = Energy Ratio / 60%
 • C_B = Corr. - Borehole Dia. = 1.15 for 8" dia. borehole
 • C_R = Corr. - Rod Length
 • C_S = Corr. - Sampling Method

Actual Energy Ratio = 0.67-1.17 (Safety Hammer)
 = 0.50-1.00 (Donut Hammer)
 Sampling Method = 1.0 Standard sampler
 = 1.2 Sampler w/o liner

NorCal Engineering
 SOILS AND GEOTECHNICAL CONSULTANTS

PROJECT _____ DATE _____

EVALUATION OF LIQUEFACTION POTENTIAL

Attachment: Appendix E-Geotechnical Engineering Investigation (4465 : PEN20-0118-0119, PEN20-0122



Compass Danbe Centerpointe

GREENHOUSE GAS ANALYSIS

CITY OF MORENO VALLEY

PREPARED BY:

Haseeb Qureshi
hqureshi@urbanxroads.com

Alyssa Tamase
atamase@urbanxroads.com

NOVEMBER 12, 2020

13661-02 GHG Report

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE OF CONTENTS

TABLE OF CONTENTS	I
APPENDICES II	
LIST OF EXHIBITS	II
LIST OF TABLES	II
LIST OF ABBREVIATED TERMS	III
EXECUTIVE SUMMARY	1
ES.1 Summary of Findings.....	1
ES.2 Project Requirements.....	1
1 INTRODUCTION	4
1.1 Site Location.....	4
1.2 Project Description.....	4
2 CLIMATE CHANGE SETTING	8
2.1 Introduction to Global Climate Change.....	8
2.2 Global Climate Change Defined.....	8
2.3 GHGs.....	8
2.4 Global Warming Potential.....	15
2.5 GHG Emissions Inventories.....	15
2.6 Effects of Climate Change in California.....	16
2.7 Regulatory Setting.....	18
2.8 City of Moreno Valley.....	38
2.9 Discussion on Establishment of Significance Thresholds.....	39
3 PROJECT GHG IMPACT	41
3.1 Introduction.....	41
3.2 Standards of Significance.....	41
3.3 Models Employed To Analyze GHGs.....	41
3.4 Life-Cycle Analysis Not Required.....	42
3.5 Construction Emissions.....	42
3.6 Operational Emissions.....	44
3.7 Emissions Summary.....	48
3.8 GHG Emissions Findings and Recommendations.....	48
4 REFERENCES	59
5 CERTIFICATIONS	64

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDICES

- APPENDIX 3.1: CALEEMOD PROJECT ANNUAL CONSTRUCTION EMISSIONS MODEL OUTPUTS
- APPENDIX 3.2: CALEEMOD PROJECT ANNUAL OPERATIONS (PASSENGER CARS) EMISSIONS MODEL OUTPUTS
- APPENDIX 3.3: CALEEMOD PROJECT ANNUAL OPERATIONS (TRUCKS) EMISSIONS MODEL OUTPUTS
- APPENDIX 3.4: EMFAC 2017 OUTPUTS

LIST OF EXHIBITS

EXHIBIT 1-A: LOCATION MAP5

EXHIBIT 1-B: SITE PLAN6

EXHIBIT 2-A: SUMMARY OF PROJECTED GLOBAL WARMING IMPACT, 2070-2099 (AS COMPARED WITH 1961-1990)..... 14

LIST OF TABLES

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS1

TABLE 2-1: GREENHOUSE GASES9

TABLE 2-2: GWP AND ATMOSPHERIC LIFETIME OF SELECT GHGS 15

TABLE 2-3: TOP GHG PRODUCING COUNTRIES AND THE EUROPEAN UNION 16

TABLE 3-1: CONSTRUCTION DURATION.....43

TABLE 3-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS (1 OF 2)43

TABLE 3-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS (2 OF 2)44

TABLE 3-3: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS.....44

TABLE 3-4: PASSENGER CAR FLEET MIX46

TABLE 3-5: TRUCK FLEET MIX.....47

TABLE 3-6: PROJECT GHG EMISSIONS.....48

TABLE 3-7: 2017 SCOPING PLAN CONSISTENCY SUMMARY49

TABLE 3-8: CITY OF MORENO VALLEY GENERAL PLAN CONSISTENCY..... 54

TABLE 3-9: CITY OF MORENO VALLEY GENERAL PLAN CONSISTENCY..... 55

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

LIST OF ABBREVIATED TERMS

%	Percent
°C	Degrees Celsius
°F	Degrees Fahrenheit
(1)	Reference
2017 Scoping Plan	Final 2017 Scoping Plan Update
AB	Assembly Bill
AB 32	Global Warming Solutions Act of 2006
AB 1493	Pavley Fuel Efficiency Standards
AB 1881	California Water Conservation Landscaping Act of 2006
Annex I	Industrialized Nations
APA	Administrative Procedure Act
AQIA	<i>Compass Danbe Centerpointe Air Quality Impact Analysis</i>
BAU	Business As Usual
C ₂ F ₆	Hexafluoroethane
C ₂ H ₆	Ethane
CalEEMod	California Emissions Estimator Model
CALGAPS	California LBNL GHG Analysis of Policies Spreadsheet
CALGreen	California Green Building Standards Code
CAS	Climate Action Strategy
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resource Board
CBSC	California Building Standards Commission
CEC	California Energy Commission
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
<i>CEQA Guidelines</i>	<i>2019 California Environmental Quality Act Guidelines</i>
CDFR	California Department of Food and Agriculture
CF ₄	Tetrafluoromethane
CFC	Chlorofluorocarbons
CFC-113	Trichlorotrifluoroethane
CH ₄	Methane
City	City of Moreno Valley
CNRA	California Natural Resources Agency
<i>CNRA 2009</i>	<i>2009 California Climate Adaptation Strategy</i>
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent

Convention	United Nation's Framework Convention on Climate Change
COP	Conference of the Parties
CPUC	California Public Utilities Commission
DWR	Department of Water Resources
EMFAC	Emission Factor Model
EPA	Environmental Protection Agency
FED	Functional Equivalent Document
GCC	Global Climate Change
Gg	Gigagram
GHGA	Greenhouse Gas Analysis
GPA	General Plan Amendment
gpd	Gallons Per Day
gpm	Gallons Per Minute
GWP	Global Warming Potential
H ₂ O	Water
HFC	Hydrofluorocarbons
HDT	Heavy-Duty Trucks
HFC-23	Fluoroform
HFC-134a	1,1,1,2-tetrafluoroethane
HFC-152a	1,1-difluoroethane
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent System Operator
ITE	Institute of Transportation Engineers
kWh	Kilowatt Hours
lbs	Pounds
LBNL	Lawrence Berkeley National Laboratory
LCA	Life-Cycle Analysis
LCD	Liquid Crystal Display
LCFS	Low Carbon Fuel Standard or Executive Order S-01-07
LEV III	Low-Emission Vehicle
LULUCF	Land-Use, Land-Use Change and Forestry
MARB/IPA	March Air Reserve Base and Inland Port Airport
MMR	Mandatory Reporting Rule
MMTCO ₂ e	Million Metric Ton of Carbon Dioxide Equivalent
mpg	Miles Per Gallon
MPOs	Metropolitan Planning Organizations
MMTCO ₂ e/yr	Million Metric Ton of Carbon Dioxide Equivalent Per Year
MT/yr	Metric Tons Per Year

MTCO ₂ e	Metric Ton of Carbon Dioxide Equivalent
MTCO ₂ e/yr	Metric Ton of Carbon Dioxide Equivalent Per Year
MVU	Moreno Valley Electric Utility
MW	Megawatts
MWh	Megawatts Per Hour
MWELO	California Department of Water Resources' Model Water Efficient
N ₂ O	Nitrous Oxide
NDC	Nationally Determined Contributions
NF ₃	Nitrogen Trifluoride
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health
Non-Annex I	Developing Nations
OAL	Office of Administrative Law
OPR	Office of Planning and Research
PFC	Perfluorocarbons
ppb	Parts Per Billion
ppm	Parts Per Million
ppt	Parts Per Trillion
Project	Compass Danbe Centerpointe
RPS	Renewable Portfolio Standards
SAFE	Safer Affordable Fuel-Efficient Vehicles Rule
SB	Senate Bill
SB 32	California Global Warming Solutions Act of 2006
SB 375	Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies
SB 1078	Renewable Portfolio Standards
SB 1368	Statewide Retail Provider Emissions Performance Standards
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
Scoping Plan	California Air Resources Board Climate Change Scoping Plan
sf	Square Feet
SF ₆	Sulfur Hexafluoride
SLPS	Short-Lived Climate Pollutant Strategy
SP	Service Population
TDM	Transportation Demand Management

TA	<i>Alessandro Warehouse Traffic Impact Analysis</i>
Title 20	Appliance Energy Efficiency Standards
Title 24	California Building Code
U.N.	United Nations
U.S.	United States
UNFCCC	United Nations' Framework Convention on Climate Change
UTR	Utility Tractors
VMT	Vehicle Miles Traveled
WCI	Western Climate Initiative
WRI	World Resources Institute
ZC	Zone Change
ZE/NZE	Zero and Near-Zero Emissions
ZEV	Zero-Emissions Vehicles

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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Compass Danbe Centerpointe Greenhouse Gas Analysis* (GHGA) is summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the *2019 California Environmental Quality Act (CEQA) Guidelines (CEQA Guidelines)* (1). Table ES-1 shows the findings of significance for potential greenhouse gas (GHG) impacts under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
GHG Impact #1: The Project would not generate direct or indirect GHG emission that would result in a significant impact on the environment.	3.8	<i>Less Than Significant</i>	<i>n/a</i>
GHG Impact #2: The Project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.	3.8	<i>Less Than Significant</i>	<i>n/a</i>

ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the State of California and the South Coast Air Quality Management District (SCAQMD) aimed at the reduction of air pollutant emissions. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of GHG emissions include:

- Global Warming Solutions Act of 2006 (Assembly Bill (AB) 32) (2).
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (Senate Bill (SB) 375) (3).
- Pavley Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new vehicles (4).
- California Building Code (Title 24 California Code of Regulations (CCR)). Establishes energy efficiency requirements for new construction (5).
- Appliance Energy Efficiency Standards (Title 20 CCR). Establishes energy efficiency requirements for appliances (6).
- Low Carbon Fuel Standard (LCFS). Requires carbon content of fuel sold in California to be 10 percent (%) less by 2020 (7).
- California Water Conservation in Landscaping Act of 2006 (AB 1881). Requires local agencies to adopt the Department of Water Resources updated Water Efficient Landscape Ordinance or equivalent by January 1, 2010 to ensure efficient landscapes in new development and reduced water waste in existing landscapes (8).

- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions (9).
- Renewable Portfolio Standards (SB 1078 – also referred to as RPS). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20% by 2010 and 33% by 2020 (10).
- California Global Warming Solutions Act of 2006 (SB 32). Requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15 (11).

Promulgated regulations that will affect the Project's emissions are accounted for in the Project's GHG calculations provided in this report. In particular, AB 1493, LCFS, and RPS, and therefore are accounted for in the Project's emission calculations.

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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

1 INTRODUCTION

This report presents the results of the GHGA prepared by Urban Crossroads, Inc., for the proposed Compass Danbe Centerpointe (Project). The purpose of this GHGA is to evaluate Project-related construction and operational emissions and determine the level of GHG impacts as a result of constructing and operating the Project.

1.1 SITE LOCATION

The proposed project is located south of Alessandro Boulevard on either side of Chagall Court in the City of Moreno Valley as shown on Exhibit 1-A. The March Air Reserve Base/Inland Port Airport (MARB/IPA) is located approximately 0.9 miles south of the Project site. The Project site is bordered to the west by vacant land, to the east by vacant land, to the north by commercial and residential uses, and to the south are existing industrial buildings.

This proposed Project includes a General Plan Amendment (GPA) and a Zone Change (ZC). The site is currently designated as Commercial in the City's General Plan, which would require a land use and zoning change to Light Industrial use. The proposed changes are consistent with the zones to the west, south and east of the subject site and adjacent properties. The amendment is in keeping with the uses surrounding the project site.

1.2 PROJECT DESCRIPTION

Exhibit 1-B illustrates a preliminary site plan for the Project. The Project is anticipated to be developed within a single phase with an anticipated opening year of 2022. The proposed Project consists of the following uses:

- Building 1: 206,665 square feet (sf) of warehousing (70% of total building sf) and 88,571 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 295,236 sf for Building 1
- Building 2: 70,876 sf of warehousing (70% of total building sf) and 30,376 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 101,252 sf for Building 2

This analysis includes a conservative assumption of on-site Project-related emission sources for potential future tenants, including architectural coatings, consumer products, landscape maintenance equipment, emissions associated with natural gas and electricity, and mobile source emissions. This analysis is intended to describe GHG impacts associated with the expected operational activities at the Project site. This report assumes the Project will operate 24-hours daily for seven days per week. At the time this GHG impact analysis was prepared, the future tenants of the proposed Project were unknown however any tenant would operate consistent with a high-cube warehouse.

EXHIBIT 1-A: LOCATION MAP



Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

2 CLIMATE CHANGE SETTING

2.1 INTRODUCTION TO GLOBAL CLIMATE CHANGE

GCC is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project like the proposed Project evaluated in this GHGA cannot generate enough GHG emissions to affect a discernible change in global climate. However, the proposed Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. Because these changes may have serious environmental consequences, Section 3.0 will evaluate the potential for the proposed Project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

2.2 GLOBAL CLIMATE CHANGE DEFINED

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO₂, N₂O, CH₄, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radioactive heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

2.3 GHGs

2.3.1 GHGs AND HEALTH EFFECTS

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. Many gases demonstrate these properties and as discussed in Table 2-1. For the purposes of this analysis, emissions of CO₂, CH₄, and N₂O were evaluated (see Table 3-1 later in this report) because these gases are the primary contributors to GCC from development projects.

Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

TABLE 2-1: GREENHOUSE GASES

Greenhouse Gases	Description	Sources	Health Effects
Water	<p>Water is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. A climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change.</p> <p>As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is</p>	<p>The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.</p>	<p>There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor.</p>

Greenhouse Gases	Description	Sources	Health Effects
	<p>unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the earth's surface and heat it up) (12).</p>		
CO ₂	<p>CO₂ is an odorless and colorless GHG. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO₂ concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Left unchecked, the concentration of CO₂ in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources (13).</p>	<p>CO₂ is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. CO₂ is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks (14).</p>	<p>Outdoor levels of CO₂ are not high enough to result in negative health effects.</p> <p>According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of CO₂ can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of CO₂ in the earth's atmosphere are estimated to be approximately 370 ppm, the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15 minute period (15).</p>

Greenhouse Gases	Description	Sources	Health Effects
CH ₄	CH ₄ is an extremely effective absorber of radiation, although its atmospheric concentration is less than CO ₂ and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs.	CH ₄ has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH ₄ . Other anthropogenic sources include fossil-fuel combustion and biomass burning (16).	CH ₄ is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to high levels of CH ₄ can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.
N ₂ O	N ₂ O, also known as laughing gas, is a colorless GHG. Concentrations of N ₂ O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb).	N ₂ O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also	N ₂ O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage) (17).

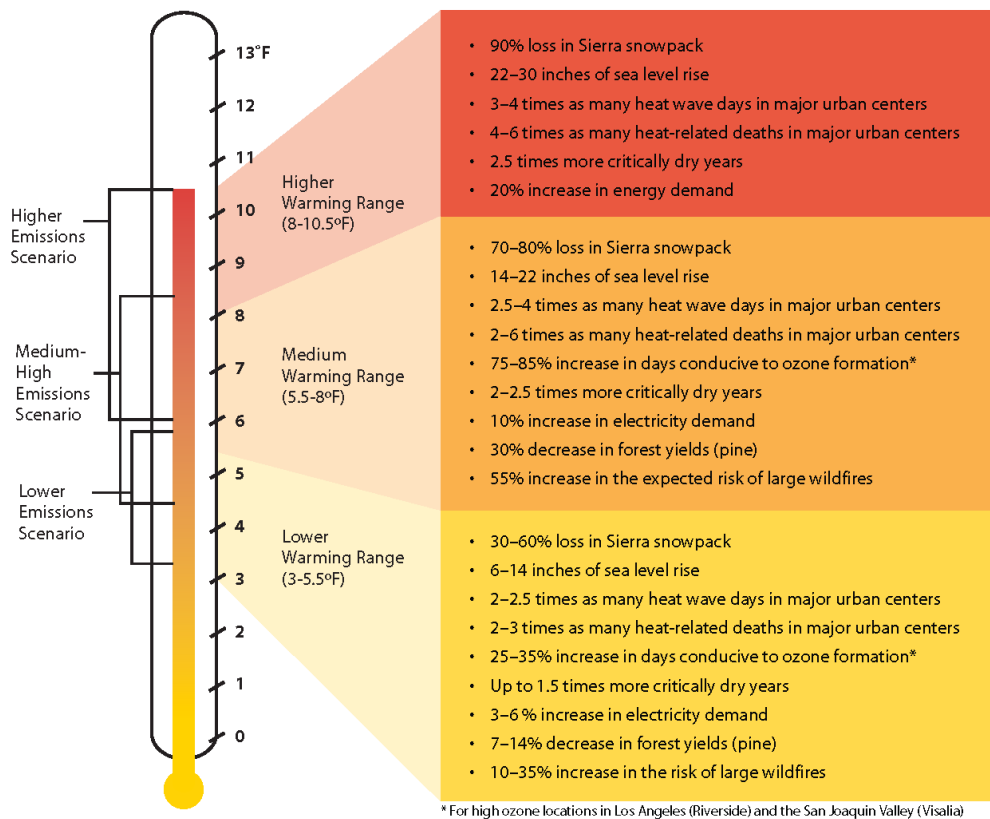
Greenhouse Gases	Description	Sources	Health Effects
		used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. N ₂ O can be transported into the stratosphere, be deposited on the earth's surface, and be converted to other compounds by chemical reaction (17).	
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in CH ₄ or ethane (C ₂ H ₆) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	CFCs have no natural source but were first synthesized in 1928. They were used for refrigerants, aerosol propellants and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years (18).	In confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.

Greenhouse Gases	Description	Sources	Health Effects
HFCs	HFCs are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential (GWP). The HFCs with the largest measured atmospheric abundances are (in order), fluoroform (CHF ₃), 1,1,1,2-tetrafluoroethane (CH ₂ FCF), and 1,1-difluoroethane (CH ₃ CF ₂). Prior to 1990, the only significant emissions were of CHF ₃ . CH ₂ FCF emissions are increasing due to its use as a refrigerant.	HFCs are manmade for applications such as automobile air conditioners and refrigerants.	No health effects are known to result from exposure to HFCs.
PFCs	PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above earth's surface, are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF ₄) and hexafluoroethane (C ₂ F ₆). The EPA estimates that concentrations of CF ₄ in the atmosphere are over 70 parts per trillion (ppt).	The two main sources of PFCs are primary aluminum production and semiconductor manufacture.	No health effects are known to result from exposure to PFCs.
SF ₆	SF ₆ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900) (19). The EPA indicates that concentrations in the 1990s were about 4 ppt.	SF ₆ is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.	In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.

Greenhouse Gases	Description	Sources	Health Effects
Nitrogen Trifluoride (NF ₃)	NF ₃ is a colorless gas with a distinctly moldy odor. The World Resources Institute (WRI) indicates that NF ₃ has a 100-year GWP of 17,200 (20).	NF ₃ is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display (LCD) panels, types of solar panels, and chemical lasers.	Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis (21).

The potential health effects related directly to the emissions of CO₂, CH₄, and N₂O as they relate to development projects such as the proposed Project are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth’s ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas (22). Exhibit 2-A presents the potential impacts of global warming (23).

EXHIBIT 2-A: SUMMARY OF PROJECTED GLOBAL WARMING IMPACT, 2070-2099 (AS COMPARED WITH 1961-1990)



Source: Barbara H. Allen-Diaz. "Climate change affects us all." *University of California, Agriculture and Natural Resources*, 2009.

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

2.4 GLOBAL WARMING POTENTIAL

GHGs have varying GWP values. GWP of a GHG indicates the amount of warming a gas causes over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO₂ is utilized as the reference gas for GWP, and thus has a GWP of 1. CO₂ equivalent (CO₂e) is a term used for describing the difference GHGs in a common unit. CO₂e signifies the amount of CO₂ which would have the equivalent GWP.

The atmospheric lifetime and GWP of selected GHGs are summarized at Table 2-2. As shown in the table below, GWP for the Second Assessment Report, the Intergovernmental Panel on Climate Change (IPCC)'s scientific and socio-economic assessment on climate change, range from 1 for CO₂ to 23,900 for SF₆ and GWP for the IPCC's 5th Assessment Report range from 1 for CO₂ to 23,500 for SF₆ (24).

TABLE 2-2: GWP AND ATMOSPHERIC LIFETIME OF SELECT GHGS

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)	
		2 nd Assessment Report	5 th Assessment Report
CO ₂	See*	1	1
CH ₄	12 .4	21	28
N ₂ O	121	310	265
HFC-23	222	11,700	12,400
HFC-134a	13.4	1,300	1,300
HFC-152a	1.5	140	138
SF ₆	3,200	23,900	23,500

*As per Appendix 8.A. of IPCC's 5th Assessment Report, no single lifetime can be given.

Source: Table 2.14 of the IPCC Fourth Assessment Report, 2007

2.5 GHG EMISSIONS INVENTORIES

2.5.1 GLOBAL

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2018. Based on the latest available data, the sum of these emissions totaled approximately 28,768,439 gigagram (Gg) CO₂e¹ (25) (26) as summarized on Table 2-3.

¹ The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2018 data, the United Nations' Framework Convention on Climate Change (UNFCCC) data for the most recent year were used U.N. Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," The most recent GHG emissions for China and India are from 2014 and 2010, respectively.

2.5.2 UNITED STATES

As noted in Table 2-3, the United States, as a single country, was the number two producer of GHG emissions in 2018.

TABLE 2-3: TOP GHG PRODUCING COUNTRIES AND THE EUROPEAN UNION ²

Emitting Countries	GHG Emissions (Gg CO ₂ e)
China	12,300,200
United States	6,676,650
European Union (28-member countries)	4,232,274
Russian Federation	2,220,123
India	2,100,850
Japan	1,238,343
Total	28,768,439

2.5.3 STATE OF CALIFORNIA

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls, but is still a substantial contributor to the United States (U.S.) emissions inventory total (27). The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2019 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2017 GHG emissions period, California emitted an average 424.1 million metric tons of CO₂e per year (MMTCO₂e/yr) (28).

2.6 EFFECTS OF CLIMATE CHANGE IN CALIFORNIA

2.6.1 PUBLIC HEALTH

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures

² Used <http://unfccc.int> data for Annex I countries. Consulted the CAIT Climate Data Explorer in <https://www.climatewatchdata.org> site to reference Non-Annex I countries of China and India.

remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

2.6.2 WATER RESOURCES

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

2.6.3 AGRICULTURE

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO₂ levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while

range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

2.6.4 FORESTS AND LANDSCAPES

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.

2.6.5 RISING SEA LEVELS

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

2.7 REGULATORY SETTING

2.7.1 INTERNATIONAL

Climate change is a global issue involving GHG emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce GHGs.

IPCC

In 1988, the United Nations (U.N.) and the World Meteorological Organization established the IPCC to assess the scientific, technical and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

UNITED NATION'S FRAMEWORK CONVENTION ON CLIMATE CHANGE (CONVENTION)

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the Convention, governments gather and share information on GHG

emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

INTERNATIONAL CLIMATE CHANGE TREATIES

The Kyoto Protocol is an international agreement linked to the Convention. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5% against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of “common but differentiated responsibilities.”

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius (°C) above pre-industrial levels, subject to a review in 2015. The UN Climate Change Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings are gradually gaining consensus among participants on individual climate change issues.

On September 23, 2014 more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the U.N. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the U.N. Framework Convention on Climate Change (UNFCCC) reached a landmark agreement on December 12, 2015 in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2°C, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make “nationally determined contributions” (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and “progress made in implementing and achieving” their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they will “represent a progression” beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing \$100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address “loss and damage” resulting from climate change, which explicitly will not “involve or provide a basis for any liability or compensation;”
- Require parties engaging in international emissions trading to avoid “double counting;” and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country’s NDC (C2ES 2015a) (29).

On November 4, 2019, the Trump administration formally notified the U.N. that the United States would withdraw from the Paris Agreement. It should be noted that withdrawal would be effective one year after notification in 2020.

2.7.2 NATIONAL

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

GHG ENDANGERMENT

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the United States Supreme Court (U.S. Court) found that four GHGs, including CO₂, are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act (CAA). The Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs— CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations.

- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section “Clean Vehicles” below. After a lengthy legal challenge, the U.S. Court declined to review an Appeals Court ruling that upheld the EPA Administrator’s findings (30).

CLEAN VEHICLES

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the U.S. On April 1, 2010, the EPA and the Department of Transportation’s National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the U.S.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty (MD) passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile, equivalent to 35.5 miles per gallon (mpg) if the automobile industry were to meet this CO₂ level solely through fuel economy improvements. Together, these standards would cut CO₂ emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the NHTSA issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012. The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and MD passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO₂ in model year 2025, which is equivalent to 54.5 mpg if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks (HDT) and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20% reduction in CO₂ emissions and fuel consumption by the 2018 model year. For HDT and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10% reduction for gasoline vehicles and a 15% reduction for diesel vehicles by the 2018 model year (12 and 17% respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10% reduction in fuel consumption and CO₂ emissions from the 2014 to 2018 model years.

On April 2, 2018, the EPA signed the Mid-term Evaluation Final Determination, which declared that the MY 2022-2025 GHG standards are not appropriate and should be revised (31). This Final Determination serves to initiate a notice to further consider appropriate standards for MY 2022-2025 light-duty vehicles. On August 2, 2018, the NHTSA in conjunction with the EPA, released a notice of proposed rulemaking, the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks* (SAFE Vehicles Rule). The SAFE Vehicles Rule was proposed to amend existing Corporate Average Fuel Economy (CAFE) and tailpipe CO₂ standards for passenger cars and light trucks and to establish new standards covering model years 2021 through 2026. As of March 31, 2020, the NHTSA and EPA finalized the SAFE Vehicle Rule which increased stringency of CAFE and CO₂ emissions standards by 1.5% each year through model year 2026 (32).

MANDATORY REPORTING OF GHGS

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons per year (MT/yr) or more of GHG emissions are required to submit annual reports to the EPA.

NEW SOURCE REVIEW

The EPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule “tailors” the requirements of these CAA permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

“This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the CAA, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016.”

The EPA estimates that facilities responsible for nearly 70% of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

STANDARDS OF PERFORMANCE FOR GHG EMISSIONS FOR NEW STATIONARY SOURCES: ELECTRIC UTILITY GENERATING UNITS

As required by a settlement agreement, the EPA proposed new performance standards for emissions of CO₂ for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts (MW) would be required to meet an output-based standard of 1,000 pounds (lbs) of CO₂ per MW-hour (MWh), based on the performance of widely used natural gas combined cycle technology. It should be noted that on February 9, 2016 the U.S. Court issued a stay of this regulation pending litigation. Additionally, the current EPA Administrator has also signed a measure to repeal the Clean Power Plan, including the CO₂ standards. The Clean Power Plan was officially repealed on June 19, 2019, when the EPA issued the final Affordable Clean Energy rule (ACE). Under ACE, new state emission guidelines were established that provided existing coal-fired electric utility generating units with achievable standards.

CAP-AND-TRADE

Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded or provides flexibility on how the emitter can comply. Successful examples in the U.S. include the Acid Rain Program and the N₂O Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap-and-trade.

The Regional GHG Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO₂ emissions from power plants, auctions CO₂ emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008 and in 2020 has retained all participating states.

The Western Climate Initiative (WCI) partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15% below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system January 1, 2014, and joint offset auctions took place in 2015. While the WCI has yet to publish whether it has successfully reached the 2020 emissions goal initiative set in 2007, SB 32, requires that California, a major partner in the WCI, adopt the goal of reducing statewide GHG emissions to 40% below the 1990 level by 2030.

SMARTWAY PROGRAM

The SmartWay Program is a public-private initiative between the EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other

federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is comprised of four components (33):

1. SmartWay Transport Partnership: A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
2. SmartWay Technology Program: A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
3. SmartWay Vehicles: A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
4. SmartWay International Interests: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared towards reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all HDTs will have to comply with the CARB GHG Regulation that is designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel-efficient. For instance, in 2015, 53 foot or longer dry vans or refrigerated trailers equipped with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10% or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, the EPA has evaluated the fuel saving benefits of various devices through grants, cooperative agreements, emissions and fuel economy testing, demonstration projects and technical literature review. As a result, the EPA has determined the following types of technologies provide fuel saving and/or emission reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies – less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel will eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

2.7.3 CALIFORNIA

2.7.3.1 LEGISLATIVE ACTIONS TO REDUCE GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation such as the landmark AB 32

was specifically enacted to address GHG emissions. Other legislation such as Title 24 and Title 20 energy standards were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

AB 32

The California State Legislature enacted AB 32, which required that GHGs emitted in California be reduced to 1990 levels by the year 2020 (this goal has been met³). GHGs as defined under AB 32 include CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The CARB is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

“Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.”

SB 32

On September 8, 2016, Governor Jerry Brown signed the SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature (34).

CARB SCOPING PLAN UPDATE

In November 2017, CARB released the *Final 2017 Scoping Plan Update*, which identifies the State’s post-2020 reduction strategy. The *Final 2017 Scoping Plan Update* reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the LCFS, and much cleaner cars, trucks and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH₄ emissions from agricultural and other wastes.

The *Final 2017 Scoping Plan Update* establishes a new emissions limit of 260 MMTCO_{2e} for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030 (35).

³ Based upon the 2019 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2017 GHG emissions period, California emitted an average 424.1 MMTCO_{2e} (60). This is less than the 2020 emissions target of 431 MMTCO_{2e}.

California’s climate strategy will require contributions from all sectors of the economy, including the land base, and will include enhanced focus on zero- and near-zero-emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (CH₄, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries will further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California’s local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the *Final 2017 Scoping Plan Update* framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks.
- LCFS, with an increased stringency (18% by 2030).
- Implementing SB 350, which expands the RPS to 50% RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of zero-emission vehicles (ZEV) trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing CH₄ and hydrofluorocarbon emissions by 40% and anthropogenic black carbon emissions by 50% by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20% reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California’s land base as a net carbon sink.

Note, however, that the *Final 2017 Scoping Plan Update* acknowledges that:

“[a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.”

In addition to the statewide strategies listed above, the *Final 2017 Scoping Plan Update* also identifies local governments as essential partners in achieving the State’s long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO₂e (MTCO₂e) or less per capita by 2030 and 2 MTCO₂e or less per capita by 2050. For CEQA projects, CARB states that lead agencies

may develop evidenced-based bright-line numeric thresholds—consistent with the Scoping Plan and the State’s long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and mitigation measures that avoid or minimize project emissions to the degree feasible; or, a performance-based metric using a CAP or other plan to reduce GHG emissions is appropriate.

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) and supported by CARB, California, under its existing and proposed GHG reduction policies, could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that by 2030, emissions could range from 211 to 428 MTCO₂e per year (MTCO₂e/yr), indicating that “even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40% below the 1990 level [of SB 32].” CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions would not meet the State’s 80% reduction goal by 2050, various combinations of policies could allow California’s cumulative emissions to remain very low through 2050 (36) (37).

CAP-AND-TRADE PROGRAM

The Scoping Plan identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program will help put California on the path to meet its goal of achieving a 40% reduction in GHG emissions from 1990 levels by 2030. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap will be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from regulated entities by more than 16% between 2013 and 2020, and by an additional 40% by 2030. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program’s duration.

Covered entities that emit more than 25,000 MTCO₂e/yr must comply with the Cap-and-Trade Program. Triggering of the 25,000 MTCO₂e/yr “inclusion threshold” is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or “MRR”).

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender “compliance instruments” for each MTCO₂e of GHG they emit. There also are requirements to surrender compliance instruments covering 30% of the prior year’s compliance obligation by November of each year (38).

The Cap-and-Trade Program provides a firm cap, which provides the highest certainty of achieving the 2030 target. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by CARB in the *First Update to the Climate Change Scoping Plan*:

“The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative.” (39)

The Cap-and-Trade Program covered approximately 80% of California’s GHG emissions (35). The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects’ electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program’s first compliance period. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported.

THE SUSTAINABLE COMMUNITIES AND CLIMATE PROTECTION ACT OF 2008 (SB 375)

Passing the Senate on August 30, 2008, SB 375 was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40% of the total GHG emissions in California. SB 375 states, “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 does the following: it (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that the CARB accepts as achieving the GHG emission reduction targets.

2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the mitigation measures required by an applicable prior environmental document.

AB 1493

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.

The standards phase in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards will result in about a 22% reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30% reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program (LEV III) or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34% from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EVs (EV) and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.

CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.

- Reorganize the Independent System Operator to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

2.7.3.1 EXECUTIVE ORDERS RELATED TO GHG EMISSIONS

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the state and guide the actions of state agencies.

EXECUTIVE ORDER B-55-18

Executive Order B-55-18 was signed by Governor Brown on September 10, 2018. The order establishes an additional Statewide policy to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter. As per Executive Order B-55-18, CARB is directed to work with relevant State agencies to develop a framework for implementation and accounting that tracks progress toward this goal and to ensure future Climate Change Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

EXECUTIVE ORDER S-3-05

Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

EXECUTIVE ORDER S-01-07 (LCFS)

The Governor signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. The CARB adopted the LCFS on April 23, 2009.

The LCFS was challenged in the U.S. District Court in Fresno in 2011. The court's ruling issued on December 29, 2011, included a preliminary injunction against CARB's implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012, pending final ruling on appeal, allowing CARB to continue to implement and enforce the regulation. The Ninth Circuit Court's decision, filed September 18, 2013, vacated the preliminary injunction. In essence, the court held that LCFS adopted by CARB were not in conflict with federal law. On August 8, 2013, the Fifth District Court of Appeal (California) ruled CARB failed to comply with CEQA and the Administrative Procedure Act (APA) when adopting regulations for LCFS. In a partially published opinion, the Court of Appeal reversed the trial court's judgment and directed issuance of a writ of mandate setting aside Resolution 09-31 and two executive orders of CARB approving LCFS

regulations promulgated to reduce GHG emissions. However, the court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while CARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015 the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

In 2018, the CARB approved amendments to the regulation, which included strengthening the carbon intensity benchmarks through 2030 in compliance with the SB 32 GHG emissions reduction target for 2030. The amendments included crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector (40).

EXECUTIVE ORDER S-13-08

Executive Order S-13-08 states that “climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California’s economy, to the health and welfare of its population and to its natural resources.” Pursuant to the requirements in the Order, the 2009 California Climate Adaptation Strategy (CNRA 2009) was adopted, which is the “...first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States.” Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

EXECUTIVE ORDER B-30-15

On April 29, 2015, Governor Edmund G. Brown Jr. issued an executive order to establish a California GHG reduction target of 40% below 1990 levels by 2030. The Governor’s executive order aligns California’s GHG reduction targets with those of leading international governments ahead of the U.N. Climate Change Conference in Paris late 2015. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMTCO_{2e}. The Order also requires the state’s climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable for local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

2.7.3.2 CALIFORNIA REGULATIONS AND BUILDING CODES

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

TITLE 20 CCR

CCR, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. 23 categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles or other mobile equipment (CEC 2012).

TITLE 24 CCR

CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020.

The CEC indicates that the 2019 Title 24 standards will require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, update indoor and outdoor lighting for nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar photovoltaic systems, homes built under the 2019 standards will about 53% less energy than homes built under the 2016 standards. Nonresidential buildings will use approximately 30% less energy due to lighting upgrades (41).

CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2011, and is administered by the California Building Standards Commission (BSC). CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2019 California Green Building Code Standards that have become effective on January 1, 2020. Local jurisdictions are permitted to adopt more stringent requirements, as state law provides methods for local enhancements. CALGreen recognizes that many jurisdictions have developed existing construction and demolition ordinances and defers to them as the ruling guidance provided, they establish a minimum 65% diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings must meet

in order to be certified for occupancy, which is generally enforced by the local building official. 2019 CALGreen standards are applicable to the Project and require (42):

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- Designated parking. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phase project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
 - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
 - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
 - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).
 - Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).

- Outdoor portable water use in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient (MWELo), whichever is more stringent (5.304.1).
- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 sf or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gal/day (5.303.1.1 and 5.303.1.2).
- Outdoor water use in rehabilitated landscape projects equal or greater than 2,500 sf. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 sf requiring a building or landscape permit (5.304.3).
- Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

MWELo

The MWELo was required by AB 1881, the Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Governor Brown's Drought Executive Order of April 1, 2015 (Executive Order B-29-15) directed DWR to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015 effective December 15, 2015. New development projects that include landscape areas of 500 sf or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems;
- Incentives for graywater usage;
- Improvements in on-site stormwater capture;
- Limiting the portion of landscapes that can be planted with high water use plants; and
- Reporting requirements for local agencies.

CARB REFRIGERANT MANAGEMENT PROGRAM

CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, CCR. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 lbs of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

TRACTOR-TRAILER GHG REGULATION

The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the HD tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors model year 2011 and later must be SmartWay certified. All other tractors must use SmartWay verified low rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

PHASE I AND 2 HEAVY-DUTY VEHICLE GHG STANDARDS

CARB has adopted a new regulation for GHG emissions from HDTs and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the EPA rule for new trucks and engines nationally. Existing HD vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer Greenhouse Gas Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation. In September 2011, the EPA adopted their new rule for HDTs and engines. The EPA rule has compliance requirements for new compression and spark ignition engines, as well as trucks from Class 2b through Class 8. Compliance requirements begin with model year (MY) 2014 with stringency levels increasing through MY 2018. The rule organizes truck compliance into three groupings, which include a) HD pickups and vans; b) vocational vehicles; and c) combination tractors. The EPA rule does not regulate trailers.

CARB staff has worked jointly with the EPA and the NHTSA on the next phase of federal GHG emission standards for medium-duty trucks (MDT) and HDT vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year HDT vehicles, including trailers. But as discussed above, the EPA and NHTSA have proposed to roll back GHG and fuel economy standards for cars and light-duty trucks, which suggests a similar rollback of Phase 2 standards for MDT and HDT vehicles may be pursued.

In February 2019, the OAL approved the Phase 2 Heavy-Duty Vehicle GHG Standards and became effective April 1, 2019. The Phase 2 GHG standards are needed to offset projected vehicle miles traveled (VMT) growth and keep heavy-duty truck CO₂ emissions declining. The federal Phase 2 standards establish for the first time, federal emissions requirements for trailers hauled by heavy-duty tractors. The federal Phase 2 standards are more technology-forcing than the federal Phase 1 standards, requiring manufacturers to improve existing technologies or develop new technologies to meet the standards. The federal Phase 2 standards for tractors, vocational vehicles, and heavy-duty pick-up trucks and vans (PUVs) will be phased-in from 2021-2027, additionally for trailers, the standards are phased-in from 2018 (2020 in California) through 2027 (43).

SB 97 AND THE CEQA GUIDELINES UPDATE

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states “(a) On or before July 1, 2009, the Office of Planning and Research (OPR) shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the OPR pursuant to subdivision (a).” Section 21097 was also added to the Public Resources Code. It provided CEQA protection until January 1, 2010 for transportation projects funded by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 or projects funded by the Disaster Preparedness and Flood Prevention Bond Act of 2006, in stating that the failure to analyze adequately the effects of GHGs would not violate CEQA.

On December 28, 2018, the Natural Resources Agency announced the OAL approved the amendments to the *CEQA Guidelines* for implementing the CEQA. The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing *CEQA Guidelines* to reference climate change.

Section 15064.3 was added the *CEQA Guidelines* and states that in determining the significance of a project’s GHG emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project’s emissions to the effects of climate change. A project’s incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency’s analysis should consider a timeframe that is appropriate for the project. The agency’s analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. Additionally, a lead agency may use a model or methodology to estimate GHG emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project’s incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use (44).

CALIFORNIA RPS PROGRAM (SB 100)

Under the existing RPS, 25% of retail sales are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California’s RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative

emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

2.7.4 REGIONAL

The project is within the South Coast Air Basin (SCAB), which is under the jurisdiction of the SCAQMD.

SCAQMD

SCAQMD is the agency responsible for air quality planning and regulation in the SCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SCAB. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, that could be applied by lead agencies (45). The working group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
 - Residential and Commercial land use: 3,000 MTCO₂e/yr
 - Industrial land use: 10,000 MTCO₂e/yr
 - Based on land use type: residential: 3,500 MTCO₂e/yr; commercial: 1,400 MTCO₂e/yr; or mixed use: 3,000 MTCO₂e/yr
- Tier 4 has the following options:

- Option 1: Reduce Business-as-Usual (BAU) emissions by a certain percentage; this percentage is currently undefined.
- Option 2: Early implementation of applicable AB 32 Scoping Plan measures
- Option 3: 2020 target for service populations, which includes residents and employees: 4.8 MTCO₂e per service population per year for projects and 6.6 MTCO₂e per service population per year for plans;
- Option 3, 2035 target: 3.0 MTCO₂e per service population per year for projects and 4.1 MTCO₂e per service population per year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's interim thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO₂ concentrations at 450 ppm, thus stabilizing global climate.

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. At this time, it is unknown if the project would include stationary sources of emissions subject to SCAQMD permits. Notwithstanding, if the Project requires a stationary permit, it would be subject to the applicable SCAQMD regulations.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

2.8 CITY OF MORENO VALLEY

2.8.1 CITY OF MORENO VALLEY GENERAL PLAN MEASURES

Although the City of Moreno Valley General Plan does not identify specific GHG or climate change policies or goal, a number of the measures identified in the General Plan's Air Quality Element act to reduce or control criteria pollutant emissions and peripherally reduce GHG emissions.

2.8.2 CITY OF MORENO VALLEY ENERGY EFFICIENCY AND CLIMATE ACTION STRATEGY (CAS)

The City of Moreno Valley approved an Energy Efficiency & CAS as well as GHG Analysis on October 9, 2012. The CAS identifies ways that the City can reduce energy and water consumption and GHG emissions as an organization (its employees and the operation of its facilities) and outlines the actions that the City can encourage and community members can employ to reduce their own energy and water consumption and GHG emissions. The policies in the document are to reduce GHG emissions in 2010 by 15% by 2020.

2.9 DISCUSSION ON ESTABLISHMENT OF SIGNIFICANCE THRESHOLDS

The City of Moreno Valley does not have an adopted threshold of significance for GHG emissions. For CEQA purposes, the City has discretion to select an appropriate significance criterion, based on substantial evidence. The SCAQMD's adopted numerical threshold of 10,000 MTCO₂e/yr for industrial stationary source emissions is selected as the significance criterion. The SCAQMD-adopted industrial threshold was selected by the City because the proposed Project is analogous to an industrial use much more closely than any other land use such as commercial or residential in terms of its expected operating characteristics. The Project proposes a single warehouse building, characteristic of an industrial operation. Further, analysis of the Project's traffic generation is based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, 2017 for industrial and warehouse uses. Also, 10,000 MTCO₂e has been used as the significance threshold by many local government lead agencies for logistics projects throughout the Southern California Association of Governments (SCAG) region since the SCAQMD adopted this threshold for its own use. Further, to ensure that the threshold is conservative in its application, although the SCAQMD uses their adopted 10,000 MTCO₂e threshold to determine the significance of stationary source emissions for industrial projects, the 10,000 MTCO₂e threshold used in this analysis is applied to all sources of Project-related GHG emissions whether stationary source, mobile source, area source, or other.

Use of this threshold is also consistent with guidance provided in the CAPCOA *CEQA and Climate Change* handbook, as such the City has opted to use a non-zero threshold approach based on Approach 2 of the handbook. Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90% of emissions from future development. The latest threshold developed by SCAQMD using this method is 10,000 MTCO₂e/yr for industrial projects. This threshold is based on the review of 711 CEQA projects. The SCAQMD found that use of the 10,000 MTCO₂e threshold would result in a capture rate of 90% for all new or modified projects. A 90% emission capture rate means that 90% of total emissions from all new or modified stationary source projects would be subject to some type of CEQA analysis.

As such, the SCAQMD's recommended GHG threshold was established to achieve an emission capture rate of 90% of all new or modified stationary source projects. A GHG significance threshold based on a 90% emission capture rate is appropriate to address the long-term adverse potential impacts associated with GHG emissions. Further, a 90% emission capture rate sets the emission threshold low enough to capture a substantial fraction of future projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that SCAQMD estimates that these GHG emissions would account for <1% of future 2050 statewide GHG emissions target (85 MMTCO₂e/yr). In addition, these small projects would be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory (46).

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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

3 PROJECT GHG IMPACT

3.1 INTRODUCTION

The Project has been evaluated to determine if it will result in a significant GHG impact. The significance of these potential impacts is described in the following section.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related GHG impacts are taken from the Initial Study Checklist in Appendix G of the State *CEQA Guidelines* (14 CCR of Regulations §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to GHG if it would (1):

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

3.3 MODELS EMPLOYED TO ANALYZE GHGS

3.3.1 CALIFORNIA EMISSIONS ESTIMATOR MODEL (CALEEMOD)

On October 17, 2017, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod Version 2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (47). Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity are provided in Appendices 3.1 through 3.3. CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water.

3.3.2 EMFAC2017 EMISSION RATES

On August 19, 2019, the EPA approved the 2017 version of the EMISSIONS FACTOR model (EMFAC) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2017 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to project changes in future emissions from on-road mobile sources (48). This GHGA utilizes annual EMFAC2017 emission factors in order to derive vehicle emissions associated with Project operational activities.

Because the EMFAC2017 emission rates are associated with vehicle fuel types while CalEEMod vehicle emission factors are aggregated to include all fuel types for each individual vehicle class, the EMFAC2017 emission rates for different fuel types of a vehicle class are averaged by activity

or by population and activity to derive CalEEMod emission factors. The equations applied to obtain CalEEMod vehicle emission factors for each emission type are detailed in CalEEMod User's Guide *Appendix A: Calculation Details for CalEEMod* (49).

3.4 LIFE-CYCLE ANALYSIS NOT REQUIRED

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time (50). Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the Project development, infrastructure and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time, an LCA would be extremely speculative and thus has not been prepared.

Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood or documented, and would be challenging to mitigate (51). Additionally, the science to calculate life cycle emissions is not yet established or well defined; therefore, SCAQMD has not recommended, and is not requiring, life-cycle emissions analysis.

3.5 CONSTRUCTION EMISSIONS

Project construction activities would generate CO₂ and CH₄ emissions. The report *Compass Danbe Centerpointe Air Quality Impact Analysis Report* (AQIA) (Urban Crossroads, Inc.) contains detailed information regarding Project construction activities (52). As discussed in the AQIA, Construction related emissions are expected from the following construction activities:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

3.5.1 CONSTRUCTION DURATION

Construction is expected to commence in October 2021 and will last through June 2022. The construction schedule utilized in the analysis, shown in Table 3-1, represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.⁴ The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required

⁴ As shown in the CalEEMod User's Guide Version 2016.3.2, Section 4.3 "OFFROAD Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

per CEQA Guidelines (53). The duration of construction activity was based on CalEEMod default parameters and the 2022 Opening Year.

TABLE 3-1: CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Site Preparation	10/04/2021	10/15/2021	10
Grading	10/16/2021	11/26/2021	30
Building Construction	11/27/2021	06/24/2022	150
Paving	05/28/2022	06/24/2022	20
Architectural Coating	05/01/2022	06/24/2022	40

Source: Construction activity based on the 2022 Opening Year.

3.5.2 CONSTRUCTION EQUIPMENT

Site specific construction fleet may vary due to specific project needs at the time of construction. The associated construction equipment was generally based on CalEEMod defaults. A detailed summary of construction equipment assumptions by phase is provided at Table 3-2. Please refer to specific detailed modeling inputs/outputs contained in Appendix 3.1 of this GHGA.

TABLE 3-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS (1 OF 2)

Phase Name	Equipment	Amount	Hours Per Day
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
	Water Trucks	1	4
Grading	Crawler Tractors	2	8
	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
	Water Trucks	1	4
Building Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
	Water Trucks	1	4

TABLE 3-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS (2 OF 2)

Phase Name	Equipment	Amount	Hours Per Day
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
	Water Trucks	1	4
Architectural Coating	Air Compressors	1	8

Source: Construction equipment generally based on CalEEMod defaults.

3.5.3 CONSTRUCTION EMISSIONS SUMMARY

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions (54). As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 3-3.

TABLE 3-3: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS

Year	Emissions (metric tons per year)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ e ⁵
2021	229.69	0.05	0.00	230.95
2022	561.32	0.06	0.00	562.90
Total	791.01	0.11	0.00	793.85
Amortized Construction Emissions (MTCO₂e)	26.37	0.00	0.00	26.46

3.6 OPERATIONAL EMISSIONS

Operational activities associated with the Project will result in emissions of CO₂, CH₄, and N₂O from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- Water Supply, Treatment, and Distribution
- Solid Waste

⁵ CalEEMod reports the most common GHGs emitted which include CO₂, CH₄, and N₂O. These GHGs are then converted into the CO₂e by multiplying the individual GHG by the GWP.

3.6.1 AREA SOURCE EMISSIONS

LANDSCAPE MAINTENANCE EQUIPMENT

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

3.6.2 ENERGY SOURCE EMISSIONS

COMBUSTION EMISSIONS ASSOCIATED WITH NATURAL GAS AND ELECTRICITY

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO₂ and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting⁶. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. It should be noted that for the industrial components of the proposed Project, CalEEMod default parameters were used.

TITLE 24 ENERGY EFFICIENCY STANDARDS

California's Energy Efficiency Standards for Residential and Nonresidential Buildings was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity. The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020. The CEC anticipates that nonresidential buildings will use approximately 30% less energy (41). The CalEEMod defaults for Title 24 – Electricity and Lighting Energy were reduced by 30% in order to reflect consistency with the 2019 Title 24 standard.

3.6.3 MOBILE SOURCE EMISSIONS

The Project related operational GHG emissions derive primarily from vehicle trips generated by the Project, including employee and driver trips to and from the site and truck trips associated with the proposed uses. Trip characteristics available from the *Alessandro Warehouse Traffic Analysis* (TA) report were utilized in this analysis. Per the TA, the Project would generate a total of approximately 742 two-way vehicular trips per day (1,500 trips inbound and 1,500 trips outbound), including 224 two-way truck trips per day (112 truck trips inbound and 112 truck trips outbound) (55).

⁶ The CalEEMod emissions inventory model does not include indirect emission related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time as there is insufficient information as to the number and type of street lighting that would occur.

3.6.3.1 APPROACH FOR ESTIMATE OF MOBILE SOURCE EMISSIONS

Two separate model runs were utilized to accurately analyze emissions resulting from passenger car and truck operations.

PASSENGER CAR

For purposes of analysis, the CalEEMod default trip length of 16.6 miles was utilized along with an assumption of 100% primary trips. It is important to note that although the TA does not breakdown passenger cars by type, this analysis assumes that passenger cars include Light-Duty-Auto vehicles (LDA), Light-Duty-Trucks (LDT1⁷ & LDT2⁸), and Medium-Duty-Vehicles (MDV) vehicle types. In order to account for emissions generated by employees, the fleet mix presented in Table 3-4 was utilized in this analysis. Additional details on the use of the applicable fleet mix can be found in the footnote to Table 3-4.

TABLE 3-4: PASSENGER CAR FLEET MIX⁹

Land Use	Vehicle Type	%
Building 1		
Warehouse/ High-Cube Cold Storage Warehouse	LDA	61.73
	LDT1	4.17
	LDT2	21.05
	MDV	13.05
Building 2		
Warehouse/ High-Cube Cold Storage Warehouse	LDA	61.73
	LDT1	4.17
	LDT2	21.05
	MDV	13.05

TRUCKS

The second run analyzed truck emissions, incorporated the SCAQMD recommended truck trip length of 40 miles¹⁰ and an assumption of 100% primary trips. In order to be consistent with the TIA, trucks are broken down by truck type. The trucks are comprised of 2-axle/Light-Heavy-Duty Trucks (LHDT), 3-axle/Medium-Heavy-Duty Trucks (MHDT), and 4+-axle/Heavy-Heavy-Duty Trucks (HHDT). In order to account for emissions generated by trucks, the fleet mix presented in

⁷ Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

⁸ Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

⁹ The Project-specific employee and driver fleet mix used in this analysis is based on a proportional split utilizing the CalEEMod default percentage assigned to LDA, LDT1, LDT2, and MDV vehicle types.

¹⁰ The average trip length for heavy trucks were based on the SCAQMD documents for the implementation of the Facility Based Mobile Source Measures (FBMSMs) adopted in the 2016 AQMP. SCAQMD's "Preliminary Warehouse Emission Calculations" cites 39.9-mile trip length for heavy-heavy trucks (41). As a conservative measure, a trip length of 40 miles has been utilized for all trucks for the purpose of this analysis.

Table 3-5 was utilized in this analysis. Additional details on the use of the applicable fleet mix can be found in the footnote to Table 3-5.

TABLE 3-5: TRUCK FLEET MIX¹¹

Land Use	Vehicle Type	%
Building 1		
Warehouse	LHDT	16.32
	MHDT	20.41
	HHDT	63.27
High-Cube Cold Storage Warehouse	LHDT	35.30
	MHDT	11.76
	HHDT	52.94
Building 2		
Warehouse	LHDT	16.67
	MHDT	22.22
	HHDT	61.11
High-Cube Cold Storage Warehouse	LHDT	36.36
	MHDT	9.09
	HHDT	54.55

3.6.4 ON-SITE CARGO HANDLING EQUIPMENT EMISSIONS

It is common for industrial warehouse buildings to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. The cargo handling equipment is assumed to have a horsepower (hp) range of approximately 175 hp to 200 hp. Based on the latest available information from SCAQMD (56); for example, high-cube warehouse projects typically have 3.6 yard trucks per million sf of building space. For this particular Project, based on the maximum square footage of each building space, on-site modeled operational equipment includes up to two (2) 200 hp, compressed natural gas or gasoline-powered yard tractors operating at 4 hours a day for 365 days of the year.

3.6.5 WATER SUPPLY, TREATMENT AND DISTRIBUTION

Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and

¹¹ Project-specific truck fleet mix is based on the number of trips generated by each truck type (LHDT, MHDT, HHDT) relative to the total number of truck trips generated by the Project.

distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used.

3.6.6 SOLID WASTE

Industrial land uses will result in the generation and disposal of solid waste. A percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by CalEEMod using default parameters.

3.7 EMISSIONS SUMMARY

The annual GHG emissions associated with the operation of the proposed Project are summarized in Table 3-6. As shown, the Project would generate approximately 6,649.16 MTCO₂e/yr.

TABLE 3-6: PROJECT GHG EMISSIONS

Emission Source	Emissions (MT/yr)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ e
Annual construction-related emissions amortized over 30 years	26.37	0.00	0.00	26.46
Area Source	0.02	5.00E-05	0.00	0.02
Energy Source	2,019.87	0.08	0.02	2,027.91
Mobile Source (Passenger Cars)	758.61	0.02	0.00	759.02
Mobile Source (Trucks)	3,038.11	0.05	0.00	3,039.35
On-Site Equipment Source	101.58	0.03	0.00	102.41
Waste	75.66	4.47	0.00	187.44
Water Usage	409.48	3.00	0.07	506.56
Total CO₂e (All Sources)	6,649.16			

Source: CalEEMod output, See Appendix 3.1 for detailed model outputs.

3.8 GHG EMISSIONS FINDINGS AND RECOMMENDATIONS

3.8.1 GHG IMPACT 1

The Project could generate direct or indirect GHG emissions that would result in a significant impact on the environment.

As shown on Table 3-6, the Project will result in a net total of approximately 6,649.16 MTCO₂/yr; the proposed Project would not exceed the SCAQMD/City's screening threshold of 10,000 MTCO₂e/yr. Thus, the Project would not have the potential to result in a cumulatively

considerable impact with respect to GHG emissions. As such, a less than significant impact is expected.

3.8.2 GHG IMPACT 2

The Project could not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

As previously stated, pursuant to 15604.4 of the *CEQA Guidelines*, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions (1). As such, the Project's consistency with SB 32 (2017 Scoping Plan), is discussed below. It Consistency with AB 32 and the 2008 Scoping Plan is not necessary, since the target year for AB 32 and the 2008 Scoping Plan was 2020, and the Project's buildout year is 2021. As such the 2008 Scoping Plan does not apply and consistency with the 2017 Scoping Plan is relevant. Project consistency with SB 32 and City's General Plan Measures, Energy Efficiency, and CAS is evaluated in the following discussion.

SB 32/2017 SCOPING PLAN CONSISTENCY

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Table 3-7 summarizes the Project's consistency with the 2017 Scoping Plan. As summarized, the Project will not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories.

TABLE 3-7: 2017 SCOPING PLAN CONSISTENCY SUMMARY¹²

Action	Responsible Parties	Consistency
Implement SB 350 by 2030		
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.	CPUC, CEC, CARB	Consistent. The Project would use energy from Moreno Valley Electric Utility (MVU). MVU has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources. The Project would not interfere with or obstruct MVU energy source diversification efforts.
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.		Consistent. The Project would be designed and constructed to implement the energy efficiency measures for new industrial developments and would include several measures designed to reduce energy consumption. The Project would not interfere with or obstruct policies or strategies to establish annual targets for statewide energy efficiency savings and demand reduction.

¹² Measures can be found at the following link: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

Action	Responsible Parties	Consistency
<p>Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly- owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.</p>		<p>Consistent. The proposed Project would be designed and constructed to implement the energy efficiency measures, where applicable by including several measures designed to reduce energy consumption. The proposed Project includes energy efficient field lighting and fixtures that meet the current Title 24 Standards throughout the Project Site and would be a modern development with energy efficient boilers, heaters, and air conditioning systems.</p>
Implement Mobile Source Strategy (Cleaner Technology and Fuels)		
<p>At least 1.5 million zero emission and plug-in hybrid light-duty EVs by 2025.</p>	<p>CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, OPR, Local Agencies</p>	<p>Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2025 targets. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.</p>
<p>At least 4.2 million zero emission and plug-in hybrid light-duty EVs by 2030.</p>		<p>Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2030 targets. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.</p>
<p>Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.</p>		<p>Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.</p>
<p>Medium- and Heavy-Duty GHG Phase 2.</p>		<p>Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to implement Medium- and Heavy-Duty GHG Phase 2. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.</p>

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Action	Responsible Parties	Consistency
<p>Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO_x standard.</p>		<p>Not applicable. This measure is not within the purview of this Project.</p>
<p>Last Mile Delivery: New regulation that would result in the use of low NO_x or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3-7 truck sales in local fleets starting in 2020, increasing to 10% in 2025 and remaining flat through 2030.</p>		<p>Not applicable. This Project is not responsible for implementation of SB 375 and would therefore not conflict with this measure.</p>
<p>Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."</p>		<p>Consistent. This Project would not obstruct or interfere with implementation of SB 375 and would therefore not conflict with this measure.</p>
<p>Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).</p>	<p>CARB</p>	<p>Not applicable. The Project is not within the purview of SB 375 and would therefore not conflict with this measure.</p>
<p>Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g. via guideline documents, funding programs, project selection, etc.).</p>	<p>CalSTA, SGC, OPR, CARB, Governor's Office of Business and Economic Development (GO-Biz), California Infrastructure and Economic</p>	<p>Consistent. The Project would not obstruct or interfere with agency efforts to harmonize transportation facility project performance with emissions reductions and increase competitiveness of transit and active transportation modes.</p>

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Action	Responsible Parties	Consistency
	Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans	
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR, SGC, CARB	Consistent. The Project would not obstruct or interfere with agency efforts to develop pricing policies to support low-GHG transportation.
Implement California Sustainable Freight Action Plan		
Improve freight system efficiency.	CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GO-Biz	Consistent. This measure would apply to all trucks accessing the Project site, this may include existing trucks or new trucks that are part of the statewide goods movement sector. The Project would not obstruct or interfere with agency efforts to improve freight system efficiency.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.		Not applicable. This measure is not within the purview of this Project.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.	CARB	Consistent. When adopted, this measure would apply to all fuel purchased and used by the Project in the state. The Project would not obstruct or interfere with agency efforts to adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.
Implement the Short-Lived Climate Pollutant Strategy (SLPS) by 2030		
40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.	CARB, CalRecycle, CDFA, California State Water Resource	Not applicable. This measure is not within the purview of this Project.

Action	Responsible Parties	Consistency
50% reduction in black carbon emissions below 2013 levels.	Control Board (SWRCB), Local Air Districts	
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	CARB, CalRecycle, CDFA, SWRCB, Local Air Districts	Not applicable. This measure is not within the purview of this Project.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	Consistent. The Project would be required to comply with any applicable Cap-and-Trade Program provisions. The Project would not obstruct or interfere agency efforts to implement the post-2020 Cap-and-Trade Program.
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink		
Protect land from conversion through conservation easements and other incentives.	CNRA, Departments Within CDFA, CalEPA, CARB	Not applicable. This measure is not within the purview of this Project. However, the Project site is not an identified property that needs to be conserved.
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity		Consistent. The Project site is vacant disturbed property and does not comprise an area that would effectively provide for carbon sequestration. The Project would not obstruct or interfere agency efforts to increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments		Consistent. Where appropriate, Project designs will incorporate wood or wood products. The Project would not obstruct or interfere agency efforts to encourage use of wood and agricultural products to increase the amount of carbon stored in the natural and built environments.
Establish scenario projections to serve as the foundation for the Implementation Plan		Not applicable. This measure is not within the purview of this Project.

Action	Responsible Parties	Consistency
Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018	CARB	Not applicable. This measure is not within the purview of this Project.
Implement Forest Carbon Plan	CNRA, California Department of Forestry and Fire Protection (CAL FIRE), CalEPA and Departments Within	Not applicable. This measure is not within the purview of this Project.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies & Local Agencies	Not applicable. This measure is not within the purview of this Project.

As shown above, the Project would not conflict with any of the 2017 Scoping Plan elements as any regulations adopted would apply directly or indirectly to the Project. Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40% below 1990 levels by 2030 (57).

CITY OF MORENO VALLEY GENERAL PLAN MEASURES CONSISTENCY

As previously stated, the City of Moreno Valley General Plan does not identify specific GHG or climate change policies or goal, a number of the measures identified in the General Plan's Air Quality Element act to reduce or control criteria pollutant emissions and peripherally reduce GHG emissions. As shown on Table 3-8, the Project has been evaluated for consistency with the City's General Plan Air Quality Element.

TABLE 3-8: CITY OF MORENO VALLEY GENERAL PLAN CONSISTENCY

Objective/Policy	Project Consistency
Objective 6.6: Promote land use patterns that reduce daily automotive trips and reduce trip distance for work, shopping, school, and recreation.	Consistent. The Project site is providing employment opportunities to Moreno Valley and the surrounding area.
Objective 6.7: Reduce mobile and stationary source air pollutant emissions.	Consistent. The Project site is located proximate to existing and proposed major roadways, acting to generally reduce vehicle trip lengths, thereby reducing mobile source emissions. The Project will further reduce mobile source emissions by creating local employment opportunities, reducing commuter VMT

	within the region. Additionally, the Project will implement energy efficient designs and operational programs meeting or surpassing California Code of Regulations (CCR) Title 24 Building Standards, including but not limited to compliance with or betterment of, energy conservation requirements identified at CCR Title 24, Part 6, Energy Code. Energy efficient designs and programs implemented by the Project reduce resources consumption with correlating reductions in stationary-source emissions.
Policy 6.7.5: Require grading activities to comply with SCAQMD District’s Rule 403 regarding the control of fugitive dust.	Consistent. The Project will be required to implement fugitive dust control measures consistent with SCAQMD Rule 403.
Policy 6.7.6: Require building construction to comply with the energy conservation requirements of Title 24 of the California Administrative Code [CCR].	Consistent. Pursuant to City and State Building Code requirements, the Project will meet or surpass applicable CCR Title 24 energy conservation requirements.
Source: City of Moreno Valley General Plan, Safety Element	

CITY OF MORENO VALLEY ENERGY EFFICIENCY AND CAS CONSISTENCY

The City of Moreno Valley released an Energy Efficiency and CAS as well as a GHG Analysis for public review on May 8, 2012. The documents were approved on October 9, 2012. The CAS identifies ways that the City can reduce energy and water consumption and GHG emissions as an organization (its employees and the operation of its facilities) and outlines the actions that the City can encourage and community members can employ to reduce their own energy and water consumption and GHG emissions. The policies in the document are to reduce GHG emissions in 2010 by 15% by 2020. The following table consists of an analysis of Project consistency with the policies in the CAS.

TABLE 3-9: CITY OF MORENO VALLEY GENERAL PLAN CONSISTENCY

Objective/Policy	Project Consistency
<p>R2-T1: Land Use Based Trips and VMT Reduction Policies.</p> <p>Encourage the development of Transit Priority Projects along High-Quality Transit Corridors identified in the SCAG Sustainable Communities Plan, to allow a reduction in VMT.</p>	Consistent. The Project site is located proximate to existing and proposed major roadways, acting to generally reduce vehicle trip lengths, thereby reducing mobile source emissions. The Project will further reduce mobile source emissions by creating local employment opportunities, reducing commuter VMT within the region.
<p>R2-T3: Employment-Based Trip Reductions.</p>	Consistent. The Project will encourage carpooling and provide information to employees on the use of public transit.

Objective/Policy	Project Consistency
<p>Require a Transportation Demand Management (TDM) program for new development to reduce automobile travel by encouraging ride-sharing, carpooling, and alternative modes of transportation.</p>	
<p>R2-E1: New Construction Residential Energy Efficiency Requirements.</p> <p>Require energy efficient design for all new residential buildings to be 10% beyond the current Title 24 standards.</p>	<p>Not applicable; this measure applies to residential projects.</p>
<p>R2-E2: New Construction Residential Renewable Energy.</p> <p>Facilitate the use of renewable energy (such as solar (photovoltaic) panels or small wind turbines) for new residential developments. Alternative approach would be the purchase of renewable energy resources offsite.</p>	<p>Not applicable; this measure applies to residential projects</p>
<p>R2-E5: New Construction Commercial Energy Efficiency Requirements.</p> <p>Require energy efficient design for all new commercial buildings to be 10% beyond the 2008 Title 24 standards (which were in effect at the time the CAP was adopted).</p>	<p>Project consistency: Consistent; Current Title 24 requirements would achieve greater reduction than envisioned by the City's CAS. Further, the Project would be required to comply with any adopted municipal code requirements set forth by the City of Moreno Valley. As such the Project would be consistent with R2-E5.</p>
<p>R3-E1: Energy Efficient Development, and Renewable Energy Deployment Facilitation and Streamlining.</p> <p>Updating of codes and zoning requirements and guidelines to further implement green building practices. This could include incentives for energy efficient projects.</p>	<p>Project consistency: Not applicable on a project-level.</p>
<p>R3-L2: Heat Island Plan. Develop measures that address "heat islands."</p>	<p>Project consistency: Consistent; the Project will comply with the City of Moreno Valley's landscaping requirements.</p>

Objective/Policy	Project Consistency
Potential measures include using strategically placed shade trees, using paving materials with a Solar Reflective Index of at least 29, an open grid pavement system, or covered parking.	
<p>R2-W1: Water Use Reduction Initiative.</p> <p>Consider adopting a per capita water use reduction goal, which mandates the reduction of water use of 20% per capita with requirements applicable to new development and with cooperative support of the water agencies.</p>	<p>Project consistency: Consistent. California Green Building Standards Code, Chapter 5, Division 5.3, Section 5.303.2 requires that indoor water use be reduced by 20%. Section 5.304.3 requires irrigation controllers and sensors.</p>
<p>R3-W1: Water Efficiency Training and Education.</p> <p>Work with EMWD and local water companies to implement a public information and education program that promotes water conservation.</p>	<p>Project consistency: Not applicable at a project-level.</p>
<p>R2-S1: City Diversion Program.</p> <p>For Solid Waste, consider a target of increasing the waste diverted from the landfill to a total of 75% by 2020.</p>	<p>Project consistency: Consistent; the Project will comply with the City of Moreno Valley's citywide goal of solid waste reduction. Additionally, the Project will be compliant with the City of Moreno Valley's Municipal Code 8.80.030 by implementing a Waste Management Plan.</p>

Source: City of Moreno Valley General Plan, Safety Element

Notwithstanding, because the Project exceeds the applicable numeric threshold and results in a cumulatively considerable impact with respect to GHG emissions, a significant and unavoidable finding with respect to this criterion is also identified.

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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

4 REFERENCES

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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

5 CERTIFICATIONS

The contents of this GHG study report represent an accurate depiction of the GHG impacts associated with the proposed Compass Danbe Centerpointe Project. The information contained in this GHG report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

Haseeb Qureshi
Associate Principal
URBAN CROSSROADS, INC.
hqureshi@urbanxroads.com

EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 3.1:

CALEEMOD PROJECT ANNUAL CONSTRUCTION EMISSIONS MODEL OUTPUTS

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Compass Danbe Centerpointe (Construction - Unmitigated)
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	118.95	1000sqft	2.73	118,947.00	0
Unrefrigerated Warehouse-No Rail	277.54	1000sqft	6.37	277,541.00	0
Other Non-Asphalt Surfaces	73.97	1000sqft	1.70	73,972.00	0
Parking Lot	298.22	1000sqft	6.85	298,221.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use -

Construction Phase - Construction is anticipated to occur over an 8-month timeframe.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment -

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Trips and VMT - Vendor Trips have been adjusted to account for Water Trucks.

Grading - This analysis conservatively assumes that up to 10 acres will be disturbed per day.

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation - Rule 403

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
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tblConstructionPhase	NumDays	20.00	40.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.37	0.00

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	36.52	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	48.51	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	1.06	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	3.25	0.00
tblEnergyUse	T24NG	2.00	0.00
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tblGrading	AcresOfGrading	20.00	100.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
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tblSolidWaste	SolidWasteGenerationRate	260.89	0.00
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tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	126.00	128.00
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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	1.41	4.6550e-003
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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	7.3000e-005	3.0000e-006
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Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.01	0.03
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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	4.59	0.04
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tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.68	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	27,507,187.50	0.00
tblWater	IndoorWaterUseRate	64,181,125.00	0.00

2.0 Emissions Summary

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1487	1.5522	0.9674	2.5700e-003	0.4518	0.0609	0.5127	0.1381	0.0563	0.1944	0.0000	229.6927	229.6927	0.0502	0.0000	230.9479
2022	1.2143	1.9575	2.0456	6.1800e-003	0.2885	0.0645	0.3530	0.0778	0.0606	0.1384	0.0000	561.3195	561.3195	0.0631	0.0000	562.8979
Maximum	1.2143	1.9575	2.0456	6.1800e-003	0.4518	0.0645	0.5127	0.1381	0.0606	0.1944	0.0000	561.3195	561.3195	0.0631	0.0000	562.8979

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1487	1.5522	0.9674	2.5700e-003	0.2122	0.0609	0.2731	0.0636	0.0563	0.1199	0.0000	229.6925	229.6925	0.0502	0.0000	230.9477
2022	1.2143	1.9575	2.0456	6.1800e-003	0.2885	0.0645	0.3530	0.0778	0.0606	0.1384	0.0000	561.3193	561.3193	0.0631	0.0000	562.8977
Maximum	1.2143	1.9575	2.0456	6.1800e-003	0.2885	0.0645	0.3530	0.0778	0.0606	0.1384	0.0000	561.3193	561.3193	0.0631	0.0000	562.8977

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	32.36	0.00	27.68	34.53	0.00	22.40	0.00	0.00	0.00	0.00	0.00	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-4-2021	1-3-2022	1.6867	1.6867
2	1-4-2022	4-3-2022	1.0339	1.0339
3	4-4-2022	7-3-2022	2.0829	2.0829
		Highest	2.0829	2.0829

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.6466	9.0000e-005	9.8300e-003	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.6466	9.0000e-005	9.8300e-003	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/4/2021	10/15/2021	5	10	
2	Grading	Grading	10/16/2021	11/26/2021	5	30	
3	Building Construction	Building Construction	11/27/2021	6/24/2022	5	150	
4	Paving	Paving	5/28/2022	6/24/2022	5	20	
5	Architectural Coating	Architectural Coating	5/1/2022	6/24/2022	5	40	

Acres of Grading (Site Preparation Phase): 100

Acres of Grading (Grading Phase): 300

Acres of Paving: 8.55

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 594,732; Non-Residential Outdoor: 198,244; Striped Parking Area: 22,332 (Architectural Coating – sqft)

OffRoad Equipment

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	323.00	128.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	65.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1434	0.0000	0.1434	0.0554	0.0000	0.0554	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0267	0.3039	0.1093	2.8000e-004		0.0132	0.0132		0.0122	0.0122	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2568
Total	0.0267	0.3039	0.1093	2.8000e-004	0.1434	0.0132	0.1566	0.0554	0.0122	0.0676	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2568

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	9.3000e-004	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2440	0.2440	2.0000e-005	0.0000	0.2444
Worker	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004
Total	4.1000e-004	1.1900e-003	3.0100e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0439	1.0439	4.0000e-005	0.0000	1.0449

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0559	0.0000	0.0559	0.0216	0.0000	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0267	0.3039	0.1093	2.8000e-004		0.0132	0.0132		0.0122	0.0122	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2567
Total	0.0267	0.3039	0.1093	2.8000e-004	0.0559	0.0132	0.0691	0.0216	0.0122	0.0338	0.0000	25.0542	25.0542	8.1000e-003	0.0000	25.2567

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	9.3000e-004	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2440	0.2440	2.0000e-005	0.0000	0.2444
Worker	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004
Total	4.1000e-004	1.1900e-003	3.0100e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0439	1.0439	4.0000e-005	0.0000	1.0449

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2494	0.0000	0.2494	0.0668	0.0000	0.0668	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0738	0.8482	0.4684	1.0700e-003		0.0343	0.0343		0.0316	0.0316	0.0000	94.2470	94.2470	0.0305	0.0000	95.0090
Total	0.0738	0.8482	0.4684	1.0700e-003	0.2494	0.0343	0.2837	0.0668	0.0316	0.0984	0.0000	94.2470	94.2470	0.0305	0.0000	95.0090

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	2.8000e-003	5.4000e-004	1.0000e-005	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7319	0.7319	6.0000e-005	0.0000	0.7333
Worker	1.2900e-003	8.7000e-004	9.4400e-003	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.6665	2.6665	6.0000e-005	0.0000	2.6681
Total	1.3600e-003	3.6700e-003	9.9800e-003	4.0000e-005	3.4900e-003	3.0000e-005	3.5100e-003	9.3000e-004	3.0000e-005	9.5000e-004	0.0000	3.3985	3.3985	1.2000e-004	0.0000	3.4014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0973	0.0000	0.0973	0.0261	0.0000	0.0261	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0738	0.8482	0.4684	1.0700e-003		0.0343	0.0343		0.0316	0.0316	0.0000	94.2469	94.2469	0.0305	0.0000	95.0089
Total	0.0738	0.8482	0.4684	1.0700e-003	0.0973	0.0343	0.1316	0.0261	0.0316	0.0576	0.0000	94.2469	94.2469	0.0305	0.0000	95.0089

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	2.8000e-003	5.4000e-004	1.0000e-005	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7319	0.7319	6.0000e-005	0.0000	0.7333
Worker	1.2900e-003	8.7000e-004	9.4400e-003	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.6665	2.6665	6.0000e-005	0.0000	2.6681
Total	1.3600e-003	3.6700e-003	9.9800e-003	4.0000e-005	3.4900e-003	3.0000e-005	3.5100e-003	9.3000e-004	3.0000e-005	9.5000e-004	0.0000	3.3985	3.3985	1.2000e-004	0.0000	3.4014

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0253	0.2344	0.2209	3.6000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	31.0262	31.0262	7.6600e-003	0.0000	31.2176
Total	0.0253	0.2344	0.2209	3.6000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	31.0262	31.0262	7.6600e-003	0.0000	31.2176

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8200e-003	0.1492	0.0287	4.1000e-004	0.0101	2.9000e-004	0.0104	2.9200e-003	2.7000e-004	3.1900e-003	0.0000	39.0357	39.0357	2.9800e-003	0.0000	39.1102
Worker	0.0173	0.0117	0.1271	4.0000e-004	0.0444	2.7000e-004	0.0446	0.0118	2.4000e-004	0.0120	0.0000	35.8872	35.8872	8.4000e-004	0.0000	35.9081
Total	0.0211	0.1609	0.1558	8.1000e-004	0.0545	5.6000e-004	0.0550	0.0147	5.1000e-004	0.0152	0.0000	74.9229	74.9229	3.8200e-003	0.0000	75.0182

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0253	0.2344	0.2209	3.6000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	31.0262	31.0262	7.6600e-003	0.0000	31.2176
Total	0.0253	0.2344	0.2209	3.6000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	31.0262	31.0262	7.6600e-003	0.0000	31.2176

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8200e-003	0.1492	0.0287	4.1000e-004	0.0101	2.9000e-004	0.0104	2.9200e-003	2.7000e-004	3.1900e-003	0.0000	39.0357	39.0357	2.9800e-003	0.0000	39.1102
Worker	0.0173	0.0117	0.1271	4.0000e-004	0.0444	2.7000e-004	0.0446	0.0118	2.4000e-004	0.0120	0.0000	35.8872	35.8872	8.4000e-004	0.0000	35.9081
Total	0.0211	0.1609	0.1558	8.1000e-004	0.0545	5.6000e-004	0.0550	0.0147	5.1000e-004	0.0152	0.0000	74.9229	74.9229	3.8200e-003	0.0000	75.0182

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1134	1.0479	1.0900	1.8000e-003		0.0540	0.0540		0.0508	0.0508	0.0000	155.1939	155.1939	0.0381	0.0000	156.1451
Total	0.1134	1.0479	1.0900	1.8000e-003		0.0540	0.0540		0.0508	0.0508	0.0000	155.1939	155.1939	0.0381	0.0000	156.1451

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Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0178	0.7028	0.1337	2.0200e-003	0.0505	1.2000e-003	0.0517	0.0146	1.1500e-003	0.0157	0.0000	193.4997	193.4997	0.0141	0.0000	193.8523
Worker	0.0811	0.0525	0.5854	1.9100e-003	0.2219	1.2900e-003	0.2232	0.0589	1.1900e-003	0.0601	0.0000	172.8880	172.8880	3.7600e-003	0.0000	172.9819
Total	0.0989	0.7552	0.7191	3.9300e-003	0.2724	2.4900e-003	0.2749	0.0735	2.3400e-003	0.0758	0.0000	366.3876	366.3876	0.0179	0.0000	366.8342

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1134	1.0479	1.0900	1.8000e-003		0.0540	0.0540		0.0508	0.0508	0.0000	155.1937	155.1937	0.0381	0.0000	156.1450
Total	0.1134	1.0479	1.0900	1.8000e-003		0.0540	0.0540		0.0508	0.0508	0.0000	155.1937	155.1937	0.0381	0.0000	156.1450

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0178	0.7028	0.1337	2.0200e-003	0.0505	1.2000e-003	0.0517	0.0146	1.1500e-003	0.0157	0.0000	193.4997	193.4997	0.0141	0.0000	193.8523
Worker	0.0811	0.0525	0.5854	1.9100e-003	0.2219	1.2900e-003	0.2232	0.0589	1.1900e-003	0.0601	0.0000	172.8880	172.8880	3.7600e-003	0.0000	172.9819
Total	0.0989	0.7552	0.7191	3.9300e-003	0.2724	2.4900e-003	0.2749	0.0735	2.3400e-003	0.0758	0.0000	366.3876	366.3876	0.0179	0.0000	366.8342

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	8.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0200	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.7600e-003	3.3000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.4838	0.4838	4.0000e-005	0.0000	0.4846
Worker	6.0000e-004	3.9000e-004	4.3500e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2846	1.2846	3.0000e-005	0.0000	1.2853
Total	6.4000e-004	2.1500e-003	4.6800e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.7684	1.7684	7.0000e-005	0.0000	1.7699

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	8.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0200	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.7600e-003	3.3000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.4838	0.4838	4.0000e-005	0.0000	0.4846
Worker	6.0000e-004	3.9000e-004	4.3500e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2846	1.2846	3.0000e-005	0.0000	1.2853
Total	6.4000e-004	2.1500e-003	4.6800e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.7684	1.7684	7.0000e-005	0.0000	1.7699

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9706					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4500e-003	0.0376	0.0484	8.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	6.8087	6.8087	4.4000e-004	0.0000	6.8198
Total	0.9761	0.0376	0.0484	8.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	6.8087	6.8087	4.4000e-004	0.0000	6.8198

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2200e-003	3.3800e-003	0.0377	1.2000e-004	0.0143	8.0000e-005	0.0144	3.7900e-003	8.0000e-005	3.8700e-003	0.0000	11.1333	11.1333	2.4000e-004	0.0000	11.1394
Total	5.2200e-003	3.3800e-003	0.0377	1.2000e-004	0.0143	8.0000e-005	0.0144	3.7900e-003	8.0000e-005	3.8700e-003	0.0000	11.1333	11.1333	2.4000e-004	0.0000	11.1394

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9706					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4500e-003	0.0376	0.0484	8.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	6.8087	6.8087	4.4000e-004	0.0000	6.8198
Total	0.9761	0.0376	0.0484	8.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	6.8087	6.8087	4.4000e-004	0.0000	6.8198

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2200e-003	3.3800e-003	0.0377	1.2000e-004	0.0143	8.0000e-005	0.0144	3.7900e-003	8.0000e-005	3.8700e-003	0.0000	11.1333	11.1333	2.4000e-004	0.0000	11.1394
Total	5.2200e-003	3.3800e-003	0.0377	1.2000e-004	0.0143	8.0000e-005	0.0144	3.7900e-003	8.0000e-005	3.8700e-003	0.0000	11.1333	11.1333	2.4000e-004	0.0000	11.1394

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Unrefrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

Land Use	Electricity Use kWh/yr	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203
Unmitigated	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1890					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4568					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203
Total	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1890					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4568					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203
Total	1.6466	9.0000e-005	9.8300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0191	0.0191	5.0000e-005	0.0000	0.0203

7.0 Water Detail

7.1 Mitigation Measures Water

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Construction - Unmitigated) - Riverside-South Coast County, Annual

Equipment Type	Number
----------------	--------

11.0 Vegetation

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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 3.2:

CALEEMOD PROJECT ANNUAL OPERATIONS (PASSENGER CARS) EMISSIONS MODEL OUTPUTS

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Compass Danbe Center (Building 1 Operations - Passenger Cars)
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	88.57	1000sqft	2.03	88,571.00	0
Unrefrigerated Warehouse-No Rail	206.67	1000sqft	4.75	206,665.00	0
Other Non-Asphalt Surfaces	45.03	1000sqft	1.03	45,032.00	0
Parking Lot	202.77	1000sqft	4.66	202,767.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Total Building 1 Area is 12.47 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Passenger Car Fleet Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, and MDV).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.19	0.21

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LotAcreage	4.74	4.75
tblLandUse	LotAcreage	4.65	4.66
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.03	2.2560e-003
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.38
tblVehicleTrips	ST_TR	1.68	0.11
tblVehicleTrips	SU_TR	1.68	1.38
tblVehicleTrips	SU_TR	1.68	0.04
tblVehicleTrips	WD_TR	1.68	1.38
tblVehicleTrips	WD_TR	1.68	1.28

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Energy	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	1,501.898 ₄	1,501.898 ₄	0.0564	0.0153	1,507.876 ₅
Mobile	0.1276	0.1441	1.8448	6.1200e-003	0.7111	3.2200e-003	0.7144	0.1888	2.9700e-003	0.1917	0.0000	565.1798	565.1798	0.0123	0.0000	565.4882
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	56.3341	0.0000	56.3341	3.3293	0.0000	139.5652
Water						0.0000	0.0000		0.0000	0.0000	21.6595	283.2445	304.9041	2.2363	0.0550	377.1870
Total	1.3995	0.6105	2.1875	8.1100e-003	0.7111	0.0291	0.7402	0.1888	0.0282	0.2169	77.9936	2,401.128₄	2,479.122₀	5.6508	0.0703	2,641.334₁

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Energy	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	1,501.8984	1,501.8984	0.0564	0.0153	1,507.8765
Mobile	0.1276	0.1441	1.8448	6.1200e-003	0.7111	3.2200e-003	0.7144	0.1888	2.9700e-003	0.1917	0.0000	565.1798	565.1798	0.0123	0.0000	565.4882
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	56.3341	0.0000	56.3341	3.3293	0.0000	139.5652
Water						0.0000	0.0000		0.0000	0.0000	21.6595	283.2445	304.9041	2.2363	0.0550	377.1870
Total	1.3995	0.6105	2.1875	8.1100e-003	0.7111	0.0291	0.7402	0.1888	0.0282	0.2169	77.9936	2,401.1284	2,479.1220	5.6508	0.0703	2,641.3341

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/29/2021	5	20	

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1276	0.1441	1.8448	6.1200e-003	0.7111	3.2200e-003	0.7144	0.1888	2.9700e-003	0.1917	0.0000	565.1798	565.1798	0.0123	0.0000	565.4882
Unmitigated	0.1276	0.1441	1.8448	6.1200e-003	0.7111	3.2200e-003	0.7144	0.1888	2.9700e-003	0.1917	0.0000	565.1798	565.1798	0.0123	0.0000	565.4882

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	122.00	122.00	122.00	737,159	737,159
Unrefrigerated Warehouse-No Rail	263.99	22.63	9.05	1,166,745	1,166,745
Total	385.99	144.63	131.05	1,903,904	1,903,904

4.3 Trip Type Information

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,246.0695	1,246.0695	0.0514	0.0106	1,250.5274
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,246.0695	1,246.0695	0.0514	0.0106	1,250.5274
NaturalGas Mitigated	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491
NaturalGas Unmitigated	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.49852e+006	0.0243	0.2205	0.1852	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	240.0582	240.0582	4.6000e-003	4.4000e-003	241.4848
Unrefrigerated Warehouse-No Rail	295531	1.5900e-003	0.0145	0.0122	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	15.7707	15.7707	3.0000e-004	2.9000e-004	15.8644
Total		0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.49852e+006	0.0243	0.2205	0.1852	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	240.0582	240.0582	4.6000e-003	4.4000e-003	241.4848
Unrefrigerated Warehouse-No Rail	295531	1.5900e-003	0.0145	0.0122	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	15.7707	15.7707	3.0000e-004	2.9000e-004	15.8644
Total		0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	70968.4	22.6121	9.3000e-004	1.9000e-004	22.6930
Refrigerated Warehouse-No Rail	3.44718e+006	1,098.3465	0.0453	9.3800e-003	1,102.2758
Unrefrigerated Warehouse-No Rail	392664	125.1110	5.1700e-003	1.0700e-003	125.5586
Total		1,246.0695	0.0514	0.0106	1,250.5274

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	70968.4	22.6121	9.3000e-004	1.9000e-004	22.6930
Refrigerated Warehouse-No Rail	3.44718e+006	1,098.3465	0.0453	9.3800e-003	1,102.2758
Unrefrigerated Warehouse-No Rail	392664	125.1110	5.1700e-003	1.0700e-003	125.5586
Total		1,246.0695	0.0514	0.0106	1,250.5274

6.0 Area Detail

6.1 Mitigation Measures Area

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Unmitigated	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.5000e-004	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Total	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.5000e-004	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Total	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

7.0 Water Detail

7.1 Mitigation Measures Water

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	304.9041	2.2363	0.0550	377.1870
Unmitigated	304.9041	2.2363	0.0550	377.1870

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	20.4818 / 0	91.4723	0.6709	0.0165	113.1574
Unrefrigerated Warehouse-No Rail	47.7901 / 0	213.4318	1.5654	0.0385	264.0296
Total		304.9041	2.2363	0.0549	377.1870

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	20.4818 / 0	91.4723	0.6709	0.0165	113.1574
Unrefrigerated Warehouse-No Rail	47.7901 / 0	213.4318	1.5654	0.0385	264.0296
Total		304.9041	2.2363	0.0549	377.1870

8.0 Waste Detail

8.1 Mitigation Measures Waste

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	56.3341	3.3293	0.0000	139.5652
Unmitigated	56.3341	3.3293	0.0000	139.5652

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	83.26	16.9010	0.9988	0.0000	41.8716
Unrefrigerated Warehouse-No Rail	194.26	39.4330	2.3304	0.0000	97.6937
Total		56.3341	3.3292	0.0000	139.5652

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	83.26	16.9010	0.9988	0.0000	41.8716
Unrefrigerated Warehouse-No Rail	194.26	39.4330	2.3304	0.0000	97.6937
Total		56.3341	3.3292	0.0000	139.5652

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Compass Danbe Center (Building 1 Operations - Passenger Cars) - Riverside-South Coast County, Annual

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/Backhoes	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Total	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars)
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	30.38	1000sqft	0.70	30,376.00	0
Unrefrigerated Warehouse-No Rail	70.88	1000sqft	1.63	70,876.00	0
Other Non-Asphalt Surfaces	28.94	1000sqft	0.66	28,940.00	0
Parking Lot	95.45	1000sqft	2.19	95,454.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Total Building 2 Area is 5.18 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Passenger Car Fleet Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, and MDV).

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006

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Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.38
tblVehicleTrips	ST_TR	1.68	0.11
tblVehicleTrips	SU_TR	1.68	1.38
tblVehicleTrips	SU_TR	1.68	0.04
tblVehicleTrips	WD_TR	1.68	1.38
tblVehicleTrips	WD_TR	1.68	1.27

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Energy	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	517.9749	517.9749	0.0194	5.2800e-003	520.0355
Mobile	0.0437	0.0493	0.6314	2.1000e-003	0.2434	1.1000e-003	0.2445	0.0646	1.0200e-003	0.0656	0.0000	193.4289	193.4289	4.2200e-003	0.0000	193.5344
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	19.3227	0.0000	19.3227	1.1419	0.0000	47.8712
Water						0.0000	0.0000		0.0000	0.0000	7.4289	97.1491	104.5781	0.7670	0.0189	129.3702
Total	0.4977	0.3613	0.8404	3.1600e-003	0.2434	0.0152	0.2586	0.0646	0.0145	0.0791	26.7517	859.3507	886.1023	1.9491	0.0241	942.0200

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Energy	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	517.9749	517.9749	0.0194	5.2800e-003	520.0355
Mobile	0.0437	0.0493	0.6314	2.1000e-003	0.2434	1.1000e-003	0.2445	0.0646	1.0200e-003	0.0656	0.0000	193.4289	193.4289	4.2200e-003	0.0000	193.5344
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	19.3227	0.0000	19.3227	1.1419	0.0000	47.8712
Water						0.0000	0.0000		0.0000	0.0000	7.4289	97.1491	104.5781	0.7670	0.0189	129.3702
Total	0.4977	0.3613	0.8404	3.1600e-003	0.2434	0.0152	0.2586	0.0646	0.0145	0.0791	26.7517	859.3507	886.1023	1.9491	0.0241	942.0200

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0437	0.0493	0.6314	2.1000e-003	0.2434	1.1000e-003	0.2445	0.0646	1.0200e-003	0.0656	0.0000	193.4289	193.4289	4.2200e-003	0.0000	193.5344
Unmitigated	0.0437	0.0493	0.6314	2.1000e-003	0.2434	1.1000e-003	0.2445	0.0646	1.0200e-003	0.0656	0.0000	193.4289	193.4289	4.2200e-003	0.0000	193.5344

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	42.00	42.00	42.00	253,786	253,786
Unrefrigerated Warehouse-No Rail	90.00	7.76	3.10	397,812	397,812
Total	132.00	49.76	45.11	651,598	651,598

4.3 Trip Type Information

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.617300	0.041700	0.210500	0.130500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.2368	430.2368	0.0178	3.6700e-003	431.7760
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.2368	430.2368	0.0178	3.6700e-003	431.7760
NaturalGas Mitigated	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595
NaturalGas Unmitigated	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.5428e+006	8.3200e-003	0.0756	0.0635	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003	0.0000	82.3295	82.3295	1.5800e-003	1.5100e-003	82.8188
Unrefrigerated Warehouse-No Rail	101353	5.5000e-004	4.9700e-003	4.1700e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4086	5.4086	1.0000e-004	1.0000e-004	5.4407
Total		8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.5428e+006	8.3200e-003	0.0756	0.0635	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003	0.0000	82.3295	82.3295	1.5800e-003	1.5100e-003	82.8188
Unrefrigerated Warehouse-No Rail	101353	5.5000e-004	4.9700e-003	4.1700e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4086	5.4086	1.0000e-004	1.0000e-004	5.4407
Total		8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33408.9	10.6448	4.4000e-004	9.0000e-005	10.6829
Refrigerated Warehouse-No Rail	1.18223e+006	376.6851	0.0156	3.2200e-003	378.0327
Unrefrigerated Warehouse-No Rail	134664	42.9070	1.7700e-003	3.7000e-004	43.0605
Total		430.2368	0.0178	3.6800e-003	431.7760

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

Land Use	Electricity Use kWh/yr	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33408.9	10.6448	4.4000e-004	9.0000e-005	10.6829
Refrigerated Warehouse-No Rail	1.18223e+006	376.6851	0.0156	3.2200e-003	378.0327
Unrefrigerated Warehouse-No Rail	134664	42.9070	1.7700e-003	3.7000e-004	43.0605
Total		430.2368	0.0178	3.6800e-003	431.7760

6.0 Area Detail

6.1 Mitigation Measures Area

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Unmitigated	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Total	0.4229	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Total	0.4229	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	104.5781	0.7670	0.0189	129.3702
Unmitigated	104.5781	0.7670	0.0189	129.3702

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	7.02538 / 0	31.3755	0.2301	5.6500e-003	38.8136
Unrefrigerated Warehouse-No Rail	16.391 / 0	73.2026	0.5369	0.0132	90.5566
Total		104.5781	0.7670	0.0188	129.3702

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	7.02538 / 0	31.3755	0.2301	5.6500e-003	38.8136
Unrefrigerated Warehouse-No Rail	16.391 / 0	73.2026	0.5369	0.0132	90.5566
Total		104.5781	0.7670	0.0188	129.3702

8.0 Waste Detail

8.1 Mitigation Measures Waste

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.3227	1.1419	0.0000	47.8712
Unmitigated	19.3227	1.1419	0.0000	47.8712

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	28.56	5.7974	0.3426	0.0000	14.3629
Unrefrigerated Warehouse-No Rail	66.63	13.5253	0.7993	0.0000	33.5083
Total		19.3227	1.1419	0.0000	47.8712

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	28.56	5.7974	0.3426	0.0000	14.3629
Unrefrigerated Warehouse-No Rail	66.63	13.5253	0.7993	0.0000	33.5083
Total		19.3227	1.1419	0.0000	47.8712

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Compass Danbe Centerpointe (Building 2 Operations - Passenger Cars) - Riverside-South Coast County, Annual

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/Backhoes	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Total	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 3.3:

CALEEMOD PROJECT ANNUAL OPERATIONS (TRUCKS) EMISSIONS MODEL OUTPUTS

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

Compass Danbe Center (Building 1 Operations - Trucks)
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	88.57	1000sqft	2.03	88,571.00	0
Unrefrigerated Warehouse-No Rail	206.67	1000sqft	4.75	206,665.00	0
Other Non-Asphalt Surfaces	45.03	1000sqft	1.03	45,032.00	0
Parking Lot	202.77	1000sqft	4.66	202,767.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Total Building 1 Area is 12.47 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Truck Fleet Mix estimated by rationing the Trip Rates for each truck type based on information provided in the Traffic Analysis.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.53
tblFleetMix	HHD	0.07	0.63
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.35
tblFleetMix	LHD1	0.02	0.16
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.12
tblFleetMix	MHD	0.02	0.20
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LotAcreage	4.74	4.75
tblLandUse	LotAcreage	4.65	4.66
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22

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Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05

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Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.77
tblVehicleTrips	ST_TR	1.68	0.04
tblVehicleTrips	SU_TR	1.68	0.77

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleTrips	SU_TR	1.68	0.02
tblVehicleTrips	WD_TR	1.68	0.77
tblVehicleTrips	WD_TR	1.68	0.47

2.0 Emissions Summary

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Energy	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	1,501.8984	1,501.8984	0.0564	0.0153	1,507.8765
Mobile	0.1420	5.4039	1.1064	0.0234	0.8854	0.0659	0.9513	0.2487	0.0630	0.3117	0.0000	2,257.9895	2,257.9895	0.0369	0.0000	2,258.9110
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	56.3341	0.0000	56.3341	3.3293	0.0000	139.5652
Water						0.0000	0.0000		0.0000	0.0000	21.6595	283.2445	304.9041	2.2363	0.0550	377.1870
Total	1.4139	5.8703	1.4492	0.0254	0.8854	0.0917	0.9771	0.2487	0.0882	0.3369	77.9936	4,093.9381	4,171.9317	5.6753	0.0703	4,334.7569

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Energy	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	1,501.8984	1,501.8984	0.0564	0.0153	1,507.8765
Mobile	0.1420	5.4039	1.1064	0.0234	0.8854	0.0659	0.9513	0.2487	0.0630	0.3117	0.0000	2,257.9895	2,257.9895	0.0369	0.0000	2,258.9110
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	56.3341	0.0000	56.3341	3.3293	0.0000	139.5652
Water						0.0000	0.0000		0.0000	0.0000	21.6595	283.2445	304.9041	2.2363	0.0550	377.1870
Total	1.4139	5.8703	1.4492	0.0254	0.8854	0.0917	0.9771	0.2487	0.0882	0.3369	77.9936	4,093.9381	4,171.9317	5.6753	0.0703	4,334.7569

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1420	5.4039	1.1064	0.0234	0.8854	0.0659	0.9513	0.2487	0.0630	0.3117	0.0000	2,257.9895	2,257.9895	0.0369	0.0000	2,258.9110
Unmitigated	0.1420	5.4039	1.1064	0.0234	0.8854	0.0659	0.9513	0.2487	0.0630	0.3117	0.0000	2,257.9895	2,257.9895	0.0369	0.0000	2,258.9110

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	68.00	68.00	68.00	990,021	990,021
Unrefrigerated Warehouse-No Rail	98.00	8.37	3.35	1,043,579	1,043,579
Total	166.00	76.37	71.34	2,033,600	2,033,600

4.3 Trip Type Information

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.353000	0.000000	0.117600	0.529400	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.163200	0.000000	0.204100	0.632700	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,246.0695	1,246.0695	0.0514	0.0106	1,250.5274
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,246.0695	1,246.0695	0.0514	0.0106	1,250.5274
NaturalGas Mitigated	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491
NaturalGas Unmitigated	0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.49852e+006	0.0243	0.2205	0.1852	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	240.0582	240.0582	4.6000e-003	4.4000e-003	241.4848
Unrefrigerated Warehouse-No Rail	295531	1.5900e-003	0.0145	0.0122	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	15.7707	15.7707	3.0000e-004	2.9000e-004	15.8644
Total		0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	4.49852e+006	0.0243	0.2205	0.1852	1.3200e-003		0.0168	0.0168		0.0168	0.0168	0.0000	240.0582	240.0582	4.6000e-003	4.4000e-003	241.4848
Unrefrigerated Warehouse-No Rail	295531	1.5900e-003	0.0145	0.0122	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	15.7707	15.7707	3.0000e-004	2.9000e-004	15.8644
Total		0.0259	0.2350	0.1974	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.8289	255.8289	4.9000e-003	4.6900e-003	257.3491

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	70968.4	22.6121	9.3000e-004	1.9000e-004	22.6930
Refrigerated Warehouse-No Rail	3.44718e+006	1,098.3465	0.0453	9.3800e-003	1,102.2758
Unrefrigerated Warehouse-No Rail	392664	125.1110	5.1700e-003	1.0700e-003	125.5586
Total		1,246.0695	0.0514	0.0106	1,250.5274

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	70968.4	22.6121	9.3000e-004	1.9000e-004	22.6930
Refrigerated Warehouse-No Rail	3.44718e+006	1,098.3465	0.0453	9.3800e-003	1,102.2758
Unrefrigerated Warehouse-No Rail	392664	125.1110	5.1700e-003	1.0700e-003	125.5586
Total		1,246.0695	0.0514	0.0106	1,250.5274

6.0 Area Detail

6.1 Mitigation Measures Area

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Unmitigated	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.5000e-004	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Total	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.5000e-004	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144
Total	1.2238	6.0000e-005	6.9400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0144

7.0 Water Detail

7.1 Mitigation Measures Water

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	304.9041	2.2363	0.0550	377.1870
Unmitigated	304.9041	2.2363	0.0550	377.1870

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	20.4818 / 0	91.4723	0.6709	0.0165	113.1574
Unrefrigerated Warehouse-No Rail	47.7901 / 0	213.4318	1.5654	0.0385	264.0296
Total		304.9041	2.2363	0.0549	377.1870

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	20.4818 / 0	91.4723	0.6709	0.0165	113.1574
Unrefrigerated Warehouse-No Rail	47.7901 / 0	213.4318	1.5654	0.0385	264.0296
Total		304.9041	2.2363	0.0549	377.1870

8.0 Waste Detail

8.1 Mitigation Measures Waste

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	56.3341	3.3293	0.0000	139.5652
Unmitigated	56.3341	3.3293	0.0000	139.5652

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	83.26	16.9010	0.9988	0.0000	41.8716
Unrefrigerated Warehouse-No Rail	194.26	39.4330	2.3304	0.0000	97.6937
Total		56.3341	3.3292	0.0000	139.5652

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	83.26	16.9010	0.9988	0.0000	41.8716
Unrefrigerated Warehouse-No Rail	194.26	39.4330	2.3304	0.0000	97.6937
Total		56.3341	3.3292	0.0000	139.5652

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Compass Danbe Center (Building 1 Operations - Trucks) - Riverside-South Coast County, Annual

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/Backhoes	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Total	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

Compass Danbe Centerpointe (Building 2 Operations - Trucks)
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	30.38	1000sqft	0.70	30,376.00	0
Unrefrigerated Warehouse-No Rail	70.88	1000sqft	1.63	70,876.00	0
Other Non-Asphalt Surfaces	28.94	1000sqft	0.66	28,940.00	0
Parking Lot	95.45	1000sqft	2.19	95,454.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Total Building 2 Area is 5.18 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Characteristics based on information provided in the Traffic Analysis report prepared by Urban Crossroads, Inc.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The Project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Truck Fleet Mix estimated by rationing the Trip Rates for each truck type based on information provided in the Traffic Analysis.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.37	1.66
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	T24E	1.06	0.74
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	3.25	2.28
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHD	0.07	0.55
tblFleetMix	HHD	0.07	0.61
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.36
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.09
tblFleetMix	MHD	0.02	0.22
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	24.87	5.85
tblVehicleEF	HHD	2.31	2.81
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.0310e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
tblVehicleEF	HHD	0.92	0.50
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.28	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	25.67	5.66
tblVehicleEF	HHD	2.18	2.65
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	9.3550e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.75	0.46
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
tblVehicleEF	HHD	2.6650e-003	1.2100e-004
tblVehicleEF	HHD	0.87	0.52
tblVehicleEF	HHD	8.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.46	0.02
tblVehicleEF	HHD	0.03	2.2560e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04
tblVehicleEF	HHD	23.77	6.08
tblVehicleEF	HHD	2.30	2.76
tblVehicleEF	HHD	20.31	2.22
tblVehicleEF	HHD	0.01	3.4600e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.86	0.41
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	258.04
tblVehicleEF	LDA	56.65	53.55
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	278.99
tblVehicleEF	LDA	56.65	52.91
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05
tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	254.50
tblVehicleEF	LDA	56.65	53.52
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37
tblVehicleEF	LDT1	305.87	306.08
tblVehicleEF	LDT1	70.39	65.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	327.89
tblVehicleEF	LDT1	70.39	64.46
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.18	0.27
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	302.40
tblVehicleEF	LDT1	70.39	65.25
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.19	0.28
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	324.29
tblVehicleEF	LDT2	78.65	69.43
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	345.21
tblVehicleEF	LDT2	78.65	68.58
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.26
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	320.76
tblVehicleEF	LDT2	78.65	69.40
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	0.96	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	0.93	0.28
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	0.95	0.29
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	0.50	0.17
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.48	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	0.50	0.16
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003
tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	407.49
tblVehicleEF	MDV	107.24	86.52
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	429.84
tblVehicleEF	MDV	107.24	85.49
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	0.26	0.34
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	403.72
tblVehicleEF	MDV	107.24	86.49
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.27	0.36
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.79	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.82	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003
tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	11.52	1.41
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	11.50	1.41
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	11.53	1.41
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93
tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	2.13	0.63
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	2.10	0.62
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	2.13	0.62
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	12.32	0.72
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36
tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	12.29	0.71
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	12.33	0.72
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	12.22	0.22
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	12.31	0.23
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.72
tblVehicleTrips	ST_TR	1.68	0.04
tblVehicleTrips	SU_TR	1.68	0.72
tblVehicleTrips	SU_TR	1.68	0.02
tblVehicleTrips	WD_TR	1.68	0.72

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

tblVehicleTrips	WD_TR	1.68	0.51
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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Energy	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	517.9749	517.9749	0.0194	5.2800e-003	520.0355
Mobile	0.0491	1.8670	0.3826	8.0900e-003	0.3061	0.0228	0.3289	0.0860	0.0218	0.1078	0.0000	780.1183	780.1183	0.0127	0.0000	780.4364
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	19.3227	0.0000	19.3227	1.1419	0.0000	47.8712
Water						0.0000	0.0000		0.0000	0.0000	7.4289	97.1491	104.5781	0.7670	0.0189	129.3702
Total	0.5031	2.1789	0.5917	9.1500e-003	0.3061	0.0369	0.3430	0.0860	0.0353	0.1213	26.7517	1,446.0401	1,472.7917	1.9576	0.0241	1,528.9221

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Energy	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	517.9749	517.9749	0.0194	5.2800e-003	520.0355
Mobile	0.0491	1.8670	0.3826	8.0900e-003	0.3061	0.0228	0.3289	0.0860	0.0218	0.1078	0.0000	780.1183	780.1183	0.0127	0.0000	780.4364
Offroad	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Waste						0.0000	0.0000		0.0000	0.0000	19.3227	0.0000	19.3227	1.1419	0.0000	47.8712
Water						0.0000	0.0000		0.0000	0.0000	7.4289	97.1491	104.5781	0.7670	0.0189	129.3702
Total	0.5031	2.1789	0.5917	9.1500e-003	0.3061	0.0369	0.3430	0.0860	0.0353	0.1213	26.7517	1,446.0401	1,472.7917	1.9576	0.0241	1,528.9221

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0491	1.8670	0.3826	8.0900e-003	0.3061	0.0228	0.3289	0.0860	0.0218	0.1078	0.0000	780.1183	780.1183	0.0127	0.0000	780.4364
Unmitigated	0.0491	1.8670	0.3826	8.0900e-003	0.3061	0.0228	0.3289	0.0860	0.0218	0.1078	0.0000	780.1183	780.1183	0.0127	0.0000	780.4364

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	22.00	22.00	22.00	320,339	320,339
Unrefrigerated Warehouse-No Rail	36.00	2.87	1.15	382,737	382,737
Total	58.00	24.87	23.15	703,077	703,077

4.3 Trip Type Information

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Refrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.363600	0.000000	0.090900	0.545500	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.166700	0.000000	0.222200	0.611100	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.2368	430.2368	0.0178	3.6700e-003	431.7760
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.2368	430.2368	0.0178	3.6700e-003	431.7760
NaturalGas Mitigated	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595
NaturalGas Unmitigated	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.5428e+006	8.3200e-003	0.0756	0.0635	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003	0.0000	82.3295	82.3295	1.5800e-003	1.5100e-003	82.8188
Unrefrigerated Warehouse-No Rail	101353	5.5000e-004	4.9700e-003	4.1700e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4086	5.4086	1.0000e-004	1.0000e-004	5.4407
Total		8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.5428e+006	8.3200e-003	0.0756	0.0635	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003	0.0000	82.3295	82.3295	1.5800e-003	1.5100e-003	82.8188
Unrefrigerated Warehouse-No Rail	101353	5.5000e-004	4.9700e-003	4.1700e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4086	5.4086	1.0000e-004	1.0000e-004	5.4407
Total		8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7381	87.7381	1.6800e-003	1.6100e-003	88.2595

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33408.9	10.6448	4.4000e-004	9.0000e-005	10.6829
Refrigerated Warehouse-No Rail	1.18223e+006	376.6851	0.0156	3.2200e-003	378.0327
Unrefrigerated Warehouse-No Rail	134664	42.9070	1.7700e-003	3.7000e-004	43.0605
Total		430.2368	0.0178	3.6800e-003	431.7760

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

Land Use	Electricity Use kWh/yr	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33408.9	10.6448	4.4000e-004	9.0000e-005	10.6829
Refrigerated Warehouse-No Rail	1.18223e+006	376.6851	0.0156	3.2200e-003	378.0327
Unrefrigerated Warehouse-No Rail	134664	42.9070	1.7700e-003	3.7000e-004	43.0605
Total		430.2368	0.0178	3.6800e-003	431.7760

6.0 Area Detail

6.1 Mitigation Measures Area

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Unmitigated	0.4228	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Total	0.4229	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003
Total	0.4229	3.0000e-005	2.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6000e-003	5.6000e-003	1.0000e-005	0.0000	5.9700e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	104.5781	0.7670	0.0189	129.3702
Unmitigated	104.5781	0.7670	0.0189	129.3702

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	7.02538 / 0	31.3755	0.2301	5.6500e-003	38.8136
Unrefrigerated Warehouse-No Rail	16.391 / 0	73.2026	0.5369	0.0132	90.5566
Total		104.5781	0.7670	0.0188	129.3702

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	7.02538 / 0	31.3755	0.2301	5.6500e-003	38.8136
Unrefrigerated Warehouse-No Rail	16.391 / 0	73.2026	0.5369	0.0132	90.5566
Total		104.5781	0.7670	0.0188	129.3702

8.0 Waste Detail

8.1 Mitigation Measures Waste

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.3227	1.1419	0.0000	47.8712
Unmitigated	19.3227	1.1419	0.0000	47.8712

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	28.56	5.7974	0.3426	0.0000	14.3629
Unrefrigerated Warehouse-No Rail	66.63	13.5253	0.7993	0.0000	33.5083
Total		19.3227	1.1419	0.0000	47.8712

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	28.56	5.7974	0.3426	0.0000	14.3629
Unrefrigerated Warehouse-No Rail	66.63	13.5253	0.7993	0.0000	33.5083
Total		19.3227	1.1419	0.0000	47.8712

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

Compass Danbe Centerpointe (Building 2 Operations - Trucks) - Riverside-South Coast County, Annual

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/Backhoes	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028
Total	0.0223	0.2313	0.1384	5.8000e-004		7.9800e-003	7.9800e-003		7.3400e-003	7.3400e-003	0.0000	50.7922	50.7922	0.0164	0.0000	51.2028

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 3.4:
EMFAC 2017 OUTPUTS

Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

EMFAC2017 Derived CalEEMod Annual Emission Rates: Year 2022^{1,2}

Season	Pollutant	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	MCY	OBUS	MH
Annual	CH4_IDLEX	0	0	0	0	0.0046573	0.002838777	0.002735836	0.022299247	0.0086193	0	0	0.08718	0
Annual	CH4_RUNEX	0.0021323	0.0066595	0.0035681	0.0047137	0.0048744	0.003516414	0.003024146	0.027344819	0.0071936	3.039609	0.3149194	0.0068646	0.0033376
Annual	CH4_STREX	0.0483239	0.0808829	0.0678879	0.0846611	0.0144216	0.00765576	0.007001349	2.13536E-07	0.0245802	0.025253	0.243112	0.008049	0
Annual	CO_IDLEX	0	0	0	0	0.1685148	0.127042827	0.139656915	6.000754905	0.477517	0	0	3.4030123	0
Annual	CO_RUNEX	0.5984624	1.3744935	0.8535908	1.0068017	0.6599647	0.479075267	0.308907948	0.30294567	0.8653173	23.57629	19.15844	0.5712088	0.3410887
Annual	CO_STREX	2.0873724	2.3667137	2.6761897	3.1454402	0.9168211	0.493048832	0.820412067	0.004654597	2.7340226	1.904172	8.6223448	1.0867549	0
Annual	CO2_NBIO_IDLEX	0	0	0	0	9.4297862	15.04024708	70.85828834	112.98621	66.930592	0	0	372.28069	0
Annual	CO2_NBIO_RUNEX	258.03615	306.08392	324.29114	407.49466	628.02344	622.3700135	946.7679684	1341.198175	1366.5243	1641.136	207.70227	1106.7073	935.85446
Annual	CO2_NBIO_STREX	53.548384	65.279819	69.428304	86.524974	10.150986	6.517982154	7.056269916	0.038741696	21.51741	23.35359	60.66584	6.9484057	0
Annual	NOX_IDLEX	0	0	0	0	0.0849776	0.126090396	0.56450814	5.853724636	0.2987984	0	0	3.424683	0
Annual	NOX_RUNEX	0.0346921	0.1214222	0.0737765	0.1001736	1.5327872	1.671546595	1.594494837	2.808044554	1.3548209	0.303771	1.1286234	4.6073102	4.4020535
Annual	NOX_STREX ³	0.1762104	0.285364	0.2800737	0.360196	0.2948791	0.165656334	1.414452996	2.221485508	0.6263402	0.234928	0.2629455	0.7172059	0
Annual	PM10_IDLEX	0	0	0	0	0.0010052	0.001507447	0.001466129	0.003031451	0.0005765	0	0	0.0036144	0
Annual	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.060431687	0.13034	0.091898	0.01176	0.7448002	0.13034
Annual	PM10_PMTW	0.008	0.008	0.008	0.008	0.0100605	0.010946841	0.012000003	0.035233293	0.012	0.020229	0.004	0.010588	0.016
Annual	PM10_RUNEX	0.0013706	0.0020657	0.001409	0.0014812	0.0108961	0.014044995	0.046809039	0.03260842	0.0199752	0.002162	0.001761	0.0273746	0.140933
Annual	PM10_STREX	0.0018338	0.0027558	0.0018664	0.0019435	0.000219	0.000101489	0.18839E-05	5.31169E-07	0.0002137	0.00021	0.0028427	4.605E-05	0
Annual	PM25_IDLEX	0	0	0	0	0.0009617	0.001442236	0.001402705	0.002900312	0.0005515	0	0	0.0034581	0
Annual	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.025899294	0.05586	0.039385	0.00504	0.3192001	0.05586
Annual	PM25_PMTW	0.002	0.002	0.002	0.002	0.0025151	0.00273671	0.003000001	0.008808323	0.003	0.005057	0.001	0.002647	0.004
Annual	PM25_RUNEX	0.0012627	0.0019009	0.0012971	0.0013664	0.0104059	0.013428529	0.044781789	0.031197786	0.0190972	0.002049	0.0016471	0.0261807	0.1348363
Annual	PM25_STREX	0.0016862	0.002534	0.0017161	0.0017873	0.0002013	9.33155E-05	7.52893E-05	4.8839E-07	0.0001965	0.000193	0.0026759	4.234E-05	0
Annual	ROG_DIURN	0.0536506	0.17758307	0.087154	0.1069754	0.0025175	0.00117141	0.000439176	2.96534E-06	0.0025666	0.0027	1.4268789	0.0014762	0
Annual	ROG_HTSK	0.0914841	0.2454321	0.126947	0.1578141	0.0725758	0.035253377	0.015178833	0.000109891	0.0263671	0.015418	0.7895327	0.010663	0
Annual	ROG_IDLEX	0	0	0	0	0.0201193	0.015152618	0.017077593	0.437369796	0.0481253	0	0	0.4068131	0
Annual	ROG_RESTL	0.0426578	0.1236415	0.0733346	0.0948216	0.0013132	0.000630451	0.000234947	1.8146E-06	0.0011655	0.001093	0.7582515	0.0007395	0
Annual	ROG_RUNEX	0.0080166	0.0291533	0.0142861	0.0195706	0.0582807	0.05882567	0.053960607	0.049346722	0.0580098	0.048628	2.1320983	0.0960761	0.0718567
Annual	ROG_RUNLS	0.199944	0.7978661	0.407726	0.4669001	0.4572341	0.208034027	0.076680948	0.005033316	0.2896294	0.076082	1.8232699	0.0645755	0
Annual	ROG_STREX	0.2089894	0.4082819	0.3101606	0.4134193	0.0716331	0.037459907	0.037794433	1.09368E-06	0.1310842	0.098385	1.8419405	0.0469909	0
Annual	SO2_IDLEX	0	0	0	0	9.108E-05	0.000143446	0.000671653	0.010458195	0.0006392	0	0	0.0035603	0
Annual	SO2_RUNEX	0.0025363	0.0030093	0.0031877	0.0040033	0.006105	0.005987865	0.008993447	0.012504767	0.0132714	0.006386	0.0020554	0.0105966	0.0088472
Annual	SO2_STREX	0.0005265	0.0006418	0.0006826	0.0008507	0.0001005	6.45007E-05	6.98275E-05	3.8338E-07	0.0002129	0.000231	0.0006003	6.876E-05	0
Annual	TOG_DIURN	0.0536666	0.1775839	0.0871802	0.1070075	0.0025175	0.00117141	0.000439176	2.96534E-06	0.0025666	0.0027	1.4268789	0.0014762	0
Annual	TOG_HTSK	0.0915115	0.2455057	0.1269851	0.1578615	0.0725758	0.035253377	0.015178833	0.000109891	0.0263671	0.015418	0.7895327	0.010663	0
Annual	TOG_IDLEX	0	0	0	0	0.0280727	0.020161123	0.022394002	0.49990888	0.0643949	0	0	0.5877071	0
Annual	TOG_RESTL	0.0426706	0.1236785	0.0733566	0.0948501	0.0013132	0.000630451	0.000234947	1.8146E-06	0.0011655	0.001093	0.7582515	0.0007395	0
Annual	TOG_RUNEX	0.0116581	0.0425208	0.0208155	0.0284374	0.0704671	0.06832071	0.062470616	0.081411206	0.0750594	3.107974	2.6272085	0.1143358	0.0818041
Annual	TOG_RUNLS	0.200004	0.7981055	0.4078483	0.4670402	0.4572341	0.208034027	0.076680948	0.000503316	0.2896294	0.076082	1.8232699	0.0645755	0
Annual	TOG_STREX	0.2289078	0.4471945	0.3397219	0.4528186	0.0784292	0.04113883	0.041380147	1.19744E-06	0.1435207	0.107719	2.0044277	0.0514491	0
Summer	CH4_IDLEX	0	0	0	0	0.0046706	0.002846409	0.002602736	0.023341464	0.008671	0	0	0.0872916	0
Summer	CH4_RUNEX	0.0024045	0.0074265	0.0040045	0.0052953	0.0049553	0.00354149	0.002345269	0.0073439	3.039654	0.31021	0.0069517	0.0033376	0
Summer	CH4_STREX	0.0419434	0.0696605	0.0588207	0.073304	0.0138687	0.007362714	0.006727665	2.03724E-07	0.0234565	0.022963	0.2145163	0.0067101	0
Summer	CO_IDLEX	0	0	0	0	0.1685148	0.127042827	0.270218426	5.87498718	0.4682564	0	0	3.3646916	0
Summer	CO_RUNEX	0.7177735	1.6227536	1.0168895	1.1961789	0.6693628	0.481766723	0.310980312	0.303092418	0.8833949	23.57848	19.13031	0.5808353	0.3410887
Summer	CO_STREX	1.7511794	1.9780854	2.237349	2.6220541	0.8690961	0.467642112	0.774228664	0.004392713	2.5420934	1.619337	7.8983767	0.7800871	0
Summer	CO2_NBIO_IDLEX	0	0	0	0	9.4297862	15.04024708	71.76800642	110.839123	66.844908	0	0	382.15181	0
Summer	CO2_NBIO_RUNEX	278.99185	327.88765	345.20747	429.83964	628.04012	622.3747409	946.771601	1341.198419	1366.5561	1641.14	207.49752	1106.7244	935.85446
Summer	CO2_NBIO_STREX	52.912888	64.459742	68.579771	85.491596	10.065351	6.472492093	6.977588427	0.038326433	21.191892	22.87169	58.759212	6.4358977	0
Summer	NOX_IDLEX	0	0	0	0	0.0849776	0.126090396	0.567249469	5.664993997	0.2926627	0	0	3.5107759	0
Summer	NOX_RUNEX	0.0314373	0.108969	0.066544	0.0903665	1.4438338	1.57878478	1.503100528	2.654111195	1.2623225	0.295492	0.9760553	4.3337255	4.1547322
Summer	NOX_STREX ³	0.1641715	0.2657236	0.2608992	0.3354792	0.2832727	0.159149649	1.411616319	2.221479665	0.615344	0.223401	0.247611	0.7116035	0
Summer	PM10_IDLEX	0	0	0	0	0.0010052	0.001507447	0.001238698	0.002673221	0.0004894	0	0	0.0030538	0
Summer	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.060431687	0.13034	0.091898	0.01176	0.7448002	0.13034
Summer	PM10_PMTW	0.008	0.008	0.008	0.008	0.0100605	0.010946841	0.012000003	0.035233293	0.012	0.020229	0.004	0.010588	0.016
Summer	PM10_RUNEX	0.0013706	0.0020657	0.001409	0.0014812	0.0108961	0.014044995	0.046809039	0.03260842	0.0199752	0.002162	0.001761	0.0273746	0.140933
Summer	PM10_STREX	0.0018338	0.0027558	0.0018664	0.0019435	0.000219	0.000101489	0.18839E-05	5.31169E-07	0.0002137	0.00021	0.0028427	4.605E-05	0
Summer	PM25_IDLEX	0	0	0	0	0.0009617	0.001442236	0.001185113	0.002557578	0.0004682	0	0	0.0029217	0
Summer	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.025899294	0.05586	0.039385	0.00504	0.3192001	0.05586
Summer	PM25_PMTW	0.002	0.002	0.002	0.002	0.0025151	0.00273671	0.003000001	0.008808323	0.003	0.005057	0.001	0.002647	0.004
Summer	PM25_RUNEX	0.0012627	0.0019009	0.0012971	0.0013664	0.0104059	0.013428529	0.044781789	0.031197786	0.0190972	0.002049	0.0016471	0.0261807	0.1348363
Summer	PM25_STREX	0.0016862	0.002534	0.0017161	0.0017873	0.0002013	9.33155E-05	7.52893E-05	4.8839E-07	0.0001965	0.000193	0.0026759	4.234E-05	0
Summer	ROG_DIURN	0.0993468	0.3302614	0.1608817	0.1968329	0.0044753	0.002086132	0.00079064	5.58519E-06	0.0046821	0.004797	2.7413126	0.0025872	0
Summer	ROG_HTSK	0.1026521	0.2880101	0.1430859	0.174794	0.0822699	0.04009149	0.017219051	0.00012087	0.0286399	0.018018	1.0931546	0.0110683	0
Summer	ROG_IDLEX	0	0	0	0	0.0201293	0.015152618	0.016478994	0.458046849	0.0486832	0	0	0.406438	0
Summer	ROG_RESTL	0.079786	0.234605	0.1352927	0.1732435	0.0025194	0.001208137	0.000464147	3.76492E-06	0.00				

Winter	CH4_IDLEX	0	0	0	0	0.0046596	0.002840096	0.002932158	0.018984827	0.0085852	0	0	0.0871884	0
Winter	CH4_RUNEX	0.0020955	0.0065513	0.0035086	0.0046307	0.0048833	0.003519566	0.003025046	0.00225575	0.0072067	3.039613	0.3122868	0.0068632	0.0033376
Winter	CH4_STREX	0.0483168	0.0808544	0.0678811	0.0846532	0.0143211	0.007603361	0.006936561	2.11875E-07	0.0245022	0.025129	0.2380506	0.0081927	0
Winter	CO_IDLEX	0	0	0	0	0.1685148	0.127042827	0.388613734	6.138731245	0.4903055	0	0	3.4559313	0
Winter	CO_RUNEX	0.5767313	1.3282424	0.8236115	0.9713122	0.6609454	0.479380313	0.30908191	0.226210244	0.8668135	23.57648	18.588627	0.5710068	0.3410887
Winter	CO_STREX	2.0711673	2.3487361	2.6578251	3.1240059	0.9082043	0.488588018	0.811652807	0.004605	2.7242863	1.887883	8.40556	1.1101001	0
Winter	CO2_NBIO_IDLEX	0	0	0	0	9.4297862	15.04024708	69.59803901	1113.281679	67.048919	0	0	358.64914	0
Winter	CO2_NBIO_RUNEX	254.50038	302.40081	320.76072	403.72151	628.02517	622.3705508	946.7682753	1323.582348	1366.527	1641.137	206.72038	1106.7069	935.85446
Winter	CO2_NBIO_STREX	53.521907	65.249167	69.398074	86.48944	10.135477	6.509959599	7.041432935	0.038663054	21.500507	23.32603	60.181595	6.9882546	0
Winter	NOX_IDLEX	0	0	0	0	0.0849776	0.126090396	0.560721944	6.079051458	0.3072715	0	0	3.3057928	0
Winter	NOX_RUNEX	0.0331298	0.1160852	0.0704748	0.0957136	1.5079758	1.64558119	1.567865596	2.757795545	1.3294207	0.301646	1.0919814	4.5383203	4.3296996
Winter	NOX_STREX ³	0.1745017	0.2827159	0.2773901	0.3567738	0.2904721	0.163173023	1.413608248	2.221483768	0.6229975	0.232883	0.2603555	0.717481	0
Winter	PM10_IDLEX	0	0	0	0	0.0010052	0.001507447	0.001780199	0.003460469	0.0006968	0	0	0.0043886	0
Winter	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.060093071	0.13034	0.091898	0.01176	0.7448002	0.13034
Winter	PM10_PMTW	0.008	0.008	0.008	0.008	0.0100605	0.010946841	0.012000003	0.035035849	0.012	0.020229	0.004	0.010588	0.016
Winter	PM10_RUNEX	0.0013706	0.0020657	0.001409	0.0014812	0.0108961	0.014044995	0.046809039	0.032581175	0.0199752	0.002162	0.001761	0.0273746	0.140933
Winter	PM10_STREX	0.0018338	0.0027558	0.0018664	0.0019435	0.000219	0.000101489	8.18839E-05	5.31169E-07	0.0002137	0.00021	0.0028427	4.605E-05	0
Winter	PM25_IDLEX	0	0	0	0	0.0009617	0.001442236	0.001703189	0.003310771	0.0006666	0	0	0.0041987	0
Winter	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.025754173	0.05586	0.039385	0.00504	0.3192001	0.05586
Winter	PM25_PMTW	0.002	0.002	0.002	0.002	0.0025151	0.00273671	0.003000001	0.008758962	0.003	0.005057	0.001	0.002647	0.004
Winter	PM25_RUNEX	0.0012627	0.0019009	0.0012971	0.0013664	0.0104059	0.013428529	0.044781789	0.031171719	0.0190972	0.002049	0.0016471	0.0261807	0.1348363
Winter	PM25_STREX	0.0016862	0.002534	0.0017161	0.0017873	0.0002013	9.33155E-05	7.52893E-05	4.8839E-07	0.0001965	0.000193	0.0026759	4.234E-05	0
Winter	ROG_DIURN	0.0527051	0.1803305	0.0838102	0.1008627	0.0026467	0.001200627	0.000463464	3.06217E-06	0.0027865	0.002759	1.6354712	0.0013983	0
Winter	ROG_HTSK	0.1004418	0.2824634	0.1398745	0.1710303	0.0846098	0.040448879	0.016874546	0.000122941	0.0283346	0.017333	1.0575845	0.010924	0
Winter	ROG_IDLEX	0	0	0	0	0.0201293	0.015152618	0.017914416	0.408738125	0.047355	0	0	0.4073311	0
Winter	ROG_RESTL	0.0427275	0.1233241	0.073516	0.0952255	0.0013783	0.000654	0.000247728	1.9621E-06	0.0012415	0.001147	0.7635438	0.0007651	0
Winter	ROG_RUNEX	0.0078721	0.0286426	0.0140344	0.0191986	0.0582495	0.058838155	0.053967818	0.048188712	0.0580726	0.04864	2.1101923	0.0960721	0.0718567
Winter	ROG_RUNLS	0.2259827	0.9317114	0.4712763	0.5357345	0.4920635	0.224700316	0.083499513	0.000535108	0.3083767	0.089294	2.0842358	0.0784382	0
Winter	ROG_STREX	0.208794	0.4076866	0.3098727	0.4130089	0.0710817	0.037176335	0.037510547	1.08547E-06	0.1306462	0.097868	1.7996021	0.0478385	0
Winter	SO2_IDLEX	0	0	0	0	9.108E-05	0.000143446	0.000659616	0.010517733	0.0006403	0	0	0.0034316	0
Winter	SO2_RUNEX	0.0025015	0.0029731	0.003153	0.0039662	0.006105	0.005987871	0.00899345	0.012504768	0.0132714	0.006386	0.0020457	0.0105966	0.0088472
Winter	SO2_STREX	0.0005262	0.0006415	0.0006823	0.0008504	0.0001003	6.44213E-05	6.96807E-05	3.82602E-07	0.0002128	0.000231	0.0005955	6.915E-05	0
Winter	TOG_DIURN	0.0527209	0.1803846	0.0838353	0.100893	0.0026467	0.001200627	0.000463464	3.06217E-06	0.0027865	0.002759	1.6354712	0.0013983	0
Winter	TOG_HTSK	0.1004719	0.2825481	0.1399164	0.1710816	0.0846098	0.040448879	0.016874546	0.000122941	0.0283346	0.017333	1.0575845	0.010924	0
Winter	TOG_IDLEX	0	0	0	0	0.0280727	0.020161123	0.023594826	0.465317242	0.0635179	0	0	0.5876667	0
Winter	TOG_RESTL	0.0427403	0.1233611	0.0735381	0.095254	0.0013783	0.000654	0.000247728	1.9621E-06	0.0012415	0.001147	0.7635438	0.0007651	0
Winter	TOG_RUNEX	0.0114475	0.0417762	0.0204485	0.0278972	0.0705276	0.068338928	0.062481137	0.054895029	0.0751509	3.107992	2.6007426	0.1143299	0.0818041
Winter	TOG_RUNLS	0.2260505	0.931991	0.4714177	0.5358952	0.4920635	0.224700316	0.083499513	0.000535108	0.3083767	0.089294	2.0842358	0.0784382	0
Winter	TOG_STREX	0.2286938	0.4465425	0.3394066	0.4523693	0.0778255	0.040703407	0.041069327	1.18845E-06	0.1430411	0.107154	1.9583823	0.0523771	0

1 Source: California Air Resources Board. EMFAC2017 Web Database. <https://www.arb.ca.gov/emfac/2017/>; California Air Pollution Control Officers Association (CAPCOA). 2017, November. California Emissions Estimator Model User's Guide, Version 2016.3.2, Appendix A.

2 Unless otherwise noted, per CalEEMod methodology, the calculated CalEEMod emission rates are derived from the emission rates obtained using the EMFAC2017 Web Database for the Riverside (SC) region.

3 Because EMFAC2017 provides vehicle trips data for MHDT and HHDT diesel trucks, the formula provided in Appendix A of the CalEEMod User's Guide in calculating the NO_x STREX emission rates are utilized.

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Attachment: Appendix F-Greenhouse Gas Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

PARTNER

Engineering and Science, Inc.



PHASE I ENVIRONMENTAL/ SITE ASSESSMENT REPORT

17.7 Acres

Assessor's Parcel Numbers 297-170-002 and 297-170-003
Moreno Valley, California 92553

Report Date: December 18, 2019
Partner Project No. 19-267109.1



Prepared for:

Compass Danbe Real Estate Partner LLC
532 Main Street
El Segundo, California 90245

December 18, 2019

Mr. Mark Bachli
Compass Danbe Real Estate Partner LLC
532 Main Street
El Segundo, California 90245

Subject: Phase I Environmental Site Assessment
17.7 Acres
Assessor's Parcel Number 297-170-002 and 297-170-003
Moreno Valley, California 92553
Partner Project No. 19-267109.1

Dear Mr. Bachli:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the *Phase I Environmental Site Assessment* (Phase I ESA) report of the abovementioned address (the "subject property"). This assessment was performed in conformance with the scope and limitations as detailed in the ASTM Practice E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (619) 757-1119.

Sincerely,



Mark Lambson
Principal

EXECUTIVE SUMMARY

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the scope of work and limitations of ASTM Standard Practice E1527-13, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) and set forth by Compass Danbe Real Estate Partner LLC for the property located at Assessor's Parcel Number 297-170-002 and 297-170-003 in Moreno Valley, Riverside County, California (the "subject property"). The Phase I Environmental Site Assessment is designed to provide Compass Danbe Real Estate Partner LLC with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

Property Description

The subject property is located on the south side of Alessandro Boulevard within a mixed commercial, industrial, undeveloped, and residential area of Riverside County. Please refer to the table below for further description of the subject property:

Subject Property Data

Address(es):	Alessandro Boulevard, Moreno Valley, California (street address not yet assigned)
Property Use:	Vacant Land
Land Acreage (Ac):	17.7 Acres
Number of Buildings:	None
Assessor's Parcel Number (APN):	297-170-002 and 297-170-003
Current Tenants:	None
Site Assessment Performed By:	Ramiro Vejar of Partner
Site Assessment Conducted On:	December 6, 2019

The subject property is currently unimproved, tilled, vacant land. No operations are currently performed on site. Two concrete pipes were observed on the north-northwest and northeast which distribute public right of way stormwater runoff onto the subject property. Partner further observed overhead electrical power lines on the north boundary, communication utility boxes on the north boundary, and municipal stormwater drains on the south boundary.

According to available historical sources, the subject property has been undeveloped from as early as 1901 to the present. Intermittent streams and stormwater runoff appears to flow across the subject property (trending south) from as early as 1949.

The immediately surrounding properties consist of Alessandro Boulevard followed by Plaza Del Sol, Plaza Car Wash, Woody's Restaurant, Sienna Pointe Apartments, and residential houses to the north; Prologis Logistics Center to the south; undeveloped vacant land with overgrown vegetation to the east; and undeveloped tilled vacant land to the west.

Based on information obtained from the State Water Resources Control Board (SWRCB) Geotracker website and topographic map interpretation, the depth to groundwater in the vicinity of the subject property is inferred to be approximately 46 to 48 feet below ground surface (bgs) and groundwater flow is inferred to be toward the south.

Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- Partner did not identify any recognized environmental conditions during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- Partner did not identify any environmental issues during the course of this assessment.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of Assessor's Parcel Number 297-170-002 and 297-170-003 in Moreno Valley, Riverside County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of recognized environmental conditions or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends no further investigation of the subject property at this time.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Purpose	1
1.2	Scope of Work.....	1
1.3	Limitations	2
1.4	User Reliance	2
1.5	Limiting Conditions	3
2.0	SITE DESCRIPTION	4
2.1	Site Location and Legal Description	4
2.2	Current Property Use.....	4
2.3	Current Use of Adjacent Properties.....	4
2.4	Physical Setting Sources.....	4
2.4.1	Topography.....	4
2.4.2	Hydrology.....	5
2.4.3	Geology/Soils	5
2.4.4	Flood Zone Information.....	5
3.0	HISTORICAL INFORMATION.....	7
3.1	Aerial Photograph Review	7
3.2	Fire Insurance Maps	8
3.3	City Directories.....	8
3.4	Historical Topographic Maps.....	9
4.0	REGULATORY RECORDS REVIEW	10
4.1	Regulatory Agencies.....	10
4.1.1	Health Department	10
4.1.2	Air Pollution Control Agency.....	10
4.1.3	Regional Water Quality Agency.....	10
4.1.4	Department of Toxic Substances Control	11
4.1.5	Building Department	11
4.1.6	Planning Department.....	11
4.1.7	Oil & Gas Exploration.....	11
4.1.8	Assessor's Office.....	12
4.2	Mapped Database Records Search.....	12
4.2.1	Regulatory Database Summary.....	12
4.2.2	Subject Property Listings	13
4.2.3	Adjacent Property Listings	13
4.2.4	Sites of Concern Listings.....	14
4.2.5	Orphan Listings.....	14
5.0	USER PROVIDED INFORMATION AND INTERVIEWS.....	15
5.1	Interviews	15
5.1.1	Interview with Owner	15
5.1.2	Interview with Report User.....	16
5.1.3	Interview with Key Site Manager	16
5.1.4	Interviews with Past Owners, Operators and Occupants	16
5.1.5	Interview with Others	16
5.2	User Provided Information.....	16

5.2.1 Title Records, Environmental Liens, and AULs..... 16

5.2.2 Specialized Knowledge..... 16

5.2.3 Actual Knowledge of the User 16

5.2.4 Valuation Reduction for Environmental Issues 16

5.2.5 Commonly Known or Reasonably Ascertainable Information 16

5.2.6 Previous Reports and Other Provided Documentation 16

6.0 SITE RECONNAISSANCE 17

6.1 General Site Characteristics..... 17

6.2 Potential Environmental Hazards..... 18

6.3 Non-ASTM Services..... 19

6.3.1 Asbestos-Containing Materials (ACMs) 19

6.3.2 Lead-Based Paint (LBP)..... 19

6.3.3 Radon 19

6.3.4 Lead in Drinking Water..... 20

6.3.5 Mold..... 20

6.4 Adjacent Property Reconnaissance..... 20

7.0 FINDINGS AND CONCLUSIONS..... 21

8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS 22

9.0 REFERENCES..... 23

Figures

- Figure 1** Site Location Map
- Figure 2** Site Plan
- Figure 3** Topographic Map

Appendices

- Appendix A** Site Photographs
- Appendix B** Historical/Regulatory Documentation
- Appendix C** Regulatory Database Report
- Appendix D** Qualifications

1.0 INTRODUCTION

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Standard Practice E1527-13 and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the property located at Assessor's Parcel Number 297-170-002 and 297-170-003 in Moreno Valley, Riverside County, California (the "subject property"). Any exceptions to, or deletions from, this scope of work are described in the report.

1.1 Purpose

The purpose of this ESA is to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-13) affecting the subject property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the subject property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the subject property under any applicable environmental law; 4) may affect the value of the subject property; and 5) may require specific actions to be performed with regard to such conditions and circumstances. The information contained in the ESA Report will be used by Client to: 1) evaluate its legal and financial liabilities for transactions related to foreclosure, purchase, sale, loan origination, loan workout or seller financing; 2) evaluate the subject property's overall development potential, the associated market value and the impact of applicable laws that restrict financial and other types of assistance for the future development of the subject property; and/or 3) determine whether specific actions are required to be performed prior to the foreclosure, purchase, sale, loan origination, loan workout or seller financing of the subject property.

This ESA was performed to permit the *User* to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "*landowner liability protections*," or "*LLPs*"). ASTM Standard E1527-13 constitutes "*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B).

1.2 Scope of Work

The scope of work for this ESA is in accordance with the requirements of ASTM Standard E1527-13. This assessment included: 1) a property and adjacent site reconnaissance; 2) interviews with key personnel; 3) a review of historical sources; 4) a review of regulatory agency records; and 5) a review of a regulatory database report provided by a third-party vendor. Partner contacted local agencies, such as environmental health departments, fire departments and building departments in order to determine any current and/or former hazardous substances usage, storage and/or releases of hazardous substances on the subject property. Additionally, Partner researched information on the presence of activity and use limitations (AULs) at these agencies. As defined by ASTM E1527-13, AULs are the legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the subject

property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs), are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil or groundwater on the property.

If requested by Client, this report may also include the identification, discussion of, and/or limited sampling of asbestos-containing materials (ACMs), lead-based paint (LBP), mold, and/or radon.

1.3 Limitations

Partner warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Partner believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the Client. No other warranties are implied or expressed.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Further, this report does not intend to address all of the safety concerns, if any, associated with the subject property.

Environmental concerns, which are beyond the scope of a Phase I ESA as defined by ASTM include the following: ACMs, LBP, radon, and lead in drinking water. These issues may affect environmental risk at the subject property and may warrant discussion and/or assessment; however, are considered non-scope issues. If specifically requested by the Client, these non-scope issues are discussed in Section 6.3.

1.4 User Reliance

Compass Danbe Real Estate Partner LLC engaged Partner to perform this assessment in accordance with an agreement governing the nature, scope and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of Compass Danbe Real Estate Partner LLC. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under

any course of action against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

1.5 Limiting Conditions

The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM E1527-13.

Specific limitations and exceptions to this ESA are more specifically set forth below:

- Interviews with past or current owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from other historical sources (as discussed in Section 3.0), this data gap is not expected to alter the findings of this assessment.
- Partner requested information relative to deed restrictions and environmental liens, a title search, and completion of a pre-survey questionnaire from the Report User. This information was not provided at the time of the assessment.

Due to time constraints associated with this report, the Client has requested the report despite the above-listed limitations.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The subject property at Assessor's Parcel Number 297-170-002 and 297-170-003 in Moreno Valley, California is located on the south side of Alessandro Boulevard. According to the Riverside County Assessor, the subject property is legally described as Lot 2 and 3 of Bear Valley & Alessandro Development Co. Block 242, Map Book 11, Page 11.

Please refer to Figure 1: Site Location Map, Figure 2: Site Plan, Figure 3: Topographic Map, and Appendix A: Site Photographs for the location and site characteristics of the subject property.

2.2 Current Property Use

The subject property is currently unimproved tilled vacant land. No operations are currently performed on site. Two concrete pipes were observed on the north-northwest and northeast which distribute public right of way stormwater runoff onto the subject property. Partner further observed overhead electrical power lines on the north boundary, communication utility boxes on the north boundary, and municipal stormwater drains on the south boundary.

The subject property is designated for commercial development by the City of Moreno Valley.

The subject property was not identified in the regulatory database report of Section 4.2.

2.3 Current Use of Adjacent Properties

The subject property is located within a mixed commercial, industrial, undeveloped, and residential area of Riverside County. During the vicinity reconnaissance, Partner observed the following land use on properties in the immediate vicinity of the subject property:

Immediately Surrounding Properties

North: Alessandro Boulevard followed by Plaza Del Sol, Plaza Car Wash (23100 Alessandro Boulevard), Sienna Pointe Apartments (13933 Chagall Court), and residential homes

South: Prologis Logistics Center (23450 Brodiaea Avenue)

East: Undeveloped vacant land

West: Undeveloped vacant land

The adjacent property to the northwest was identified as an Underground Storage Tank (UST), Leaking Underground Storage Tank (LUST), and California Environmental Reporting System (CERS) site in the regulatory database report of Section 4.2.

2.4 Physical Setting Sources

2.4.1 Topography

The United States Geological Survey (USGS) *Riverside East, California* Quadrangle 7.5-minute series topographic map was reviewed for this ESA. According to the contour lines on the topographic map, the subject property is located at approximately 1,565 to 1,570-feet above mean sea level (MSL). The contour lines in the area of the subject property indicate the area is sloping moderately toward the south. Improvements, with the exceptions of roadways, are not depicted on the 2018 map.

A copy of the most recent topographic map is included as Figure 3 of this report.

2.4.2 Hydrology

According to topographic map interpretation, the direction of groundwater flow in the vicinity of the subject property is inferred to be toward the south. The nearest surface water in the vicinity of the subject property is an unnamed channel located approximately 0.45-miles west of the subject property. Additionally, a drainage extends across the subject property from north to south. The feature appears to have been a former natural drainage and now appears to be an engineered flood control measure with storm water entering the property from a culvert on its northern portion. As such, regulations pertaining to wetlands may be applicable to future development plans in the vicinity of this drainage feature. No other settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed at the subject property during this assessment.

No potable water is currently supplied to the subject property. According to available information, a public water system operated by the Eastern Municipal Water District (EMWD) serves the subject property vicinity. According to available information, shallow groundwater directly beneath the subject property is not utilized for domestic purposes. The sources of public water for the City of Moreno Valley are surface water imported from northern California through the State Water Project, two Moreno Valley wells, three Perris Valley wells, treated water from the Colorado River, and groundwater from the Menifee, North Canyon Lake and Quail Valley communities.

According to a previous subsurface investigation conducted on a nearby property (23100 Alessandro Boulevard and Closed Case #200521458), the depth of groundwater in the vicinity of the subject property is inferred to be approximately 46 to 48 feet below ground surface (bgs).

2.4.3 Geology/Soils

The subject property is situated within the Peninsular ranges of the geomorphic province of the State of California. The Peninsular range is series of ranges separated by northwest trending valleys and traversed by several major active faults. The Whittier-Elsinore, San Jacinto, Newport-Inglewood, and San Andreas faults are major active fault systems located in the vicinity of the subject property. The Peninsular ranges extend into lower California, are bound to the east by the Colorado River, and extend into the Los Angeles Basin and the island group surrounding the continental shelf.

Based on information obtained from the USDA Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Monserate sandy loam (MmB). The Monserate series consists of very deep and well drained soils that formed in linear and tread alluvial fans derived from granite. The typical MmB profile is sandy loam at 0 to 10 inches; sandy clay loam at 10 to 28 inches; indurated at 28 to 45 inches; cemented at 45 to 57 inches; and loamy coarse sand, coarse sandy loam at 57 to 70 inches on slopes ranging between 0 and 5 percent.

2.4.4 Flood Zone Information

Partner performed a review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency. According to Community Panel Number 06065C0745G, dated August 28, 2008, the subject property appears to be located in Zone X, an area located outside of the 100-year and 500-year flood plains.

A copy of the reviewed flood map is included in Appendix B of this report.

3.0 HISTORICAL INFORMATION

Partner obtained historical use information about the subject property from a variety of sources. A chronological listing of the historical data found is summarized in the table below:

Historical Use Information

Period/Date	Source	Description/Use
1901-Present	Aerial Photographs, Topographic Maps, Onsite Observations	Undeveloped

According to available historical sources, the subject property has been undeveloped from as early as 1901 to the present. Intermittent streams and stormwater runoff appear to flow across the subject property (trending south) from as early as 1949.

No potential environmental concerns were identified in association with the current or former use of the subject property.

3.1 Aerial Photograph Review

Partner obtained available aerial photographs of the subject property and surrounding area from Environmental Data Resources (EDR) on November 26, 2019. The following was observed on the subject property and adjacent properties during the aerial photograph review:

<i>Date:</i>	<i>1938, 1949, 1953, 1959, 1967, 1978</i>	<i>Scale:</i>	<i>1"=500'</i>
Subject Property:	Undeveloped; an intermittent stream is present on the east and west boundaries trending south		
North:	Undeveloped across Alessandro Boulevard		
South:	Undeveloped		
East:	Undeveloped		
West:	Undeveloped		

<i>Date:</i>	<i>1985</i>	<i>Scale:</i>	<i>1"=500'</i>
Subject Property:	Undeveloped; a stream is present on the west		
North:	Appears to be under construction of the current commercial and residential properties across Alessandro Boulevard		
South:	Undeveloped		
East:	Undeveloped		
West:	Undeveloped		

<i>Date:</i>	<i>1989</i>	<i>Scale:</i>	<i>1"=500'</i>
Subject Property:	Undeveloped; a stream is present on the east and west		
North:	Developed with the current residential properties across Alessandro Boulevard		
South:	Undeveloped		
East:	Undeveloped		
West:	Undeveloped		

Date:	1994, 2006	Scale:	1"=500'
Subject Property:	Undeveloped; a stream is present on the east and west		
North:	Developed with the current residential and commercial properties across Alessandro Boulevard		
South:	Undeveloped		
East:	Undeveloped		
West:	Undeveloped		

Date:	2009	Scale:	1"=500'
Subject Property:	Undeveloped; a stream is present on the east and west		
North:	Developed with the current residential and commercial properties across Alessandro Boulevard		
South:	Vacant land and developed with a new road		
East:	Undeveloped		
West:	Undeveloped		

Date:	2012, 2016	Scale:	1"=500'
Subject Property:	Undeveloped; a stream is present on the east and west		
North:	Developed with the current residential and commercial properties across Alessandro Boulevard		
South:	Vacant land and developed and occupied with a truck trailer storage yard		
East:	Undeveloped		
West:	Undeveloped		

Copies of select aerial photographs are included in Appendix B of this report.

3.2 Fire Insurance Maps

Partner reviewed the collection of Sanborn Fire insurance maps from EDR on November 26, 2019. Sanborn map coverage was not available for the subject property.

3.3 City Directories

Partner reviewed historical city directories obtained from EDR on December 5, 2019 for past names and businesses that were listed for the subject property and adjacent properties. City directories were not identified for the subject property. The adjacent property findings are presented in the following table:

City Directory Search for Adjacent Properties	
Year(s)	Occupant Listed
1975	No listings
1981	No listings
1985	No listings
1992	No listings
1995	Gogo China, Plaza Car Wash (23100 Alessandro Boulevard)
2000	Gogo China, Plaza Del Sol Hand Carwash, Ebony Hair, Fraser Rod Enterprises Inc. (23100 Alessandro Boulevard)
2005	Gogo China, Plaza Hand Carwash Inc., Ebony Hair, Rod Fraser Enterprises Inc. (23100 Alessandro Boulevard)
2010	Gogo China, Rod Fraser Enterprises Inc., Amkusk Investments LLC, Ebony Hair (23100 Alessandro Boulevard)

City Directory Search for Adjacent Properties

Year(s) Occupant Listed

2014 Ebony Hair, Gogo China, M and M Cleaners (23100 Alessandro Boulevard)

According to the city directory review, the adjacent properties have been occupied by commercial businesses from as early as 1995. The adjacent properties to the northwest (23100 Alessandro Boulevard) across Alessandro Boulevard, were identified on the EDR regulatory database as further discussed in section 4.2.3.

Copies of reviewed city directories are included in Appendix B of this report.

3.4 Historical Topographic Maps

Partner reviewed historical topographic maps obtained from EDR on November 26, 2019. The following was observed on the subject property and adjacent properties during the topographic map review:

Date: 1901, 1942, 1947, 1953, 1967, 1980

Subject Property: Undeveloped
North: Undeveloped across Alessandro Boulevard
South: Undeveloped
East: Undeveloped
West: Undeveloped

Copies of reviewed topographic maps are included in Appendix B of this report.

4.0 REGULATORY RECORDS REVIEW

4.1 Regulatory Agencies

4.1.1 Health Department

Regulatory Agency Data

Name of Agency:	Riverside County Health Department of Environmental Health (RCDEH)
Point of Contact:	Records Management Department
Agency Address:	4065 County Circle Drive, Room 104, Riverside, CA
Agency Phone Number:	(951) 358-7018
Date of Contact:	November 26, 2019 and December 4, 2019
Method of Communication:	Email, Mail Response
Summary of Communication:	The RCDEH records department cannot locate or research a request without a physical address. As of this date, the subject property has not been issued an address.

4.1.2 Air Pollution Control Agency

Regulatory Agency Data

Name of Agency:	Air Quality Management District (AQMD)
Point of Contact:	http://www3.aqmd.gov/webappl/fim/prog/search.aspx
Agency Address:	21865 Copley Drive, Diamond Bar, California
Agency Phone Number:	(909) 396-2000
Date of Contact:	November 26, 2019 and December 10, 2019
Method of Communication:	Online Database
Summary of Communication:	No Permits to Operate (PTO), Notices of Violation (NOV), or Notices to Comply (NTC) or the presence of AULs, dry cleaning machines, or USTs were on file for the subject property with the AQMD.

4.1.3 Regional Water Quality Agency

Regulatory Agency Data

Name of Agency:	State Water Resources Control Board (SWRCB) Santa Ana Regional Water Quality Control Board (RWQCB)
Agency Address:	http://geotracker.waterboards.ca.gov/
Agency Phone Number:	(951) 782-4130
Date of Contact:	November 26, 2019 and December 10, 2019
Method of Communication:	Online Database
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the RWQCB.

4.1.4 Department of Toxic Substances Control

Regulatory Agency Data

Name of Agency:	California Department of Toxic Substances Control (DTSC)
Agency Address:	http://www.envirostor.dtsc.ca.gov/public/ http://hwts.dtsc.ca.gov/report_search.cfm?id=5
Agency Phone Number:	(877) 786-9427
Date of Contact:	November 26, 2019 and December 10, 2019
Method of Communication:	Online Database
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the DTSC.

4.1.5 Building Department

Regulatory Agency Data

Name of Agency:	Moreno Valley Building and Safety Division
Point of Contact:	City Clerk and http://www.moreno-valley.ca.us/cdd/departament/divisions-building-safety.html
Agency Address:	14177 Frederick Street, Moreno Valley, California
Agency Phone Number:	(951) 413-3350
Date of Contact:	November 26, 2019 and December 10, 2019
Method of Communication:	Online Research and Telephone
Summary of Communication:	No records for the subject property were available from the Division.

4.1.6 Planning Department

Regulatory Agency Data

Name of Agency:	Planning Division, Moreno Valley Community Development Department
Point of Contact:	http://www.moreno-valley.ca.us/city_hall/city_maps.shtml
Agency Address:	14177 Frederick Street, Moreno Valley, California
Agency Phone Number:	(951) 413-3380
Date of Contact:	November 26, 2019 and December 10, 2019
Method of Communication:	Online Database
Summary of Communication:	According to records reviewed, the subject property is zoned CC for commercial development by the City of Moreno Valley.

4.1.7 Oil & Gas Exploration

Regulatory Agency Data

Name of Agency:	California Division of Oil, Gas and Geothermal Resources (DOGGR)
Point of Contact:	http://maps.conservation.ca.gov/doms/doms-app.html
Agency Phone Number:	(916) 322-1080
Date of Contact:	November 26, 2019
Method of Communication:	Online Database
Summary of Communication:	According to DOGGR, no oil or gas wells are located on or adjacent to the subject property.

4.1.8 Assessor's Office

Regulatory Agency Data

Name of Agency:	Riverside County Assessor (RCA)
Point of Contact:	https://gis.countyofriverside.us/Html5Viewer/?viewer=MMC_Public http://pic.asrclkrec.com/
Agency Address:	4080 Lemon Street, 1st Floor Riverside, California
Agency Phone Number:	(951) 955-9553
Date of Contact:	November 26, 2019 and December 10, 2019
Method of Communication:	Online Database
Summary of Communication:	According to records reviewed, the subject property is identified by Assessor Parcel Numbers (APNs) 297-170-002 and 297-170-003 and totals 17.77 acres. No records regarding property ownership and utility information for the subject property was on file with the Assessor.

Copies of pertinent documents are included in Appendix B of this report.

4.2 Mapped Database Records Search

Information from standard federal, state, county, and city environmental record sources was provided by Environmental Data Resources, Inc. (EDR). Data from governmental agency lists are updated and integrated into one database, which is updated as these data are released. The information contained in this report was compiled from publicly available sources and the locations of the sites are plotted utilizing a geographic information system, which geocodes the site addresses. The accuracy of the geocoded locations is approximately +/-300 feet.

Using the ASTM definition of migration, Partner considers the migration of hazardous substances or petroleum products in any form onto the subject property during the evaluation of each site listed on the radius report, which includes solid, liquid, and vapor.

4.2.1 Regulatory Database Summary

Radius Report Data

Database	Search Radius (mile)	Subject Property	Adjacent Properties	Sites of Concern
Federal NPL or Delisted NPL Site	1.00	N	N	N
Federal CERCLIS Site	0.50	N	N	N
Federal CERCLIS-NFRAP Site	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSD Facility	0.50	N	N	N
Federal RCRA Generators Site (LQG, SQG, CESQG)	0.25	N	N	N
Federal IC/EC Registries	0.50	N	N	N
Federal ERNS Site	Subject Property	N	N/A	N/A
State/Tribal Equivalent NPL	1.00	N	N	N
State/Tribal Equivalent CERCLIS	1.00	N	N	N
State/Tribal Landfill/Solid Waste Disposal Site	0.50	N	N	N
State/Tribal Leaking Storage Tank Site	0.50	N	Y	N

Radius Report Data

Database	Search Radius (mile)	Subject Property	Adjacent Properties	Sites of Concern
State/Tribal Registered Storage Tank Sites (UST/AST)	0.25	N	Y	N
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N
State/Tribal Spills	0.50	N	N	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N
California Environmental Reporting System (CERS)	0.25	N	Y	N
Department of Defense (DOD)	1.00	Y	Y	N
EDR MGP	Varies	N	N	N
EDR US Hist Auto Station	Varies	N	N	N
EDR US Hist Cleaners	Varies	N	N	N

4.2.2 Subject Property Listings

The subject property and adjacent properties to the north, south, east, and west were identified on the EDR regulatory database as situated within the former March Air Force Base Department of Defense (DOD) boundary. The DOD database listing identifies March Air Force Base as a closed site. March Air Force Base is currently bounded by Cactus Avenue on the north, approximately 0.40-miles south (hydrologically down-gradient) of the subject property. The subject property not mapped within an NPL or Area of Concern (AOC) associated with the closed base. Based on the subject property and adjacent properties being historically undeveloped, and the down-gradient location of known impacted soil and groundwater associated with March Air Force Base, this listing is not expected to represent a significant environmental concern to the subject property.

4.2.3 Adjacent Property Listings

The adjacent property to the northwest is identified as an EDR Historical Cleaner site in the regulatory database report, as discussed below:

- M and M Cleaners at 23100 Alessandro Boulevard was historically located adjacent to the northwest (hydrologically up to cross-gradient) of the subject property, across Alessandro Boulevard. M and M Cleaners is listed on the EDR Historical Cleaner database as a dry-cleaning plant between 2012 and 2014. No additional information for this site was provided in the regulatory database. Furthermore, no RCRA, CERS, or HAZNET database listings were included for this site which indicates the facility was presumably a drop off agency. Based on the apparent limited duration of operations, and lack of reported releases or violations, this listing is not expected to represent a significant environmental concern to the subject property.

The adjacent property to the northwest is identified as an Underground Storage Tank (UST), Leaking Underground Storage Tank (LUST), and California Environmental Reporting System (CERS) site in the regulatory database report, as discussed below:

- Plaza Hand Car Wash at 23100 Alessandro Boulevard is located adjacent to the northwest (hydrologically up to cross-gradient) of the subject property, across Alessandro Boulevard. Plaza

Hand Car Wash is listed on the SWEEPS UST database with one 10,000-gallon regular unleaded gasoline tank and two 5,000-gallon premium unleaded gasoline tanks in 1994. The USTs are listed as registered with the State Water Resources Control Board (SWRCB) as tank identification site 33-000-000300-000001; 33-000-000300-000002; and 33-000-000300-000003. The UST database lists Plaza Hand Car Wash as permitted UST facility identification number 593. The CERS database lists Plaza Hand Car Wash as a chemical storage facility with permitted oversight provided by Riverside County Department of Environmental Health (RCDEH). No open violations were noted on the CERS database. On March 2005 during the removal of the USTs soils and shallow groundwater beneath the tanks and dispensers were determined to be impacted with methyl tert-butyl ether (MTBE), total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, xylenes (BTEX), tertiary-Amyl methyl ether (TAME), and volatile organic compounds (VOCs). As a result, three groundwater monitoring were installed to a depth of 48 to 50 feet below ground surface (bgs). Groundwater monitored after five quarters was returned with non-detected results of TPHg, BTEX, Oxygenates, MTBE, TAME, and VOCs. On December 31, 2008 the RCDEH issued a completion of site investigation and corrective action letter with no further action to Plaza Hand Car Wash. Based on the regulatory permitted oversight, regulatory closure, and tank removal with agency oversight, this site is not expected to represent a significant environmental concern to the subject property.

4.2.4 Sites of Concern Listings

No sites of concern are identified in the regulatory database report.

4.2.5 Orphan Listings

No orphan listings of concern are identified in the regulatory database report.

A copy of the regulatory database report is included in Appendix C of this report.

5.0 USER PROVIDED INFORMATION AND INTERVIEWS

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *Brownfields Amendments*), the *User* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. The *User* should provide the following information to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiries* is not complete. The *User* is asked to provide information or knowledge of the following:

- Review Title and Judicial Records for Environmental Liens and AULs
- Specialized Knowledge or Experience of the User
- Actual Knowledge of the User
- Reason for Significantly Lower Purchase Price
- Commonly Known or *Reasonably Ascertainable* information
- Degree of Obviousness
- Reason for Preparation of this Phase I ESA

Fulfillment of these user responsibilities is key to qualification for the identified defenses to CERCLA liability. Partner requested our Client to provide information to satisfy User Responsibilities as identified in Section 6 of the ASTM guidance.

Pursuant to ASTM E1527-13, Partner requested the following site information from Compass Danbe Real Estate Partner LLC (User of this report).

User Responsibilities				
Item	Provided By User	Not Provided By User	Discussed Below	Does Not Apply
Environmental Pre-Survey Questionnaire		X		
Title Records, Environmental Liens, and AULs			X	
Specialized Knowledge			X	
Actual Knowledge			X	
Valuation Reduction for Environmental Issues			X	
Identification of Key Site Manager	Section 5.1.3			
Reason for Performing Phase I ESA	Section 1.1			
Prior Environmental Reports		X		
Other				X

5.1 Interviews

5.1.1 Interview with Owner

The owner of the subject property was not available to be interviewed.

5.1.2 Interview with Report User

Please refer to Section 5.2 below for information requested from the Report User.

5.1.3 Interview with Key Site Manager

A key site manager was not provided.

5.1.4 Interviews with Past Owners, Operators and Occupants

Interviews with past owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap.

5.1.5 Interview with Others

As the subject property is not an abandoned property as defined in ASTM 1527-13, interview with others were not performed.

5.2 User Provided Information

5.2.1 Title Records, Environmental Liens, and AULs

Partner was provided with an ALTA Commitment for Title Insurance for the subject property dated November 1, 2019 and prepared by First American Title company for review as part of this assessment.

According to the report, the title search describes the subject property as assessor parcel number 297-170-002 and 297-170-003 and vested in Moreno Valley Centerpointe LLC. A drainage easement agreement was recorded December 2, 1987 as instrument number 341821 and a flood control and drainage offer of dedication was recorded December 23, 2009 as instrument number 2009-0657601. The title search did not identify any additional environmental noteworthy matters.

5.2.2 Specialized Knowledge

No specialized knowledge of environmental conditions associated with the subject property was provided by the User at the time of the assessment.

5.2.3 Actual Knowledge of the User

No actual knowledge of any environmental lien or AULs encumbering the subject property or in connection with the subject property was provided by the User at the time of the assessment.

5.2.4 Valuation Reduction for Environmental Issues

No knowledge of valuation reductions associated with the subject property was provided by the User at the time of the assessment.

5.2.5 Commonly Known or Reasonably Ascertainable Information

The User did not provide information that is commonly known or *reasonably ascertainable* within the local community about the subject property at the time of the assessment.

5.2.6 Previous Reports and Other Provided Documentation

No previous reports or other pertinent documentation was provided to Partner for review during the course of this assessment.

6.0 SITE RECONNAISSANCE

The weather at the time of the site visit was sunny and clear. Refer to Section 1.5 for limitations encountered during the field reconnaissance and Sections 2.1 and 2.2 for subject property operations. The table below provides the site assessment details:

Site Assessment Data

Site Assessment Performed By:	Ramiro Vejar
Site Assessment Conducted On:	December 6, 2019

Partner was not accompanied during the field reconnaissance activities.

No potential environmental concerns were identified during the onsite reconnaissance.

6.1 General Site Characteristics

6.1.1 Solid Waste Disposal

Solid waste is not currently generated at the subject property. A small concrete mound and three four foot steel lids were observed as illegally dumped on the south-southwest of the subject property. No additional evidence of illegal dumping or solid waste was observed during the Partner site reconnaissance.

6.1.2 Sewage Discharge and Disposal

Sanitary discharges are not currently generated at the subject property. No wastewater treatment facilities or septic systems were observed or reported on the subject property.

6.1.3 Surface Water Drainage

Storm water directly infiltrates unpaved onsite soils and flows south towards stormwater drains.

The subject property does not appear to be a designated/mapped wetland area, based on information obtained from the United States Fish & Wildlife Service; however, a comprehensive wetlands survey would be required in order to formally determine actual wetlands on the subject property. A drainage extends across the subject property from north to south. The feature appears to have been a former natural drainage and now appears to be an engineered flood control measure with storm water entering the property from a culvert on its northern portion. As such, regulations pertaining to wetlands may be applicable to future development plans in the vicinity of this drainage feature. No other surface impoundments, wetlands, natural catch basins, settling ponds, or lagoons are located on the subject property. No drywells were identified on the subject property.

6.1.4 Source of Heating and Cooling

No heating or cooling equipment was observed on the subject property.

6.1.5 Wells and Cisterns

No aboveground evidence of wells or cisterns was observed during the site reconnaissance.

6.1.6 Wastewater

Domestic wastewater generated at the subject property is disposed by means of the sanitary sewer system. No industrial process is currently performed at the subject property.

6.1.7 Septic Systems

No septic systems were observed or reported on the subject property.

6.1.8 Additional Site Observations

No additional general site characteristics were observed during the site reconnaissance.

6.2 Potential Environmental Hazards

6.2.1 Hazardous Substances and Petroleum Products Used or Stored at the Site

No hazardous substances or petroleum products were observed on the subject property during the site reconnaissance.

6.2.2 Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)

No evidence of current or former ASTs or USTs was observed during the site reconnaissance.

6.2.3 Evidence of Releases

No spills, stains or other indications that a surficial release has occurred at the subject property were observed.

6.2.4 Polychlorinated Biphenyls (PCBs)

No potential PCB-containing equipment (transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, etc.) was observed on the subject property during Partner's reconnaissance.

6.2.5 Strong, Pungent or Noxious Odors

No strong, pungent or noxious odors were evident during the site reconnaissance.

6.2.6 Pools of Liquid

No pools of liquid were observed on the subject property during the site reconnaissance.

6.2.7 Drains, Sumps and Clarifiers

No drains, sumps, or clarifiers, other than those associated with storm water removal, were observed on the subject property during the site reconnaissance.

6.2.8 Pits, Ponds and Lagoons

No pits, ponds or lagoons were observed on the subject property.

6.2.9 Stressed Vegetation

No stressed vegetation was observed on the subject property.

6.2.10 Additional Potential Environmental Hazards

No additional environmental hazards, including landfill activities or radiological hazards, were observed.

6.3 Non-ASTM Services

6.3.1 Asbestos-Containing Materials (ACMs)

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be *presumed* to contain asbestos, for purposes of this regulation. Construction materials including, but not limited to, thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building and that have not been appropriately tested may be considered "presumed asbestos-containing material" (PACM).

No buildings or structures are located on the subject property. As such, an asbestos evaluation was not required by the scope of services.

6.3.2 Lead-Based Paint (LBP)

Lead is a highly toxic metal that affects virtually every system of the body. LBP is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm² (or 5,000 ug/g or 0.5% by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X", to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

No buildings or structures are located on the subject property. As such, an LBP evaluation was not required by the scope of services.

6.3.3 Radon

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, according to the table below:

EPA Radon Zones

EPA Zones	Average Predicted Radon Levels	Potential
Zone 1	Exceed 4.0 pCi/L	Highest
Zone 2	Between 2.0 and 4.0 pCi/L	Moderate
Zone 3	Less than 2.0 pCi/L	Low

It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location.

However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Radon sampling was not conducted as part of this assessment. Review of the US EPA Map of Radon Zones places the subject property in Zone 2. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

6.3.4 Lead in Drinking Water

According to available information, a public water system operated by the Eastern Municipal Water District (EMWD) serves the subject property vicinity. According to available information, shallow groundwater directly beneath the subject property is not utilized for domestic purposes. The sources of public water for the City of Perris are surface water imported from northern California through the State Water Project, two Moreno Valley wells, three Perris Valley wells, treated water from the Colorado River, and groundwater from the Menifee, North Canyon Lake and Quail Valley communities.

According to the EMWD and the 2017 Annual Water Quality Report, water supplied to the subject property vicinity is in compliance with all State and Federal regulations pertaining to drinking water standards, including lead and copper. Water sampling was not conducted to verify water quality.

6.3.5 Mold

At the time of Partner's site visit, the subject property was observed to be vacant land; therefore, an evaluation of mold was not included in the scope of this assessment.

6.4 Adjacent Property Reconnaissance

The adjacent property reconnaissance consisted of observing the adjacent properties from the subject property premises. No items of environmental concern were identified on the adjacent properties during the site assessment, including hazardous substances, petroleum products, ASTs, USTs, evidence of releases, PCBs, strong or noxious odors, pools of liquids, sumps or clarifiers, pits or lagoons, stressed vegetation, or any other potential environmental hazards.

7.0 FINDINGS AND CONCLUSIONS

Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- Partner did not identify any recognized environmental conditions during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- Partner did not identify any environmental issues during the course of this assessment.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of Assessor's Parcel Number 297-170-002 and 297-170-003 in Moreno Valley, Riverside County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of recognized environmental conditions or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends no further investigation of the subject property at this time.

8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Partner has performed a Phase I Environmental Site Assessment of the property located at Assessor's Parcel Number 297-170-002 and 297-170-003 in Moreno Valley, Riverside County, California in conformance with the scope and limitations of the protocol and the limitations stated earlier in this report. Exceptions to or deletions from this protocol are discussed earlier in this report.

By signing below, Partner declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR §312. Partner has the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. Partner has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared By:



Ramiro Vejar
Environmental Scientist

Reviewed By:



Sarah Vosovic
Senior Author

9.0 REFERENCES

Reference Documents

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-13.

Environmental Data Resources (EDR), Radius Report, December 2019

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via internet, December 2019

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United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, December 2019

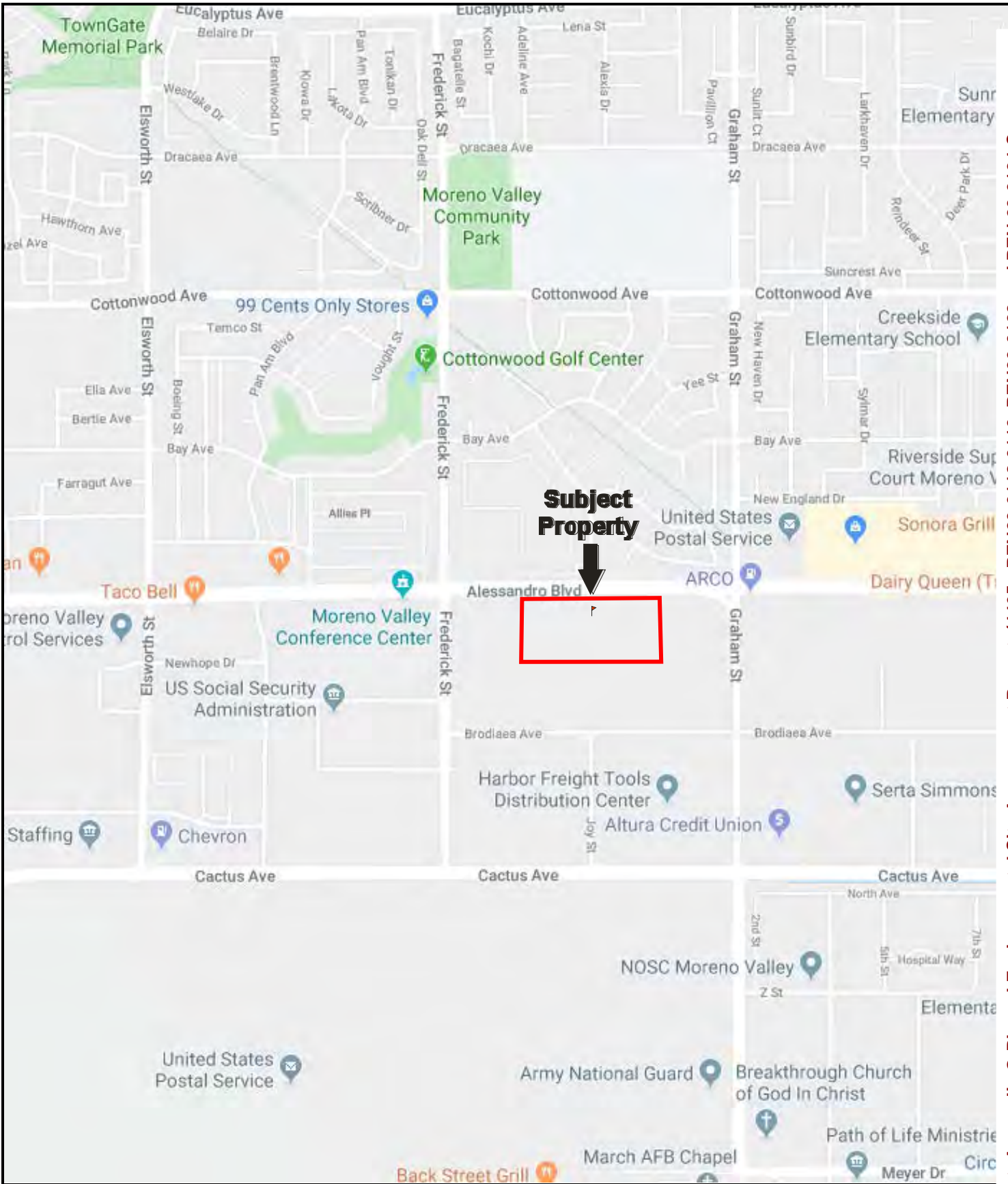
United States Environmental Protection Agency, EPA Map of Radon Zones (Document EPA-402-R-93-071), accessed via the internet, December 2019

United States Geological Survey, accessed via the Internet, December 2019

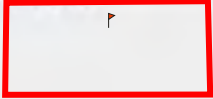
United States Geological Survey Topographic Map 2018, 7.5-minute series, accessed via internet, December 2019

FIGURES

- 1 **SITE LOCATION MAP**
- 2 **SITE PLAN**
- 3 **TOPOGRAPHIC MAP**



Subject Property



Drawing Not To Scale

KEY:
Subject Property 

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

FIGURE 1: SITE LOCATION MAP
Project No. 19-267109.1

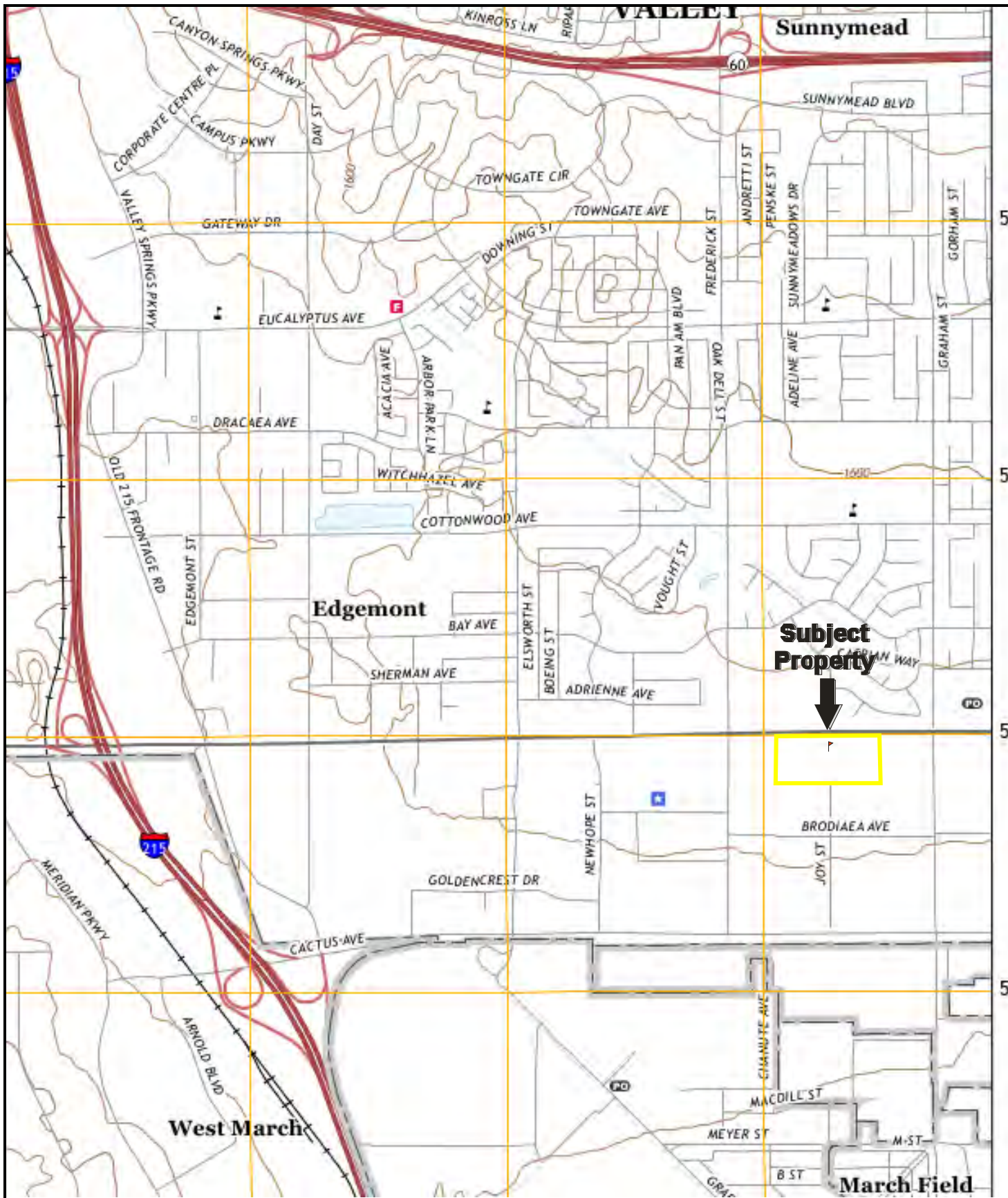


GROUNDWATER FLOW

KEY:
 Subject Property

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119,

FIGURE 2: SITE PLAN
 Project No. 19-267109.1



N
 USGS 7.5 Minute *Riverside East*, CA Quadrangle
 Created: 2018

KEY:
 Subject Property 

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

FIGURE 3: TOPOGRAPHIC MAP
 Project No. 19-267109.1

APPENDIX A: SITE PHOTOGRAPHS



1.View of the subject property from the northwest looking east..



2.View of the subject property from the northwest looking south.



3.View of the subject property from the north looking south.



4.View of the communication utility boxes on the north boundary of the subject property.



5.View of a storm water drain (easement) draining onto the subject property.



6.View of the storm water runoff tree line.

APPENDIX A: SITE PHOTOGRAPHS

Project No. 19-267109.1





7.View of the storm water easement drain on the northeast.



8.View of the subject property from the east looking west.



9.View of the subject property from the southeast looking east.



10.View of the stormwater drain on the south boundary.



11.View of the stormwater drain on the south boundary.



12.View of the southwest stormwater drain on the south boundary.



13.View of concrete illegally abandoned on the south boundary.



14.View of steel lids abandoned on the south boundary of the subject property.



15.View of the subject property from the southwest looking east.



16.View of the subject property from the southwest looking northeast.



17.View of the subject property from the southwest looking north.



18.View of the landscaped areas on the south and adjacent warehouse building.

APPENDIX A: SITE PHOTOGRAPHS
Project No. 19-267109.1





19.View of the adjacent vacant land to the west.



20.View of the adjacent vacant land to the east.



21.View of the adjacent residential homes to the northeast.



22.View of the adjacent residential apartments to the north.



23.View of the adjacent commercial property to the northwest.



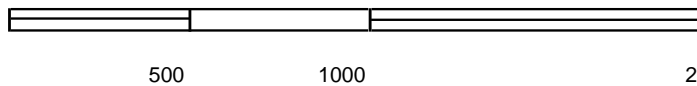
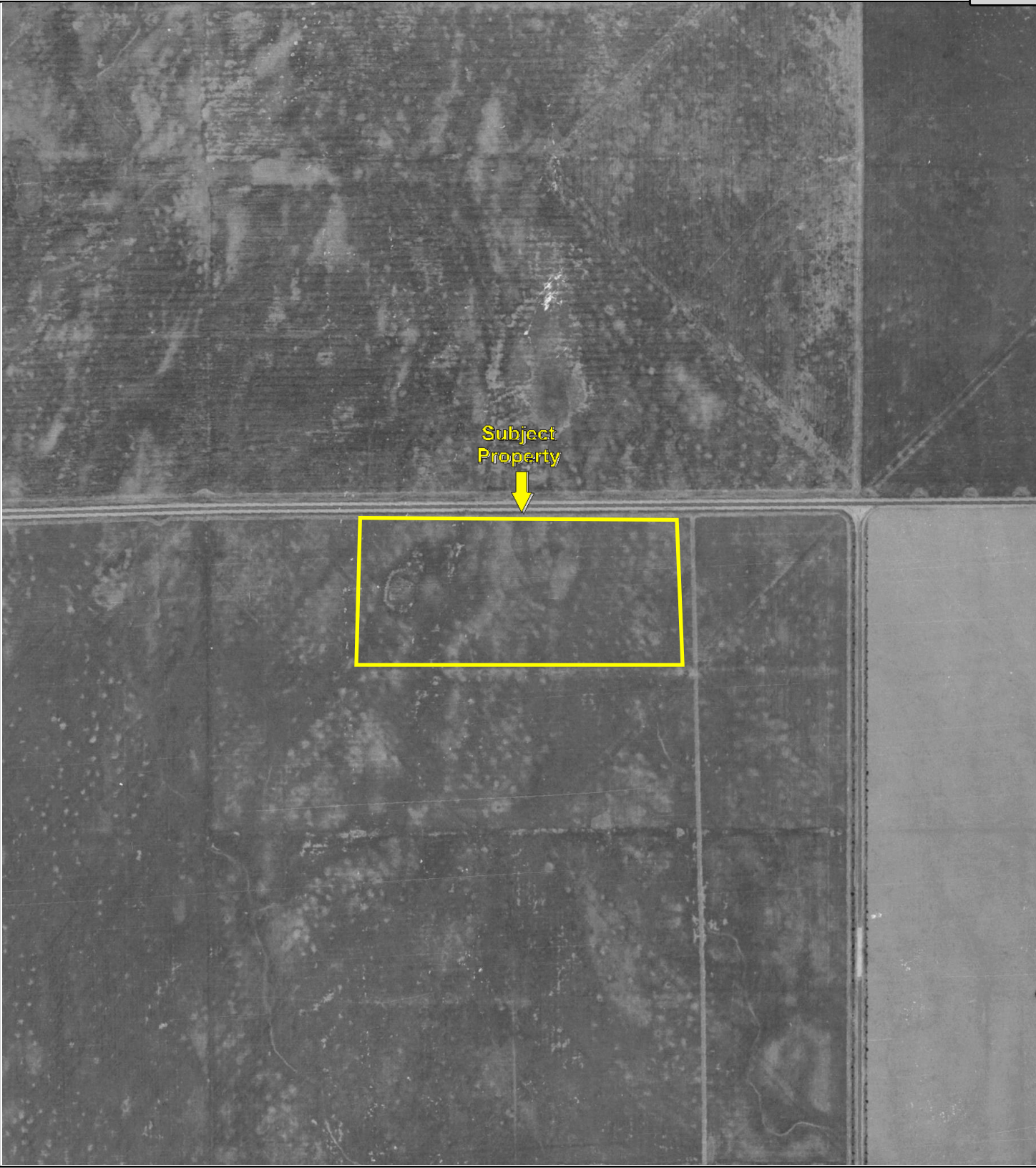
24.View of Alessandro Boulevard on the north.

APPENDIX A: SITE PHOTOGRAPHS

Project No. 19-267109.1

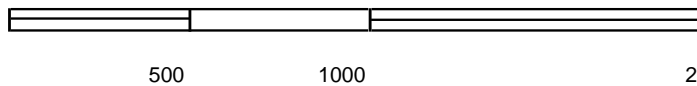
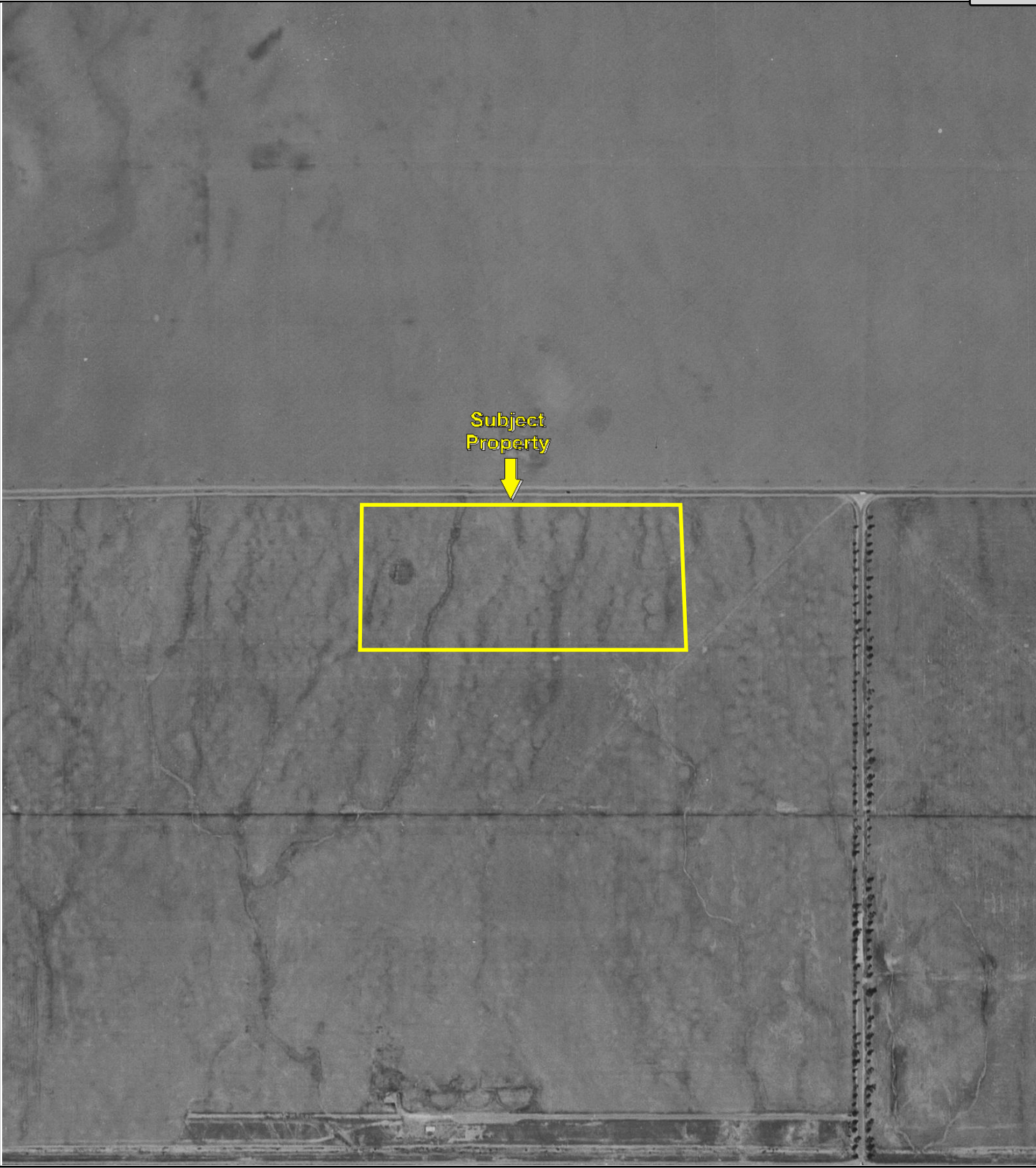



APPENDIX B: HISTORICAL/REGULATORY DOCUMENTATION



Key: Subject Property 

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

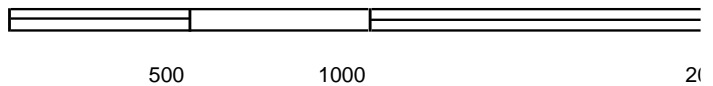
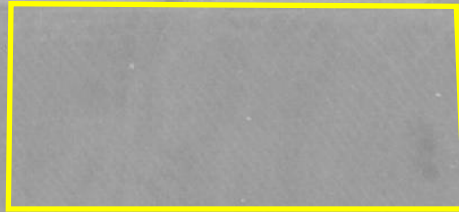


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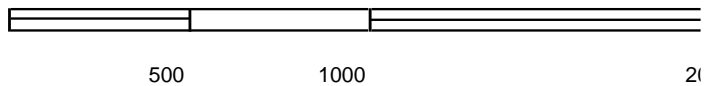



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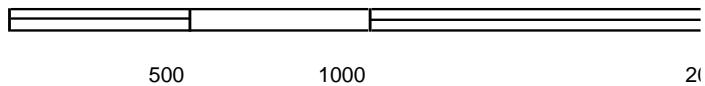
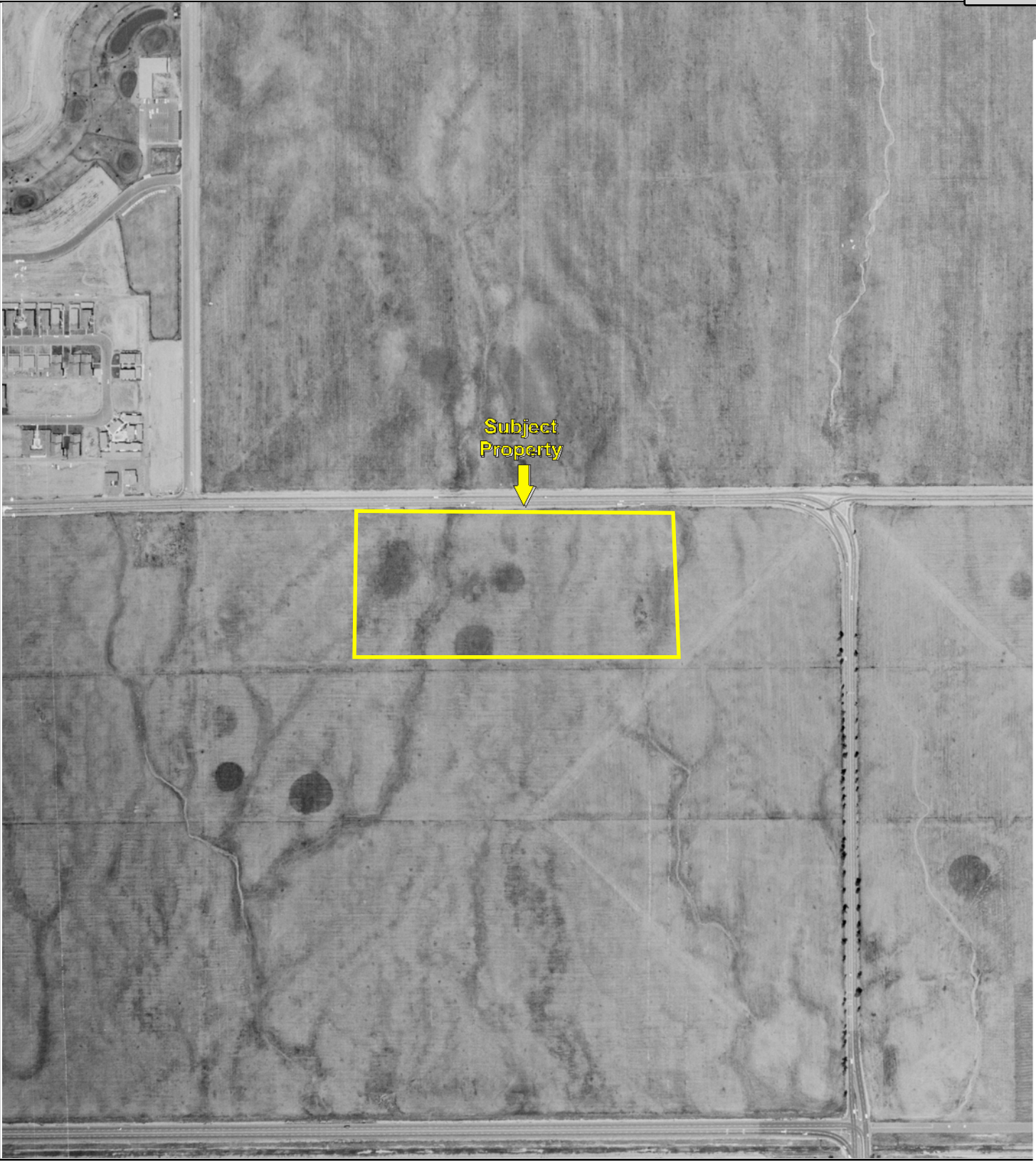


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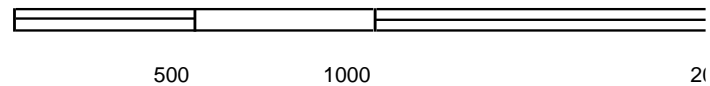
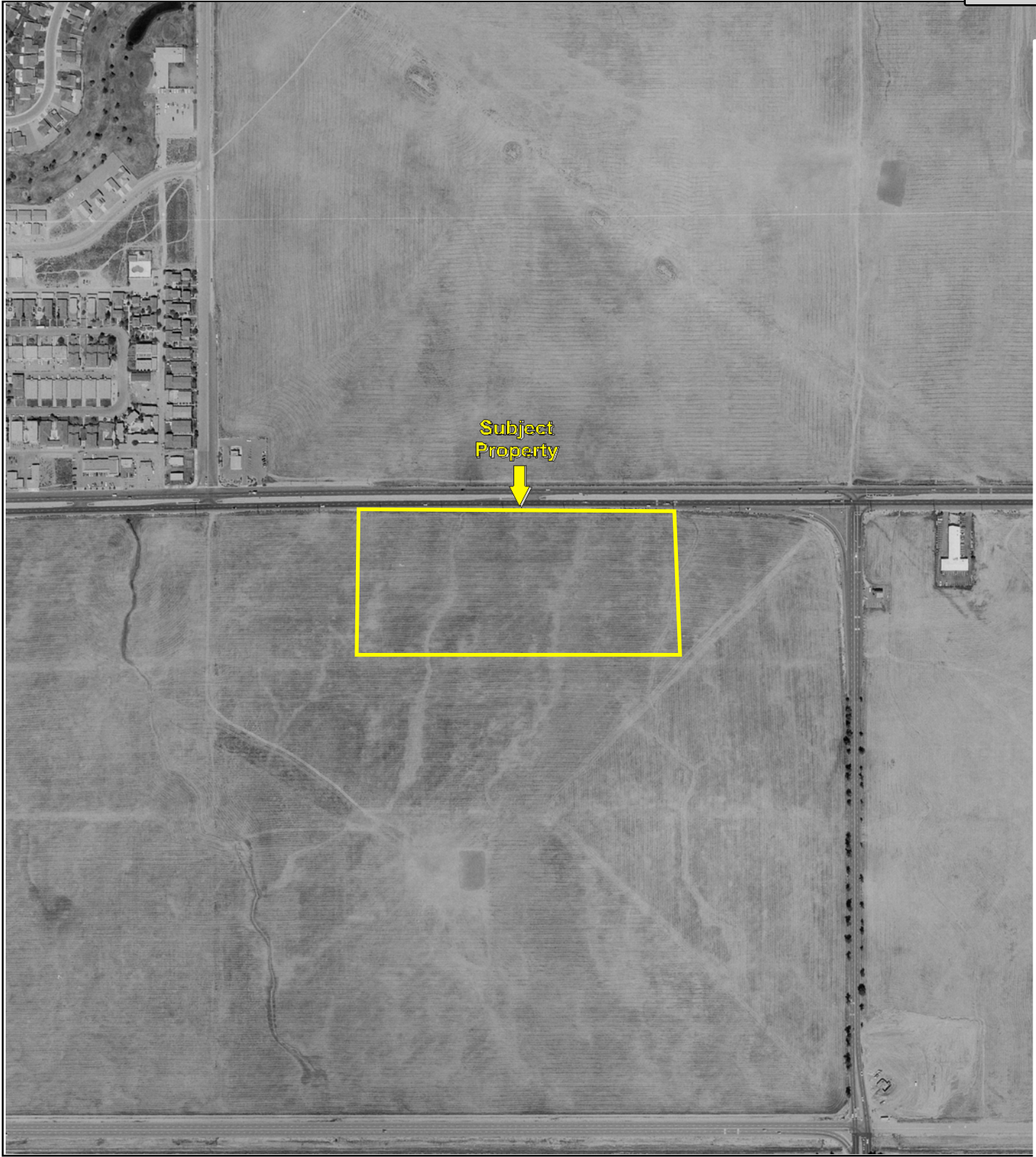


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Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

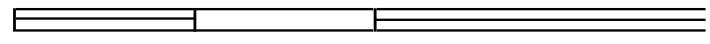


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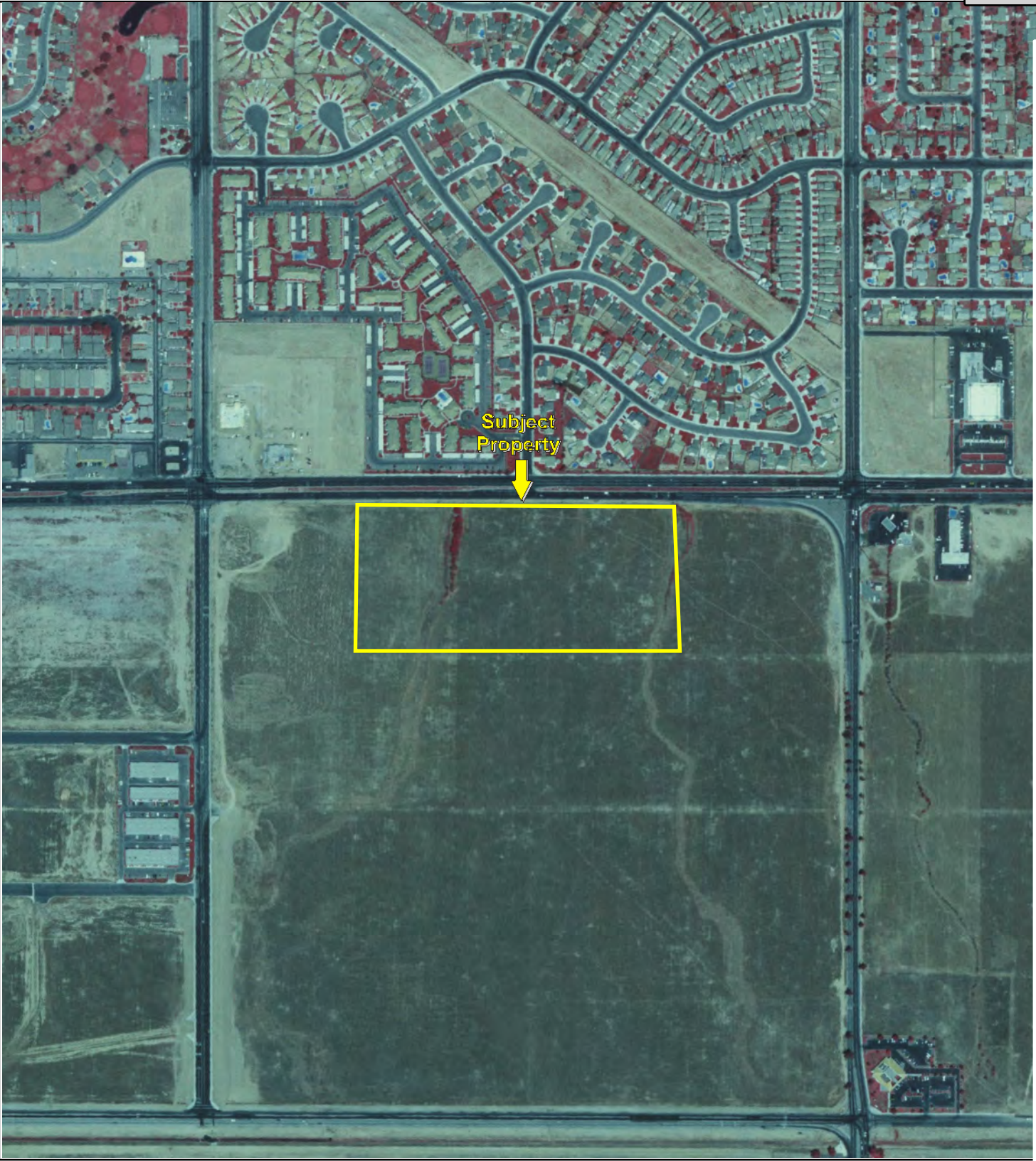


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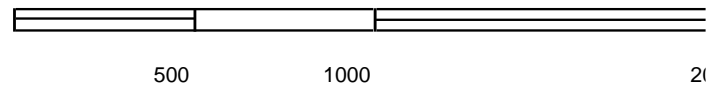


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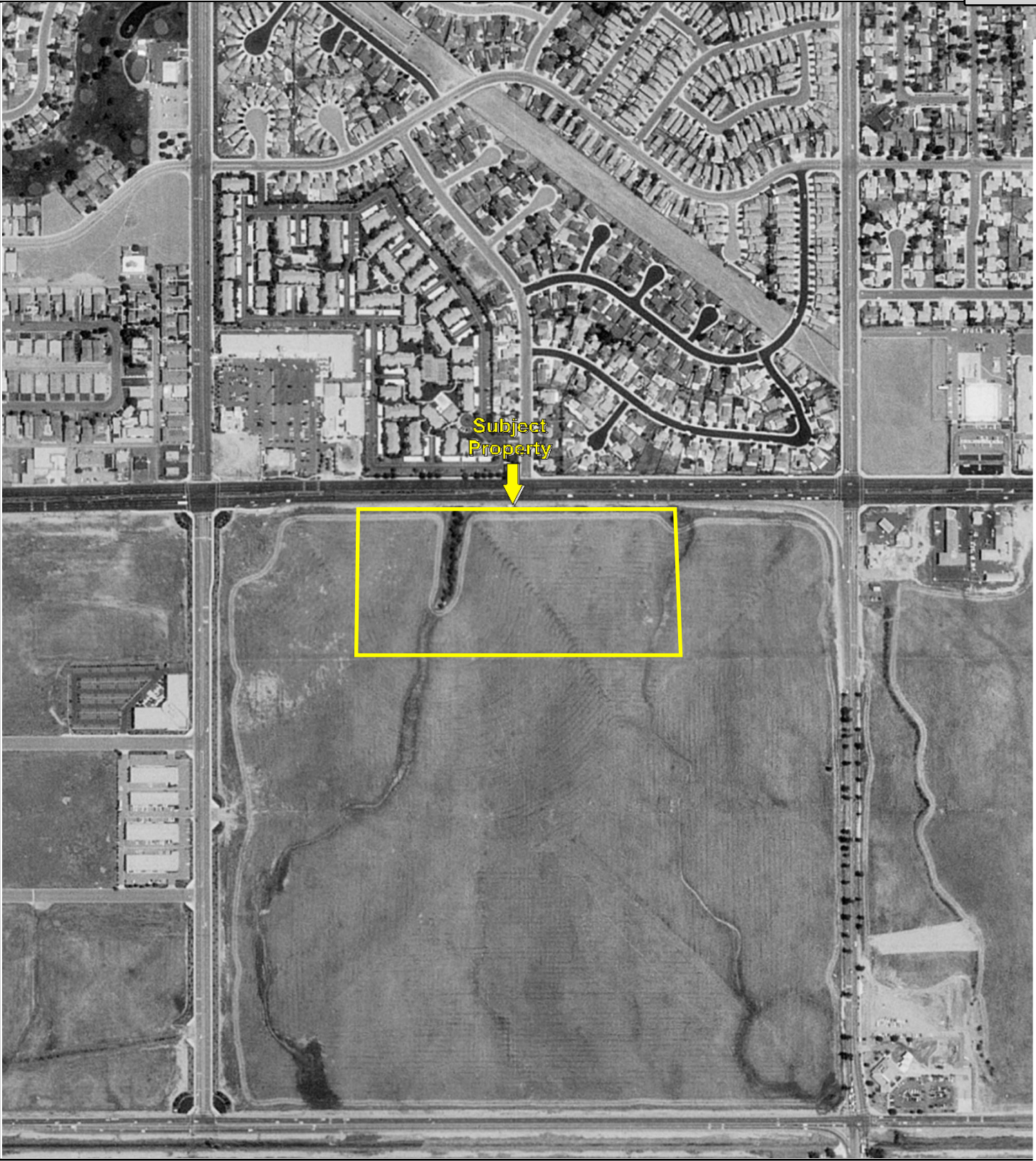


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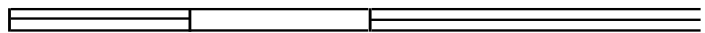
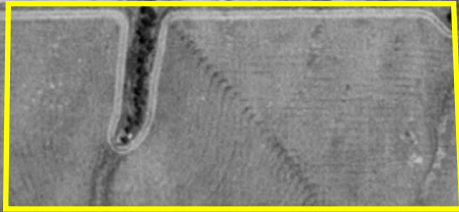


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Subject Property



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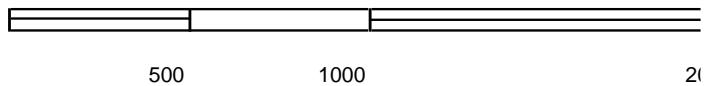


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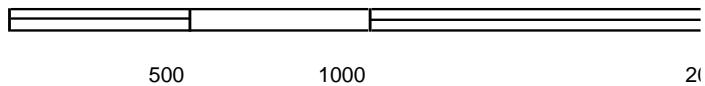


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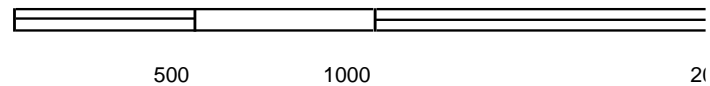
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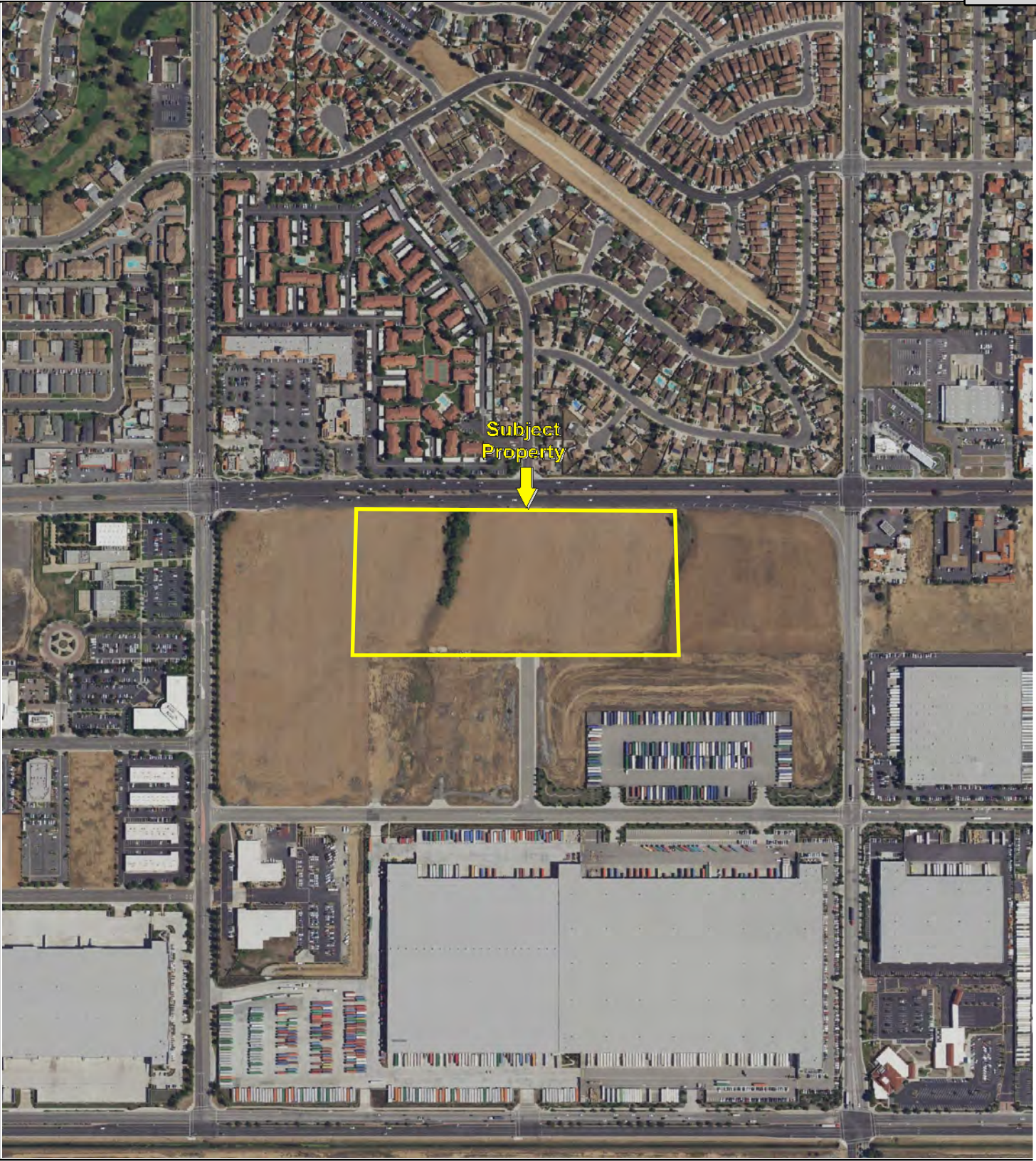
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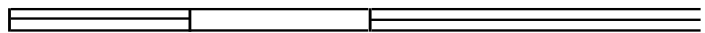


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Subject Property



500 1000 2000



Key: Subject Property



Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

17.7 Acre

APN 297-170-002, and 297-170-003

MORENO VALLEY, CA 92553

Inquiry Number: 5885406.3

November 26, 2019

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Certified Sanborn® Map Report

11/26/19

Site Name:

17.7 Acre
 APN 297-170-002, and 297-17
 MORENO VALLEY, CA 92553
 EDR Inquiry # 5885406.3

Client Name:

Partner Engineering and Science, Inc.
 2154 Torrance Blvd, Suite 200
 Torrance, CA 90501-0000
 Contact: Roy Zamarripa



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Project 19-267109.1

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17.7 Acre

APN 297-170-002, and 297-170-003
MORENO VALLEY, CA 92553

Inquiry Number: 5885406.5
December 05, 2019

The EDR-City Directory Image Report



6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2014	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2010	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2005	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
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1995	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
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1975	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1971	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

APN 297-170-002, and 297-170-003
MORENO VALLEY, CA 92553

No Addresses Found

FINDINGS

CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
<u>ALESSANDRO BLVD</u>		
2014	pg. A1	EDR Digital Archive
2010	pg. A2	EDR Digital Archive
2005	pg. A3	EDR Digital Archive
2000	pg. A4	EDR Digital Archive
1995	pg. A5	EDR Digital Archive
1992	pg. A6	EDR Digital Archive
1985	pg. A7	Haines Criss-Cross Directory
1985	pg. A8	Haines Criss-Cross Directory
1981	pg. A9	Haines Criss-Cross Directory
1975	pg. A10	Haines Criss-Cross Directory
1975	pg. A11	Haines Criss-Cross Directory
1971	-	Haines Criss-Cross Directory
		Street not listed in Source

City Directory Images

-

✓

ALESSANDRO BLVD 2014

22990 TMSO INC
23020 TOM S 1
TOMS WORLD FAMOUS CHILIBURGER
23080 99 CENTS PLUS FOOD MART
BALETTE ROBERT E MD
DEZA, ROCIO J
DR DEZAS DENTAL OFFICE
EXHILARATE FITNESS STUDIO
FLORES JOSE
HINDS NATHAN OD
LOCKER ROOM BARBER SHOP LLC
LVRX
MARINE CORPS UNITED STATES
SYB INC
VO KRISTIE OD
23100 EBONY HAIR
GOGO CHINA
M AND M CLEANERS

1.

-

✓

ALESSANDRO BLVD 2010

22960 ELKS LODGE MORENO VLY NO 2697
22990 HRMP INC
23020 TOM S 1
TOMS WORLD FAMOUS CHILIBURGER
23060 GARLIC ROSE INC
23080 99 CENTS PLUS FOOD MART
DR DEZAS DENTAL OFFICE
FLORES JOSE
FRIENDSHIP CHRSTN FLOWSHIP CH
LIFETIME VALUE PHARMACY INC
LVRX
MARINE CORPS UNITED STATES
MORENO BEACH REALTY & ESCROW I
NATOLI STEVE
SYB INC
23100 AMKUSK INVESTMENTS LLC
EBONY HAIR
GOGO CHINA
ROD FRASER ENTERPRISES INC

1.

ALESSANDRO BLVD 2005

22960 ELKS LODGE MORENO VLY NO 2697
23020 TOMS WORLD FAMOUS CHILIBURGER
23060 GARLIC ROSE INC
HOLLYWOOD STYLE
23080 99 CENTS PLUS FOOD MART
CLINICA MEDICA FAMILIAR
DR DEZAS DENTAL OFFICE
FRIENDSHIP CHRISTIAN CHURCH
FRIENDSHIP CHRISTIAN BOOKS
NATOLI STEVE
SYB INC
23100 DON, JOSE
EBONY HAIR
GOGO CHINA
GOGO, CHINA
PLAZA HAND CARWASH INC
ROD FRASER ENTERPRISES INC

1.

ALESSANDRO BLVD 2000

23020 TOMS WORLD FAMOUS CHILIBURGER
23060 GARLIC ROSE INC
23080 A1 CLEANERS
CLINICA MEDICA CO
DR DEZAS DENTAL OFFICE
FRIENDSHIP CHRISTIAN CHURCH
RAMOUNI FAISAL
23100 EBONY HAIR
FRASER ROD ENTERPRISES INC
GOGO CHINA
GOGO, CHINA
PLAZA DEL SOL HAND CARWASH

1.

ALESSANDRO BLVD 1995

22990 THRIFTY OIL CO
23080 A1 CLEANERS
RAMOUNI FAISAL
TAN, ANTONIO A
23100 GOGO CHINA
PLAZA CAR WASH

1.

ALESSANDRO BLVD 1992

23080 RAMOUNI FAISAL

1.

ALESSANDRO BLVD 1985

22876	B&G CARPET CLEANING	653-0966 +5
	CHECKS CASHED EAGLS	653-5826 +5
	EAGLES CHECKS CASHD	653-5826 +5
	GEORGE ARTHURS	656-5504 +5
	HOBIE RIVERSIDE	656-4793 3
22920	ARMSTRONG SAM RLTY	653-2104
	ASIAN IMPORTS	653-7733 +5
	CRITERION INS	653-1131 2
	GEICO SALES&SERVICE	653-1131 2
	GLEN INS AGCY	653-1130 3
	GOVERNMENT EMPLOY CO	653-1130
	NEW RIVER KWAE	656-3355 +5
	U GET CREDIT STORES	653-1138 +5
	VIS KEY TO BEAUTY	653-3783 0
22940	ACADEMY LIFE INS	656-1374 1
	N C O A SERVICE CTR	653-3135 9
22960	MORENO VLY SC MEDIA	653-9503 2

ALESSANDRO BLVD 1985

ALESSANDRO BLVD		92508 CONT.	
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23020	VALLEY BANK EDMNT	653-1101	6
23580	XXXX	00	
23581	MOTEL 6	653-2131	7
ZIP CODE 92388 SUNNYMEAD			
24481	CHIEF AUTO PARTS	653-8439	4
24491	SEVEN ELEVEN 20402	653-3032	2
24515	HOUSEHOLD BANK FSB	656-6614	+5
	SUNNYMEAD VLG DNTL	656-4477	4
24525	CAL WEST NATL BANK	656-4494	4
24551	TRAVEL TEAM	924-1004	+5
24553	YOUR YOGURT STOP	924-1408	+5
24555	HENNY PENNY GIFT SH	924-3137	+5
24557	O K KIDS	924-2702	+5
24559	DOOS IMPORTS&POSTRS	924-5666	+5
24561	TARBELL REALTORS	924-1067	+5
24563	FLOWERS&MORE	924-5147	+5
24595	STATER BROS MKT	653-7724	+5
24643	RAINBOW GIFT	924-5336	+5
24645	MASTER JEWELERS	924-4994	+5
24651	I&G FASHIONS	924-5201	+5
24653	ACTIVE FOOTWEAR	924-1571	+5
24655	FAT LARRYS B B Q	924-8288	+5
24673	CAR MAR INS AGCY	924-1071	+5
	FIRESTONE STR 27T2	656-6631	+5
24685	CLARK DRUGS	653-2102	4
	CLARK DRUGS	656-4447	4
24691	CHINA RESTAURANT	924-1888	+5
24693	XXXX	00	
24695	STAR CLEANERS	653-7050	+5
24697	IN HOME VIDEO	924-1881	+5
24699	HAIR CONNECTION THE	656-4408	+5
24701	LUIGIS ITALIAN REST	924-2080	+5
24703	KAN DO 1 HOUR PHOTO	924-3500	+5
	1 HOUR PHOTO	924-3500	+5
24705	BLOCK H&R INC	924-2888	+5
24707	KOI JAPANESE REST	924-2483	+5
24709	ALLSTATE INS CO	924-1946	+5
24711	EL TORERO REST	924-1770	+5
24725	BUILDERS EMPRM WEST	656-4424	4
24735	XXXX	00	
24739	ROUND TABLE PIZZA	656-3411	4
24749	DELOUX SC COSMETLGY	924-1844	+5
24757	BASKIN ROBBINS 31	924-1700	+5
	CANDY CO	656-7122	+5
	CASA SILGUERO	924-1212	+5
	FLIPPER FLAPPER	924-1150	+5
	SNAPPIS SANDWCH SHOP	656-5622	+5
	VA CITY CANDY CO	656-7122	+5
	WEINER CONSTRUCTION	924-2377	+5
	WHITES BIKES	653-4460	+5
	ZAPATAS BURRITO	656-5005	+5
24774	HARTER MARGIE F	653-1610	
24775	SUNNYMEAD CINEMA 4	924-1554	+5
24786	XXXX	00	
24798	XXXX	00	
24805	SUNNYMEAD MATTRESS	924-5111	+5
24810	XXXX	00	
24822	POLZIN EARL	924-4098	+5
24825	CRAFTS ALAN L ATTY	656-3515	+5
	DARLING SCOTT ATTY	656-3515	+5
	FALSETTI A A ATTY	656-3515	+5
	FALSETTI CRAFTS	656-3515	+5
	FARMERS INS AGENT	653-9494	+5
	FEMININE NAILS	924-2050	+5
	MEDOF ROBT G ATTY	656-3515	+5
	MILLER JAXON E ATTY	656-3515	+5
	PALM DAVID	653-9494	+5
	PECK JIMMY INS	653-2182	+5
	PIONEER CHICKEN 297	924-2267	+5
	PRESTIGE 1 CLEANERS	924-2337	+5
	PRITCHARD R E ATTY	656-3515	+5
	WEBB THOMAS ATTY	656-3515	+5
24831	MOSKATELS	656-4439	+5
24834	XXXX	00	
24845	CLIC PHOTO	653-4598	+5
24846	XXXX	00	
24853	DENTAL ASSOCIATES	924-1988	+5
	MING DYNASTY	924-3131	+5
	PIZZA PLAYHOUSE	653-3121	+5
	PLUMB JEWELRY	653-7333	+5
	RAMKO TECH SRV INC	924-2188	+5
	RIVRSO MEDICAL CLNC	924-1871	+5
	SUNNYMEAD CENTER	924-1871	+5
	VIDEORAMA U S A	924-2188	+5
24858	NOONAN THOS	924-2110	+5
	PETRULAK JOHN	653-1625	
24870	HITCHINS GEO D	653-2754	+5
24875	CLOTHES TIME	656-6533	+5
	COLONNAS COLORS	653-0706	+5
	FAMILY AFFAIR HAIR	656-7474	4
	FAYVA SHOES	653-9891	+5
	KIRANS HALLMARK	656-3911	+5
	MALE BOX THE	924-1331	+5
	NEW DIMENSIONS	924-1344	+5
	OPTICAL OUTLET	656-2341	+5
	PET CENTER	653-6650	+5
24891	XXXX	00	
24899	K MART DSCNT STR	656-4466	4
24910	KEITHLEY M LOVERNE	653-4047	
24991	AMER DONUTS	653-0636	+5
	B&H IMPORT AUTO SPL	924-1986	+5
	VANS TENNIS SHOES	656-5176	+5
24994	MOTTERT BILL	653-1766	7
25011	MIKES AUTO	653-9888	+5
25018	XXXX	653-3878	2

ALESSANDRO BLVD 1981

22810	ANNS BEAUTY BASKET	653-2010 6
	CENTURY 21	653-3189+1
	GLATCH LEWIS JR MD	653-1404 0
	MASCARI ANTHONY D	653-4382
	MORENO VLY NEUROPSY	653-1404 0
	SUBBIAH S MD	657-5135+1
	SUBBIAH S MD	653-2195+1
	THOMAS TRACY A	653-1404 1
22862	COUNTRY LIQUOR CO	653-2211 1
	MARKS GIFFIN WTR	656-1666+
22876	CENTENNIAL REALTY	653-7559
	CRITERION INS CO	653-1131
	LEISURE PHOTOGRAPHY	653-7817+
	MASTER ANTENNA	656-2157+
22920	ALICE ANNS DCRTNG	653-9773+
	ARMSTRONG SAM RLTY	653-2104
	CRITERION INS	653-1131+
	GEICO FNCL SRV INS	653-1131+
	GEICO&AFFILIATES	653-1131+
	GLEN INS AGCY	653-1130+
	GOVERNMENT EMPLYS	653-1130+
	GOVERNMENT EMPLYS I	653-1131+
	JOES ITALIAN RSTRNT	653-3093 1
	MOONWIND FLORAL	653-8727+
	VIS KEY TO BEAUTY	653-3783 1
22940	ACADEMY LIFE INS	656-1374+
	N C O A SERVICE CTR	653-3135 5
22960	SC MORENO VLY MEDIA	653-9503+
22990	ECONOMY OIL	653-9919+
	ECONOMY OIL CO	653-3191 0
23020	VALLEY NATL BANK	653-1101 8
23580	XXXX	00
23581	MOTEL 6	653-2131 1

ZIP CODE 92388
SUNNYMEAD

24491	7 ELEVEN FD 20402	653-3032+
24774	HARTER MARGIE F	653-1610
24786	RIDGE B J	653-2035
24798	XXXX	00
24810	XXXX	00
24822	RODRIGUEZ DAVID L	653-1910
24834	XXXX	00
24846	SHAMHART HAZEL	653-3206
24858	PETRULAK JOHN	653-1625
24870	XXXX	00
24891	BANTA J B	653-1445
24910	KEITHLEY M LOVERNE	653-4047
24994	MOTTERT BILL	653-1766
25011	MORENO SHELL	653-3400
	R&J AUTOMOTIVE	653-8788
25019	XXXX	00
25020	MUDGE D	653-0307
25021	SARGIES SUNNYMD INN	653-9944
25023	XXXX	00
25025	LORRAINES FLOWERS	653-2882

ALESSANDRO BLVD 1975

22810*	CRITERION INS CO	653-1131	4
	*G E I C O&AFFILIATE	653-1131	+5
	*GOVERNMENT EMPS INS	653-1131	+5
	*GOVERNMENT EMPLOYE CO	653-1131	4
	*HOUSE OF SAL	653-2010	4
	A*MASCARI ANTHONY D	653-4332	
22862*	ODIES LIQUOR	653-2211	
22876*	NON COMMND OFCR ASN	653-3135	+5
22920*	ARMSTRONG SAM RLTY	653-2104	4
	*DINNER DELIGHT	653-2182	4
	*HENDRICK RANCHES	653-1145	+5
	*LOYAL ESCROWS INC	653-3105	4

1.

ALESSANDRO BLVD 1975

..ALESSANDRO BLVD 92508 CONT..
 *SOUTHERN CAL FINCL 653-1145+5
 *TOWN&COUNTRY 653-3144 4
 *WRIGHTS PLACE BBQUE 653-3315+5
 22940 XXXX 00
 22960*CAL PIZZA 653-5009+5
 HAYES R D 653-8205 4
 22990 STOKKE ROBT 653-8200+5
 *STOKKES GULF SERV 653-8200+5
 23580*MOTEL 6 653-2131

ZIP CODE 92388 SUNNYMEAD

24774 HARTER MARGIE F 653-1610 4
 24798 XXXX 00
 24810 WILSON F 653-6098+5
 24822 RIDGE JAS D 653-5631 4
 24834 XXXX 00
 24846 SHAMHART HAZEL 653-3206
 24858 PETRULAK JOHN 653-1625
 24870 CLARK LARRY W 653-6656+5
 24891 BANTA J B 653-1445
 24910 KEITHLEY M LOVERNE 653-4047+5
 24994 MOTTERT BILL 653-1766
 25011*MORENO SHELL 653-9917
 25019 XXXX 00
 25021*SUNNYMEAD TAVERN 653-9942 4
 25023*CROSSROADS LAUNDRMT 653-9813 4
 25025*BILLYS REST&TK OUT 653-8260 4
 25027*MORENO VALLEY MKT 653-2835 4

Topo Sheet Key

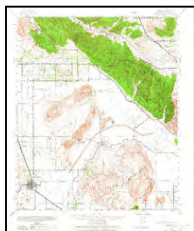
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1901 Source Sheets

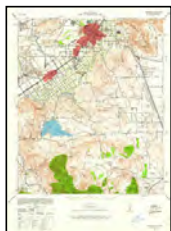


Riverside
1901
15-minute, 62500

1942 Source Sheets

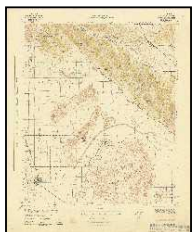


Perris
1942
15-minute, 62500
Aerial Photo Revised 1939



Riverside
1942
15-minute, 62500
Aerial Photo Revised 1939

1943 Source Sheets



PERRIS
1943
15-minute, 62500

1947 Source Sheets

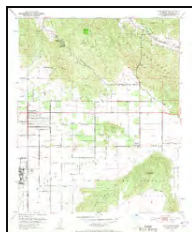


RIVERSIDE
1947
15-minute, 50000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1953 Source Sheets

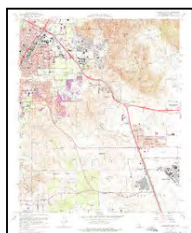


Sunnymead
1953
7.5-minute, 24000
Aerial Photo Revised 1951

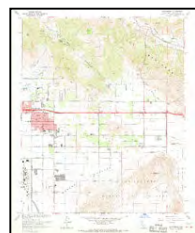


Riverside East
1953
7.5-minute, 24000
Aerial Photo Revised 1951

1967 Source Sheets



Riverside East
1967
7.5-minute, 24000
Aerial Photo Revised 1966



Sunnymead
1967
7.5-minute, 24000
Aerial Photo Revised 1966

1973 Source Sheets

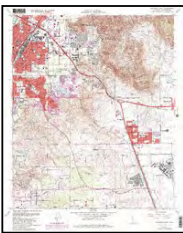


Sunnymead
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1980 Source Sheets



Sunnymead
1980
7.5-minute, 24000
Aerial Photo Revised 1978



Riverside East
1980
7.5-minute, 24000
Aerial Photo Revised 1978

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

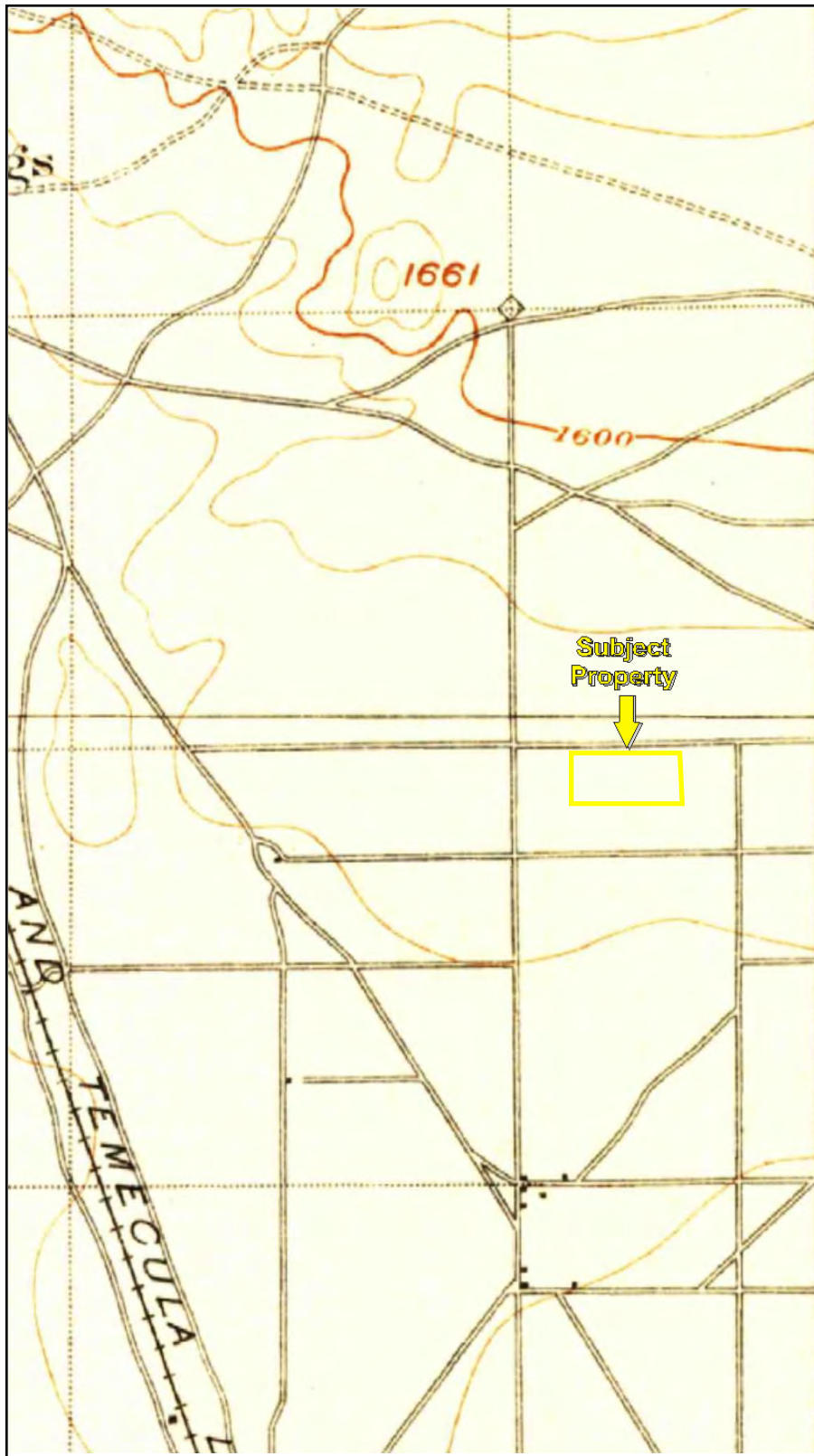
2012 Source Sheets



Riverside East
2012
7.5-minute, 24000

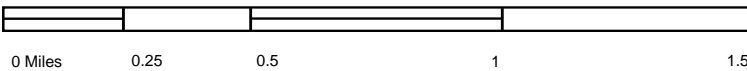


Sunnymead
2012
7.5-minute, 24000

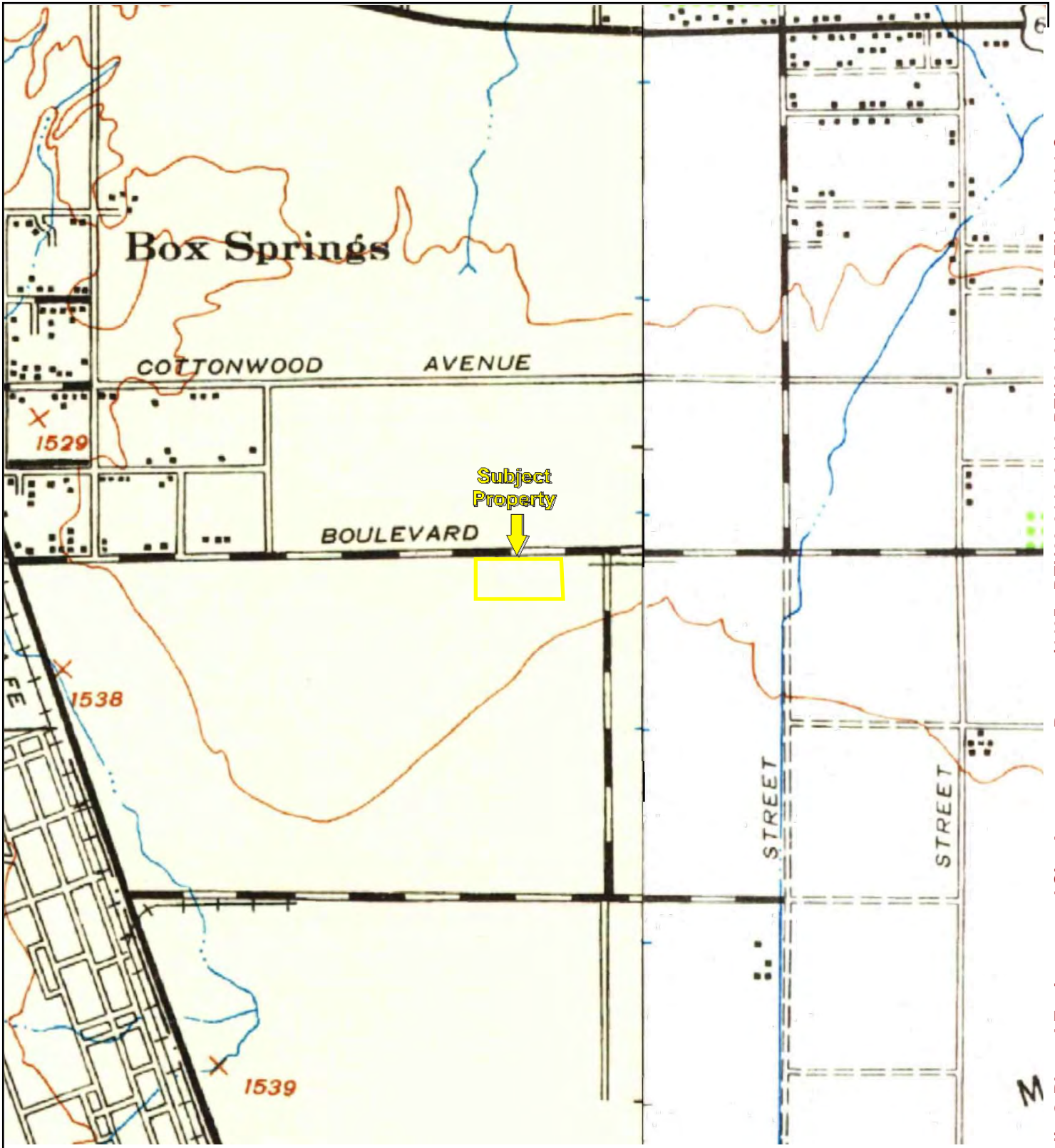


UNMAPPED UNMAPPED UNMAPPED
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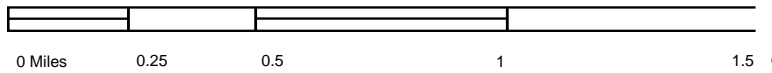
TP, Riverside, 1901, 15-minute



Key: Subject Property

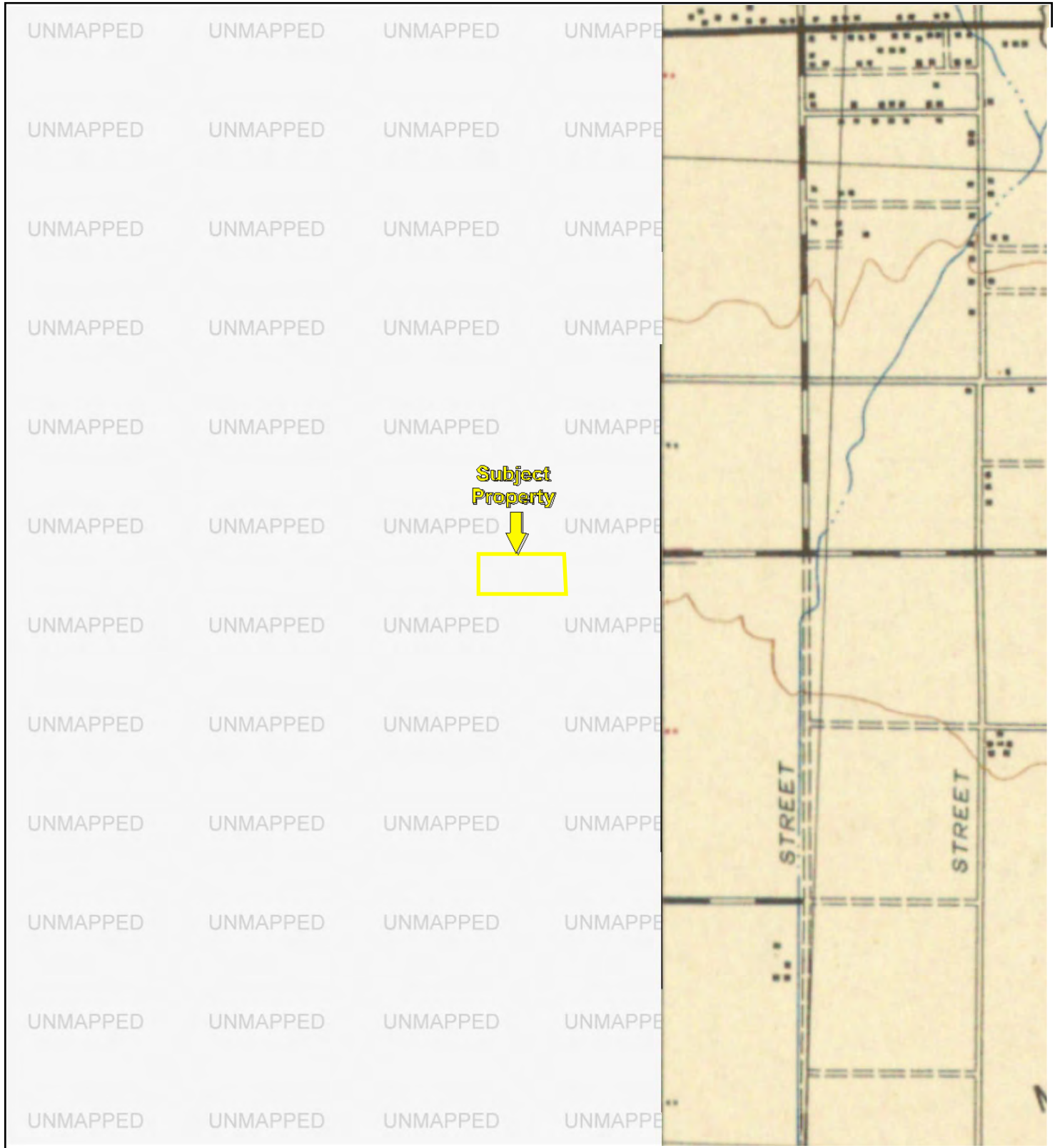


TP, Riverside, 1942, 15-minute
 E, Perris, 1942, 15-minute

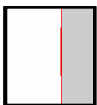
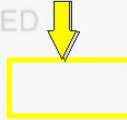


Key: Subject Property 

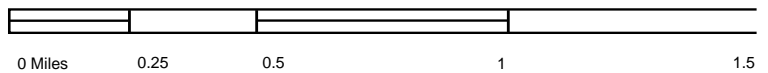
Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass



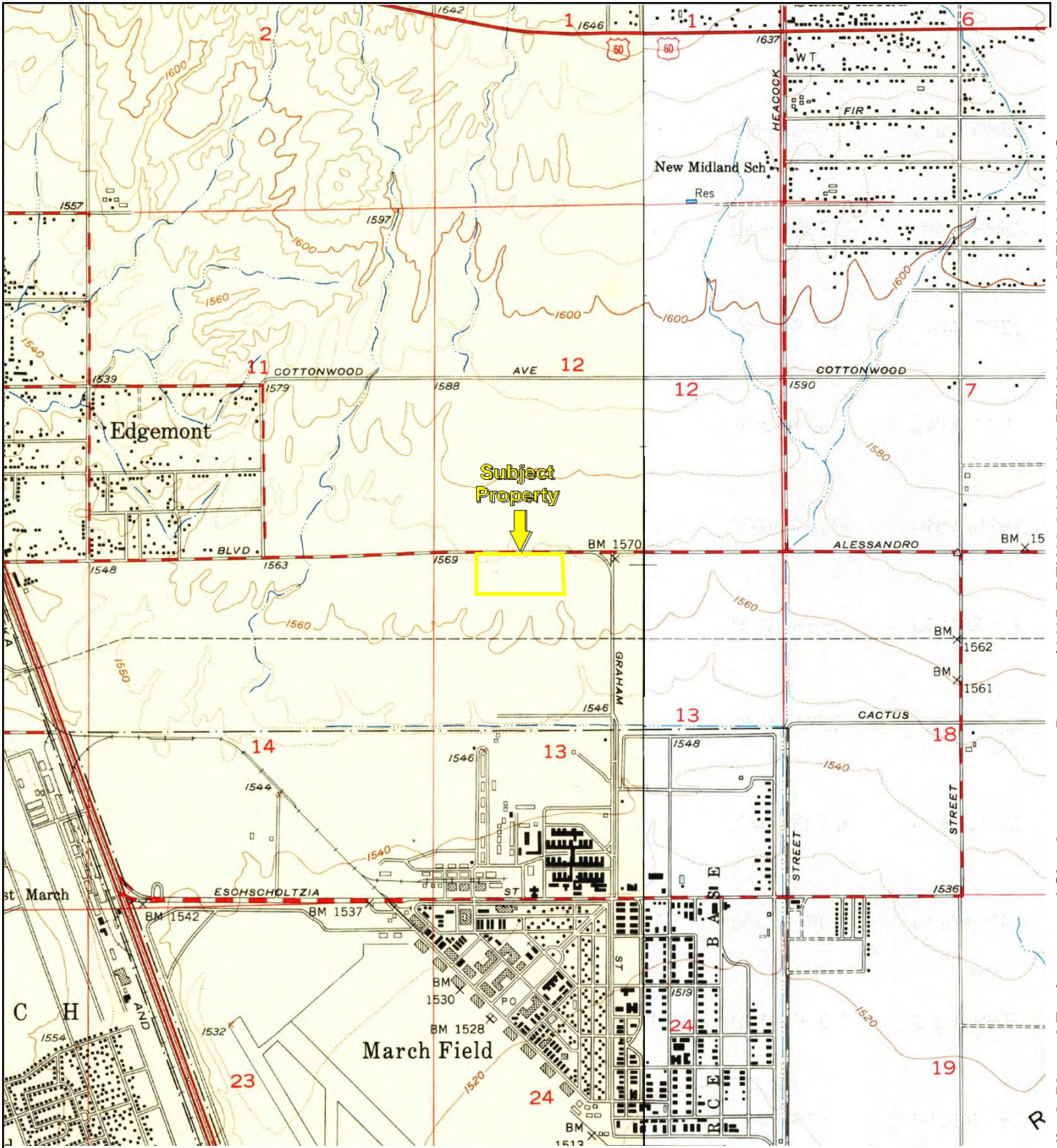
Subject Property



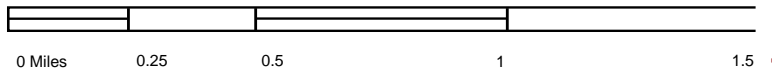
E, PERRIS, 1943, 15-minute



Key: Subject Property 

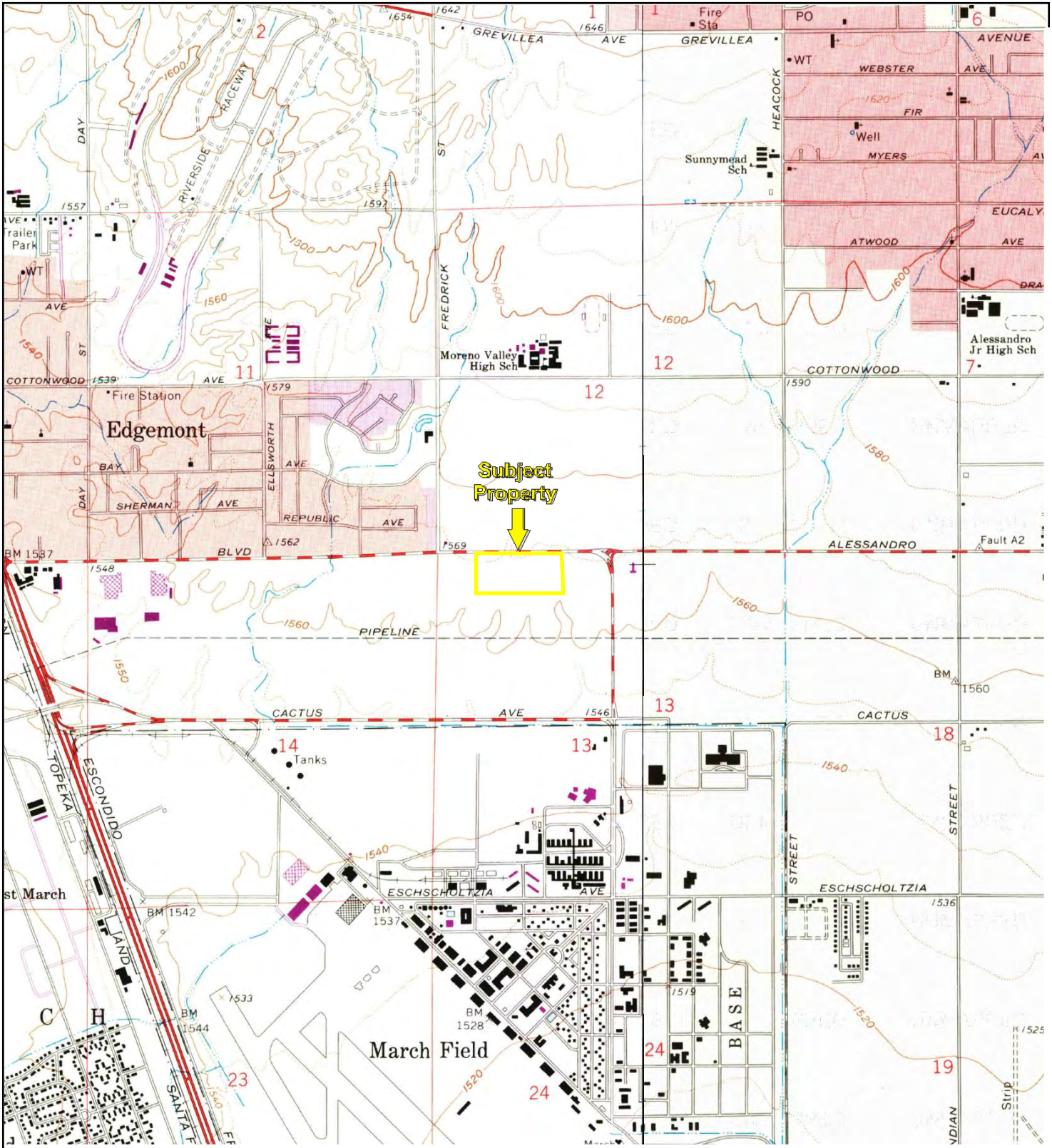


TP, Riverside East, 1953, 7.5-minute
 E, Sunnymead, 1953, 7.5-minute

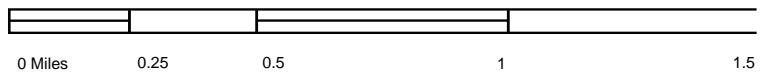


Key: Subject Property 

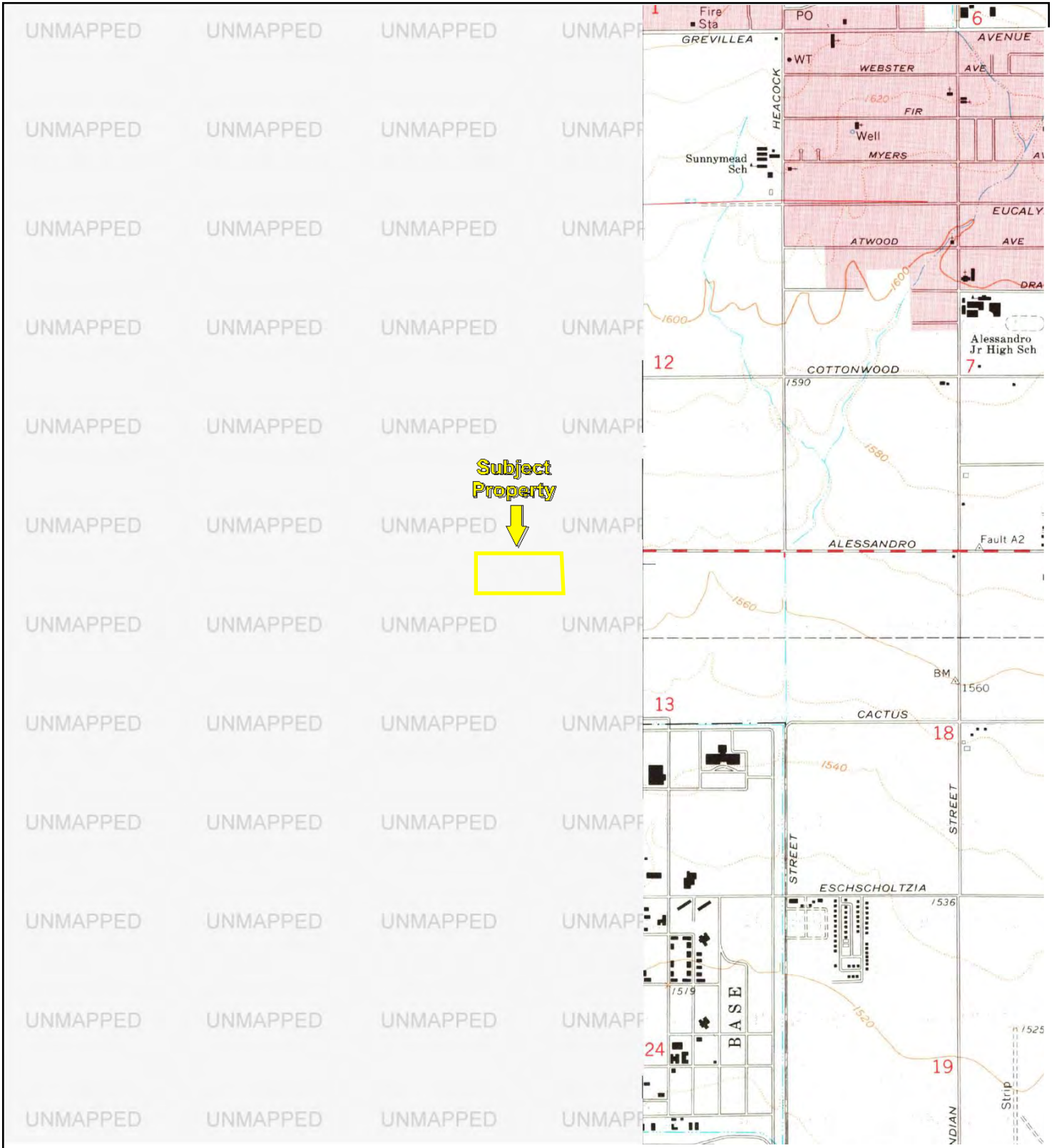
Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass



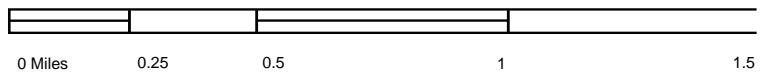
TP, Riverside East, 1967, 7.5-minute
 E, Sunnymead, 1967, 7.5-minute



Key: Subject Property

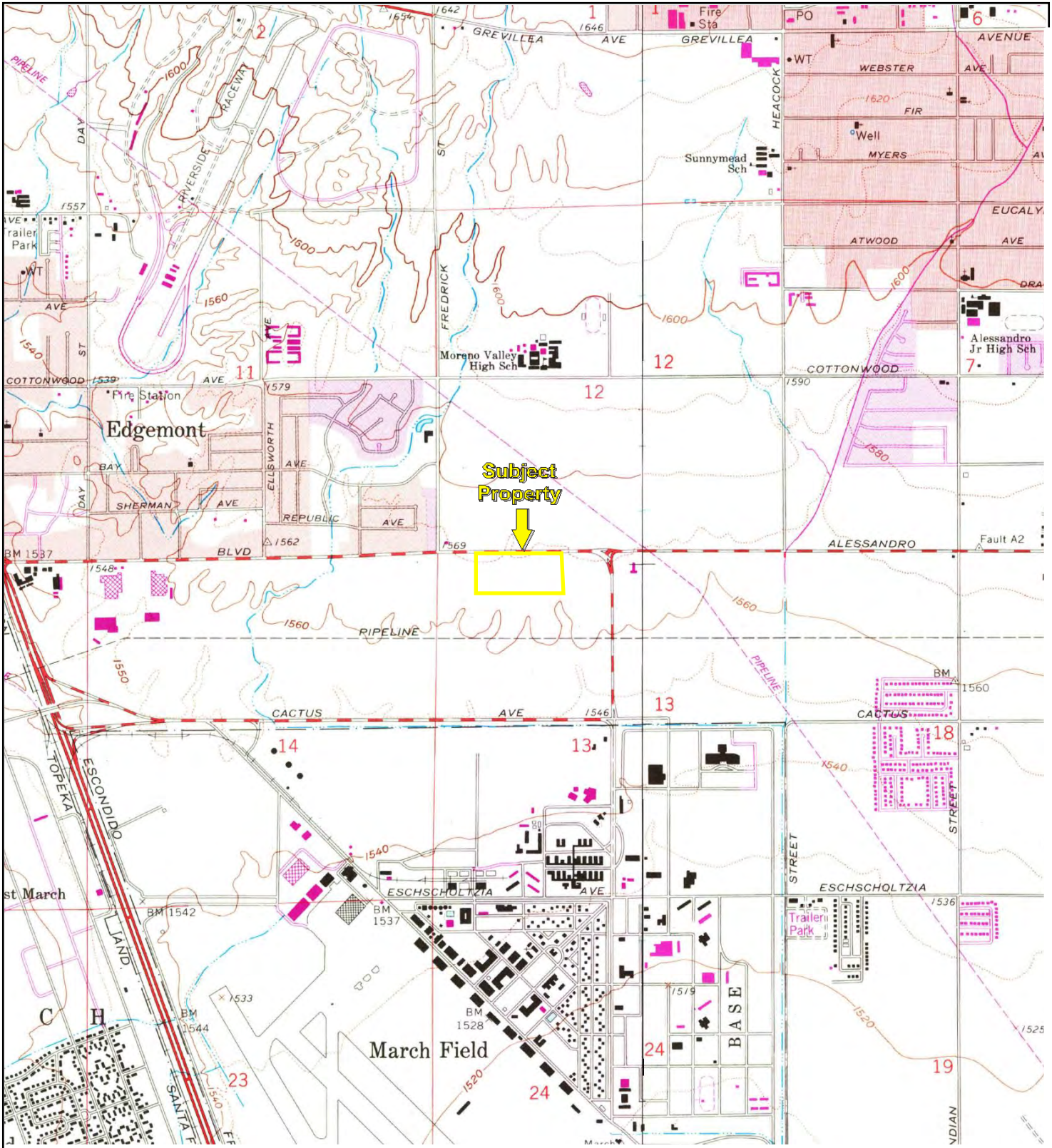


E, Sunnymead, 1973, 7.5-minute

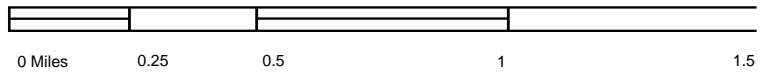


Key: Subject Property

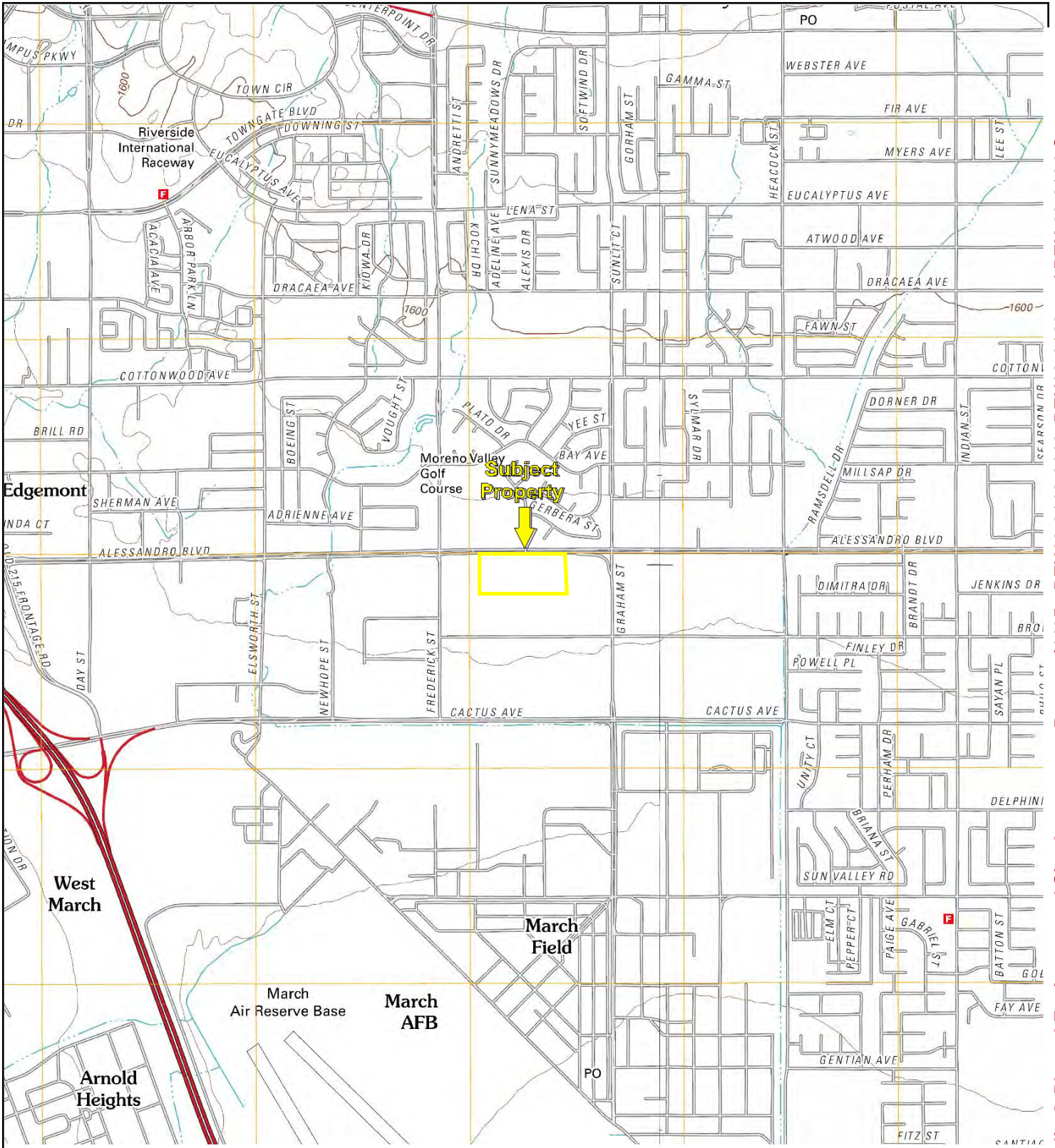
Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass



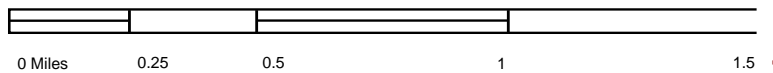
TP, Riverside East, 1980, 7.5-minute
 E, Sunnymead, 1980, 7.5-minute



Key: Subject Property



TP, Riverside East, 2012, 7.5-minute
 E, Sunnymead, 2012, 7.5-minute



Key: Subject Property



First American

Commitment

ALTA Commitment for Title Insurance

1.n

ISSUED BY

First American Title Insurance Company

File No: NCS-988766-SA1

COMMITMENT FOR TITLE INSURANCE

Issued By

FIRST AMERICAN TITLE INSURANCE COMPANY

NOTICE

IMPORTANT-READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and the Commitment Conditions, **First American Title Insurance Company**, a Nebraska Corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I-Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

First American Title Insurance Company

Dennis J. Gilmore
President

Jeffrey S. Robinson
Secretary

If this jacket was created electronically, it constitutes an original document.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

1. DEFINITIONS

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
- (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:

- (a) the Notice;
- (b) the Commitment to Issue Policy;
- (c) the Commitment Conditions;
- (d) Schedule A;
- (e) Schedule B, Part I—Requirements; and
- (f) Schedule B, Part II—Exceptions.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

- (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
 - (i) comply with the Schedule B, Part I—Requirements;
 - (ii) eliminate, with the Company's written consent, any Schedule B, Part II—Exceptions; or
 - (iii) acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
- (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
- (g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) **When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.**

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION

Arbitration provision intentionally removed.

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

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First American

Schedule A

ALTA Commitment for Title Insurance

1.n

ISSUED BY

First American Title Insurance Company

File No: NCS-988766-SA1

Transaction Identification Data for reference only:

Issuing Agent: First American Title Insurance Company National Commercial Services

Issuing Office: 3281 E Guasti Road, Suite 440, Ontario, CA 91761

Commitment No.: NCS-988766-SA1

Issuing Office File No.: NCS-988766-SA1

Property Address: APN: 297-170-002, and 297-170-003, Moreno Valley, CA

Escrow Officer/Assistant: Daniel Bell/Steven Sinohui

Revision No.:

Phone: (949)885-2448/(949)885-2469

Email: dbell@firstam.com/ssinohui@firstam.com

Title Officer/Assistant: Greg Franke/Erin West

Phone: (909)510-6200/(909)510-6215

Email: gfranke@firstam.com/ewest@firstam.com

SCHEDULE A

1. Commitment Date: November 01, 2019 at 8:00 AM
2. Policy to be issued:
 - (a) 2006 ALTA® Standard Owner Policy
Proposed Insured: Compass Danbe Real Estate Partners, LLC, a Delaware limited liability company, and/or Assignee
Proposed Policy Amount: \$ 7,710,120.00
 - (b) 2006 ALTA® Extended Loan Policy
Proposed Insured: To Be Determined
Proposed Policy Amount: \$ To Be Determined
 - (c) 2006 ALTA® Policy
Proposed Insured:
Proposed Policy Amount: \$
3. The estate or interest in the Land described or referred to in this Commitment is

FEE
4. The Title is, [at the Commitment Date, vested in:](#)

Moreno Valley Centerpointe LLC
5. The Land is described as follows:

See Exhibit "A" attached hereto and made a part hereof

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Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass



First American

Schedule BI & BII

ALTA Commitment for Title Insurance

1.n

ISSUED BY

First American Title Insurance Company

File No: NCS-988766-SA1

Commitment No.: NCS-988766-SA1

SCHEDULE B, PART I

Requirements

All of the following Requirements must be met:

- A. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.
- B. Pay the agreed amount for the estate or interest to be insured.
- C. Pay the premiums, fees, and charges for the Policy to the Company.
- D. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.
- E. Releases(s) or Reconveyance(s) of Item(s): None
- F. Other: None
- G. You must give us the following information:
 - a. Any off record leases, surveys, etc.
 - b. Statement(s) of Identity, all parties.
 - c. Other: None

The following additional requirements, as indicated by "X", must be met:

- H. Provide information regarding any off-record matters, which may include, but are not limited to: leases, recent works of improvement, or commitment statements in effect under the Environmental Responsibility Acceptance Act, Civil Code Section 850, et seq.

The Company's Owner's Affidavit form (as provided by the company) must be completed and submitted prior to close in order to satisfy this requirement. This Commitment will then be subject to such further exceptions and/or requirements as may be deemed necessary.

- I. An ALTA/NSPS survey of recent date, which complies with the current minimum standard detail requirements for ALTA/NSPS land title surveys, must be submitted to the Company for review. This Commitment will then be subject to such further exceptions and/or requirements as may be deemed necessary.

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- [X] J. The following LLC documentation is required from:
- (i) a copy of the Articles of Organization
 - (ii) a copy of the Operating Agreement, if applicable
 - (iii) a Certificate of Good Standing and/or other evidence of current Authority to Conduct Business within the State
 - (iv) express Company Consent to the current transaction
- [] K. The following partnership documentation is required :
- (i) a copy of the partnership agreement, including all applicable amendments thereto
 - (ii) a Certificate of Good Standing and/or other evidence of current Authority to Conduct Business within the State
 - (iii) express Partnership Consent to the current transaction
- [] L. The following corporation documentation is required:
- (i) a copy of the Articles of Incorporation
 - (ii) a copy of the Bylaws, including all applicable Amendments thereto
 - (iii) a Certificate of Good Standing and/or other evidence of current Authority to Conduct Business within the State
 - (iv) express Corporate Resolution consenting to the current transaction
- [X] M. Based upon the Company's review of that certain partnership/operating agreement dated **Not disclosed** for the proposed insured herein, the following requirements must be met: Any further amendments to said agreement must be submitted to the Company, together with an affidavit from one of the general partners or members stating that it is a true copy, that said partnership or limited liability company is in full force and effect, and that there have been no further amendments to the agreement. This Commitment will then be subject to such further requirements as may be deemed necessary.
- [] N. A copy of the complete lease, as referenced in Schedule A, #3 herein, together with any amendments and/or assignments thereto, must be submitted to the Company for review, along with an affidavit executed by the present lessee stating that it is a true copy, that the lease is in full force and effect, and that there have been no further amendments to the lease. This Commitment will then be subject to such further requirements as may be deemed necessary.
- [X] O. Approval from the Company's Underwriting Department must be obtained for issuance of the policy contemplated herein and any endorsements requested thereunder. This Commitment will then be subject to such further requirements as may be required to obtain such approval.
- [] P. Potential additional requirements, if ALTA Extended coverage is contemplated hereunder, and work on the land has commenced prior to close, some or all of the following requirements, and any other requirements which may be deemed necessary, may need to be met:
- [] Q. The Company's "Indemnity Agreement I" must be executed by the appropriate parties.

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- [] R. Financial statements from the appropriate parties must be submitted to the Company for review.
- [] S. A copy of the construction contract must be submitted to the Company for review.
- [] T. An inspection of the Land must be performed by the Company for verification of the phase of construction.
- [] U. The Company's "Mechanic's Lien Risk Addendum" form must be completed by a Company employee, based upon information furnished by the appropriate parties involved.

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First American

Schedule BI & BII (Cont.)

ALTA Commitment for Title Insurance

1.n

ISSUED BY

First American Title Insurance Company

File No: NCS-988766-SA1

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Commitment No.: NCS-988766-SA1

SCHEDULE B, PART II

Exceptions

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

1. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I-Requirements are met.
2. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
3. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
4. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
5. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
6. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
7. General and special taxes and assessments for the fiscal year 2019-2020.

First Installment:	\$3,386.96, OPEN
Penalty:	\$0.00
Second Installment:	\$3,386.96, OPEN
Penalty:	\$0.00
Tax Rate Area:	021-332

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(Affects Parcel 1)

8. General and special taxes and assessments for the fiscal year 2019-2020.

First Installment: \$8,689.56, OPEN
 Penalty: \$0.00
 Second Installment: \$8,689.56, OPEN
 Penalty: \$0.00
 Tax Rate Area: 021-332
 A. P. No.: 297-170-002-6

(Affects Parcel 2)

9. The land lies within the boundaries of proposed community facilities District No. 91-1, as disclosed by a map filed August 08, 1991 in [Book 33, Page 41](#) and August 30, 1991 in [Book 33, Pages 53-61](#), both of maps of assessment and community facilities districts.
10. The land lies within the boundaries of proposed community facilities District No. 4, as disclosed by a map filed September 22, 2005 in [Book 64, Page 19](#) of maps of assessment and community facilities districts.
11. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.
12. Covenants, conditions, restrictions and easements in the document recorded September 24, 1969 as Instrument No. [98071](#) of Official Records, which provide that a violation thereof shall not defeat or render invalid the lien of any first mortgage or deed of trust made in good faith and for value, but deleting any covenant, condition, or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, sexual orientation, familial status, disability, handicap, national origin, genetic information, gender, gender identity, gender expression, source of income (as defined in California Government Code § 12955(p)) or ancestry, to the extent such covenants, conditions or restrictions violation 42 U.S.C. § 3604(c) or California Government Code § 12955. Lawful restrictions under state and federal law on the age of occupants in senior housing or housing for older persons shall not be construed as restrictions based on familial status.

(Affects Both Parcels)

Document(s) declaring modifications thereof recorded April 05, 1972 as Instrument No. [44054](#) of Official Records.

13. Covenants, conditions, restrictions and easements in the document recorded January 07, 1971 as Instrument No. [1391](#) of Official Records, which provide that a violation thereof shall not defeat or render invalid the lien of any first mortgage or deed of trust made in good faith and for value, but deleting any covenant, condition, or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, sexual orientation, familial status, disability, handicap, national origin, genetic information, gender, gender identity, gender expression, source of income (as defined in California Government Code § 12955(p)) or ancestry, to the extent such covenants, conditions or restrictions violation 42 U.S.C. § 3604(c) or California Government Code § 12955. Lawful restrictions under state and federal law on the age of occupants in senior housing or housing for older persons shall not be construed as restrictions based on familial status.

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- (Affects Both Parcels)
14. Matters in a document entitled "Drainage Easement Agreement", executed by and between Wilma Pacific Inc. and The Centennial Group Inc., recorded December 02, 1987 as Instrument No. [341821](#) of Official Records, including but not limited to covenants, conditions, restrictions, easements, assessments, liens and charges.
- (Affects Both Parcels)
15. The fact that the land lies within the boundaries of the Moreno Valley Redevelopment Project Area, as disclosed by the document recorded December 29, 1987 as Instrument No. [365197](#) of Official Records.
- (Affects Both Parcels)
16. A document entitled "Resolution No. CPAB-88-2" recorded January 13, 1989 as Instrument No. [12874](#) of Official Records.
- (Affects Both Parcels)
17. The terms, provisions and easement(s) contained in the document entitled "Temporary Declaration of Easement for Acceptance of Drainage Waters" recorded January 22, 2009 as Instrument No. [2009-0029343](#) of Official Records.
- (Affects Both Parcels)
18. An offer of dedication for flood control and drainage and incidental purposes, recorded December 23, 2009 as Instrument No. [2009-0657601](#) of Official Records.
To: Riverside County Flood Control and Water Conservation District
- (Affects Parcel 2)
- Said offer was accepted by resolution, a certified copy of which was recorded January 31, 2011 as Instrument No. [2011-0049024](#), Official Records.
- The effect of a document entitled "Quitclaim Deed", recorded January 31, 2011 as Instrument No. [2011-0049025](#) of Official Records.
- Said document was not executed by the correct parties of record.
19. We find no outstanding voluntary liens of record affecting subject property. An inquiry should be made concerning the existence of any unrecorded lien or other indebtedness which could give rise to any security interest in the subject property.
- (Affects Both Parcels)
20. Water rights, claims or title to water, whether or not shown by the public records.
- (Affects Both Parcels)

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ALERT - CA Senate Bill 2 imposes an additional fee of \$75 up to \$225 at the time of recording on certain transactions effective January 1, 2018. Please contact your First American Title representative for more information on how this may affect your closing.

1. The property covered by this report is vacant land.

(Affects Both Parcels)

2. According to the public records, there has been no conveyance of the land within a period of twenty-four months prior to the date of this report, except as follows:

None

3. This preliminary report/commitment was prepared based upon an application for a policy of title insurance that identified land by street address or assessor's parcel number only. It is the responsibility of the applicant to determine whether the land referred to herein is in fact the land that is to be described in the policy or policies to be issued.

The map attached, if any, may or may not be a survey of the land depicted thereon. First American Title Insurance Company expressly disclaims any liability for loss or damage which may result from reliance on this map except to the extent coverage for such loss or damage is expressly provided by the terms and provisions of this Commitment or the Policy, if any, to which the map is attached.

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First American

ISSUED BY
First American Title Insurance Company

1.n

File No: NCS-988766-SA1

Exhibit A

File No.: NCS-988766-SA1

The Land referred to herein below is situated in the City of Moreno Valley, County of Riverside, State of California, and is described as follows:

PARCEL 1:

LOT 2, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN [BOOK 11 PAGE 10](#) OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA;

EXCEPTING THEREFROM THAT PORTION OF ALESSANDRO BOULEVARD AS CONVEYED TO THE COUNTY OF RIVERSIDE BY DOCUMENT RECORDED NOVEMBER 28, 1972 AS INSTRUMENT NO. [157190](#), OFFICIAL RECORDS.

PARCEL 2:

LOT 3, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN [BOOK 11, PAGE 10](#) OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA;

EXCEPTING THEREFROM THAT PORTION DESCRIBED IN THE DEED TO THE COUNTY OF RIVERSIDE DOCUMENT RECORDED MAY 30, 1972 AS INSTRUMENT NO. [69766](#), OFFICIAL RECORDS.

For conveyancing purposes only: APN 297-170-003-7 (Affects Parcel 1) and 297-170-002-6 (Affects Parcel 2)

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

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National Flood Hazard Layer FIRMette



33°55'14.36"N



USGS The National Map: Orthoimagery. Data refreshed April, 2019. 33°54'44.51"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Legend 1.n

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BF) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, V
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard of 1% annual chance flood with a depth less than one foot or with areas of less than one square mile
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee
OTHER AREAS		Area of Minimal Flood Hazard Zone
		Effective LOMRs
		Area of Undetermined Flood Hazard
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

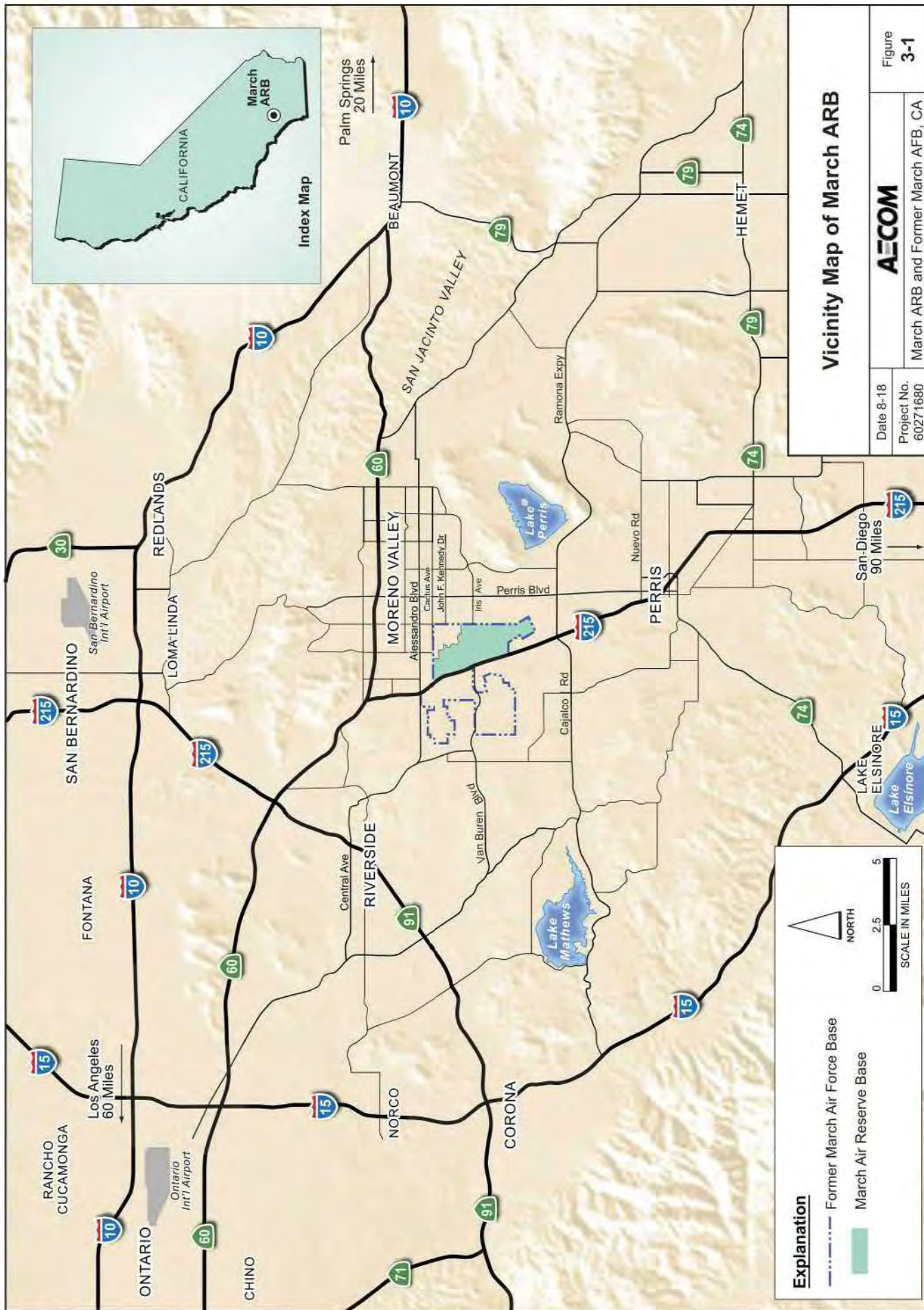
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

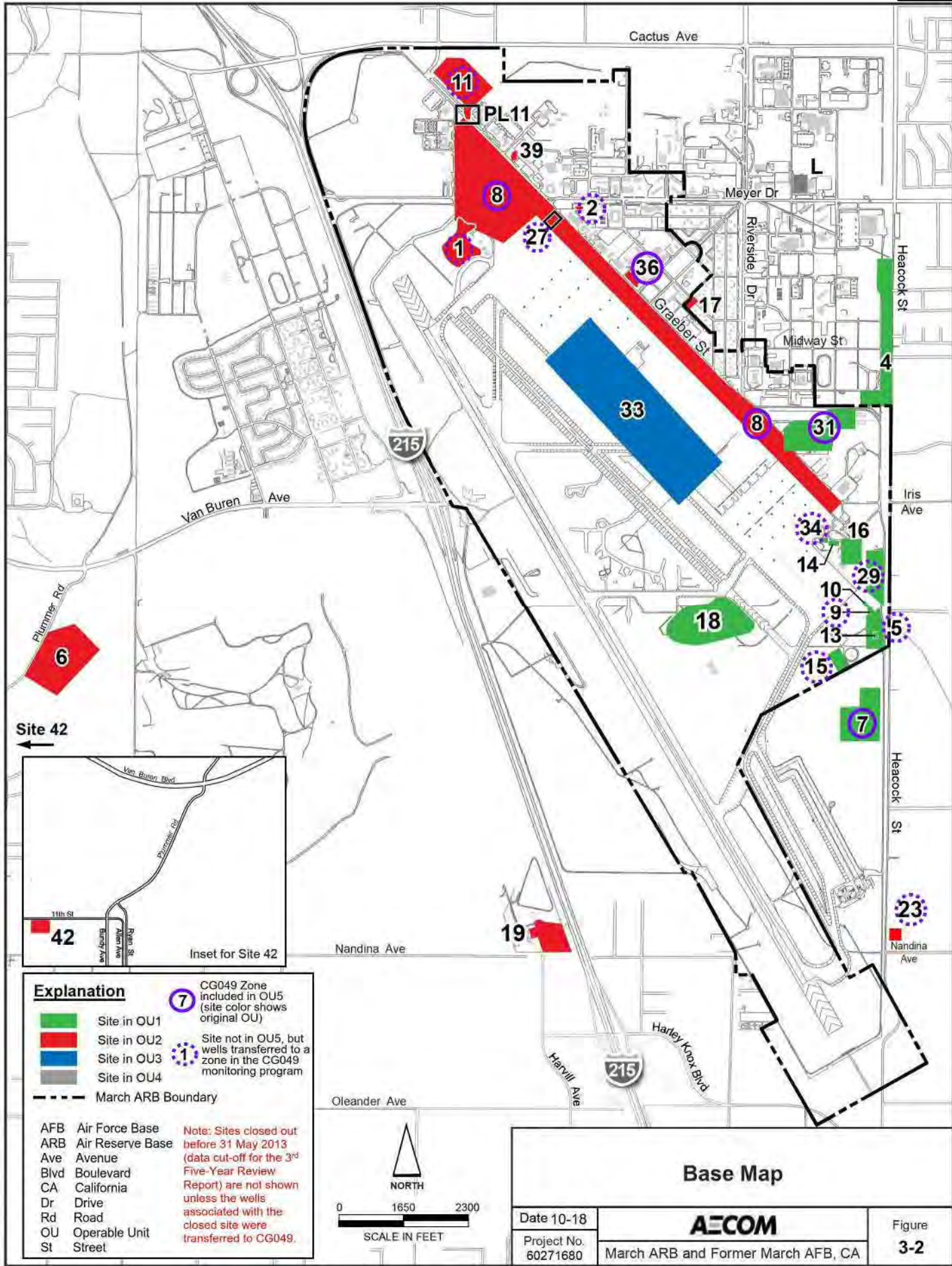
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **12/10/2019 at 12:35:58 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas are not for regulatory purposes.

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119,



MARCPBR 20112012.LTM/MR/01



Explanation

- Site in OU1
- Site in OU2
- Site in OU3
- Site in OU4
- March ARB Boundary

7 CG049 Zone included in OU5 (site color shows original OU)

1 Site not in OU5, but wells transferred to a zone in the CG049 monitoring program

AFB Air Force Base *Note: Sites closed out before 31 May 2013 (data cut-off for the 3rd Five-Year Review Report) are not shown unless the wells associated with the closed site were transferred to CG049.*

ARB Air Reserve Base

Ave Avenue

Bldv Boulevard

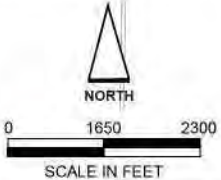
CA California

Dr Drive

Rd Road

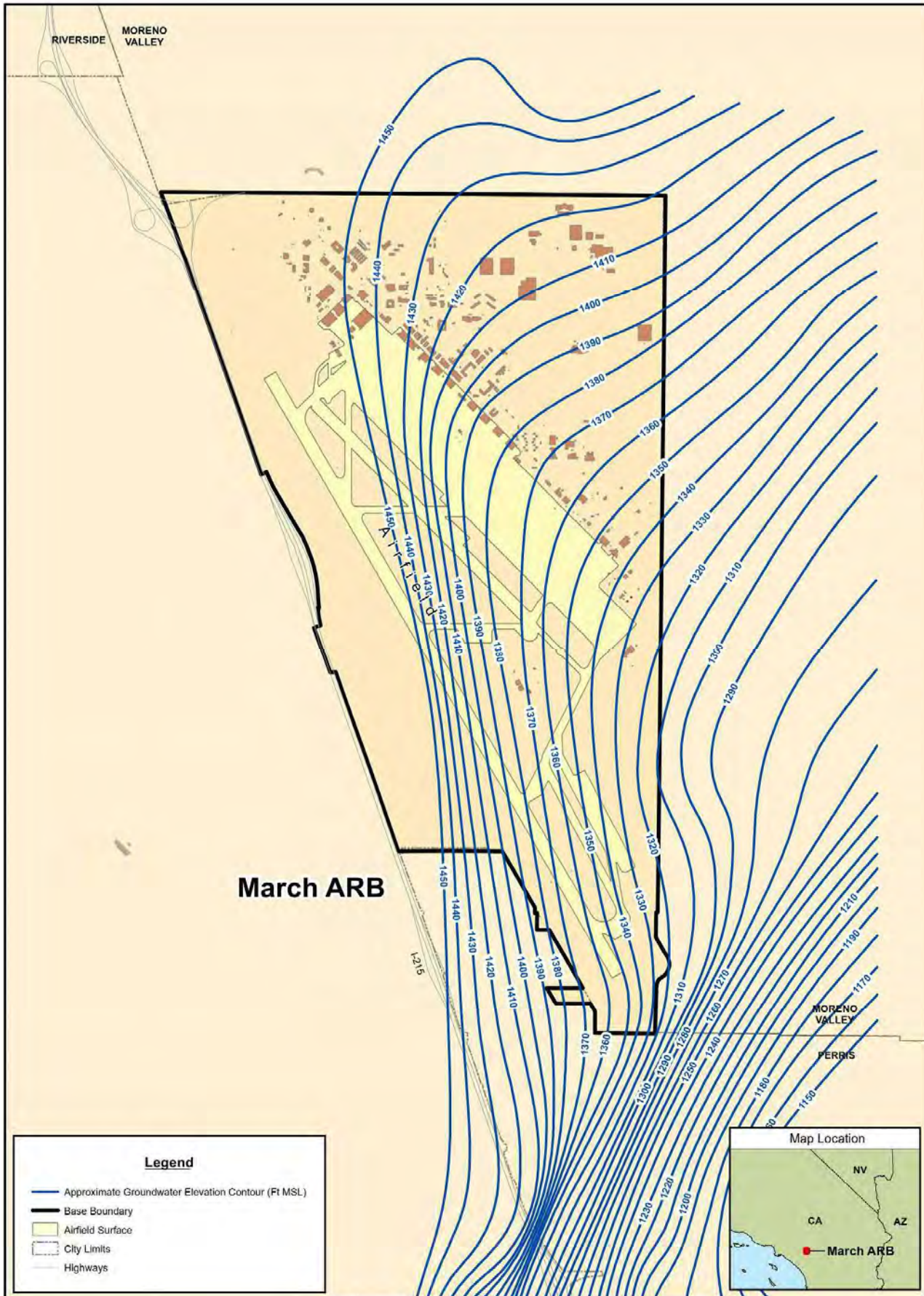
OU Operable Unit

St Street



Base Map		
Date 10-18	AECOM	Figure 3-2
Project No. 60271680	March ARB and Former March AFB, CA	

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass



Sources:
 Spring 1990 groundwater contours were digitized from Figure 9 of the report
Installation Restoration Program Records Search for March Air Force Base, California
 (CH2M Hill, April 1984).

March ARB boundary, airfield, and structures
 obtained from a DVD provided by March ARB.

City limits and highways from File Geodatabase Feature Class,
 (CWDData.gdb) provided by Riverside County Transportation
 (www.tlma.co.riverside.ca.us/online/content/gis_downloads.aspx)

Map Projection:
 NAD 1983 Feet, California State Plane
 Zone 6, FIPS 0406

Datum:
 North American, 1983

2,000 1,000 0 2,000
 Scale In Feet

1970 Water Level Surface

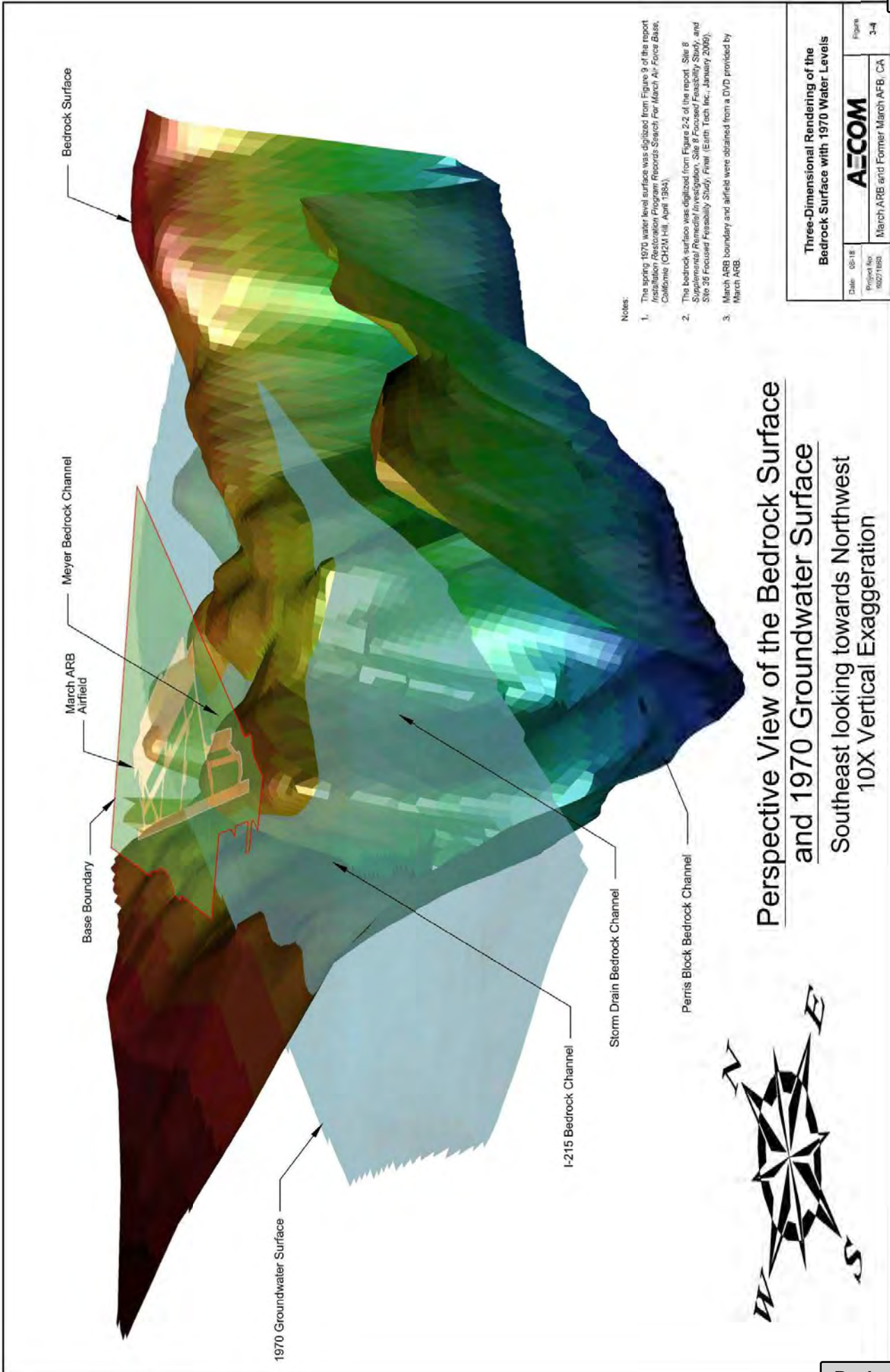
Date: 06-18

Project No.: 80271680

AECOM

March ARB and Former March AFB

Figure



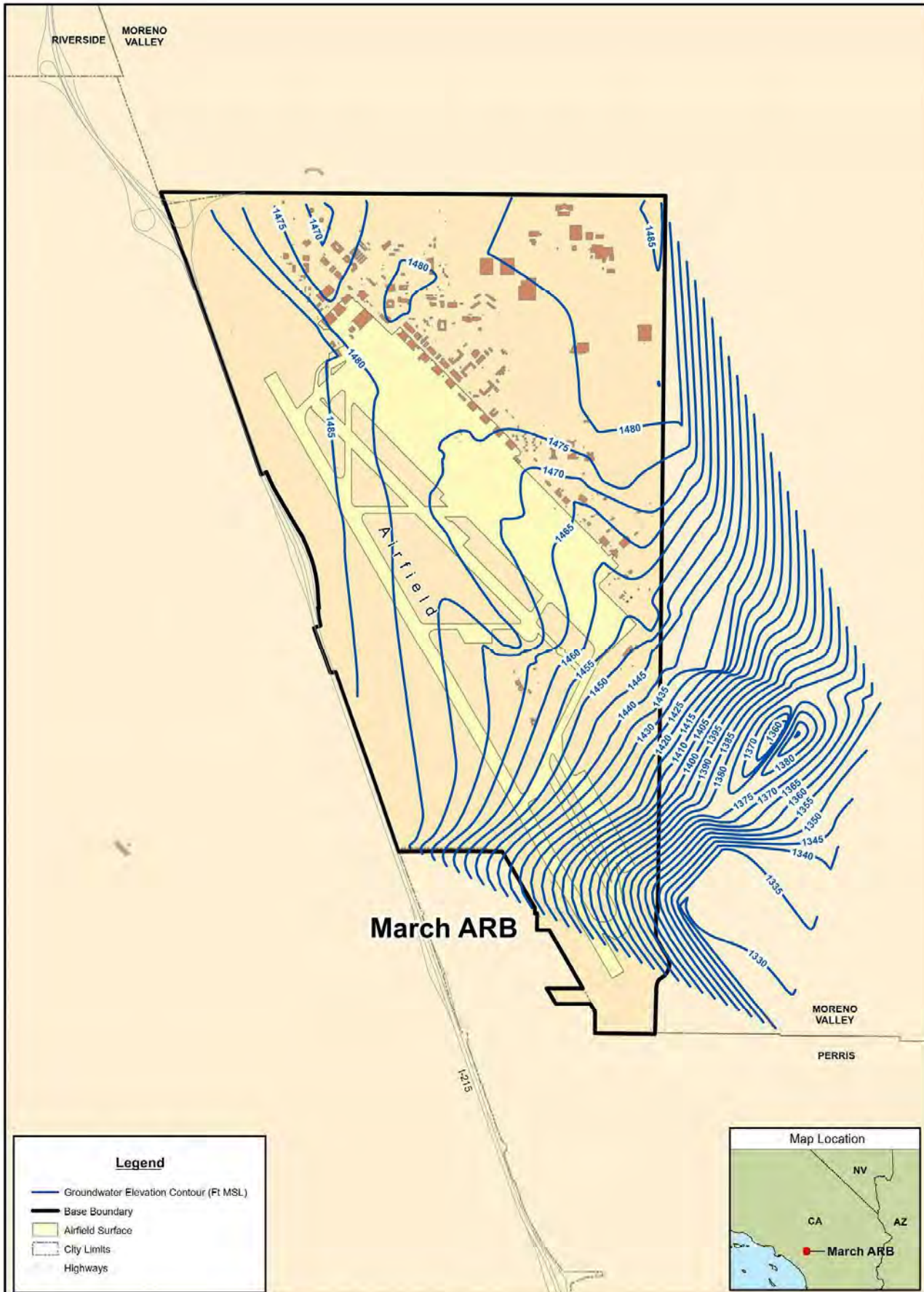
Notes:

1. The spring 1970 water level surface was digitized from Figure 9 of the report *Installation Restoration Program Records Search For March Air Force Base, California* (CH2M Hill, April 1984).
2. The bedrock surface was digitized from Figure 2-2 of the report, *Site 8 Supplemental Remedial Investigation, Site 8 Focused Feasibility Study, and Site 36 Focused Feasibility Study Final* (Earth Tech Inc., January 2009).
3. March ARB boundary and airfield were obtained from a DVD provided by March ARB.

**Perspective View of the Bedrock Surface
and 1970 Groundwater Surface**
Southeast looking towards Northwest
10X Vertical Exaggeration



Three-Dimensional Rendering of the Bedrock Surface with 1970 Water Levels	
Date: 08-18	Figure: 3-4
Project No: 10271820	March ARB and Former March AFB, CA
AECOM	



Legend

- Groundwater Elevation Contour (Ft MSL)
- Base Boundary
- Airfield Surface
- City Limits
- Highways



Sources:
 Second quarter 1993 water level elevations were obtained from table "2010AMR_Historical_GWElev.xlsx" provided on a DVD by March ARB.
 March ARB boundary, airfield, and structures obtained from a DVD provided by March ARB, Ca.
 City limits and highways from File Geodatabase Feature Class (CWDData.gdb) provided by Riverside County Transportation (www.ltrm.ca.riverside.ca.us/onlinecontent/gis_downloads.aspx)

Map Projection:
 NAD 1983 Feet, California State Plane Zone 6, FIPS 0406

Datum:
 North American, 1983

Scale In Feet

1993 Water Level Surface

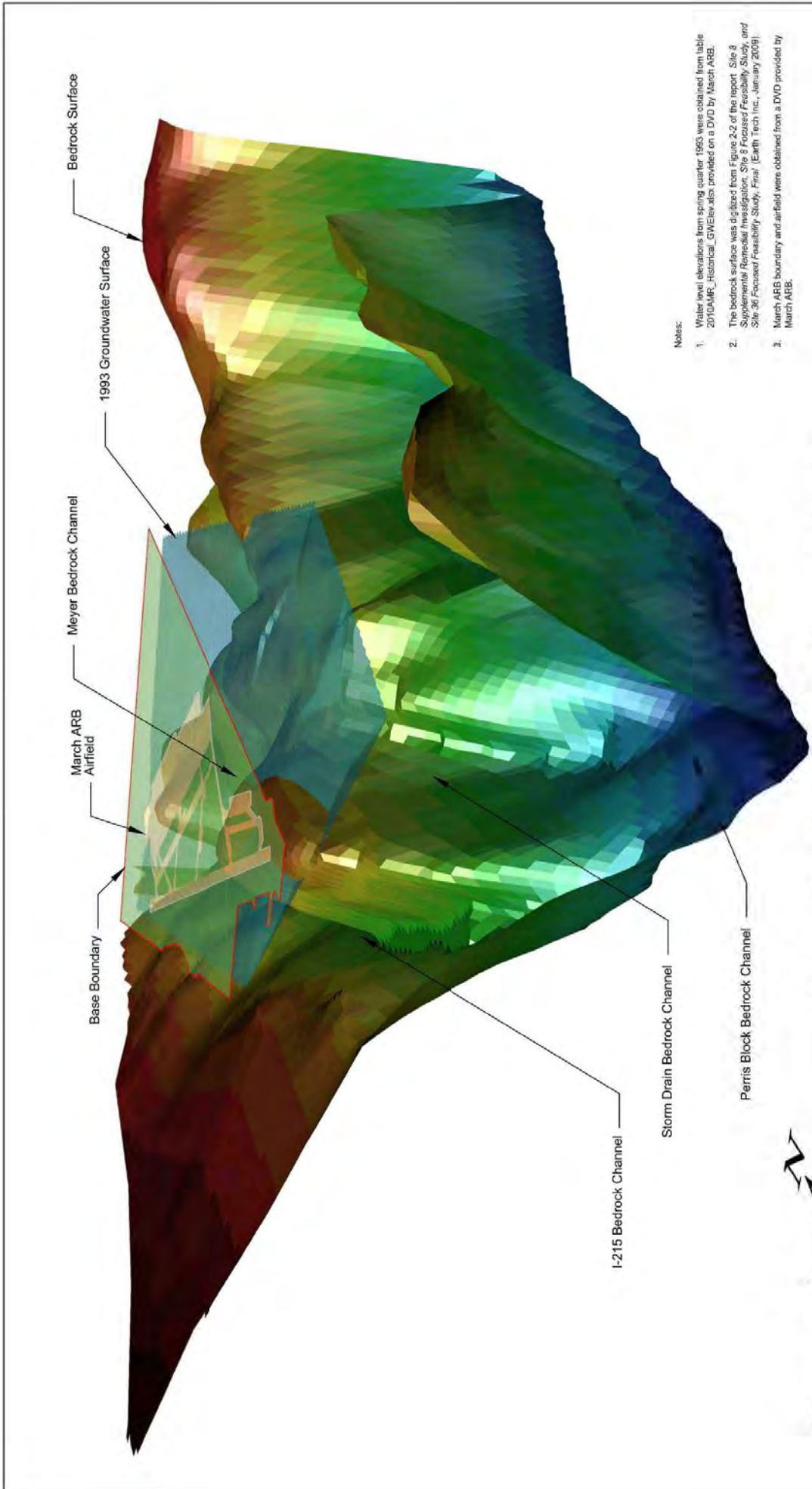
Date: 06-18

Project No.: 80271680

AECOM

March ARB and Former March AFB

Figure



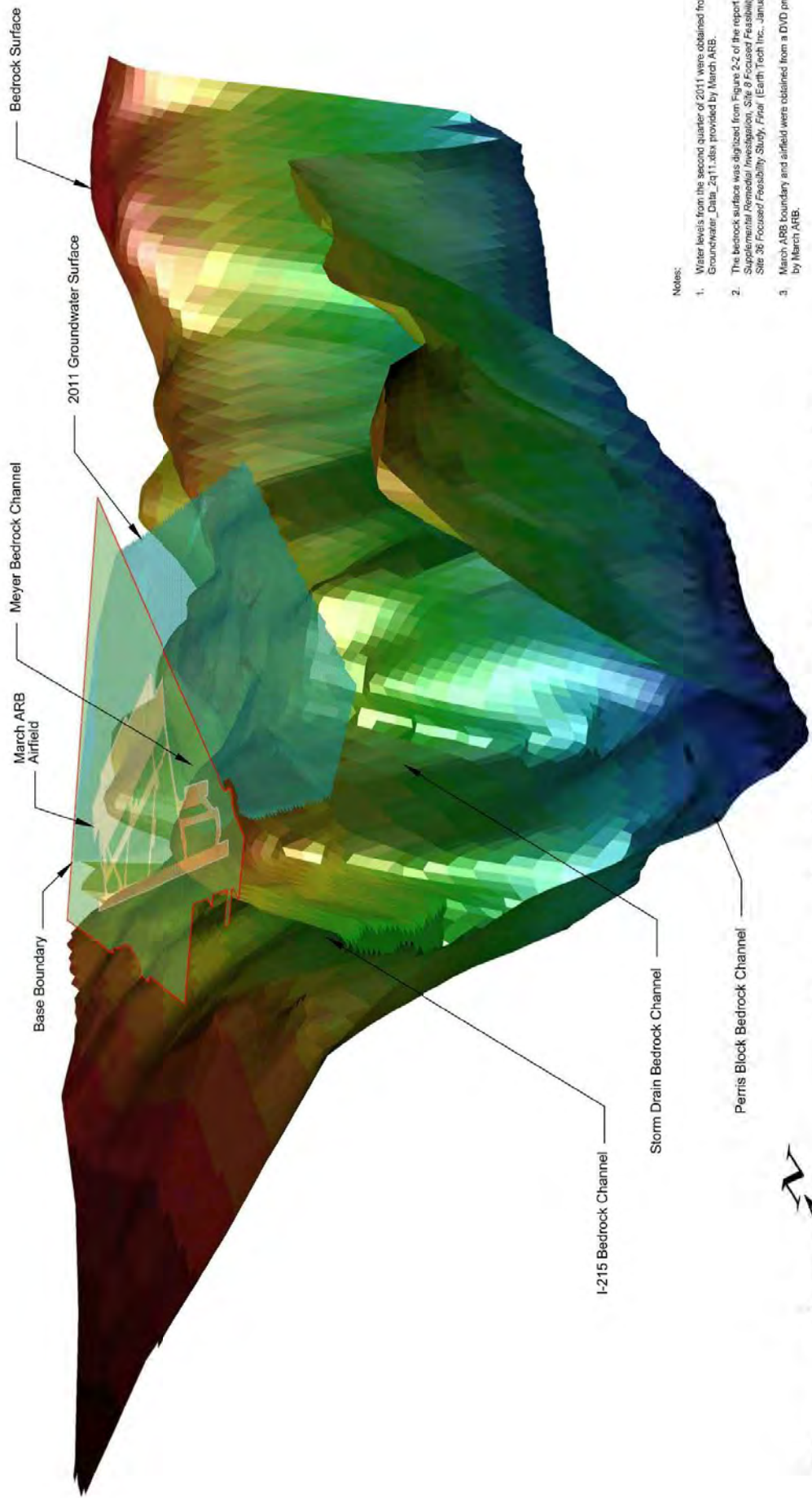
Notes:

1. Water level elevations from spring quarter 1993 were obtained from table 2010AAR_Historical_GWElev.xls provided on a DVD by March ARB.
2. The bedrock surface was digitized from Figure 2-2 of the report Site 8 Supplemental Remedial Investigation, Site 8 Focused Feasibility Study, and Site 36 Focused Feasibility Study, Final (Earth Tech Inc., January 2009).
3. March ARB boundary and airfield were obtained from a DVD provided by March ARB.

**Perspective View of the Bedrock Surface
and 1993 Groundwater Surface**
Southeast looking towards Northwest
10X Vertical Exaggeration



<p>Three-Dimensional Rendering of the Bedrock Surface with 1993 Water Levels</p>	
Date: 08-18	Figure: 3-8
Project No: 102211820	March ARB and Former March AFB, CA
<p>AECOM</p>	



Notes:

1. Water levels from the second quarter of 2011 were obtained from table Groundwater_Data_Q211.xlsx provided by March ARB.
2. The bedrock surface was digitized from Figure 2-2 of the report, Site 8 Supplemental Remedial Investigation, Site 8 Focused Feasibility Study, and Site 38 Focused Feasibility Study, Pinar Earth Tech Inc., January 2009.
3. March ARB boundary and airfield were obtained from a DVD provided by March ARB.

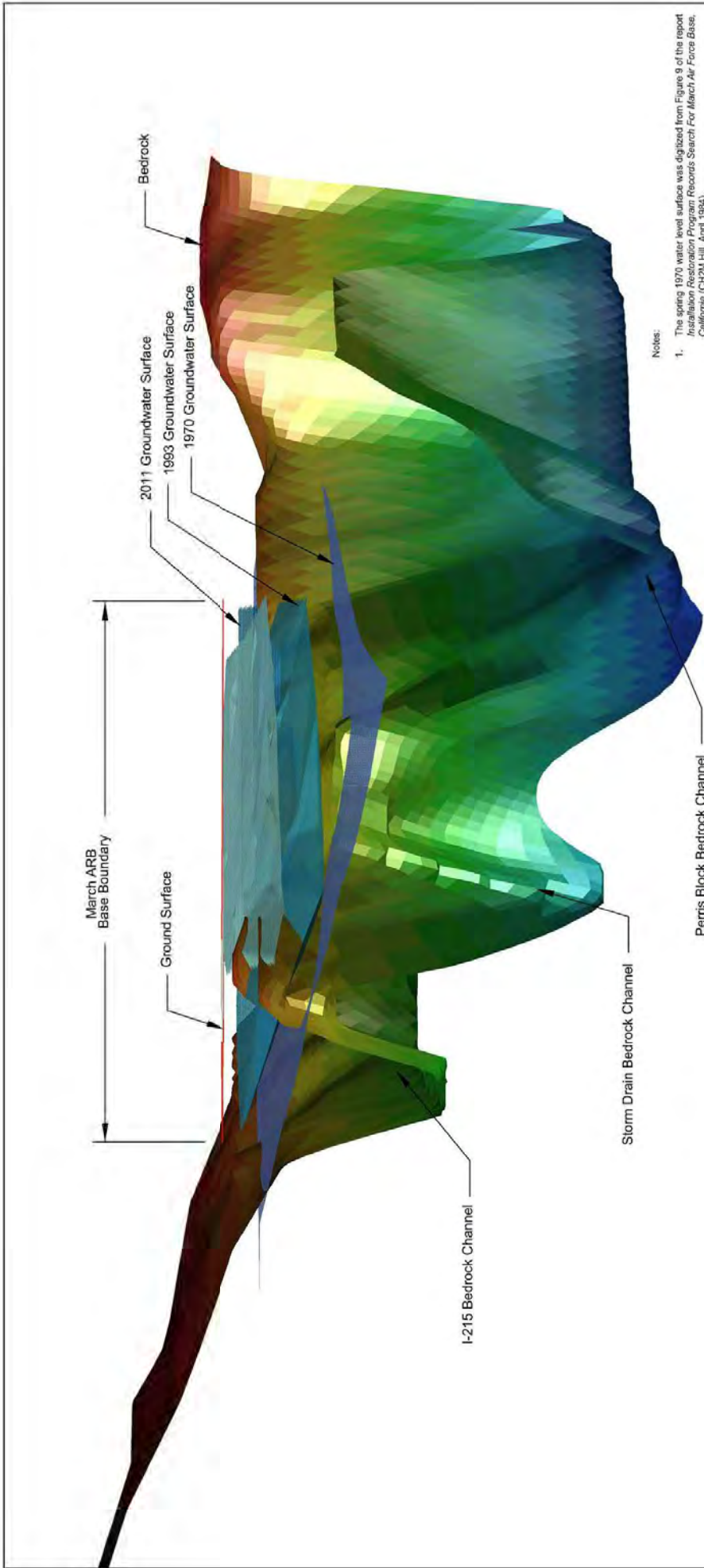


Perspective View of the Bedrock Surface and 2011 Groundwater Surface

Southeast looking towards Northwest
10X Vertical Exaggeration

Three-Dimensional Rendering of the Bedrock Surface with 2011 Water Levels

Date: 05-18	AECOM	Figure
Project No: 102271820		March ARB and Former March AFB, CA 3-7



Notes:

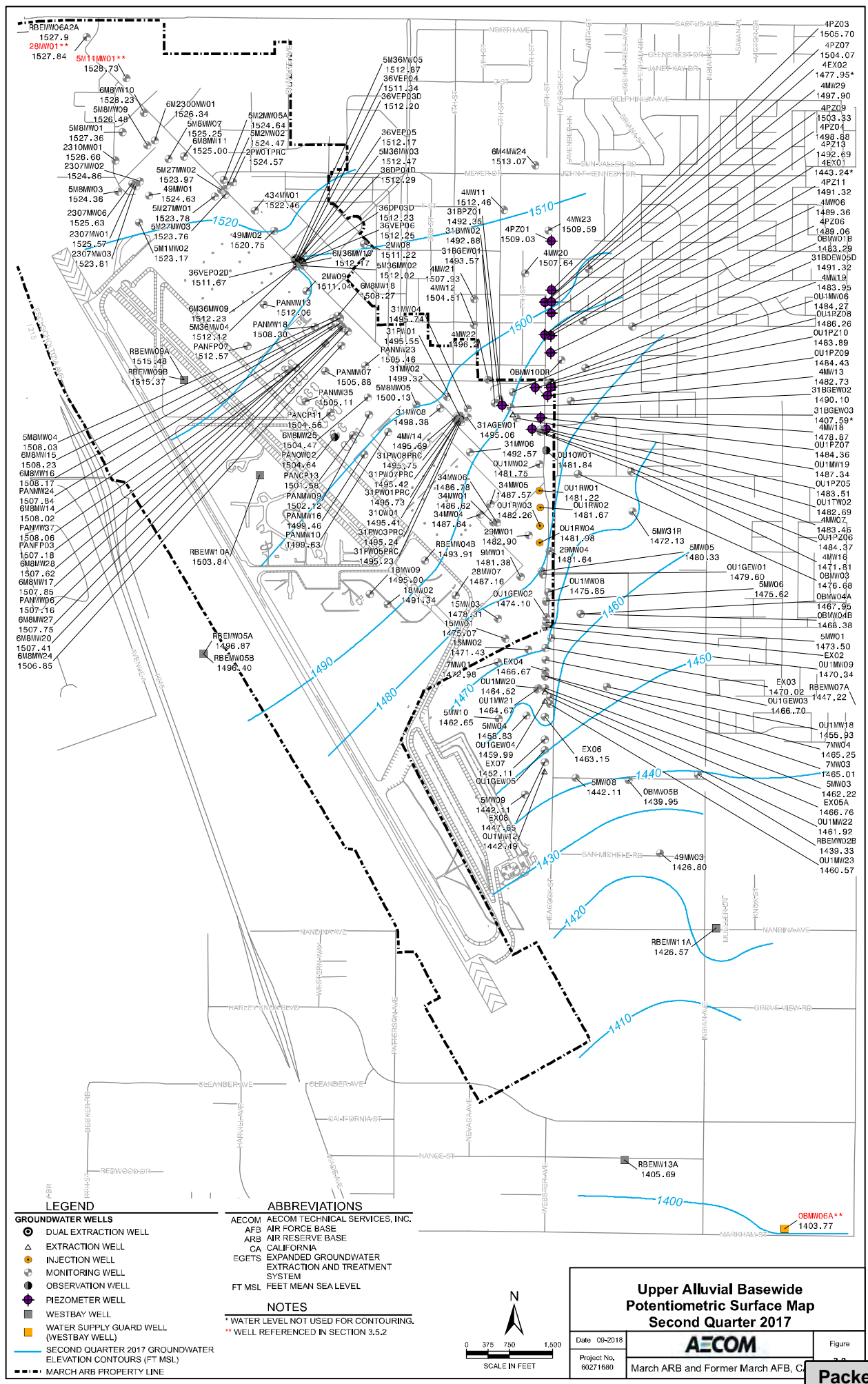
1. The spring 1970 water level surface was digitized from Figure 9 of the report Installation Restoration Program Records Search For March Air Force Base, California (CH2M Hill, April 1984).
2. Water level elevations from several water 1993 were obtained from table 2010AMR_Historical_GWELin.xlsx provided on a DVD by March ARB.
3. Water levels from second quarter 2011 were obtained from table Groundwater_Data_2011.xlsx provided by March ARB.
4. The bedrock surface was digitized from Figure 2-2 of the report Site 8 Supplemental Remedial Investigation, Site 8 Focused Feasibility Study, and Site 36 Focused Feasibility Study, Prief (Earth Tech Inc., January 2009).
5. March ARB boundary and airfield were obtained from a DVD provided by March ARB.

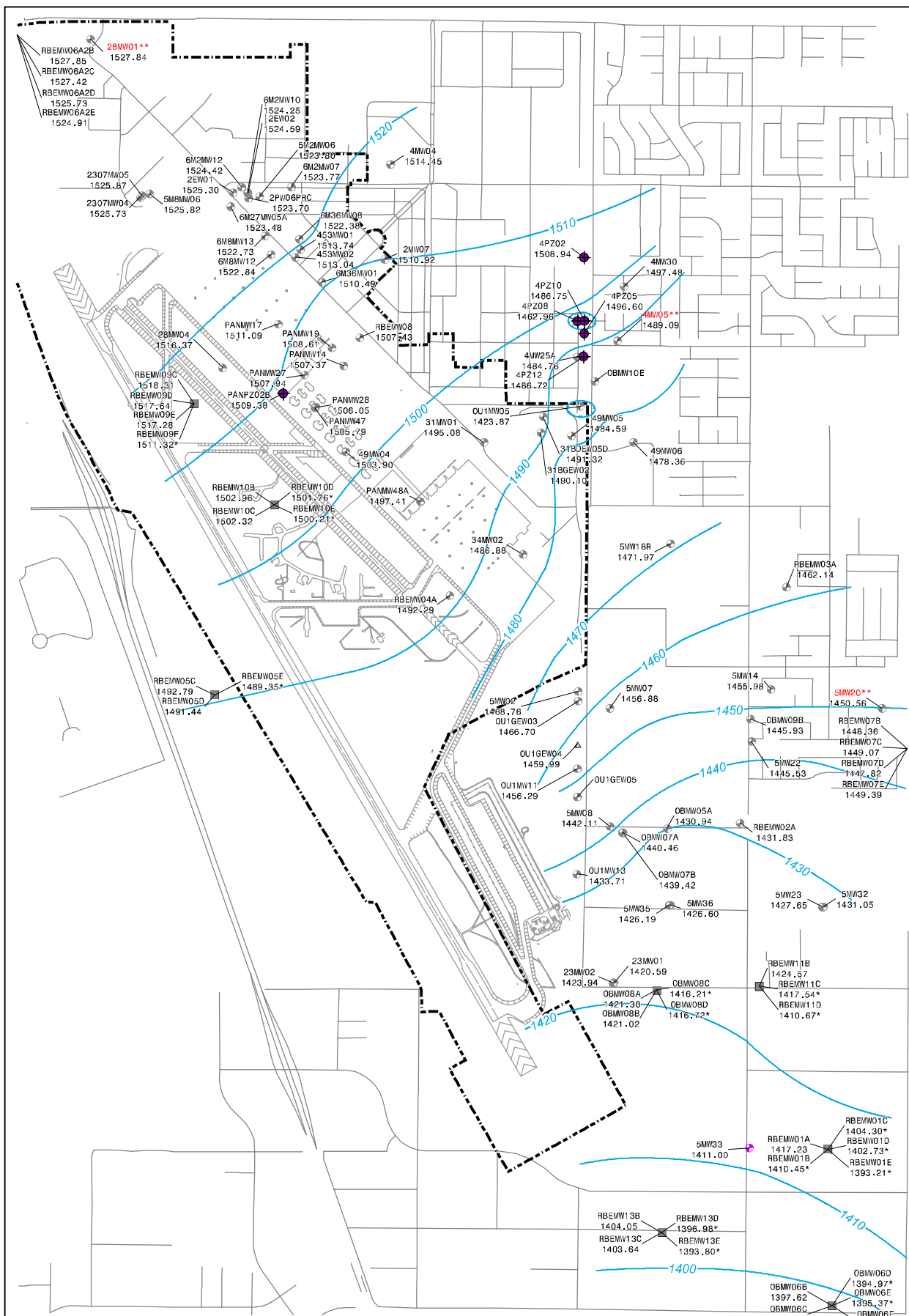
Perspective View of the Bedrock Surface and 2011, 1993, and 1970 Groundwater Surfaces

Southeast looking towards Northwest at Ground Surface 10X Vertical Exaggeration



<p>Three-Dimensional Rendering of the Bedrock Surface with Water Level History</p>	
Date: 05-18	Figure: 3-8
Project No: 002011020	March ARB and Former March AFB, CA
<p>AECOM</p>	





LEGEND

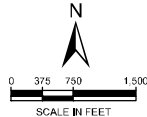
- GROUNDWATER WELLS
- EXTRACTION WELL
- MONITORING WELL
- PIEZOMETER WELL
- WESTBAY WELL
- WATER SUPPLY GUARD WELL (WESTBAY WELL)
- WATER SUPPLY GUARD WELL
- SECOND QUARTER 2017 GROUNDWATER ELEVATION CONTOURS (FT MSL)
- MARCH ARB PROPERTY LINE

ABBREVIATIONS

- AECOM REGIONAL TECHNICAL SERVICES, INC.
- AFB AIR FORCE BASE
- ARB AIR RESERVE BASE
- CA CALIFORNIA
- EGETS CAPANNOLO GEOTECHNICAL ENGINEERING AND CONSULTANTS, INC.
- FT MSL FEET MEAN SEA LEVEL

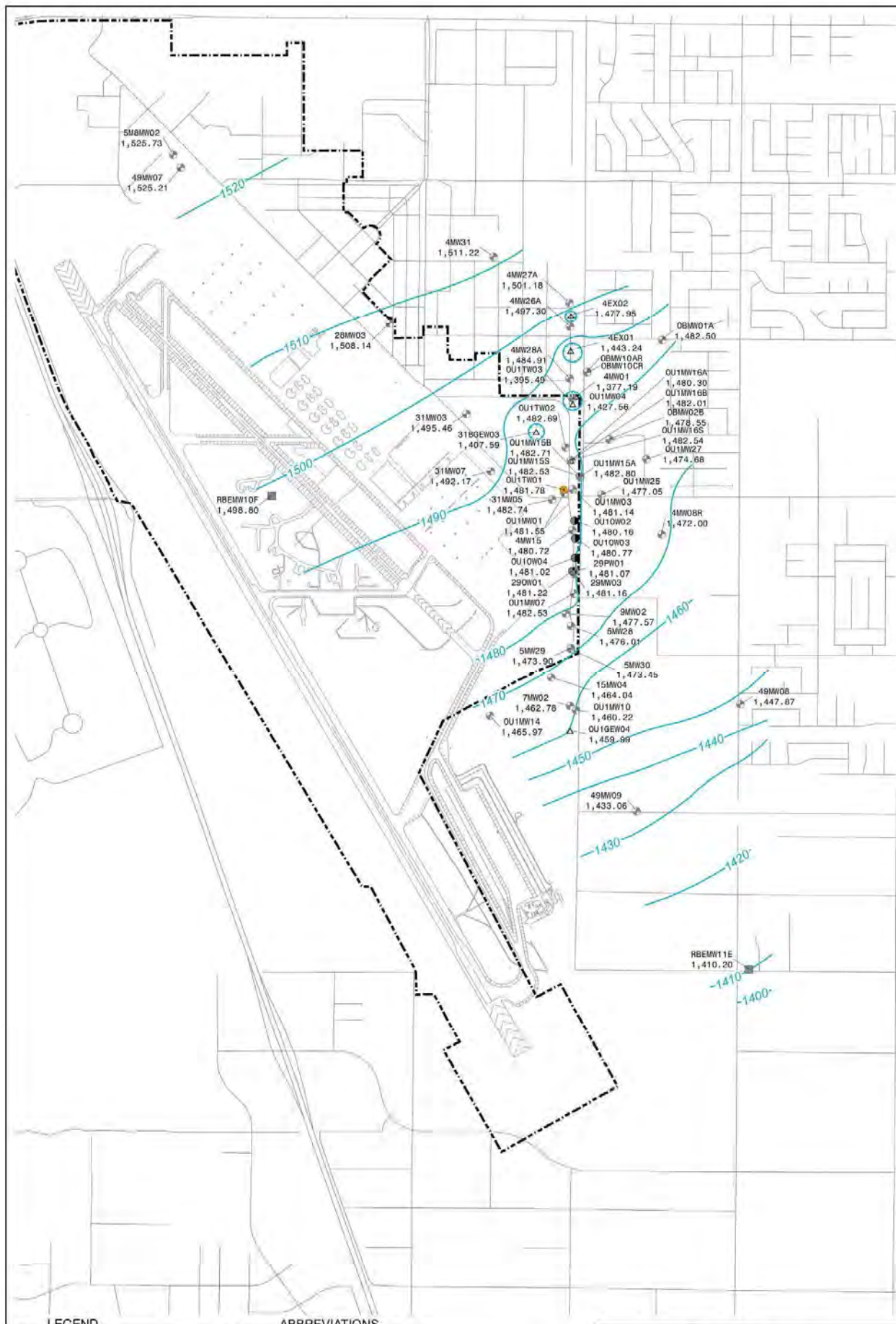
NOTES

WATER LEVEL NOT USED FOR CONTINUING WELL REFERENCED IN SPECIFICATIONS



Lower Alluvial Basewide Potentiometric Surface Map Second Quarter 2017

Date: 09-2018		Figure: 2.40
Project No: 80271880		March ARB and Former March AFB, CA



LEGEND

GROUNDWATER WELLS	
▲	EXTRACTION WELL
●	INJECTION WELL
○	MONITORING WELL
◐	OBSERVATION WELL
■	WESTBAY WELL
—	SECOND QUARTER 2017 GROUNDWATER ELEVATION CONTOURS (FT MSL)
- - -	MARCH ARB PROPERTY LINE

ABBREVIATIONS

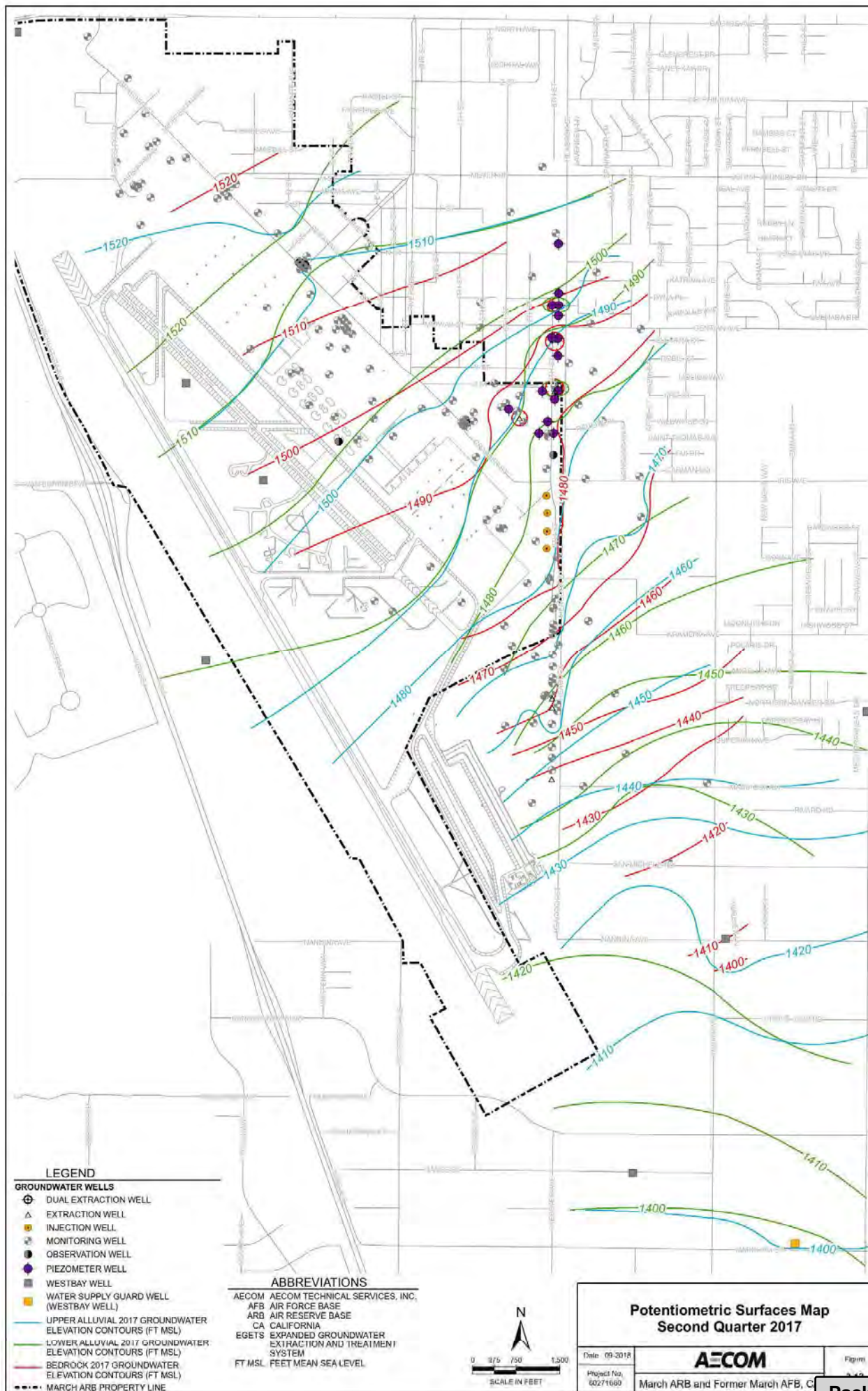
AECOM	AECOM TECHNICAL SERVICES, INC.
AFB	AIR FORCE BASE
ARB	AIR RESERVE BASE
CA	CALIFORNIA
EGETS	EXPANDED GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
FT MSL	FEET MEAN SEA LEVEL

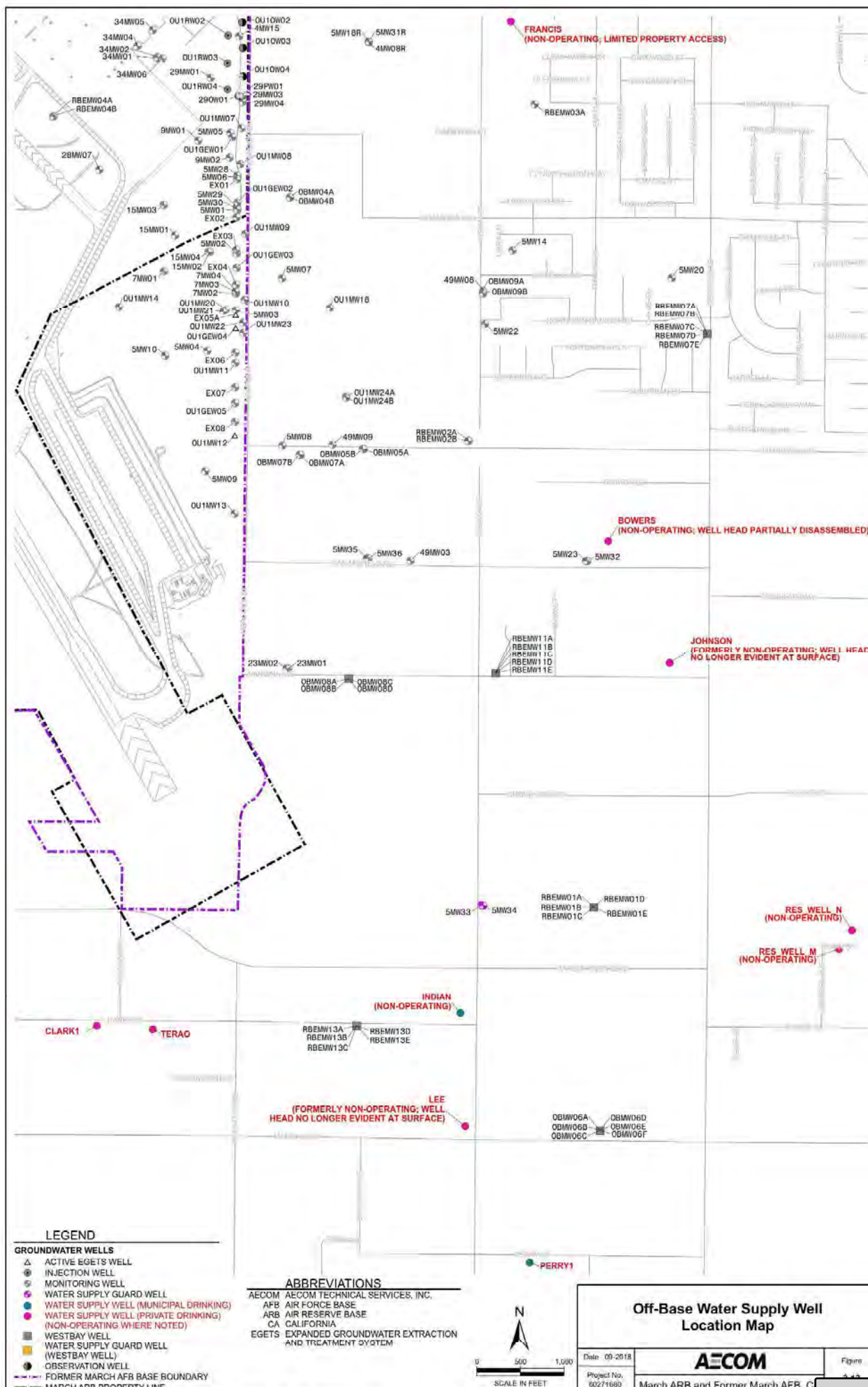


**Bedrock Basewide Potentiometric Surface Map
Second Quarter 2017**

AECOM

Date: 09-2018	Figure: 2-44
Project No.: 00271609	March ARB and Former March AFB, CA





Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Fig. 12\DCS\Programs\NFI\DATA\group\GIS\March_AFB\Project\01040_Anti_0810_2017\F12750.gxd
Date: Thursday, September 14, 2017 9:55:10 AM

Off-Base Water Supply Well Location Map

Date: 09-2018
Project No: 00271689
AECOM
March ARB and Former March AFB, CA

Figure 4.4.4

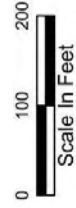


Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass



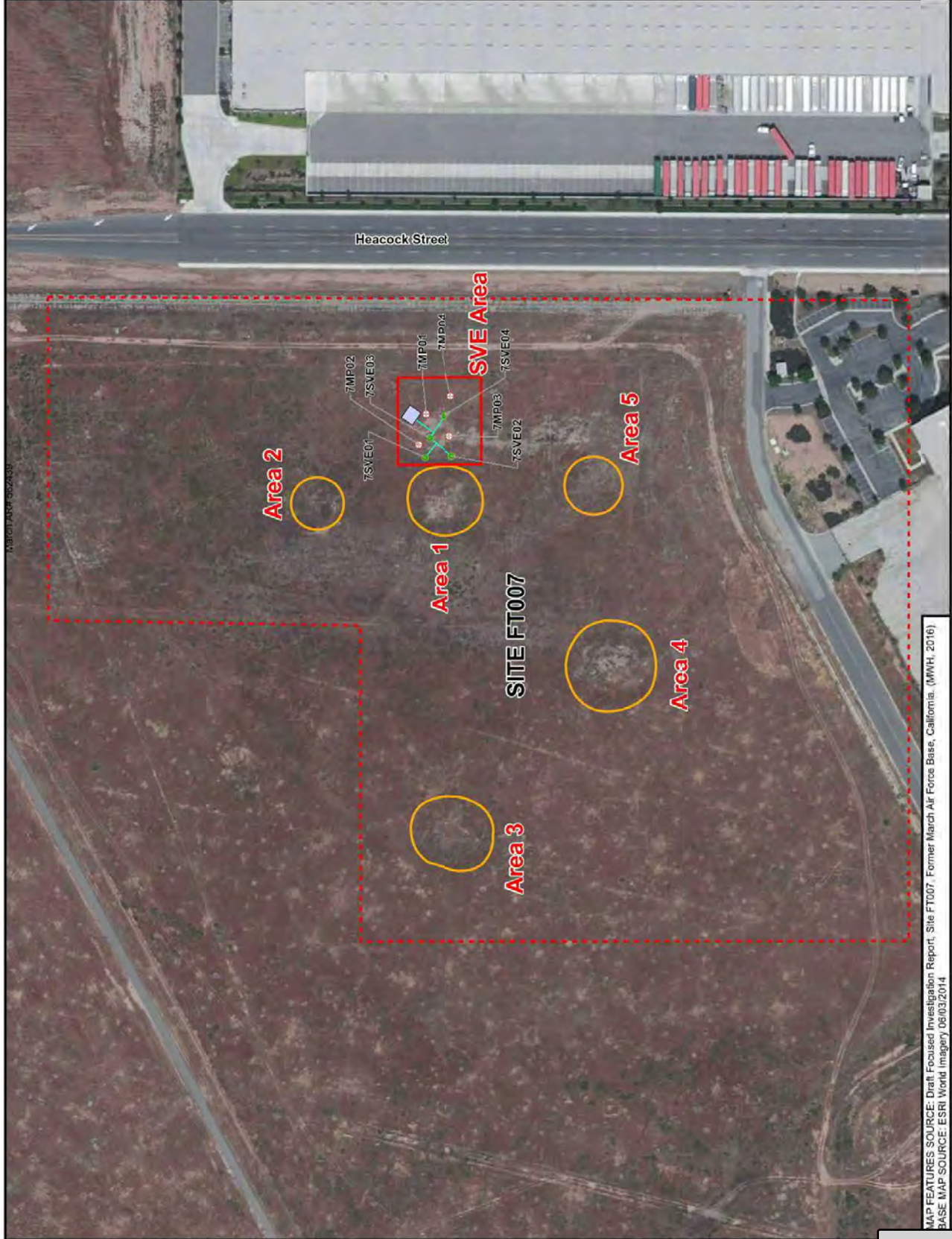
LEGEND:

- Soil Vapor Monitoring Point
- Soil Vapor Extraction Well
- Treatment Pad
- Above Ground Conveyance Piping
- Former Disposal Area or Burn Pit
- Site Boundary

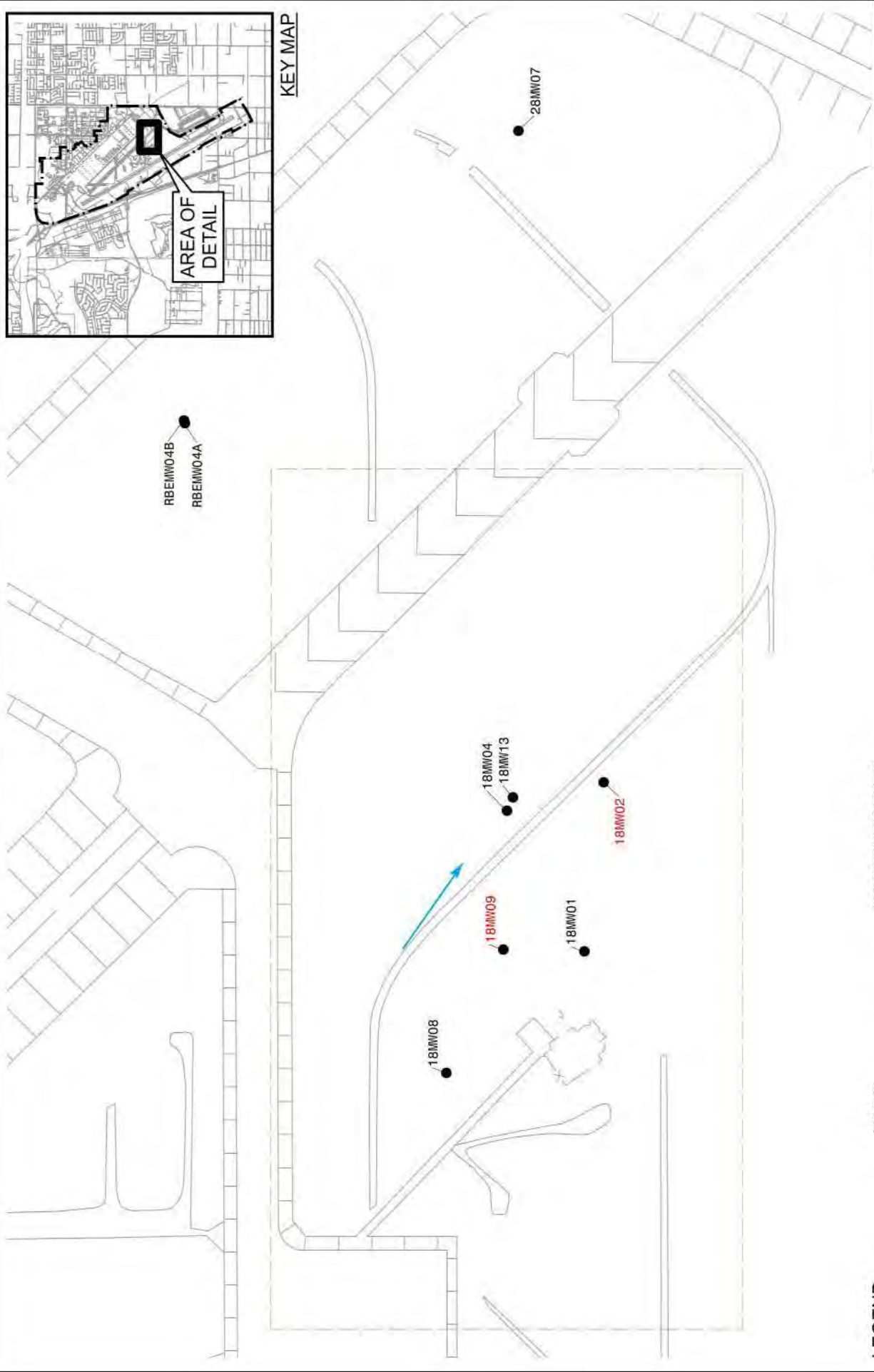


**Figure 4-2
FT007 Site Map**

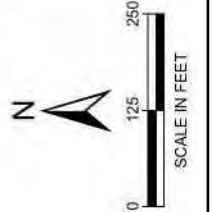
Adapted from: Interim Record of Decision Amendment Operable Unit 1, Site FT007 (USAF 2018)



MAP FEATURES SOURCE: Draft Focused Investigation Report, Site FT007, Former March Air Force Base, California. (MNH, 2016)
BASE MAP SOURCE: ESRI World Imagery 08/03/2014



OT018 Site Map		AECOM	March ARB and Former March AFB, CA
Date 08-2018	Project No. 60271680			Figure 4-3



ABBREVIATIONS

- AFB AIR FORCE BASE
- ARB AIR RESERVE BASE
- CA CALIFORNIA

NOTE

WELLS SHOWN IN RED ARE SAMPLED ANNUALLY

LEGEND

- MONITORING WELL
- SITE BOUNDARY
- GENERAL DIRECTION OF GROUNDWATER FLOW



M:\Client\AR\Slide 4 and 6 Layout 2018 Semiannual Report

Explanation

- | | |
|-------------------------------|---|
| ● Monitoring Well Location | --- Landfill Subdrain System |
| ● POC Well | --- Site Boundary |
| ● Background Well | AECOM AECOM Technical Services, Inc. |
| ● LCRS Monitoring Point | AFB Air Force Base |
| ▲ Perimeter Subdrain Cleanout | ARB Air Reserve Base |
| ● Monument Location | CA California |
| ● LFG Probe | LCRS Leachate Collection and Removal System |
| □ Landfill Subdrain Cleanout | LFG Landfill Gas |
| ■ Gate | POC Point of Compliance |
| --- Fence | |
| --- Perimeter Subdrain System | |

LF006 Site Map

Date 09-18	AECOM	Figure 5-1
Project No. 60271680	March ARB and Former March AFB, CA	

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

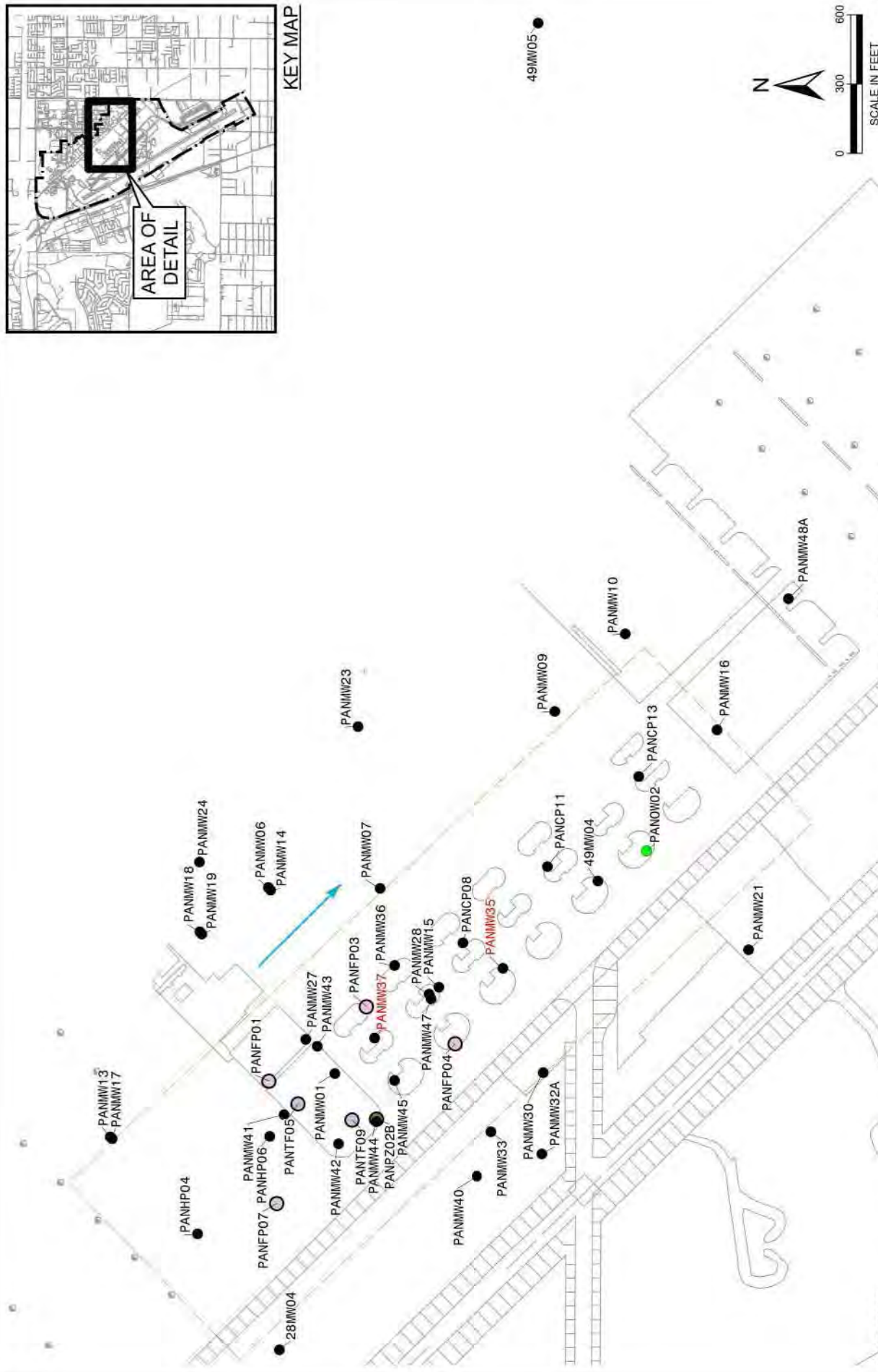
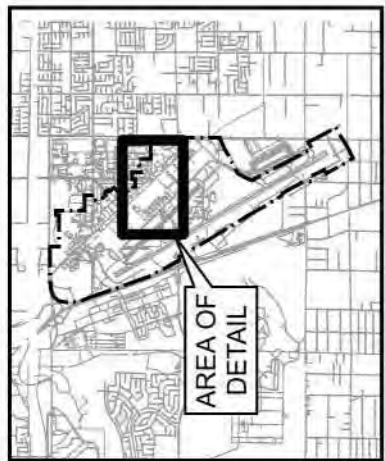
LEGEND

- PREVIOUS SOIL SAMPLE LOCATION
- SITE BOUNDARY SS011



SS011 Site Map

Date	08-18		Figure	5-2
Project No.	60271680		March ARB and Former March AFB, CA	



**ST033
Site Map**

AECOM

March ARB and Former March AFB, CA

Figure 6-1

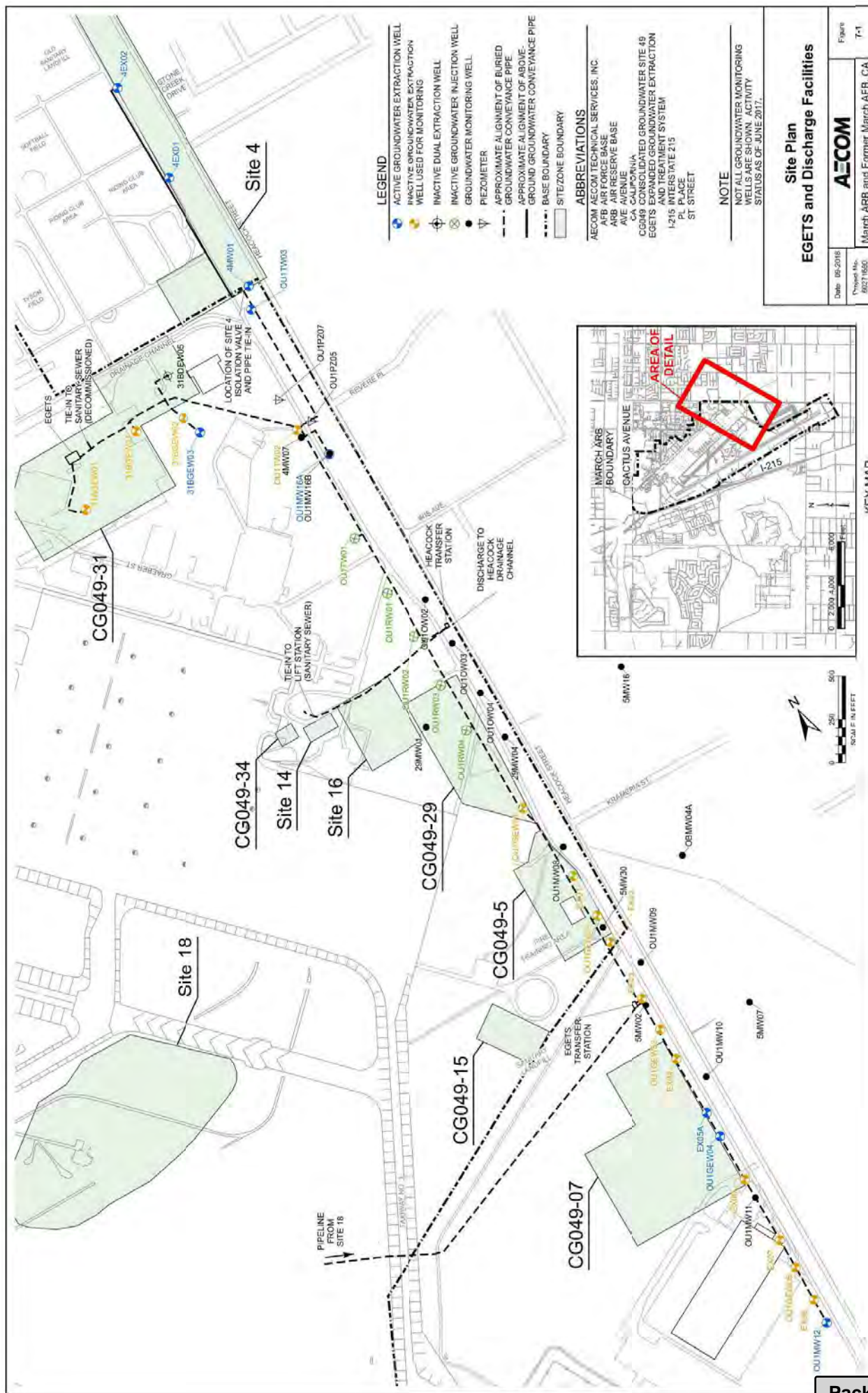
Date 08-2018
Project No. 60271680

LEGEND

- MONITORING WELL
- OBSERVATION WELL
- PRODUCT WELL
- PIEZOMETER WELL
- TOTAL FLUIDS WELL
- SITE BOUNDARY
- GROUNDWATER FLOW DIRECTION

NOTE
WELLS SHOWN IN RED ARE SAMPLED UNDER THIS MONITORING PROGRAM.

ABBREVIATIONS
AFB AIR FORCE BASE
ARB AIR RESERVE BASE
CA CALIFORNIA



- LEGEND**
- ACTIVE GROUNDWATER EXTRACTION WELL
 - INACTIVE GROUNDWATER EXTRACTION WELL USED FOR MONITORING
 - INACTIVE DUAL EXTRACTION WELL
 - INACTIVE GROUNDWATER INJECTION WELL
 - GROUNDWATER MONITORING WELL
 - PIEZOMETER
 - APPROXIMATE ALIGNMENT OF BURIED GROUNDWATER CONVEYANCE PIPE
 - GROUND GROUNDWATER CONVEYANCE PIPE
 - BASE BOUNDARY
 - SITEZONE BOUNDARY
- ABBREVIATIONS**
- AECOM AECOM TECHNICAL SERVICES, INC.
 - AFB AIR FORCE BASE
 - ARB AIR RESERVE BASE
 - AVE AVENUE
 - CA CALIFORNIA
 - CG049 CONJOINED GROUNDWATER SITE 49
 - EGETS GROUNDWATER EXTRACTION EGETS AND TREATMENT SYSTEM
 - I-215 INTERSTATE 215
 - PL PLACE
 - ST STREET
- NOTE**
- NOT ALL GROUNDWATER MONITORING WELLS ARE SHOWN. ACTIVITY STATUS AS OF JUNE 2017.

Site Plan
EGETS and Discharge Facilities

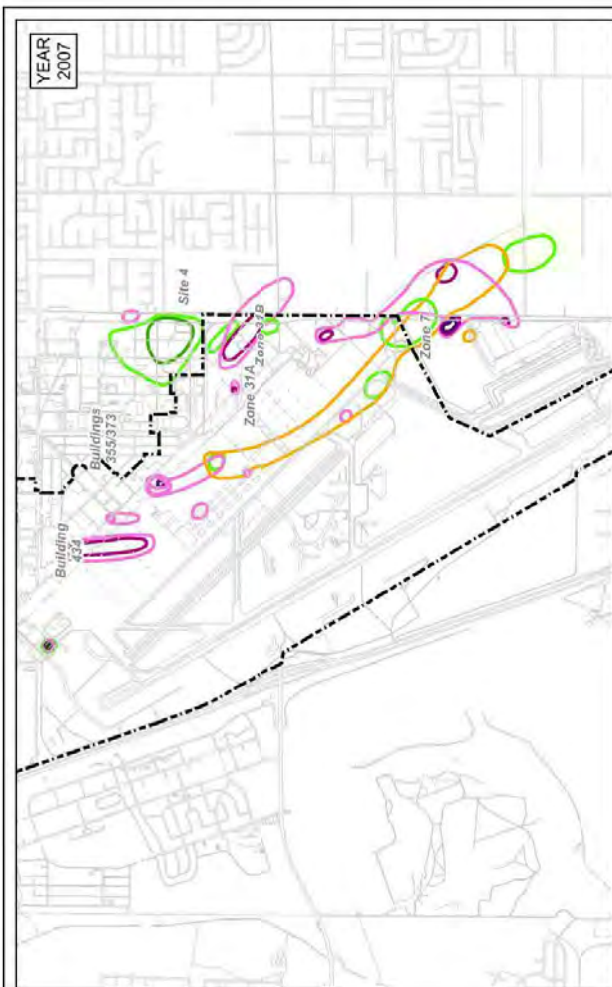
Date: 05-2016
Project No.: 06271650

AECOM

March, ARB and Former March AFB, CA

Figure: T-1





LEGEND

- TCE PLUME OUTLINE >5 µg/L
- TCE PLUME OUTLINE >10 µg/L
- TCE PLUME OUTLINE >100 µg/L
- PCE PLUME OUTLINE >5 µg/L
- PCE PLUME OUTLINE >10 µg/L
- PCE PLUME OUTLINE >100 µg/L
- CTCL PLUME OUTLINE >0.5 µg/L
- BASE PROPERTY LINE
- CONTOUR LINES DASHED WHERE APPROXIMATE

ABBREVIATIONS

- > GREATER THAN
- µg/L MICROGRAMS PER LITER
- AECOM AECOM TECHNICAL SERVICES, INC.
- AFB AIR FORCE BASE
- ARB AIR RESERVE BASE
- CA CALIFORNIA
- CTCL CARBON TETRACHLORIDE
- PCE PERCHLOROETHYLENE
- TCE TRICHLOROETHYLENE



**Upper Alluvial Plumes
Time Progression 2000 to 2017**

Date: 08-2016
Project No.: 06271650
March, ARB and Former March AFB, CA

AECOM

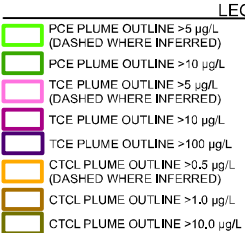
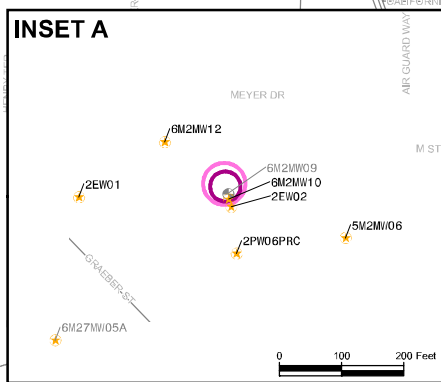
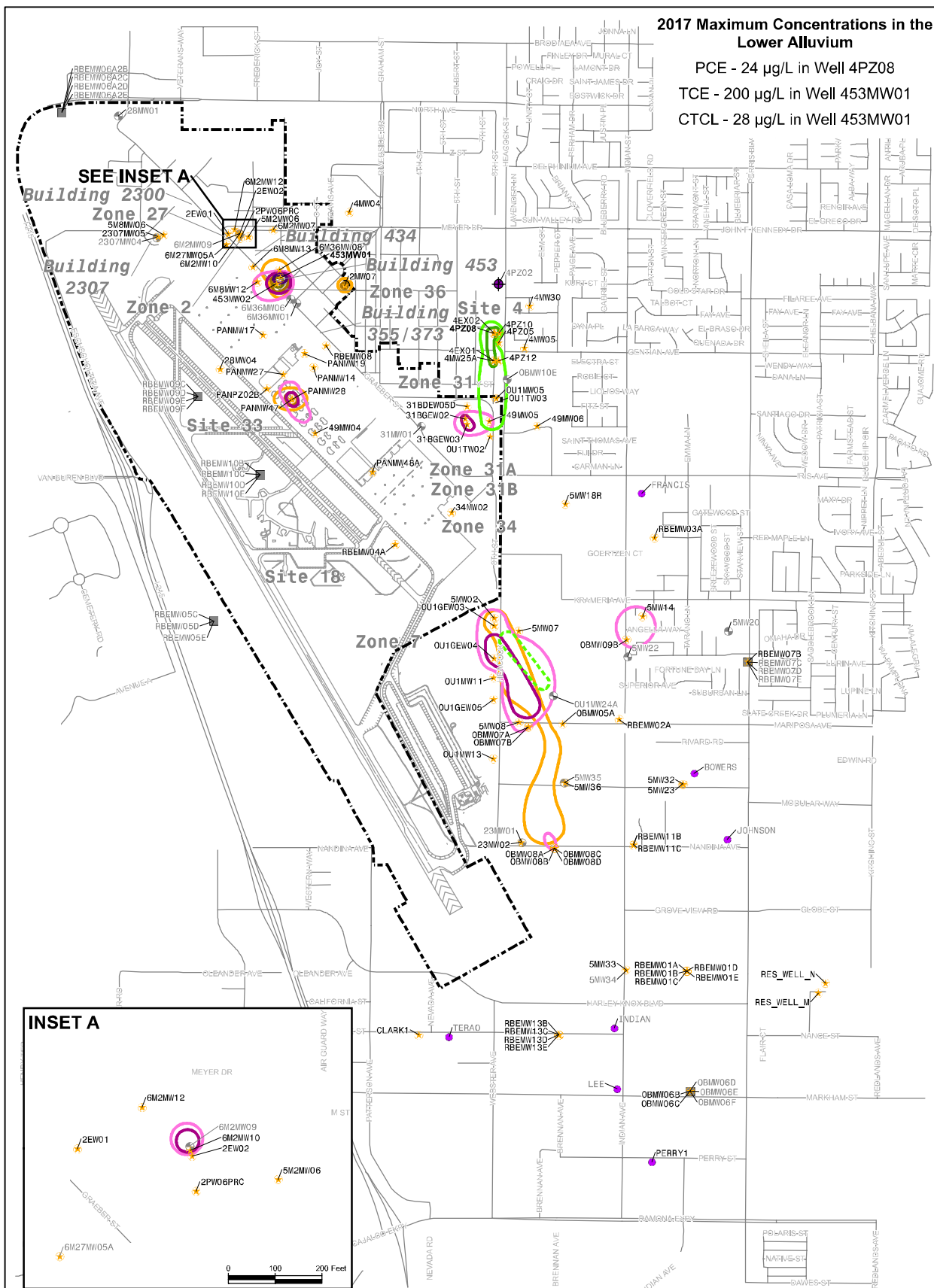
Figure: T-3

2017 Maximum Concentrations in the Lower Alluvium

PCE - 24 µg/L in Well 4PZ08

TCE - 200 µg/L in Well 453MW01

CTCL - 28 µg/L in Well 453MW01

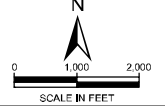


GROUNDWATER WELLS

- MONITORING WELL
- WESTBAY WELL
- WATER SUPPLY GUARD WELL (WESTBAY WELL)
- PIEZOMETER
- WATER SUPPLY WELL
- ★ WELL SAMPLED IN 2017
- MARCH ARB PROPERTY LINE

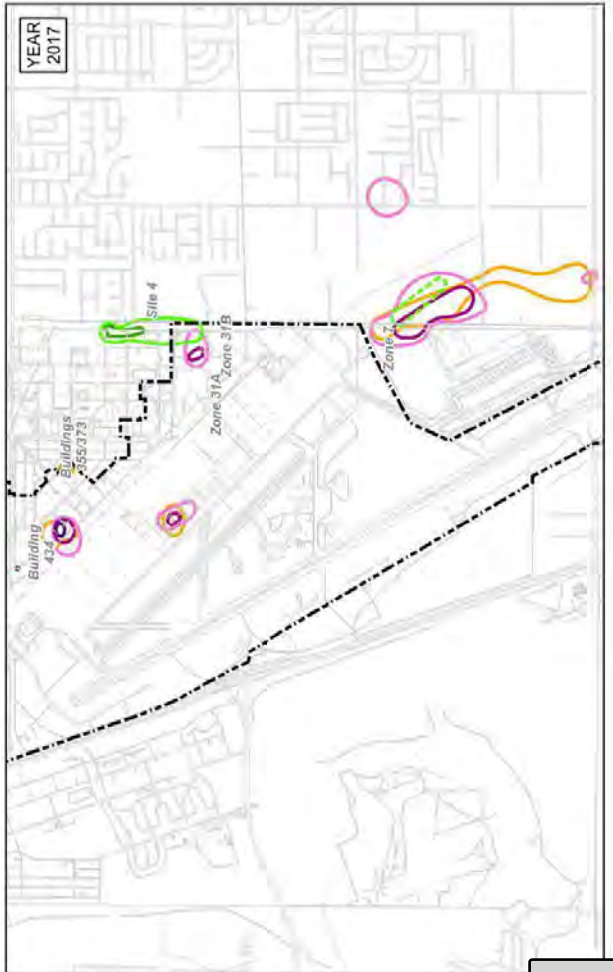
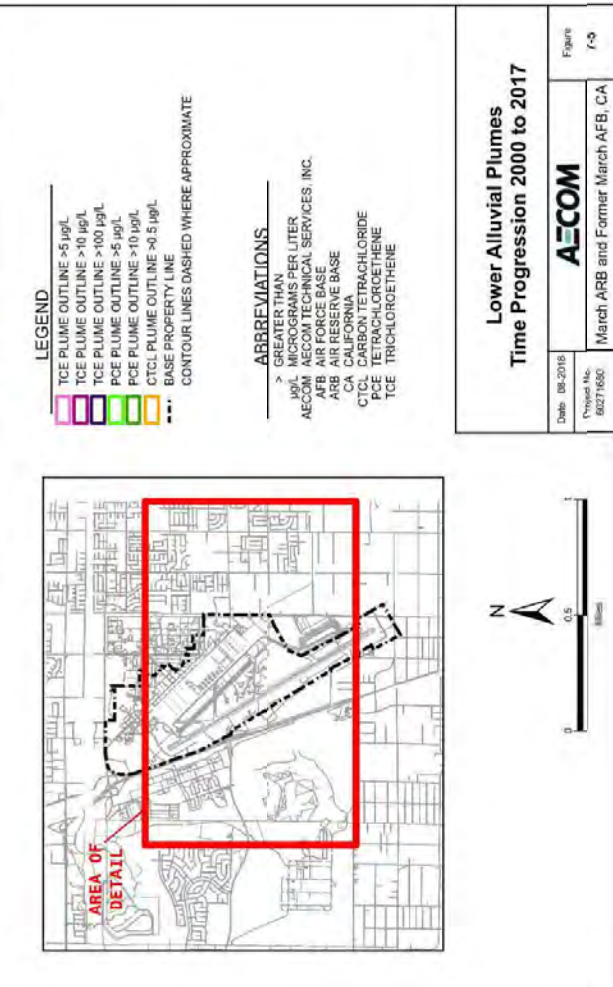
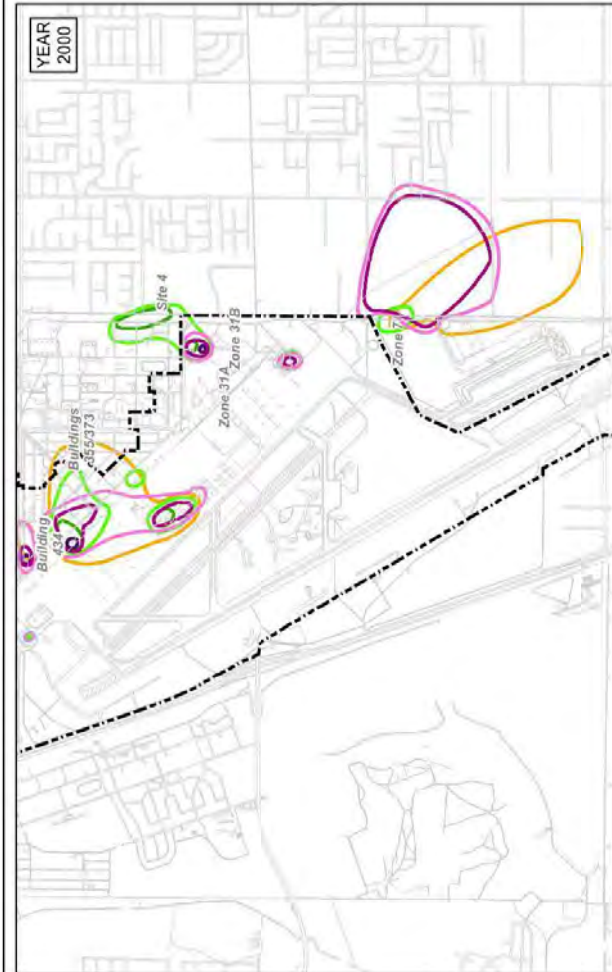
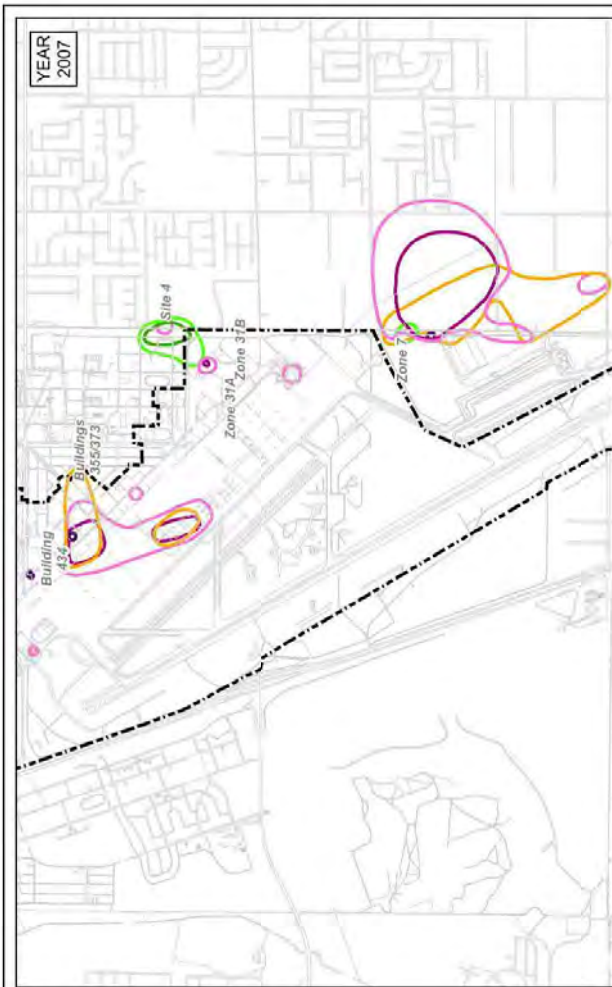
ABBREVIATIONS

- > GREATER THAN
- µg/L MICROGRAMS PER LITER
- AECOM AECOM TECHNICAL SERVICES, INC.
- AFB AIR FORCE BASE
- ARB AIR RESERVE BASE
- CA CALIFORNIA
- CTCL CARBON TETRACHLORIDE
- PCE TETRACHLOROETHENE
- TCE TRICHLOROETHENE



**Basewide Lower Alluvial Plumes
Second Quarter
2017 Sampling Results**

Date 08-2018	AECOM	Figure
Project No. 60271680	March ARB and Former March AFB, CA	



LEGEND

- TCE PLUME OUTLINE >5 µg/L
- TCE PLUME OUTLINE >10 µg/L
- PCE PLUME OUTLINE >100 µg/L
- PCE PLUME OUTLINE >5 µg/L
- CTCL PLUME OUTLINE >10 µg/L
- CTCL PLUME OUTLINE >5 µg/L
- BASE PROPERTY LINE
- - - - - CONTOUR LINES DASHED WHERE APPROXIMATE

ABBREVIATIONS

- > GREATER THAN
- µg/L MICROGRAMS PER LITER
- AECOM AECOM TECHNICAL SERVICES, INC.
- AFB AIR FORCE BASE
- ARB AIR RESERVE BASE
- CA CALIFORNIA
- CTCL CARBON TETRACHLORIDE
- PCE PERCHLOROETHYLENE
- TCE TRICHLOROETHENE

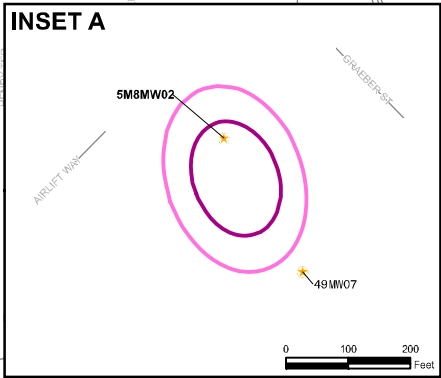
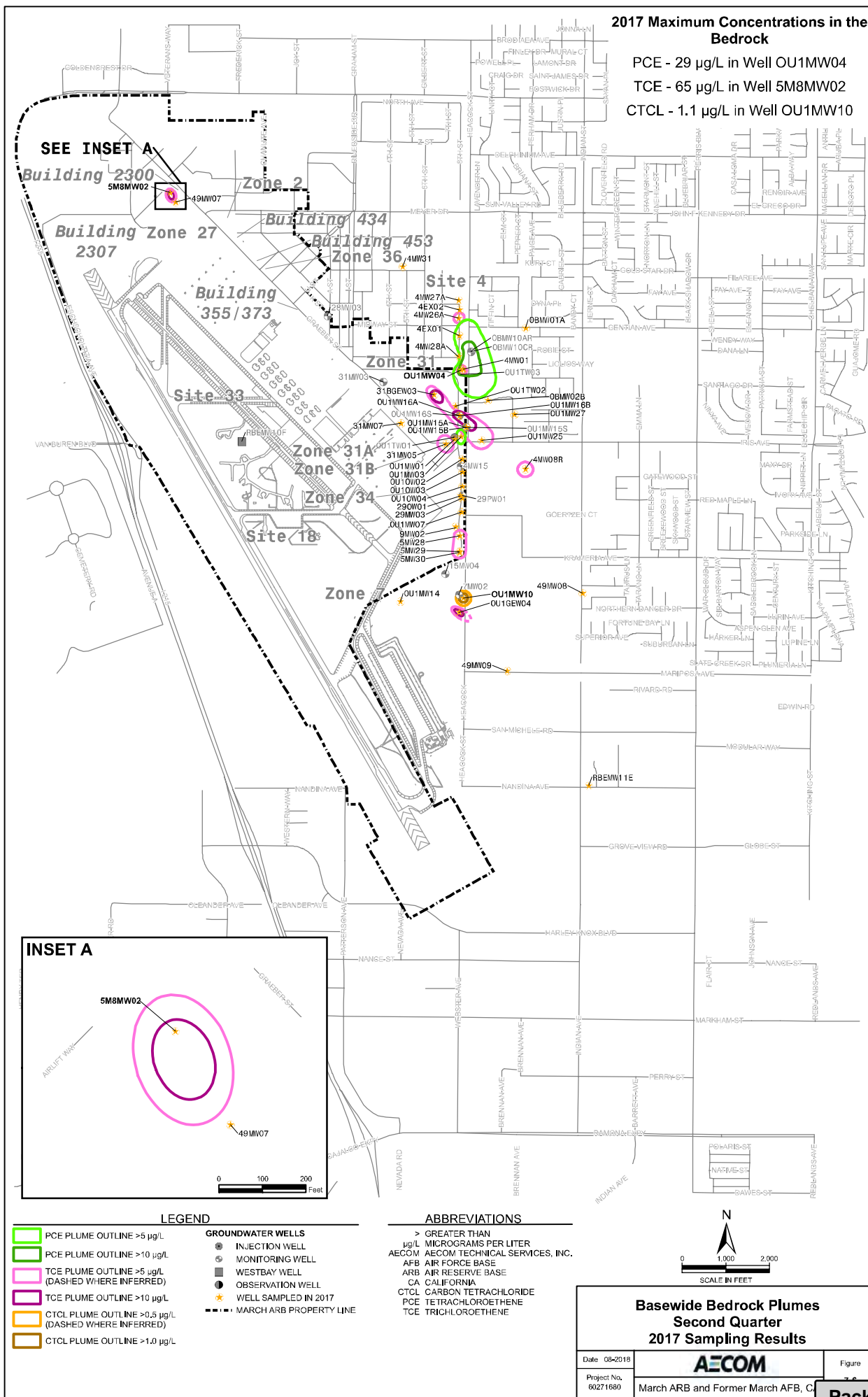


**Lower Alluvial Plumes
Time Progression 2000 to 2017**

Date: 08-2016	Figure: 7-9
Project No.: B027650	
AECOM	
March, ARB and Former March AFB, CA	

2017 Maximum Concentrations in the Bedrock

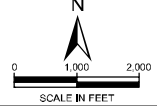
PCE - 29 µg/L in Well OU1MW04
 TCE - 65 µg/L in Well 5M8MW02
 CTCL - 1.1 µg/L in Well OU1MW10



- LEGEND**
- PCE PLUME OUTLINE >5 µg/L
 - PCE PLUME OUTLINE >10 µg/L
 - TCE PLUME OUTLINE >5 µg/L (DASHED WHERE INFERRED)
 - TCE PLUME OUTLINE >10 µg/L
 - CTCL PLUME OUTLINE >0.5 µg/L (DASHED WHERE INFERRED)
 - CTCL PLUME OUTLINE >1.0 µg/L

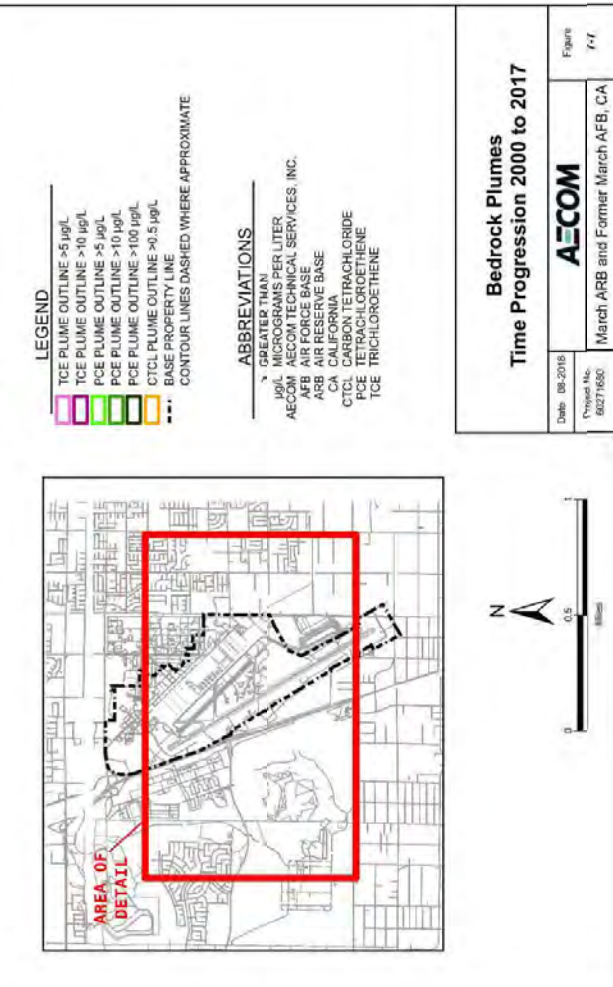
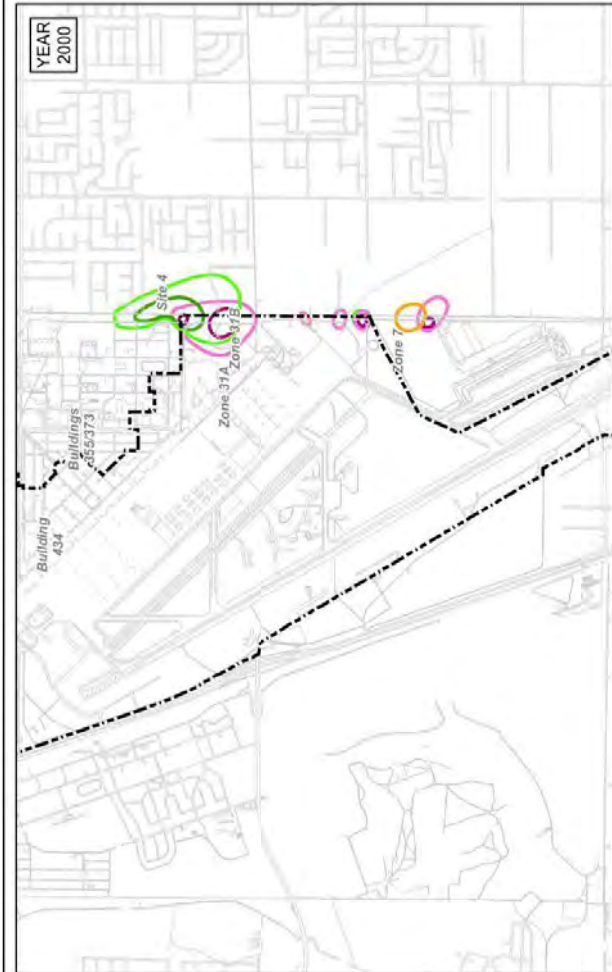
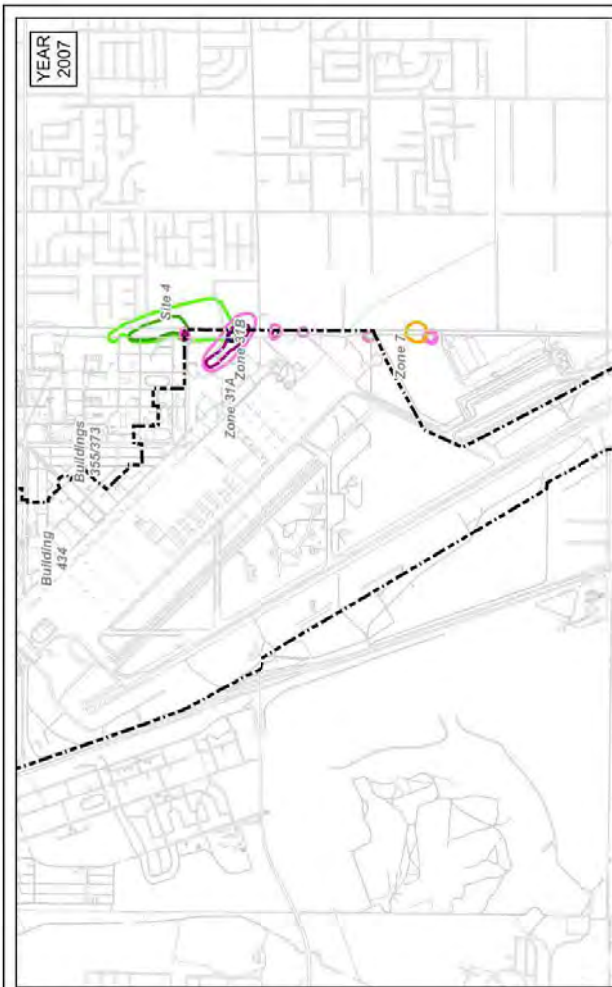
- GROUNDWATER WELLS**
- INJECTION WELL
 - MONITORING WELL
 - WESTBAY WELL
 - OBSERVATION WELL
 - WELL SAMPLED IN 2017
 - MARCH ARB PROPERTY LINE

- ABBREVIATIONS**
- > GREATER THAN
 - µg/L MICROGRAMS PER LITER
 - AECOM AECOM TECHNICAL SERVICES, INC.
 - AFB AIR FORCE BASE
 - ARB AIR RESERVE BASE
 - CA CALIFORNIA
 - CTCL CARBON TETRACHLORIDE
 - PCE TETRACHLOROETHENE
 - TCE TRICHLOROETHENE



**Basewide Bedrock Plumes
 Second Quarter
 2017 Sampling Results**

Date 08-2018	AECOM	Figure 7.6
Project No. 60271880	March ARB and Former March AFB, CA	



- LEGEND**
- TCE PLUME OUTLINE >5 µg/L
 - PCE PLUME OUTLINE >10 µg/L
 - PCE PLUME OUTLINE >5 µg/L
 - CTCL PLUME OUTLINE >10 µg/L
 - CTCL PLUME OUTLINE >100 µg/L
 - - - BASE PROPERTY LINE
 - - - CONTOUR LINES DASHED WHERE APPROXIMATE

- ABBREVIATIONS**
- > GREATER THAN
 - µg/L MICROGRAMS PER LITER
 - AECOM AECOM TECHNICAL SERVICES, INC.
 - AFB AIR FORCE BASE
 - ARB AIR RESERVE BASE
 - CA CALIFORNIA
 - CTCL CARBON TETRACHLORIDE
 - PCE PERCHLOROETHYLENE
 - TCE TRICHLOROETHENE



Bedrock Plumes
Time Progression 2000 to 2017

Date: 08-2016	AECOM	Figure: 1.n
Project No.: 06271650		March, ARB and Former March AFB, CA

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCEL MAY NOT COMPLY WITH LOCAL LOT-SPLIT OR BUILDING SITE ORDINANCES.

POR. SEC. 13 T.3S R.4W

TRA 021-332

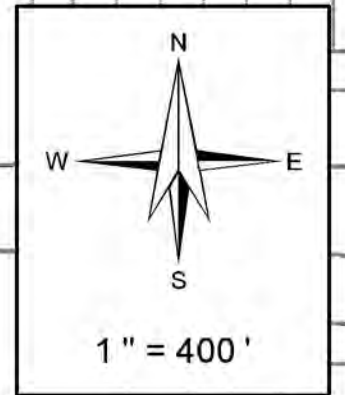
297-17

293-26

CITY OF MORENO VALLEY

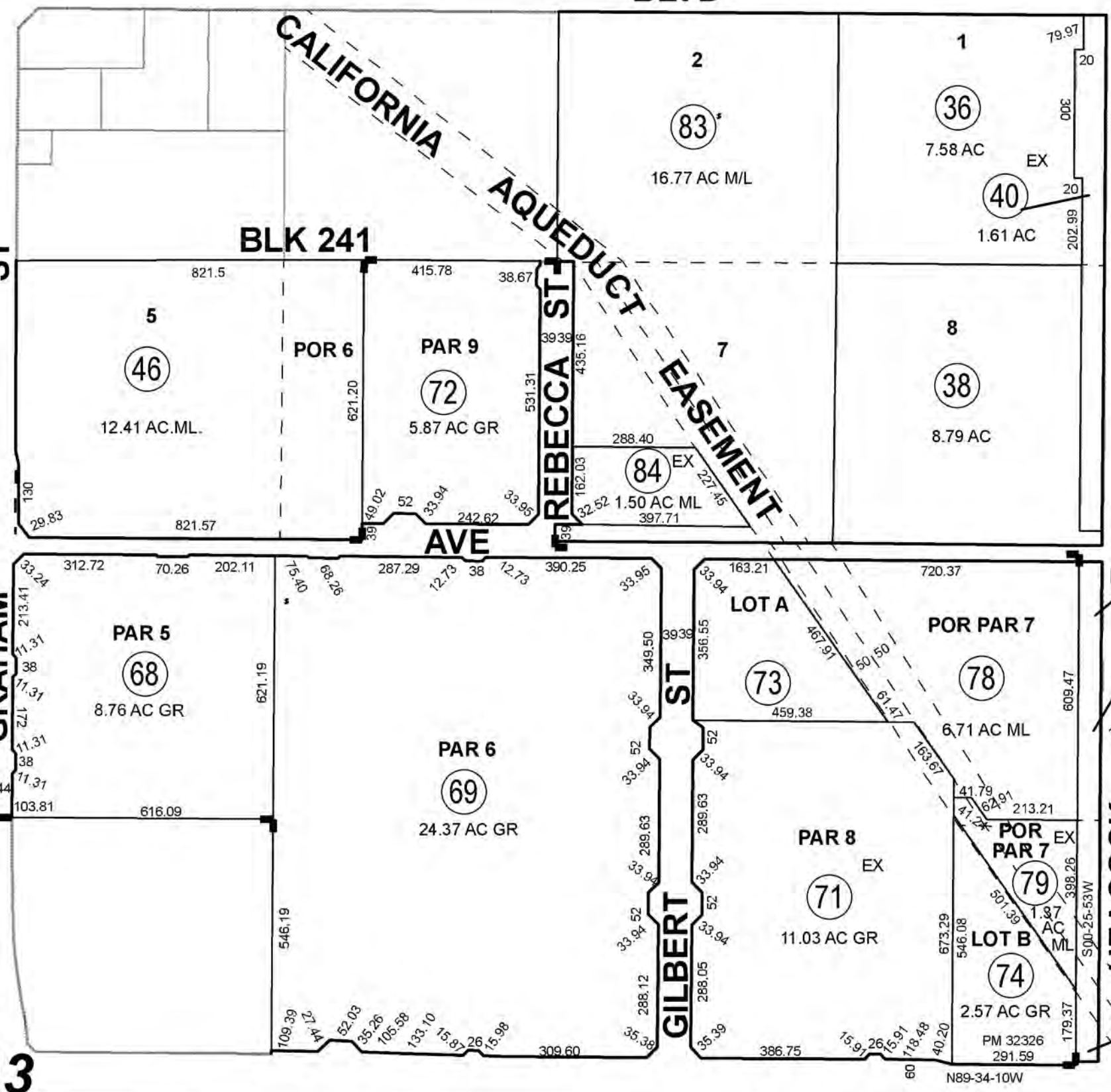
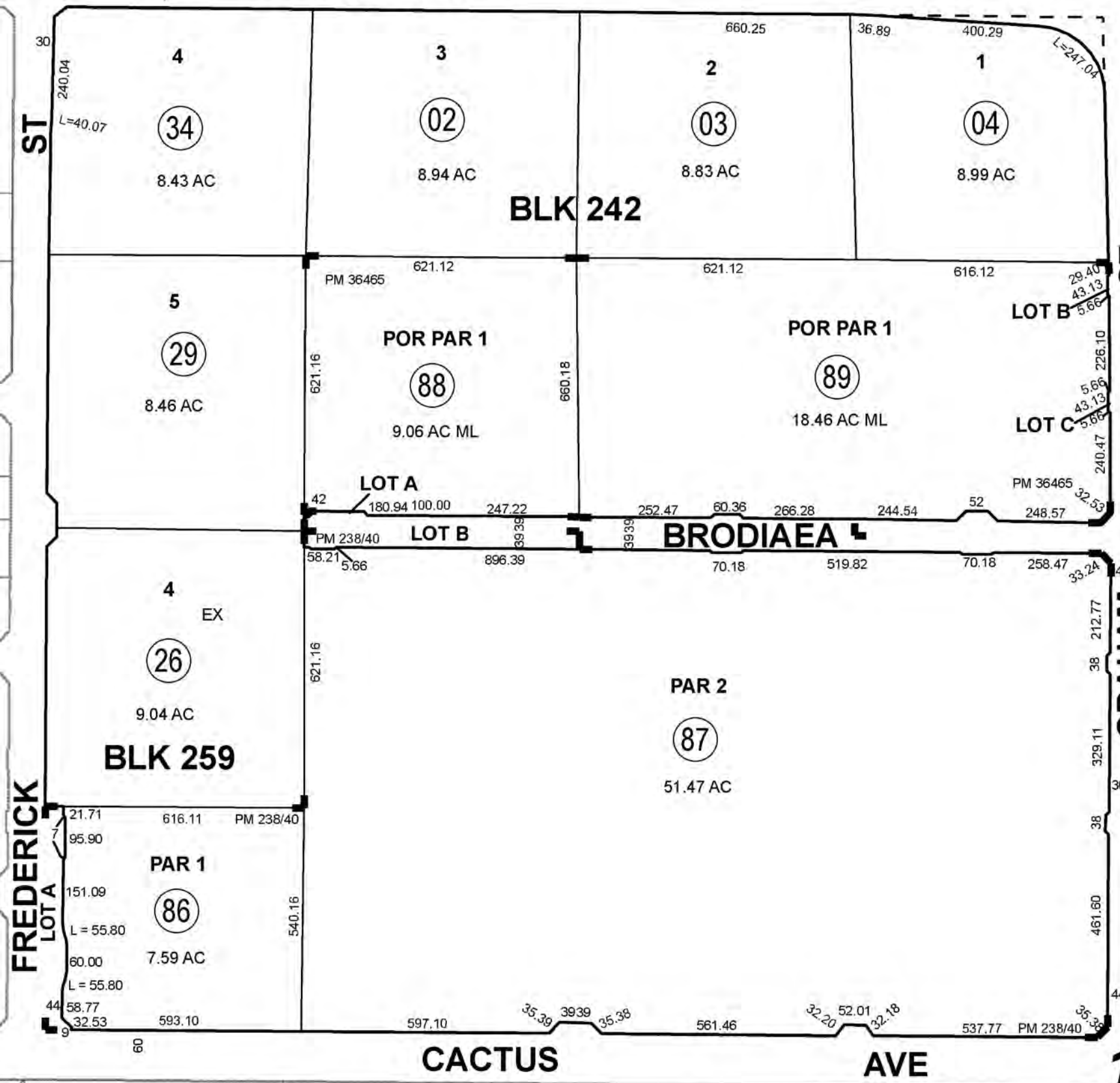
ALESSANDRO

BLVD



Legend

- Lot Lines
- Right-Of-Way
- - - Old Lot Lines
- - - Reference R.O.W
- - - Other Easements
- • • Lease Area
- Subdivision Tic Mark



Date	Old Number	New Number
9/1/1988	1,8	28,29,ST
9/1/1988	9,16	26,27,ST
9/1/1989	12	31,32,ST
9/1/1989	11	30,ST
9/1/1989	22	33,ST
8/1/1990	28	34,ST
2/1/1991	24	35,ST
2/1/1995	18	36,37
2/1/1995	19	38,39
2/1/1995	37,39	40
6/1/2000	35	41,42
11/8/2004	21,44	45
11/8/2004	20	43-44
8/16/2005	25,52	54
8/16/2005	45	46,ST
8/16/2005	23	47-48
8/16/2005	48,51	53
8/16/2005	41	49-52
8/17/2006	54	58-60
8/17/2006	53	55-57
8/17/2006	47,55,58,PG19	61
8/17/2006	56,59	62
12/14/2006	6,7,13,14	63
12/14/2006	43,49,50,57	63
12/14/2006	60-62	63
12/14/2006	30-33	63
12/14/2006	63	64-74
2/5/2007	15	76,ST
2/5/2007	10	75,ST
2/5/2007	17	77,ST
1/14/2009	70	78-79
1/24/2012	66	81,ST
1/24/2012	5	80,ST
1/24/2012	80,81	82
4/1/2013	77	83,84
1/15/2015	27,67,75,76	85
1/15/2015	85	86,87
1/31/2017	64,65	88
1/31/2017	82	89



ASSESSOR'S MAP BK 297 PG. 17
Riverside County, Calif.

LJIANG

Data
CALIF AQUEDUCT 33-04,05
RS 73/95-99
216920 9/85 (ST)
190454 5/90 (ST)
965111 5/81 (ST)
133966 7/81 (ST)

Bk 294 Pg 29	Bk 296 Pg 20	Bk 296 Pg 22	Bk 296 Pg 28	Bk 296 Pg 30	Bk 482 Pg 37
Pg 14		Pg 18			Bk 482 Pg 48
Pg 22					Bk 482 Pg 34
Pg 15		Pg 19			Bk 482 Pg 33
Pg 16	Pg 20		Pg 25		

Map Reference
MB 11/10 SB MAP NO 1 BEAR VALLEY & ALESSANDRO DEVELOPMENT CO
PM 218/34 - 42 PARCEL MAP NO. 32326
PM 238/40 - 45 PARCEL MAP NO. 36463
PM 240/65 - 69 PARCEL MAP NO. 36465

Feb 2017

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Peter Aldana , County Assessor

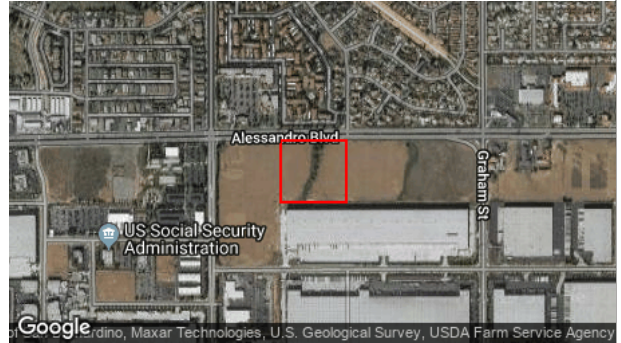
Property Address: MORENO VALLEY CA 92553

General Information

Parcel # (APN): **297-170-002** [Open Map](#)
 Owner: See Full Detail
 Mailing Address: **4343 MARKET ST #A RIVERSIDE CA 92501**
 Legal Description: **8.94 ACRES M/L IN LOT 3 BLK 242 MB 011/010 SB BEAR VALLEY & ALESSANDRO DEVELOPMENT CO**
 Use Type: **VACANT**
 Tax Rate Area: **021-332**

Assessment

Total Value:	\$869,710	Year Assd:	2019
Land:	\$869,710	Zoning:	
Structures:		Use Code:	See Full Detail
Other:		Census Tract:	See Full Detail
% Improved:	See Full Detail	Price/SqFt:	
Exempt Amt:			
HO Exempt:	N		



Full Detail \$14.95 [Add to Cart](#) The Full Property Detail includes everything displayed here plus completed information for those fields where "See Full Detail" is shown. If a field is empty on this page, no data is available, and the field will also be empty on the Full Property Detail.

Sale History

	Sale 1	Sale 2	Sale 3	Transfer
Document Date:	01/16/1996	See Full Detail		See Full Detail
Document Number:	0015631	See Full Detail		See Full Detail
Document Type:				
Transfer Amount:	\$1,200,000			
Seller (Grantor):				

Property Characteristics

Bedrooms:	Fireplace:	Units:
Baths (Full):	A/C:	Stories:
Baths (Half):	Heating:	Quality:
Total Rooms:	Pool:	Building Class:
Bldg/Liv Area:	Park Type:	Condition:
Lot Acres: 8.940	Spaces:	Site Influence:
Lot SqFt: 389,426	Garage SqFt:	Timber Preserve:
Year Built:		Ag Preserve:
Effective Year:		

**The information provided here is deemed reliable, but is not guaranteed.

[Additional reports on this property](#) ▶

Peter Aldana , County Assessor

Property Address: MORENO VALLEY CA 92553

General Information

Parcel # (APN): **297-170-003** [Open Map](#)
 Owner: See Full Detail
 Mailing Address: **4343 MARKET ST #A RIVERSIDE CA 92501**
 Legal Description: **8.83 ACRES M/L IN LOT 2 BLK 242 MB 011/010 SB BEAR VALLEY & ALESSANDRO DEVELOPMENT CO**
 Use Type: **VACANT**
 Tax Rate Area: **021-332**

Assessment

Total Value:	\$571,860	Year Assd:	2019
Land:	\$571,860	Zoning:	
Structures:		Use Code:	See Full Detail
Other:		Census Tract:	See Full Detail
% Improved:	See Full Detail	Price/SqFt:	
Exempt Amt:			
HO Exempt:	N		



Full Detail \$14.95 [Add to Cart](#) The Full Property Detail includes everything displayed here plus completed information for those fields where "See Full Detail" is shown. If a field is empty on this page, no data is available, and the field will also be empty on the Full Property Detail.

Sale History

	Sale 1	Sale 2	Sale 3	Transfer
Document Date:	01/16/1996	See Full Detail		See Full Detail
Document Number:	0015631	See Full Detail		See Full Detail
Document Type:				
Transfer Amount:	\$1,200,000			
Seller (Grantor):				

Property Characteristics

Bedrooms:	Fireplace:	Units:
Baths (Full):	A/C:	Stories:
Baths (Half):	Heating:	Quality:
Total Rooms:	Pool:	Building Class:
Bldg/Liv Area:	Park Type:	Condition:
Lot Acres: 8.830	Spaces:	Site Influence:
Lot SqFt: 384,634	Garage SqFt:	Timber Preserve:
Year Built:		Ag Preserve:
Effective Year:		

**The information provided here is deemed reliable, but is not guaranteed.

[Additional reports on this property](#)



County of Riverside
DEPARTMENT OF ENVIRONMENTAL HEALTH

STEVE VAN STOCKUM, DIRECTOR

Incomplete Records Request Notice

December 4, 2019

Request No: 46633

PARTNER
361 Corporate Terrace Circle
Corona, CA 92879
Attn: Ramiro Vejar

Request Date: 11/26/2019

Re: APNs: 297-17-002 & 297-170-003,
SOUTHEAST CORNER OF
ALESSANDRO BLVD. &
FREDERICK ST., MORENO
VALLEY

We have received your request for records however a search of our records cannot be conducted based on the information provided.

Please reference a specific site address(s) of inquiry and resubmit the records request.

The Hazardous Materials Management Division is unable to provide information about sites based on APN's or similar geographic site data.

Please direct questions or correspondence to:

Department of Environmental Health
Hazardous Materials Management Division
4065 County Circle Dr., Rm. 104
P.O. Box 7909
Riverside, CA 92513-7909
Attention: Records Management
Telephone: 951-358-5055
Fax: 951-358-5017

You may also visit our website at www.rivcoeh.org

Note: Records for disclosure information of the cities of Corona 951-736-2220, and Riverside 951-826-5737 will need to be directed to the City Fire Department.

2275 S Main Street, Ste 204
Corona, CA 92882
(951) 273-9143
(951) 520-8319 Fax

800 S Sanderson Avenue, Ste 102
Hemet, CA 92545
(951) 766-6524
(951) 791-1778 Fax

47950 Arabia Street, Ste A
Indio, CA 92201
(760) 863-8976
(760) 863-8303 Fax

4065 County Circle Dr., Ste 104
Riverside, CA 92503
(951) 358-5055
(951) 358-5342 Fax

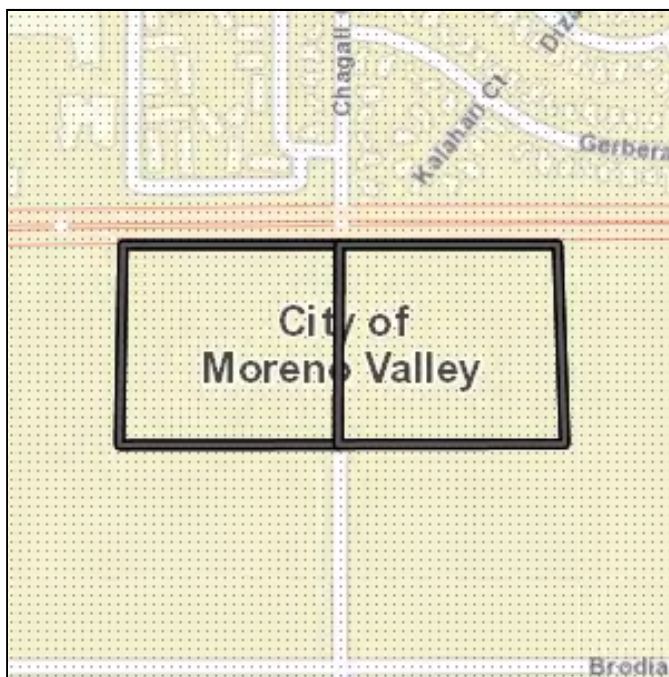
3880 Lemon Street, Ste 200
Riverside, CA 92501
(951) 955-8980
(951) 955-8988 Fax



Riverside County Parcel Report

APN(s) 297-170-002
297-170-003

MAPS/IMAGES



PARCEL

APN [297-170-002-6](#)
[297-170-003-7](#)

Previous APN 297-170-002 came from 293-261-101
297-170-003 came from 293-261-101

Owners Not Available Online

Address 297-170-002
NOT AVAILABLE

297-170-003
NOT AVAILABLE

Mailing Address 297-170-002
4343 MARKET ST STE A
RIVERSIDE CA 92501

297-170-003
4343 MARKET ST STE A
RIVERSIDE CA 92501

Legal Description 297-170-002
Recorded Book/Page: [MB 11/10](#)
Subdivision Name: BEAR VALLEY &
ALESSANDRO
DEVELOPMENT CO
Lot/Parcel: 3

Block: 242
Tract Number: 0
297-170-003
Recorded Book/Page: [MB 11/10](#)
Subdivision Name: BEAR VALLEY &
ALESSANDRO
DEVELOPMENT CO
Lot/Parcel: 2
Block: 242
Tract Number: 0

Lot Size 297-170-002
8.94
297-170-003
8.83

Property Characteristics 297-170-002
Year Constructed: 0000
Baths: 0.00
Bedrooms: 0
Construction Type: SPECIAL
Garage Type: CONSTRUCTION
Property Area (sq ft): 0
Roof Type: UNKNOWN
Stories:
Pool: NO
Central Cool: NO
Central Heat: NO
297-170-003
Year Constructed: 0000
Baths: 0.00
Bedrooms: 0

Construction Type: SPECIAL
 Garage Type: CONSTRUCTION
 Property Area (sq ft): 0
 Roof Type: UNKNOWN
 Stories:
 Pool: NO
 Central Cool: NO
 Central Heat: NO

NOT IN A ZONING DISTRICT/AREA

Community Advisory Councils NOT IN A COMMUNITY ADVISORY COUNCIL

Residential Permit Statistics N/A

Expected Units:
 BRS Permit Units: Final Issued Active
 Current Permits:
 Cumulative Total:
 % of Expected:

Supervisorial District JEFF HEWITT, DISTRICT 5

Township/Range T3SR4W SEC 12 S
 T3SR4W SEC 13 SEC

Elevation Range (ft.) MIN: 1568, AVG: 1572, MAX: 1576

Thomas Bros. Maps Page/Grid PAGE: 717, GRID: C6
 PAGE: 717, GRID: D6

Indian Tribal Land NOT IN A TRIBAL LAND

City Boundary MORENO VALLEY

City Spheres of Influence NOT IN A CITY SPHERE

LAFCO Annexation 83-101-5

Proposals PROPOSED_CITY

[March Joint Powers Authority](#) NOT A THE JURSDICTION OF THE MARCH POWERS AUTHORITY

County Service Area NOT IN A COUNTY SERVICE AREA

PLANNING more...

Specific Plans NOT IN A SPECIFIC PLAN

Land Use Designations CITY

General Plan Policy Overlays NOT IN A GENERAL PLAN POLICY OVERLAY

Area Plan (RCIP) Reche Canyon / Badlands

General Plan Policy Areas NOT IN A GENERAL PLAN POLICY AREA

[Zoning Classifications \(ORD. 348\)](#) CONTACT THE CITY FOR MORE INFORMATION

[Zoning Overlays](#) NOT IN A ZONING OVERLAY

Historical Preservation Districts NOT IN A HISTORIC PRESERVATION DISTRICT

Agricultural Preserve NOT IN AN AGRICULTURAL PRESERVE

Airport Influence Areas MARCH AIR RESERVE BASE

Airport Compatibility Zones MARCH AIR RESERVE BASE, ZONE D
 MARCH AIR RESERVE BASE, ZONE E

Zoning Districts/Areas

ENVIRONMENTAL more...

[CVMShCP \(Coachella Valley Multi-Species Habitat Conservation Plan\) Plan Area](#) NOT IN A COACHELLA VALLEY MSHCP FEE AREA

[CVMShCP \(Coachella Valley Multi-Species Habitat Conservation Plan\) Conservation Area](#) NOT COACHELLA VALLEY CONSERVATION AREA

CVMShCP Fluvial Sand Transport Special Provision Areas NOT IN A FLUVIAL SAND TRANSPORT SPECIAL PROVISION AREA

[WRMShCP \(Western Riverside County Multi-Species Habitat Conservation Plan\) Plan Area](#) WESTERN RIVERSIDE COUNTY

WRMShCP (Western Riverside County Multi-Species Habitat Conservation Plan) Cell Group NOT IN A CELL GROUP

WRMShCP Cell Number NOT IN A CELL NUMBER

HANS/ERP (Habitat Acquisition and Negotiation Strategy/Expedited Review Process) Project: NOT IN A PROJECT
 Conserve:
 Status:
 Notes:
 Intake Num:
 LMS Case:

Vegetation (2005) Urban Interface Mapping Unit
 Willow Mapping Unit

FIRE

[Fire Hazard Classification \(Ord. 787\)](#) NOT IN A FIRE HAZARD ZONE

Fire Responsibility Area NOT IN A FIRE RESPONSIBILITY AREA

DEVELOPMENT FEES

[CVMShCP \(Coachella Valley Multi-Species Habitat Conservation Plan\) Fee Area \(Ord 875\)](#) NOT IN A COACHELLA VALLEY MSHCP FEE AREA

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

WRMSHCP (Western Riverside County Multi-Species Habitat Conservation Plan) Fee Area (Ord 810)	WESTERN RIVERSIDE COUNTY
Western TUMF (Transportation Uniform Mitigation Fee Ord. 824)	CENTRAL
Eastern TUMF (Transportation Uniform Mitigation Fee Ord. 673)	NOT IN THE EASTERN TUMF FEE AREA
Road & Bridge Benefit District	NOT IN A ROAD BRIDGE BENEFIT DISTRICT
DIF (Development Impact Fee Area Ord. 659)	RECHE CANYON/BADLANDS, AREA 4
SKR Fee Area (Stephen's Kagaroo Rat Ord. 663.10)	IN OR PARTIALLY WITHIN THE SKR FEE AREA
Development Agreements	AGREEMENT: NOT IN A AMENDMENT: DEVELOPMENT EXPERATION DATE: AGREEMENT

TRANSPORTATION more...

Circulation Element Ultimate Right-of-Way	IN OR PARTIALLY WITHIN A CIRCULATION ELEMENT RIGHT-OF-WAY
Road Book Page	51
Transportation Agreements	NOT IN A TRANS AGREEMENT
CETAP (Community and Environmental Transportation Acceptability Process) Corridors	NOT IN A CETAP CORRIDOR

HYDROLOGY

Flood Plain Review	OUTSIDE FLOODPLAIN, REVIEW NOT REQUIRED
Flood Control District	RIVERSIDE COUNTY FLOOD CONTROL
Watershed	SAN JACINTO VALLEY
Water District	EASTERN MUNICIPAL WATER DISTRICT

GEOLOGIC

Fault Zone	NOT IN A FAULT ZONE
Faults	NOT IN A FAULT LINE
Liquefaction Potential	

Liquefaction Potential	Moderate
Subsidence	Susceptible
Paleontological Sensitivity	HIGH SENSITIVITY (HIGH B): SENSITIVITY EQUIVALENT TO HIGH A, BUT IS BASED ON THE OCCURRENCE OF FOSSILS AT A SPECIFIED DEPTH BELOW THE SURFACE. THE CATEGORY HIGH B INDICATES THAT FOSSILS ARE LIKELY TO BE ENCOUNTERED AT OR BELOW FOUR FEET OF DEPTH, AND MAY BE IMPACTED DURING EXCAVATION BY CONSTRUCTION ACTIVITIES.

MISCELLANEOUS

School Districts	MORENO VALLEY UNIFIED
Communities	MORENO VALLEY
Lighting (Ord. 655)	ZONE: B
2010 Census Tract	425.12
Farmland	LOCAL IMPORTANCE
Special Notes	NO SPECIAL NOTES

Tax Rate Area & District Name	021332 - CITY OF MORENO VALLEY 021332 - CITY OF MORENO VALLEY LIBRARY 021332 - CSA 152 021332 - EMWD 021332 - EMWD IMP DIST 3 021332 - EMWD IMP DIST U-13 021332 - FLOOD CONTROL ADMIN 021332 - FLOOD CONTROL ZN 4 021332 - GENERAL 021332 - GENERAL PURPOSE 021332 - MORENO VALLEY CS 021332 - MORENO VALLEY CS ZN A 021332 - MORENO VALLEY CS ZN C 021332 - MORENO VALLEY CS ZN D 021332 - MORENO VALLEY CS ZN E 021332 - MORENO VALLEY FIRE 021332 - MORENO VALLEY UNIFIED SCHOOL 021332 - MORENO VALLEY UNIFIED SCHOOL 021332 - MWD EAST 1301999 021332 - RDV CITY OF MORENO VALLEY 021332 - RIVERSIDE CITY COMMUNITY 021332 - RIVERSIDE CO OFC OF EDUCATION 021332 - SAN JACINTO BASIN RESOURCE 021332 - SO. CALIF, JT(19,30,33,36,37,56)
-------------------------------	---

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

PLUS PERMITS & CASES

Administrative Cases

Case	Case Description	Status
N/A	N/A	N/A

Building and Safety Cases

Case	Case Description	Status
N/A	N/A	N/A

Code Cases

Case	Case Description	Status
N/A	N/A	N/A

Fire Cases

Case	Case Description	Status
N/A	N/A	N/A

Planning Cases

Case	Case Description	Status
N/A	N/A	N/A

Survey Cases

Case	Case Description	Status
N/A	N/A	N/A

Transportation Cases

Case	Case Description	Status
N/A	N/A	N/A

DEPARTMENT of ENVIRONMENTAL HEALTH PERMITS

Septic Permits

Record Id	Application Date	Plan Check Approved Date	Final Inspection Date	Approved Date
N/A	N/A	N/A	N/A	N/A

Well Water Permits

Record Id	PE	Permit Paid Date	Permit Approved Date	Well Finaled Date
N/A	N/A	N/A	N/A	N/A

*** DISCLAIMER ***

Maps, permit information and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.



U.S. Fish and Wildlife Service, National Standards and Support team, wetlands_team@fws.gov

December 18, 2019

Wetlands

- | | | |
|--------------------------------|-----------------------------------|----------|
| Estuarine and Marine Deepwater | Freshwater Emergent Wetland | Lake |
| Estuarine and Marine Wetland | Freshwater Forested/Shrub Wetland | Other |
| | Freshwater Pond | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119,

APPENDIX C: REGULATORY DATABASE REPORT

17.7 Acre

APN 297-170-002, and 297-170-003
MORENO VALLEY, CA 92553

Inquiry Number: 5885406.2s
November 26, 2019

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	146
Government Records Searched/Data Currency Tracking	GR-1
 <u>GEOCHECK ADDENDUM</u>	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-8
Physical Setting Source Map Findings	A-10
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

APN 297-170-002, AND 297-170-003
MORENO VALLEY, CA 92553

COORDINATES

Latitude (North): 33.9162500 - 33° 54' 58.50"
Longitude (West): 117.2578770 - 117° 15' 28.35"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 476161.7
UTM Y (Meters): 3752705.8
Elevation: 1570 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5641312 RIVERSIDE EAST, CA
Version Date: 2012

East Map: 5641326 SUNNYMEAD, CA
Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140527, 20140603
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
 APN 297-170-002, AND 297-170-003
 MORENO VALLEY, CA 92553

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & DIRECTIO
Reg	MARCH AIR FORCE BASE		DOD	Same	1 ft.
Reg	MARCH AIR FORCE BASE	22 CSG/CC	NPL, SEMS, RCRA-LQG, US ENG CONTROLS, US INST...	Same	1919, 0.366
A1	M AND M CLEANERS	23100 ALESSANDRO BLV	EDR Hist Cleaner	Higher	171, 0.032,
A2	PLAZA HAND CAR WASH	23100 ALESSANDRO BLV	LUST, UST, CERS	Higher	171, 0.032,
A3	PLAZA HAND CAR WASH	23100 ALESSANDRO B	SWEEPS UST	Higher	171, 0.032,
A4	M & M CLEANERS, SANG	23080 ALESSANDRO BLV	DRYCLEANERS	Higher	259, 0.049,
A5	EXPEDIENT CLEANERS I	23080 ALESSANDRO BLV	DRYCLEANERS	Higher	259, 0.049,
A6	M & M CLEANERS, TAN	23080 ALESSANDRO BLV	DRYCLEANERS	Higher	259, 0.049,
A7	M & M CLEANERS	23080 ALESSANDRO BLV	CERS HAZ WASTE, HAZNET	Higher	259, 0.049,
A8	MORENO VALLEY CLINIC	23080 ALESSANDRO BLV	RCRA NonGen / NLR	Higher	259, 0.049,
A9	M&M DRY CLEANERS	23080 ALESSANDRO BOU	CPS-SLIC, BROWNFIELDS, CERS	Higher	259, 0.049,
A10	M & M CLEANERS, EXPE	23080 ALESSANDRO BLV	DRYCLEANERS	Higher	259, 0.049,
A11	A-1 CLEANERS	23080 ALESSANDRO BLV	DRYCLEANERS	Higher	259, 0.049,
A12	M & M CLEANERS, HIEU	23080 ALESSANDRO BLV	DRYCLEANERS	Higher	259, 0.049,
A13	A 1 CLEANERS	23080 ALESSADRO BLVD	RCRA-SQG, FINDS, ECHO	Higher	259, 0.049,
A14	A-1 CLEANER'S	23080 ALESSANDRO BLV	DRYCLEANERS	Higher	259, 0.049,
A15	A1 CLEANERS	23080 ALESSANDRO BLV	EDR Hist Cleaner	Higher	259, 0.049,
B16	RIVERSIDE COUNTY DEP	14290 FREDERICK ST	RCRA NonGen / NLR	Lower	707, 0.134,
B17	RIVERSIDE COUNTY WAS	14290 FREDERICK ST	HAULERS, CERS HAZ WASTE, CERS TANKS, HAZNET, CERS	Lower	707, 0.134,
B18	COUNTY OF RIVERSIDE	14290 FREDERICK ST	UST	Lower	707, 0.134,
B19	RIVERSIDE COUNTY DEP	14310 FREDERICK STRE	ENVIROSTOR, HWT	Lower	720, 0.136,
C20	TESORO (USA) 63348	22990 ALESSANDRO BLV	CERS HAZ WASTE, CERS TANKS, HAZNET, CERS	Higher	792, 0.150,
C21	TESORO USA 63348	22990 ALESSANDRO BLV	RCRA NonGen / NLR	Higher	792, 0.150,
C22	THRIFTY OIL #348	22990 ALESSANDRO BLV	LUST, SWEEPS UST, CA FID UST, HIST CORTESE	Higher	792, 0.150,
C23	ARCO FACILITY NO 097	22990 ALLESANDRO BLV	RCRA-SQG, FINDS, ECHO	Higher	792, 0.150,
C24	TESORO (USA) 63348	22990 ALESSANDRO BLV	UST	Higher	792, 0.150,
C25	THRIFTY OIL STN 348	22990 ALESSANDRO	LUST, HIST UST, CERS	Higher	792, 0.150,
D26	ALESSANDRO ARCO AM/P	23501 ALESSANDRO BLV	LUST, UST, CERS	Higher	875, 0.166,
D27	TABASSI INC DBA ALES	23501 ALESSANDRO BLV	RCRA NonGen / NLR	Higher	875, 0.166,
D28	ARCO/SHAMAAH, INC.	23501 ALESSANDRO BLV	UST	Higher	875, 0.166,
D29	SHAMAAH INC DBA ARCO	23501 ALESSANDRO BLV	RCRA NonGen / NLR	Higher	875, 0.166,
D30	ARCO AM/PM MINI MARK	23501 ALESSANDRO BLV	CERS HAZ WASTE, SWEEPS UST, CERS TANKS, CA FID...	Higher	875, 0.166,
D31	PRESTIGE STATIONS IN	23501 ALESSANDRO BLV	RCRA NonGen / NLR, FINDS, ECHO	Higher	875, 0.166,
D32	U S POST OFFICE-MORE	23580 ALESSANDRO BLV	SWEEPS UST, CA FID UST	Higher	1084, 0.206,
E33	MARCH FIELD SKEET RA		UXO	Lower	1094, 0.207,
E34	MARCH FIELD		FUDS	Lower	1094, 0.207,
35	FRAZEE PAINT	14300 GRAHAM ST	RCRA-SQG, CERS HAZ WASTE, HAZNET, NPDES, CIWQS,...	Lower	1236, 0.234,
F36	CHASE AUTO TECH	23615 ALESSANDRO BLV	RCRA NonGen / NLR	Higher	1254, 0.237,
F37	CHASE AUTO TECH	23615 ALESSANDRO BLV	CERS HAZ WASTE, CERS	Higher	1254, 0.237,

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAPPED SITES SUMMARY

Target Property Address:
 APN 297-170-002, AND 297-170-003
 MORENO VALLEY, CA 92553

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & DIRECTIO
F38	SPEEDY MOBILE LUBE	23615 ALESSANDRO BLV	RCRA NonGen / NLR	Higher	1254, 0.231 st
39	SOUTHERN AUTO SUPPLY	22886 ALESSANDRO BLV	RCRA-SQG	Higher	1289, 0.24 W
40	CIRCLE K (FORMER)	22790 ALESSANDRO BLV	LUST, SWEEPS UST, CA FID UST, HIST CORTESE, CERS	Higher	1807, 0.34 st
41	ALPER CLEANERS	14420 ELSWORTH ST.,	ENVIROSTOR	Lower	3677, 0.69 W
42	TOWNGATE ELEMENTARY	ELSWORTH STREET/DRAC	ENVIROSTOR, SCH	Higher	5248, 0.99 /

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

EXECUTIVE SUMMARY

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
 AST..... Aboveground Petroleum Storage Tank Facilities
 INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
 INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
 SWRCY..... Recycler Database
 HAULERS..... Registered Waste Tire Haulers Listing
 INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
 ODI..... Open Dump Inventory
 DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
 IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
 HIST Cal-Sites..... Historical Calsites Database
 SCH..... School Property Evaluation Program
 CDL..... Clandestine Drug Labs
 Toxic Pits..... Toxic Pits Cleanup Act Sites
 US CDL..... National Clandestine Laboratory Register
 PFAS..... PFAS Contamination Site Location Listing

Local Land Records

LIENS..... Environmental Liens Listing
 LIENS 2..... CERCLA Lien Information

EXECUTIVE SUMMARY

DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
 CHMIRS..... California Hazardous Material Incident Report System
 LDS..... Land Disposal Sites Listing
 MCS..... Military Cleanup Sites Listing
 SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
 US FIN ASSUR..... Financial Assurance Information
 EPA WATCH LIST..... EPA WATCH LIST
 2020 COR ACTION..... 2020 Corrective Action Program List
 TSCA..... Toxic Substances Control Act
 TRIS..... Toxic Chemical Release Inventory System
 SSTS..... Section 7 Tracking Systems
 RMP..... Risk Management Plans
 RAATS..... RCRA Administrative Action Tracking System
 PRP..... Potentially Responsible Parties
 PADS..... PCB Activity Database System
 ICIS..... Integrated Compliance Information System
 FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
 MLTS..... Material Licensing Tracking System
 COAL ASH DOE..... Steam-Electric Plant Operation Data
 COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
 PCB TRANSFORMER..... PCB Transformer Registration Database
 RADINFO..... Radiation Information Database
 HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
 DOT OPS..... Incident and Accident Data
 CONSENT..... Superfund (CERCLA) Consent Decrees
 INDIAN RESERV..... Indian Reservations
 FUSRAP..... Formerly Utilized Sites Remedial Action Program
 UMTRA..... Uranium Mill Tailings Sites
 LEAD SMELTERS..... Lead Smelter Sites
 US AIRS..... Aerometric Information Retrieval System Facility Subsystem
 US MINES..... Mines Master Index File
 ABANDONED MINES..... Abandoned Mines
 FINDS..... Facility Index System/Facility Registry System
 DOCKET HWC..... Hazardous Waste Compliance Docket Listing
 ECHO..... Enforcement & Compliance History Information
 FUELS PROGRAM..... EPA Fuels Program Registered Listing
 CA BOND EXP. PLAN..... Bond Expenditure Plan
 Cortese..... "Cortese" Hazardous Waste & Substances Sites List
 CUPA Listings..... CUPA Resources List
 EML..... Emissions Inventory Data
 ENF..... Enforcement Action Listing
 Financial Assurance..... Financial Assurance Information Listing
 HAZNET..... Facility and Manifest Data
 ICE..... ICE
 HWP..... EnviroStor Permitted Facilities Listing
 MINES..... Mines Site Location Listing

EXECUTIVE SUMMARY

MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
CERS.....	CERS
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
MINES MRDS.....	Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historical Auto Stations

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF.....	Recovered Government Archive Solid Waste Facilities List
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 10/25/2019 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE Cerclis ID:: 902761 EPA Id: CA4570024527	22 CSG/CC	S 1/4 - 1/2 (0.363 mi.)	0	8

Federal CERCLIS list

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 10/25/2019 has revealed that there is 1 SEMS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE Site ID: 0902761 EPA Id: CA4570024527	22 CSG/CC	S 1/4 - 1/2 (0.363 mi.)	0	8

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/24/2019 has revealed that there are 4 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
A 1 CLEANERS	23080 ALESSADRO BLVD	NW 0 - 1/8 (0.049 mi.)	A13	55

EXECUTIVE SUMMARY

EPA ID:: CAD983613001				
ARCO FACILITY NO 097	22990 ALLESANDRO BLV	WNW 1/8 - 1/4 (0.150 mi.)	C23	80
EPA ID:: CAR000102798				
SOUTHERN AUTO SUPPLY	22886 ALESSANDRO BLV	WNW 1/8 - 1/4 (0.244 mi.)	39	136
EPA ID:: CAR000075945				
Lower Elevation	Address	Direction / Distance	Map ID	Page
FRAZEE PAINT	14300 GRAHAM ST	SE 1/8 - 1/4 (0.234 mi.)	35	113
EPA ID:: CAR000209171				

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 08/19/2019 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE	22 CSG/CC	S 1/4 - 1/2 (0.363 mi.)	0	8
EPA ID:: CA4570024527				
EPA ID:: CA4570024527				

US INST CONTROL: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROL list, as provided by EDR, and dated 08/19/2019 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE	22 CSG/CC	S 1/4 - 1/2 (0.363 mi.)	0	8
EPA ID:: CA4570024527				

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/29/2019 has revealed that there are

EXECUTIVE SUMMARY

3 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
TOWNGATE ELEMENTARY Status: No Action Required Facility Id: 33650012	ELSWORTH STREET/DRAC	NW 1/2 - 1 (0.994 mi.)	42	143
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
RIVERSIDE COUNTY DEP Status: Inactive - Action Required Facility Id: 80000870	14310 FREDERICK STRE	WSW 1/8 - 1/4 (0.136 mi.)	B19	68
ALPER CLEANERS Status: Refer: 1248 Local Agency Facility Id: 33720002	14420 ELSWORTH ST.,	WSW 1/2 - 1 (0.696 mi.)	41	142

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 5 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PLAZA HAND CAR WASH Database: LUST, Date of Government Version: 09/09/2019 Database: RIVERSIDE CO. LUST, Date of Government Version: 07/10/2019 Status: Completed - Case Closed Facility Id: 200521458 Global Id: T0606563337 Facility Status: 9	23100 ALESSANDRO BLV	NW 0 - 1/8 (0.032 mi.)	A2	34
THRIFTY OIL #348 Database: LUST REG 8, Date of Government Version: 02/14/2005 Database: RIVERSIDE CO. LUST, Date of Government Version: 07/10/2019 Facility Status: Preliminary site assessment underway Facility Id: 95137 Facility Status: 9 Global ID: T0606500421	22990 ALESSANDRO BLV	WNW 1/8 - 1/4 (0.150 mi.)	C22	77
THRIFTY OIL STN 348 Database: LUST, Date of Government Version: 09/09/2019 Status: Completed - Case Closed Global Id: T0606500421	22990 ALESSANDRO	WNW 1/8 - 1/4 (0.150 mi.)	C25	82
ALESSANDRO ARCO AM/P Database: LUST REG 8, Date of Government Version: 02/14/2005 Database: LUST, Date of Government Version: 09/09/2019 Database: RIVERSIDE CO. LUST, Date of Government Version: 07/10/2019 Status: Completed - Case Closed Facility Status: Case Closed Facility Id: 200016218	23501 ALESSANDRO BLV	E 1/8 - 1/4 (0.166 mi.)	D26	85

EXECUTIVE SUMMARY

Facility Id: FA0013987

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
COUNTY OF RIVERSIDE	14290 FREDERICK ST	WSW 1/8 - 1/4 (0.134 mi.)	B18	67
Database: RIVERSIDE CO. UST, Date of Government Version: 07/10/2019				
Database: UST, Date of Government Version: 09/09/2019				
Facility Id: FA0023076				

State and tribal Brownfields sites

BROWNFIELDS: A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

A review of the BROWNFIELDS list, as provided by EDR, and dated 09/23/2019 has revealed that there is 1 BROWNFIELDS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>M&M DRY CLEANERS</i>	<i>23080 ALESSANDRO BOU</i>	<i>NW 0 - 1/8 (0.049 mi.)</i>	<i>A9</i>	<i>52</i>

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 08/14/2019 has revealed that there are 6 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>M & M CLEANERS</i>	<i>23080 ALESSANDRO BLV</i>	<i>NW 0 - 1/8 (0.049 mi.)</i>	<i>A7</i>	<i>49</i>
<i>TESORO (USA) 63348</i>	<i>22990 ALESSANDRO BLV</i>	<i>WNW 1/8 - 1/4 (0.150 mi.)</i>	<i>C20</i>	<i>69</i>
<i>ARCO AM/PM MINI MARK</i>	<i>23501 ALESSANDRO BLV</i>	<i>E 1/8 - 1/4 (0.166 mi.)</i>	<i>D30</i>	<i>91</i>
<i>CHASE AUTO TECH</i>	<i>23615 ALESSANDRO BLV</i>	<i>E 1/8 - 1/4 (0.237 mi.)</i>	<i>F37</i>	<i>129</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>RIVERSIDE COUNTY WAS</i>	<i>14290 FREDERICK ST</i>	<i>WSW 1/8 - 1/4 (0.134 mi.)</i>	<i>B17</i>	<i>59</i>
<i>FRAZEE PAINT</i>	<i>14300 GRAHAM ST</i>	<i>SE 1/8 - 1/4 (0.234 mi.)</i>	<i>35</i>	<i>113</i>

EXECUTIVE SUMMARY

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 4 SWEEPS UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PLAZA HAND CAR WASH Status: A Tank Status: A Comp Number: 300	23100 ALESSANDRO B	NW 0 - 1/8 (0.032 mi.)	A3	46
THRIFTY OIL #348 Status: A Tank Status: A Comp Number: 4735	22990 ALESSANDRO BLV	WNW 1/8 - 1/4 (0.150 mi.)	C22	77
ARCO AM/PM MINI MARK Status: A Tank Status: A Comp Number: 17	23501 ALESSANDRO BLV	E 1/8 - 1/4 (0.166 mi.)	D30	91
U S POST OFFICE-MORE Status: A Tank Status: A Comp Number: 11115	23580 ALESSANDRO BLV	ENE 1/8 - 1/4 (0.205 mi.)	D32	111

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
THRIFTY OIL STN 348 Facility Id: 00000004735	22990 ALESSANDRO	WNW 1/8 - 1/4 (0.150 mi.)	C25	82

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 3 CA FID UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
THRIFTY OIL #348 Facility Id: 33001092 Status: A	22990 ALESSANDRO BLV	WNW 1/8 - 1/4 (0.150 mi.)	C22	77
ARCO AM/PM MINI MARK Facility Id: 33004554	23501 ALESSANDRO BLV	E 1/8 - 1/4 (0.166 mi.)	D30	91

EXECUTIVE SUMMARY

EPA ID:: CAL000260330

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 05/15/2019 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH FIELD		SW 1/8 - 1/4 (0.207 mi.)	E34	112

DOD: Consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE		0 - 1/8 (0.000 mi.)	0	8

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 10/25/2019 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE EPA ID:: CA4570024527	22 CSG/CC	S 1/4 - 1/2 (0.363 mi.)	0	8

UXO: A listing of unexploded ordnance site locations

A review of the UXO list, as provided by EDR, and dated 12/31/2017 has revealed that there is 1 UXO site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH FIELD SKEET RA		SW 1/8 - 1/4 (0.207 mi.)	E33	112

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, has revealed that there are 7 DRYCLEANERS sites

EXECUTIVE SUMMARY

within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
M & M CLEANERS, SANG Database: DRYCLEAN SOUTH COAST, Date of Government Version: 09/27/2019	23080 ALESSANDRO BLV	NW 0 - 1/8 (0.049 mi.)	A4	47
EXPEDIENT CLEANERS I Database: DRYCLEANERS, Date of Government Version: 06/04/2019 EPA Id: CAL000303565	23080 ALESSANDRO BLV	NW 0 - 1/8 (0.049 mi.)	A5	47
M & M CLEANERS, TAN Database: DRYCLEAN SOUTH COAST, Date of Government Version: 09/27/2019	23080 ALESSANDRO BLV	NW 0 - 1/8 (0.049 mi.)	A6	48
M & M CLEANERS, EXPE Database: DRYCLEAN SOUTH COAST, Date of Government Version: 09/27/2019	23080 ALESSANDRO BLV	NW 0 - 1/8 (0.049 mi.)	A10	54
A-1 CLEANERS Database: DRYCLEAN SOUTH COAST, Date of Government Version: 09/27/2019	23080 ALESSANDRO BLV	NW 0 - 1/8 (0.049 mi.)	A11	54
M & M CLEANERS, HIEU Database: DRYCLEAN SOUTH COAST, Date of Government Version: 09/27/2019	23080 ALESSANDRO BLV	NW 0 - 1/8 (0.049 mi.)	A12	55
A-1 CLEANER'S Database: DRYCLEAN SOUTH COAST, Date of Government Version: 09/27/2019	23080 ALESSANDRO BLV	NW 0 - 1/8 (0.049 mi.)	A14	57

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
THRIFTY OIL #348 Reg Id: 083302648T	22990 ALESSANDRO BLV	WNW 1/8 - 1/4 (0.150 mi.)	C22	77
ARCO AM/PM MINI MARK Reg Id: 083303648T	23501 ALESSANDRO BLV	E 1/8 - 1/4 (0.166 mi.)	D30	91
CIRCLE K (FORMER) Reg Id: 083301110T	22790 ALESSANDRO BLV	W 1/4 - 1/2 (0.342 mi.)	40	137

HWT: A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

A review of the HWT list, as provided by EDR, and dated 10/07/2019 has revealed that there is 1 HWT site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
RIVERSIDE COUNTY DEP Reg Num: 3450	14310 FREDERICK STRE	WSW 1/8 - 1/4 (0.136 mi.)	B19	68

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

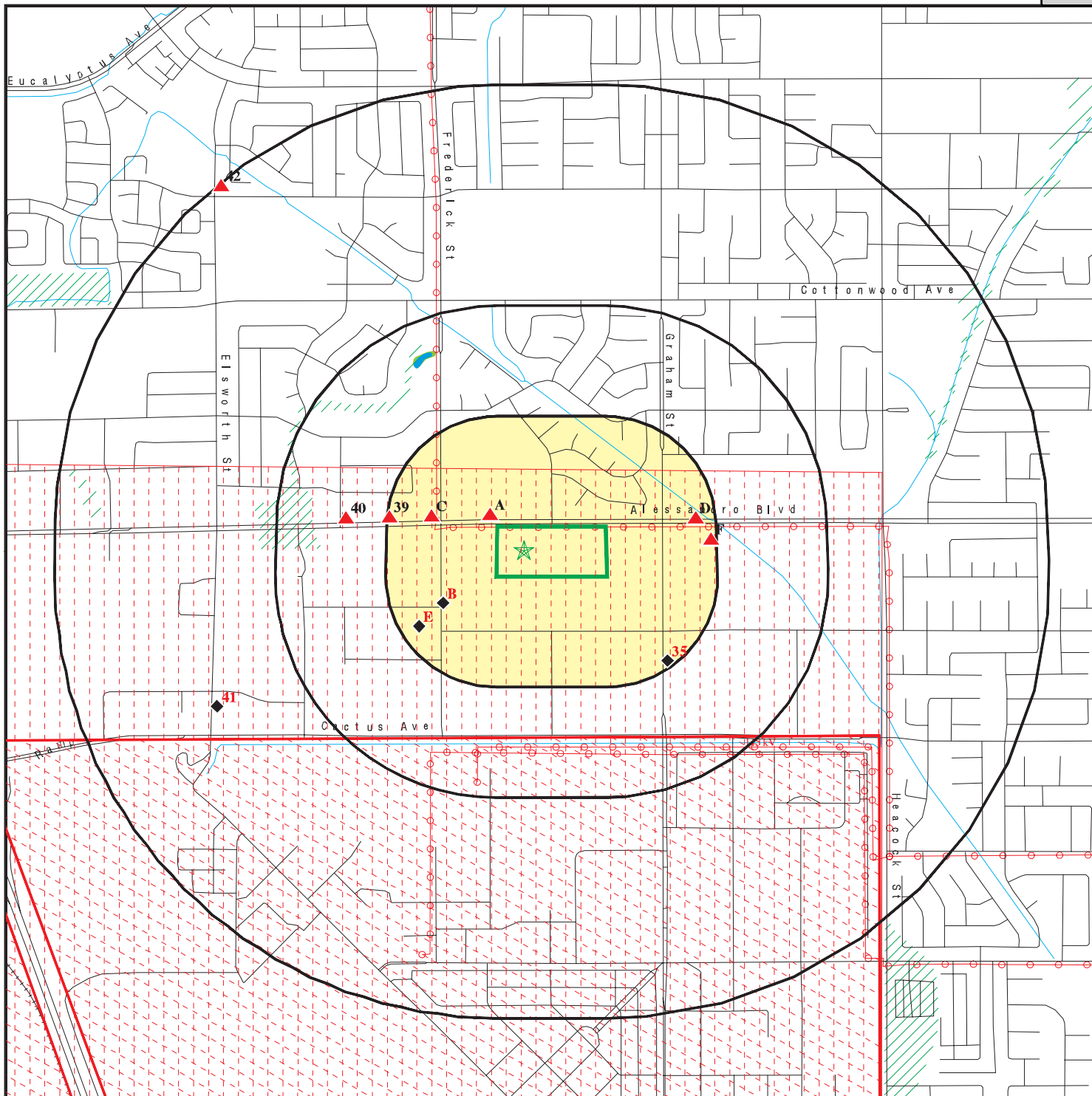
A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 2 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
M AND M CLEANERS	23100 ALESSANDRO BLV	NW 0 - 1/8 (0.032 mi.)	A1	34
A1 CLEANERS	23080 ALESSANDRO BLV	NW 0 - 1/8 (0.049 mi.)	A15	57

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

<u>Site Name</u>	<u>Database(s)</u>
HARBOR FREIGHT TOOLS, BRODIAEA WAR	CERS HAZ WASTE, CERS
UCR - PARKING LOT 6	LUST
U.S. AIR FORCE - MARCH AFB (FORMER	CPS-SLIC
RIVERSIDE PLUME	CPS-SLIC



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

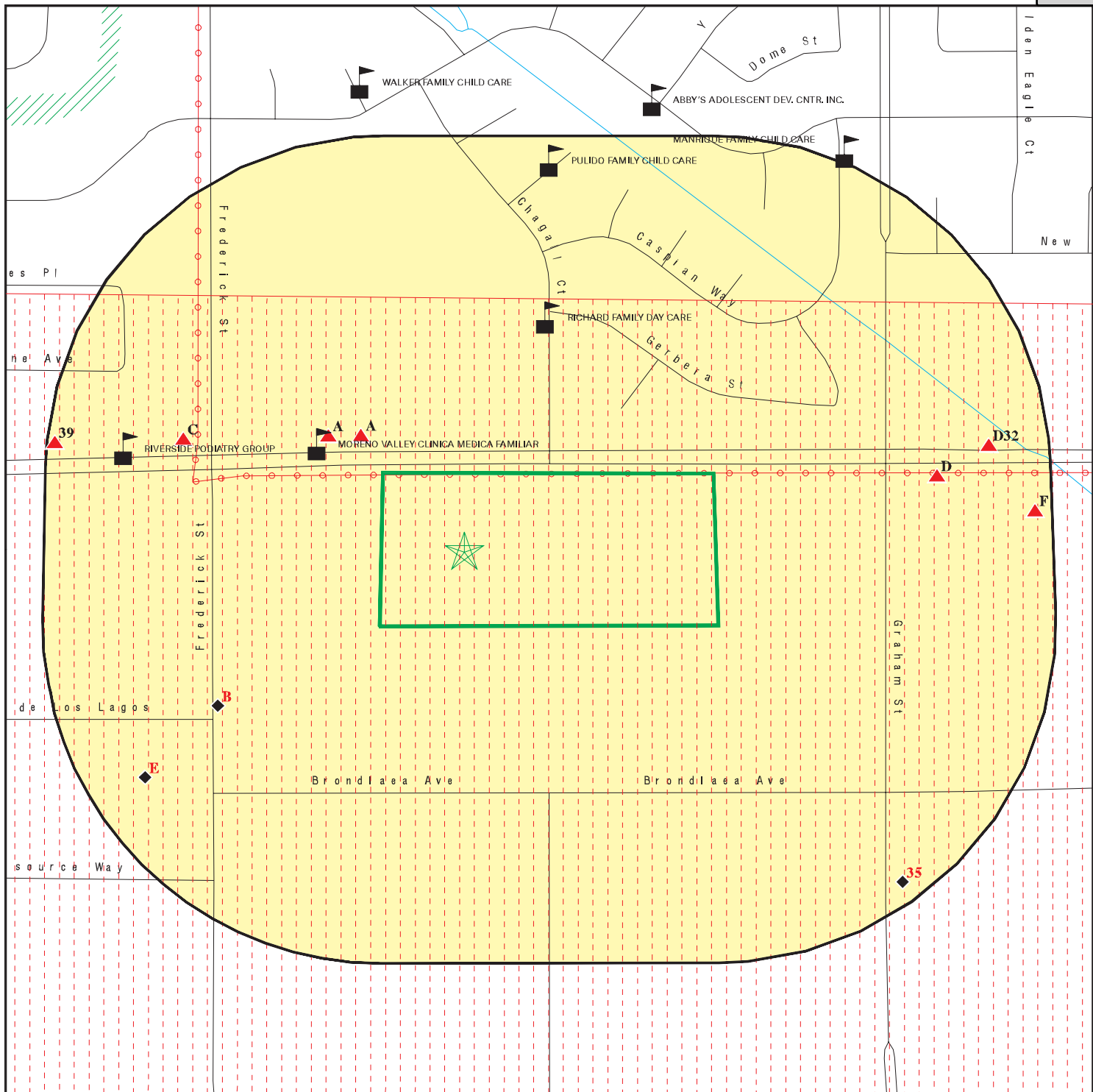
Areas of Concern








This report includes Interactive Map Layers display and/or hide map information. The legend includes only those icons for the default map view.





SITE NAME: 17.7 Acre
 ADDRESS: APN 297-170-002, and 297-170-003
 MORENO VALLEY CA 92553
 LAT/LONG: 33.91625 / 117.257877


CLIENT: Partner Engineering and Science, Inc.
 CONTACT: Roy Zamarripa
 INQUIRY #: 5885406.2s
 DATE: November 26, 2019 4:09 pm

Packet Pg. 2446



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Power transmission lines
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard

 Areas of Concern



This report includes Interactive Map Layers display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 17.7 Acre
 ADDRESS: APN 297-170-002, and 297-170-003
 MORENO VALLEY CA 92553
 LAT/LONG: 33.91625 / 117.257877

CLIENT: Partner Engineering and Science, Inc.
 CONTACT: Roy Zamarripa
 INQUIRY #: 5885406.2s
 DATE: November 26, 2019 4:11 pm

Packet Pg. 2447

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	1	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	1	NR	NR	1
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	3	NR	NR	NR	4
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	1	NR	NR	1
US INST CONTROL	0.500		0	0	1	NR	NR	1
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
ENVIROSTOR	1.000		0	1	0	2	NR	3
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		1	3	1	NR	NR	5

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		1	0	0	NR	NR	1
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	4	NR	NR	NR	5
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		1	0	0	NR	NR	1
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		1	5	NR	NR	NR	6
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	3	NR	NR	NR	4
HIST UST	0.250		0	1	NR	NR	NR	1
CA FID UST	0.250		0	3	NR	NR	NR	3
CERS TANKS	0.250		0	3	NR	NR	NR	3
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	7	NR	NR	NR	8
FUDS	1.000		0	1	0	0	NR	1
DOD	1.000		1	0	0	0	NR	1
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	1	0	NR	1
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	1	0	0	NR	1
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

DOD
Region

MARCH AIR FORCE BASE (CLOSED)
MARCH AIR FORCE BASE (CLO (County), CA

DOD CUSA143538
N/A

< 1/8
1 ft.

DOD:
Feature 1: Air Force DOD
Feature 2: Not reported
Feature 3: Not reported
URL: Not reported
Name 1: March Air Force Base (Closed)
Name 2: Not reported
Name 3: Not reported
State: CA
DOD Site: Yes
Tile name: CARIVERSIDE

NPL
Region
South
1/4-1/2
1919 ft.

MARCH AIR FORCE BASE
22 CSG/CC
RIVERSIDE, CA 92518

NPL 1000169261
SEMS CA4570024527
RCRA-LQG
US ENG CONTROLS
US INST CONTROL
ROD
PRP

NPL:
Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City, State, Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
EPA Region: 9
Federal: Y
Final Date: 1989-11-21 00:00:00
Site ID: 902761
Latitude: 33.906388999999997
Site Score: 31.940000000000001
Longitude: -117.2557

NPL:
EPA ID: CA4570024527
NPL Status: Currently on the Final NPL
Category Description: Depth To Aquifer-> 50 And <= 100 Feet
Category Value: 65

EPA ID: CA4570024527
NPL Status: Currently on the Final NPL
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value: 10

NPL:
EPA ID: CA4570024527
Site ID: 0902761
Site Status: F
Federal Site: Y
EPA Region: 09
Date Proposed: 07/14/89
Date Deleted: Not reported
Date Finalized: 11/21/89

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

NPL:

EPA ID: CA4570024527
NPL Status: Currently on the Final NPL
Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

EPA ID: CA4570024527
NPL Status: Currently on the Final NPL
Substance ID: A046
Substance: POLYCHLORINATED BIPHENYLS
CAS #: 1336-36-3
Pathway: GROUND WATER PATHWAY
Scoring: 3

EPA ID: CA4570024527
NPL Status: Currently on the Final NPL
Substance ID: U210
Substance: TETRACHLOROETHENE
CAS #: 127-18-4
Pathway: GROUND WATER PATHWAY
Scoring: 2

EPA ID: CA4570024527
NPL Status: Currently on the Final NPL
Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)
CAS #: 79-01-6
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL:

EPA ID: CA4570024527
Summary: Conditions at proposal (July 14, 1989): March Air Force Base (MAFB) covers approximately 7,000 acres near Riverside in the Moreno Valley in Riverside County, California. MAFB is adjacent to light industrial, agricultural, and residential areas.

EPA ID: CA4570024527
Summary: as. Established in 1918 as the Alessandro Aviation Field, MAFB has served as a training base and refueling operations base. Industrial operations (including aircraft maintenance and repair) involved use of solvents and disposal of solvent waste.

EPA ID: CA4570024527
Summary: es. MAFB is participating in the Installation Restoration Program (IRP), established in 1978. Under this program, the Department of Defense seeks to identify, investigate, and clean up contamination from hazardous materials. As part of

EPA ID: CA4570024527
Summary: IRP, the Air Force investigated 28 potentially contaminated disposal areas. MAFB Well No. 1 on-base was found to be contaminated with trichloroethylene, tetrachloroethylene, and cis-1,2-dichloroethylene.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

at levels that exceed State drinking water

EPA ID: CA4570024527
Summary: er standards. It was taken out of service. Soils on the base are contaminated with toluene and benzene. An estimated 11,600 people obtain drinking water from municipal wells within 3 miles of hazardous substances on MAFB. The Air Force

EPA ID: CA4570024527
Summary: is conducting a remedial investigation/ feasibility study (RI/FS) to determine the type and extent of contamination at the base and identify alternatives for remedial action. Status November 21, 1989): Field work continues on the RI/FS.

EPA ID: CA4570024527
Summary: Not reported

NPL:
EPA ID: CA4570024527
NPL Status: Final
Proposed Date: 07/14/1989
Final Date: 11/21/1989
Deleted Date: Not reported

NPL:
EPA ID: CA4570024527
NPL Name: MARCH AIR FORCE BASE

SEMS:
Site ID: 0902761
EPA ID: CA4570024527
Cong District: 41,43
FIPS Code: 06065
Latitude: 33.906389
Longitude: -117.255700
FF: Y
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:
Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 02
Action Code: RO
Action Name: ROD
SEQ: 4
Start Date: 2004-05-11 04:00:00
Finish Date: 5/11/2004 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 02
Action Code: RO
Action Name: ROD
SEQ: 5
Start Date: 2005-09-30 04:00:00
Finish Date: 9/30/2005 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: AR
Action Name: ADMIN REC
SEQ: 1
Start Date: 2000-10-24 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 01
Action Code: LX
Action Name: FF RD
SEQ: 1
Start Date: 1996-04-07 05:00:00
Finish Date: 4/18/1996 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 04
Action Code: LW
Action Name: FF RI/FS
SEQ: 2
Start Date: 1990-09-27 04:00:00
Finish Date: 9/29/2005 4:00:00 AM

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y
OU:	04
Action Code:	RO
Action Name:	ROD
SEQ:	3
Start Date:	2005-09-29 04:00:00
Finish Date:	9/29/2005 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y
OU:	01
Action Code:	LY
Action Name:	FF RA
SEQ:	1
Start Date:	1996-03-05 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LW
Action Name:	FF RI/FS
SEQ:	6
Start Date:	1995-07-01 04:00:00
Finish Date:	7/1/1997 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	RO
Action Name:	ROD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

SEQ:	7
Start Date:	2004-04-01 05:00:00
Finish Date:	4/1/2004 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y
OU:	01
Action Code:	LW
Action Name:	FF RI/FS
SEQ:	1
Start Date:	1990-09-27 04:00:00
Finish Date:	6/20/1996 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y
OU:	01
Action Code:	RO
Action Name:	ROD
SEQ:	1
Start Date:	1996-06-20 04:00:00
Finish Date:	6/20/1996 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LW
Action Name:	FF RI/FS
SEQ:	4
Start Date:	1992-01-24 05:00:00
Finish Date:	4/30/1995 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

OU: 05
Action Code: LW
Action Name: FF RI/FS
SEQ: 5
Start Date: 2005-10-30 04:00:00
Finish Date: 5/21/2015 5:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 05
Action Code: RO
Action Name: ROD
SEQ: 6
Start Date: 2019-04-22 04:00:00
Finish Date: 4/22/2019 4:00:00 AM
Qual: R
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 01
Action Code: EE
Action Name: EE/CA
SEQ: 1
Start Date: 2018-11-12 05:00:00
Finish Date: 11/12/2018 5:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 6/1/1987 4:00:00 AM
Qual: L
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: NF
Action Name: NPL FINL
SEQ: 1
Start Date: 1989-11-21 05:00:00
Finish Date: 11/21/1989 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1985-02-01 06:00:00
Finish Date: 2/1/1985 6:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: NP
Action Name: PROPOSED
SEQ: 1
Start Date: 1989-07-14 04:00:00
Finish Date: 7/14/1989 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: HR
Action Name: HAZRANK
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 6/1/1987 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: 1987-02-01 05:00:00
Finish Date: 2/1/1987 5:00:00 AM
Qual: L
Current Action Lead: Fed Fac

RCRA-LQG:

Date form received by agency: 2016-02-29 00:00:00.0
Facility name: MARCH AIR RESERVE BASE
Facility address: 610 MEYER DR
BLDG 2403
MARCH ARB, CA 92518
EPA ID: CA4570024527
Mailing address: MEYER DR
BLDG 2403
MARCH ARB, CA 92518
Contact: CRAIG HUNTER
Contact address: MEYER DR BLDG 2403
MARCH ARB, CA 92518
Contact country: US
Contact telephone: 951-655-5082
Contact email: CRAIG.HUNTER.1@US.AF.MIL
EPA Region: 09
Land type: Federal
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: GEN. RUSSELL A. MUNCY
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Owner/operator extension: Not reported
Legal status: Federal
Owner/Operator Type: Operator
Owner/Op start date: 2013-11-01 00:00:00.0
Owner/Op end date: Not reported

Owner/operator name: US AIR FORCE
Owner/operator address: GRAEBER BLDG 470
MARCH ARB, CA 92518

Owner/operator country: US
Owner/operator telephone: 951-655-4665
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Federal
Owner/Operator Type: Owner
Owner/Op start date: 1945-01-01 00:00:00.0
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Universal Waste Summary:

Waste type: Thermostats
Accumulated waste on-site: Yes
Generated waste on-site: No

Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: No

Waste type: Lamps
Accumulated waste on-site: Yes
Generated waste on-site: No

Historical Generators:

Date form received by agency: 2014-10-22 00:00:00.0
Site name: MARCH AIR RESERVE BASE
Classification: Large Quantity Generator

Date form received by agency: 2013-03-20 00:00:00.0
Site name: MARCH AIR RESERVE BASE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Classification: Large Quantity Generator

Date form received by agency: 2010-07-15 00:00:00.0
Site name: MARCH AIR RESERVE BASE
Classification: Large Quantity Generator

Date form received by agency: 2008-03-26 00:00:00.0
Site name: MARCH AIR RESERVE BASE
Classification: Large Quantity Generator

Date form received by agency: 2006-02-08 00:00:00.0
Site name: MARCH AIR RESERVE BASE
Classification: Large Quantity Generator

Date form received by agency: 2004-02-25 00:00:00.0
Site name: MARCH AIR RESERVE BASE
Classification: Large Quantity Generator

Date form received by agency: 2002-04-10 00:00:00.0
Site name: MARCH AIR RESERVE BASE
Classification: Large Quantity Generator

Date form received by agency: 2000-10-12 00:00:00.0
Site name: MARCH ARB CA
Classification: Large Quantity Generator

Date form received by agency: 2000-07-14 00:00:00.0
Site name: MARCH AIR RESERVE BASE
Classification: Large Quantity Generator

Date form received by agency: 1999-03-04 00:00:00.0
Site name: MARCH ARB, CA
Classification: Large Quantity Generator

Date form received by agency: 1996-09-01 00:00:00.0
Site name: MARCH AIR RESERVE BASE
Classification: Large Quantity Generator

Date form received by agency: 1996-03-26 00:00:00.0
Site name: MARCH AFB, CA
Classification: Large Quantity Generator

Date form received by agency: 1994-03-31 00:00:00.0
Site name: MARCH AIR FORCE BASE, CA
Classification: Large Quantity Generator

Date form received by agency: 1992-03-30 00:00:00.0
Site name: MARCH AIR FORCE BASE
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 151
. Waste name: Asbestos-containing waste

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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MARCH AIR FORCE BASE (Continued)

1000169261

. Waste code:	181
. Waste name:	Other inorganic solid waste
. Waste code:	214
. Waste name:	Unspecified solvent mixture
. Waste code:	223
. Waste name:	Unspecified oil-containing waste
. Waste code:	241
. Waste name:	Tank bottom waste
. Waste code:	281
. Waste name:	Adhesives
. Waste code:	331
. Waste name:	Off-specification, aged, or surplus organics
. Waste code:	342
. Waste name:	Organic liquids with metals (see 121)
. Waste code:	343
. Waste name:	Unspecified organic liquid mixture
. Waste code:	352
. Waste name:	Other organic solids
. Waste code:	461
. Waste name:	Degreasing sludge
. Waste code:	541
. Waste name:	Photochemicals / photo processing waste
. Waste code:	723
. Waste name:	Liquids with chromium (VI) > 500 mg/l
. Waste code:	791
. Waste name:	Liquids with pH < 2
. Waste code:	792
. Waste name:	Liquids with pH < 2 with metals
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D003
. Waste name:	REACTIVE WASTE
. Waste code:	D004
. Waste name:	ARSENIC
. Waste code:	D005
. Waste name:	BARIUM

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

- . Waste code: D006
- . Waste name: CADMIUM

- . Waste code: D007
- . Waste name: CHROMIUM

- . Waste code: D008
- . Waste name: LEAD

- . Waste code: D009
- . Waste name: MERCURY

- . Waste code: D011
- . Waste name: SILVER

- . Waste code: D018
- . Waste name: BENZENE

- . Waste code: D021
- . Waste name: CHLOROBENZENE

- . Waste code: D035
- . Waste name: METHYL ETHYL KETONE

- . Waste code: F001
- . Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

- . Waste code: F002
- . Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

- . Waste code: F003
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

- . Waste code: F005
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

- . Waste code: P098
- . Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

- . Waste code: U188
- . Waste name: PHENOL

- . Waste code: U227
- . Waste name: 1,1,2-TRICHLOROETHANE (OR) ETHANE, 1,1,2-TRICHLORO-

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

- Waste code: D001
- Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
- Amount (Lbs): 15899.4

- Waste code: D002
- Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
- Amount (Lbs): 186

- Waste code: D003
- Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
- Amount (Lbs): 1

- Waste code: D005
- Waste name: BARIUM
- Amount (Lbs): 8

- Waste code: D006
- Waste name: CADMIUM
- Amount (Lbs): 843

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Waste code:	D007
Waste name:	CHROMIUM
Amount (Lbs):	1026
Waste code:	D008
Waste name:	LEAD
Amount (Lbs):	843
Waste code:	D009
Waste name:	MERCURY
Amount (Lbs):	2
Waste code:	D011
Waste name:	SILVER
Amount (Lbs):	1
Waste code:	D018
Waste name:	BENZENE
Amount (Lbs):	3436
Waste code:	D035
Waste name:	METHYL ETHYL KETONE
Amount (Lbs):	11381

Facility Has Received Notices of Violations:

Regulation violated:	FR - 262.30-34.C
Area of violation:	Generators - General
Date violation determined:	1995-04-27 00:00:00.0
Date achieved compliance:	2000-04-27 00:00:00.0
Violation lead agency:	EPA
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	1995-04-28 00:00:00.0
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	EPA
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	FR - 262.10-12.A
Area of violation:	Generators - General
Date violation determined:	1984-03-05 00:00:00.0
Date achieved compliance:	1995-04-04 00:00:00.0
Violation lead agency:	EPA
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	1984-05-18 00:00:00.0
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	EPA
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Evaluation Action Summary:

Evaluation date:	2006-11-02 00:00:00.0
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Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 1996-05-06 00:00:00.0
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 1995-04-04 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 2000-04-27 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1984-03-05 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 1995-04-04 00:00:00.0
Evaluation lead agency: EPA

Site:

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
Event Code: Not reported
Action Taken Date: 09/30/2005
EPA ID: CA4570024527
Site ID: 0902761
Action Name: RECORD OF DECISION
Action ID: 005
Operable Unit: 02
Action Completion Date: 09/30/2005
Contaminated Media: Groundwater
Engineering Control: No Action
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Media:

Engineering Control: Bioremediation (Ex-Situ)
EPA ID: CA4570024527
Contaminated Media: Soil
Site ID: 0902761
Action ID: 001
Action Completion Date: 08/24/2000
Operable Unit: 01
Action Name: Explanation Of Significant Differences
Action Taken Date: 10/31/2000
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Engineering Control: Discharge

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

EPA ID:	CA4570024527
Contaminated Media:	Groundwater
Site ID:	0902761
Action ID:	001
Action Completion Date:	06/20/1996
Operable Unit:	01
Action Name:	RECORD OF DECISION
Action Taken Date:	06/30/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	Extraction
EPA ID:	CA4570024527
Contaminated Media:	Groundwater
Site ID:	0902761
Action ID:	001
Action Completion Date:	06/20/1996
Operable Unit:	01
Action Name:	RECORD OF DECISION
Action Taken Date:	06/30/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	Liquid Phase Carbon Adsorption
EPA ID:	CA4570024527
Contaminated Media:	Groundwater
Site ID:	0902761
Action ID:	001
Action Completion Date:	06/20/1996
Operable Unit:	01
Action Name:	RECORD OF DECISION
Action Taken Date:	06/30/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	Monitoring
EPA ID:	CA4570024527
Contaminated Media:	Groundwater
Site ID:	0902761
Action ID:	001
Action Completion Date:	06/20/1996
Operable Unit:	01
Action Name:	RECORD OF DECISION
Action Taken Date:	06/30/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	Other, (N.O.S.)
EPA ID:	CA4570024527

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Contaminated Media: Groundwater
Site ID: 0902761
Action ID: 001
Action Completion Date: 06/20/1996
Operable Unit: 01
Action Name: RECORD OF DECISION
Action Taken Date: 06/30/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Engineering Control: Cap
EPA ID: CA4570024527
Contaminated Media: Soil
Site ID: 0902761
Action ID: 001
Action Completion Date: 06/20/1996
Operable Unit: 01
Action Name: RECORD OF DECISION
Action Taken Date: 06/30/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Engineering Control: Disposal
EPA ID: CA4570024527
Contaminated Media: Soil
Site ID: 0902761
Action ID: 001
Action Completion Date: 06/20/1996
Operable Unit: 01
Action Name: RECORD OF DECISION
Action Taken Date: 06/30/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Engineering Control: Excavation
EPA ID: CA4570024527
Contaminated Media: Soil
Site ID: 0902761
Action ID: 001
Action Completion Date: 06/20/1996
Operable Unit: 01
Action Name: RECORD OF DECISION
Action Taken Date: 06/30/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Engineering Control: Impermeable Barrier
EPA ID: CA4570024527
Contaminated Media: Soil

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Site ID:	0902761
Action ID:	001
Action Completion Date:	06/20/1996
Operable Unit:	01
Action Name:	RECORD OF DECISION
Action Taken Date:	06/30/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	Low Temperature Thermal Desorption
EPA ID:	CA4570024527
Contaminated Media:	Soil
Site ID:	0902761
Action ID:	001
Action Completion Date:	06/20/1996
Operable Unit:	01
Action Name:	RECORD OF DECISION
Action Taken Date:	06/30/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	Monitoring
EPA ID:	CA4570024527
Contaminated Media:	Soil
Site ID:	0902761
Action ID:	001
Action Completion Date:	06/20/1996
Operable Unit:	01
Action Name:	RECORD OF DECISION
Action Taken Date:	06/30/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	Operations & Maintenance (O&M)
EPA ID:	CA4570024527
Contaminated Media:	Soil
Site ID:	0902761
Action ID:	001
Action Completion Date:	06/20/1996
Operable Unit:	01
Action Name:	RECORD OF DECISION
Action Taken Date:	06/30/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	Recycling
EPA ID:	CA4570024527
Contaminated Media:	Soil
Site ID:	0902761

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Action ID:	001
Action Completion Date:	06/20/1996
Operable Unit:	01
Action Name:	RECORD OF DECISION
Action Taken Date:	06/30/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	Soil Vapor Extraction (in-situ)
EPA ID:	CA4570024527
Contaminated Media:	Soil
Site ID:	0902761
Action ID:	001
Action Completion Date:	06/20/1996
Operable Unit:	01
Action Name:	RECORD OF DECISION
Action Taken Date:	06/30/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	No Action
EPA ID:	CA4570024527
Contaminated Media:	Groundwater
Site ID:	0902761
Action ID:	003
Action Completion Date:	09/29/2005
Operable Unit:	04
Action Name:	RECORD OF DECISION
Action Taken Date:	09/30/2005
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	Monitoring
EPA ID:	CA4570024527
Contaminated Media:	Soil
Site ID:	0902761
Action ID:	003
Action Completion Date:	09/29/2005
Operable Unit:	04
Action Name:	RECORD OF DECISION
Action Taken Date:	09/30/2005
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Engineering Control:	No Action
EPA ID:	CA4570024527
Contaminated Media:	Soil
Site ID:	0902761
Action ID:	003

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Action Completion Date: 09/29/2005
Operable Unit: 04
Action Name: RECORD OF DECISION
Action Taken Date: 09/30/2005
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Engineering Control: No Action
EPA ID: CA4570024527
Contaminated Media: Groundwater
Site ID: 0902761
Action ID: 005
Action Completion Date: 09/30/2005
Operable Unit: 02
Action Name: RECORD OF DECISION
Action Taken Date: 09/30/2005
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Engineering Control: No Action
EPA ID: CA4570024527
Contaminated Media: Soil
Site ID: 0902761
Action ID: 005
Action Completion Date: 09/30/2005
Operable Unit: 02
Action Name: RECORD OF DECISION
Action Taken Date: 09/30/2005
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

US INST CONTROL:

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
Site ID: 0902761
Action Name: RECORD OF DECISION
Action ID: 003
Operable Unit: 04
Action Completion Date: 09/29/2005
Actual Date: 09/30/2005
Contaminated Media: Soil
Institutional Control: Covenant
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
Site ID: 0902761
Action Name: RECORD OF DECISION
Action ID: 003
Operable Unit: 04
Action Completion Date: 09/29/2005
Actual Date: 09/30/2005
Contaminated Media: Soil
Institutional Control: Deed Notices
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
Site ID: 0902761
Action Name: RECORD OF DECISION
Action ID: 003
Operable Unit: 04
Action Completion Date: 09/29/2005
Actual Date: 09/30/2005
Contaminated Media: Soil
Institutional Control: Subdivision regulation
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
Site ID: 0902761
Action Name: RECORD OF DECISION
Action ID: 003
Operable Unit: 04
Action Completion Date: 09/29/2005
Actual Date: 09/30/2005
Contaminated Media: Soil
Institutional Control: Zoning regulation
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

City,State,Zip:	RIVERSIDE, CA 92518
EPA ID:	CA4570024527
Site ID:	0902761
Action Name:	RECORD OF DECISION
Action ID:	004
Operable Unit:	02
Action Completion Date:	05/11/2004
Actual Date:	06/15/2004
Contaminated Media:	Groundwater
Institutional Control:	Covenant
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Name:	MARCH AIR FORCE BASE
Address:	22 CSG/CC
Address 2:	Not reported
City,State,Zip:	RIVERSIDE, CA 92518
EPA ID:	CA4570024527
Site ID:	0902761
Action Name:	RECORD OF DECISION
Action ID:	004
Operable Unit:	02
Action Completion Date:	05/11/2004
Actual Date:	06/15/2004
Contaminated Media:	Soil
Institutional Control:	Covenant
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Name:	MARCH AIR FORCE BASE
Address:	22 CSG/CC
Address 2:	Not reported
City,State,Zip:	RIVERSIDE, CA 92518
EPA ID:	CA4570024527
Site ID:	0902761
Action Name:	RECORD OF DECISION
Action ID:	005
Operable Unit:	02
Action Completion Date:	09/30/2005
Actual Date:	09/30/2005
Contaminated Media:	Soil
Institutional Control:	Base use plan change
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Name:	MARCH AIR FORCE BASE
Address:	22 CSG/CC
Address 2:	Not reported
City,State,Zip:	RIVERSIDE, CA 92518
EPA ID:	CA4570024527
Site ID:	0902761

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Action Name: RECORD OF DECISION
Action ID: 005
Operable Unit: 02
Action Completion Date: 09/30/2005
Actual Date: 09/30/2005
Contaminated Media: Soil
Institutional Control: Building, demolition, or excavation regulation
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

ROD:

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ESD
Operable Unit Number: EAST MARCH - SOILS/GW
SEQ ID: 1
Action Completion: 2000-08-24 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: EAST MARCH - SOILS/GW
SEQ ID: 1
Action Completion: 1996-06-20 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: BASEWIDE
SEQ ID: 3
Action Completion: 2005-09-29 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: WEST MARCH - SOILS/GW
SEQ ID: 4
Action Completion: 2004-05-11 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: WEST MARCH - SOILS/GW
SEQ ID: 5
Action Completion: 2005-09-30 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: SITEWIDE GW
SEQ ID: 6
Action Completion: 2019-04-22 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: WEST MARCH - SOILS/GW
SEQ ID: 7
Action Completion: 2004-04-01 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD Amendment
Operable Unit Number: EAST MARCH - SOILS/GW
SEQ ID: 1
Action Completion: 2017-08-01 00:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD Amendment
Operable Unit Number: EAST MARCH - SOILS/GW
SEQ ID: 2
Action Completion: 2019-02-25 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD Amendment
Operable Unit Number: WEST MARCH - SOILS/GW
SEQ ID: 3
Action Completion: 2016-12-12 00:00:00
NPL Status: Final
Non NPL Status: Not reported

PRP:

EPAID: CA4570024527
Site ID: 0902761
Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
NPL Status: Currently on the Final NPL
NPL Status Short Name: Not reported
PRP Name: STATE OF CALIFORNIA/DEPT. OF HEALTH SERVICES
PRP Address: "REG. 4, 245 W. BDWY, SUITE 350 "
PRP City: "LONG BEACH,"
PRP State: CA
PRP Zip: 90802
Data Type: GENERAL NOTICE
Action Date: 2/7/1990
Settlement Code: NJ-1
Settlement: Not Ltrs

PRP Name: STATE OF CALIFORNIA/DEPT. OF WATER QUALITY
PRP Address: "6809 INDIANA AVE., SUITE 200 "
PRP City: "RIVERSIDE,"
PRP State: CA
PRP Zip: 92506
Data Type: GENERAL NOTICE
Action Date: 2/7/1990
Settlement Code: NJ-1
Settlement: Not Ltrs

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

PRP Name: U.S. AIR FORCE
PRP Address: 22 CSG/CC
PRP City: MARCH AFB
PRP State: CA
PRP Zip: 92518
Data Type: GENERAL NOTICE
Action Date: 2/7/1990
Settlement Code: NJ-1
Settlement: Not Ltrs

PRP Name: U.S. AIR FORCE
PRP Address: "AFRCE-WD/ROV 630 SANSOME ST., RM 1316"
PRP City: SAN FRANCISCO
PRP State: CA
PRP Zip: 94111
Data Type: GENERAL NOTICE
Action Date: 2/7/1990
Settlement Code: NJ-1
Settlement: Not Ltrs

A1
NW
< 1/8
0.032 mi.
171 ft.

M AND M CLEANERS
23100 ALESSANDRO BLVD
MORENO VALLEY, CA 92553

EDR Hist Cleaner 1020031619
N/A

Site 1 of 15 in cluster A

Relative: EDR Hist Cleaner
Higher

Actual:
1575 ft.

Year:	Name:	Type:
2012	M AND M CLEANERS	Drycleaning Plants, Except Rugs, NEC
2013	M AND M CLEANERS	Drycleaning Plants, Except Rugs, NEC
2014	M AND M CLEANERS	Drycleaning Plants, Except Rugs, NEC

A2
NW
< 1/8
0.032 mi.
171 ft.

PLAZA HAND CAR WASH
23100 ALESSANDRO BLVD
MORENO VALLEY, CA 92553

LUST U003949023
UST N/A
CERS

Site 2 of 15 in cluster A

Relative: LUST:
Higher

Actual:
1575 ft.

Name: PLAZA HAND CAR WASH
Address: 23100 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Lead Agency: RIVERSIDE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606563337
Global Id: T0606563337
Latitude: 33.917960094
Longitude: -117.259563628
Status: Completed - Case Closed
Status Date: 12/31/2008
Case Worker: SCB
RB Case Number: Not reported
Local Agency: RIVERSIDE COUNTY LOP
File Location: Local Agency
Local Case Number: 200521458

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PLAZA HAND CAR WASH (Continued)

U003949023

Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:

Global Id: T0606563337
Contact Type: Regional Board Caseworker
Contact Name: Ken Williams
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: ken.williams@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606563337
Contact Type: Local Agency Caseworker
Contact Name: SHARON BOLTINGHOUSE
Organization Name: RIVERSIDE COUNTY LOP
Address: 3880 LEMON ST SUITE 200
City: RIVERSIDE
Email: sbolting@rivco.org
Phone Number: 9519558980

LUST:

Global Id: T0606563337
Action Type: Other
Date: 04/28/2005
Action: Leak Discovery

Global Id: T0606563337
Action Type: ENFORCEMENT
Date: 11/27/2007
Action: LOP Case Closure Summary to RB

Global Id: T0606563337
Action Type: ENFORCEMENT
Date: 02/22/2008
Action: Staff Letter - #RCDEH022208

Global Id: T0606563337
Action Type: ENFORCEMENT
Date: 03/25/2007
Action: Technical Correspondence / Assistance / Other - #RCDEH 032507

Global Id: T0606563337
Action Type: ENFORCEMENT
Date: 04/27/2005
Action: Other Report - #UST Sample Analytical Report

Global Id: T0606563337
Action Type: Other
Date: 03/29/2005
Action: Leak Stopped

Global Id: T0606563337
Action Type: Other
Date: 04/28/2005

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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PLAZA HAND CAR WASH (Continued)

U003949023

Action:	Leak Reported
Global Id:	T0606563337
Action Type:	RESPONSE
Date:	12/27/2007
Action:	Other Report / Document
Global Id:	T0606563337
Action Type:	RESPONSE
Date:	04/25/2008
Action:	Other Report / Document
Global Id:	T0606563337
Action Type:	ENFORCEMENT
Date:	11/13/2008
Action:	Staff Letter - #RCDEH111308
Global Id:	T0606563337
Action Type:	ENFORCEMENT
Date:	12/31/2008
Action:	Closure/No Further Action Letter - #RCDEH Closure Docs
Global Id:	T0606563337
Action Type:	RESPONSE
Date:	12/15/2008
Action:	Well Destruction Report
Global Id:	T0606563337
Action Type:	RESPONSE
Date:	10/15/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0606563337
Action Type:	RESPONSE
Date:	07/15/2007
Action:	Monitoring Report - Quarterly
LUST:	
Global Id:	T0606563337
Status:	Open - Case Begin Date
Status Date:	03/29/2005
Global Id:	T0606563337
Status:	Open - Site Assessment
Status Date:	04/28/2005
Global Id:	T0606563337
Status:	Open - Site Assessment
Status Date:	06/22/2006
Global Id:	T0606563337
Status:	Open - Verification Monitoring
Status Date:	03/24/2007
Global Id:	T0606563337
Status:	Completed - Case Closed
Status Date:	12/31/2008

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

PLAZA HAND CAR WASH (Continued)

U003949023

RIVERSIDE CO. LUST:

Name: PLAZA HAND CAR WASH
Address: 23100 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA
Region: RIVERSIDE
Facility ID: 200521458
Employee: Boltinghous-LOP
Site Closed: Yes
Case Type: Soil only
Facility Status: closed/action completed
Casetype Decode: Soil only is impacted
Fstatus Decode: Closed/Action completed

UST:

Name: PLAZA HAND CAR WASH
Address: 23100 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Facility ID: 593
Permitting Agency: RIVERSIDE COUNTY
Latitude: 33.9194115
Longitude: -117.2579269

CERS:

Name: PLAZA HAND CAR WASH
Address: 23100 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 144159
CERS ID: 10316167
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 144159
Site Name: Plaza Hand Car Wash
Violation Date: 07-05-2017
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2

Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violation Notes: Not reported
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 144159
Site Name: Plaza Hand Car Wash
Violation Date: 04-03-2014
Citation: HSC 6.5 25250.7 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.7
Violation Description: Failure to handle contaminated used oil (other than minimal amounts of vehicle fuel) as a hazardous waste.

Violation Notes: Returned to compliance on 04/14/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PLAZA HAND CAR WASH (Continued)

U003949023

Site ID: 144159
 Site Name: Plaza Hand Car Wash
 Violation Date: 04-03-2014
 Citation: HSC 6.95 25505(c) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(c)
 Violation Description: Failure to review, revise, and recertify the business plan at least once every three years.
 Violation Notes: Returned to compliance on 04/07/2014.
 Violation Division: Riverside County Department of Env Health
 Violation Program: HMRRP
 Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
 Eval Date: 04-03-2014
 Violations Found: Yes
 Eval Type: Routine done by local agency
 Eval Notes: Not reported
 Eval Division: Riverside County Department of Env Health
 Eval Program: HMRRP
 Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
 Eval Date: 04-03-2014
 Violations Found: Yes
 Eval Type: Routine done by local agency
 Eval Notes: Not reported
 Eval Division: Riverside County Department of Env Health
 Eval Program: HW
 Eval Source: CERS

Eval General Type: Other/Unknown
 Eval Date: 04-07-2014
 Violations Found: No
 Eval Type: Other, not routine, done by local agency
 Eval Notes: Not reported
 Eval Division: Riverside County Department of Env Health
 Eval Program: HMRRP
 Eval Source: CERS

Eval General Type: Other/Unknown
 Eval Date: 07-05-2017
 Violations Found: Yes
 Eval Type: Other, not routine, done by local agency
 Eval Notes: Not reported
 Eval Division: Riverside County Department of Env Health
 Eval Program: HMRRP
 Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
 Eval Date: 08-02-2017
 Violations Found: No
 Eval Type: Routine done by local agency
 Eval Notes: CERS
 Eval Division: Riverside County Department of Env Health
 Eval Program: HMRRP
 Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PLAZA HAND CAR WASH (Continued)

U003949023

Enforcement Action:

Site ID: 144159
 Site Name: Plaza Hand Car Wash
 Site Address: 23100 ALESSANDRO BLVD
 Site City: MORENO VALLEY
 Site Zip: 92553
 Enf Action Date: 04-03-2014
 Enf Action Type: Notice of Violation (Unified Program)
 Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
 Enf Action Notes: Not reported
 Enf Action Division: Riverside County Department of Env Health
 Enf Action Program: HMRRP
 Enf Action Source: CERS

Site ID: 144159
 Site Name: Plaza Hand Car Wash
 Site Address: 23100 ALESSANDRO BLVD
 Site City: MORENO VALLEY
 Site Zip: 92553
 Enf Action Date: 04-03-2014
 Enf Action Type: Notice of Violation (Unified Program)
 Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
 Enf Action Notes: Not reported
 Enf Action Division: Riverside County Department of Env Health
 Enf Action Program: HW
 Enf Action Source: CERS

Coordinates:

Site ID: 144159
 Facility Name: Plaza Hand Car Wash
 Env Int Type Code: HMBP
 Program ID: 10316167
 Coord Name: Not reported
 Ref Point Type Desc: Center of a facility or station.
 Latitude: 33.917930
 Longitude: -117.259290

Affiliation:

Affiliation Type Desc: Legal Owner
 Entity Name: Amkush Investments/D. Patel
 Entity Title: Not reported
 Affiliation Address: 23100 Alessandro Blvd
 Affiliation City: Moreno Valley
 Affiliation State: CA
 Affiliation Country: United States
 Affiliation Zip: 92553
 Affiliation Phone: (909) 697-4420

Affiliation Type Desc: Regional Board Caseworker
 Entity Name: Ken Williams - SANTA ANA RWQCB (REGION 8)
 Entity Title: Not reported
 Affiliation Address: 3737 MAIN STREET, SUITE 500
 Affiliation City: RIVERSIDE
 Affiliation State: CA
 Affiliation Country: Not reported
 Affiliation Zip: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

PLAZA HAND CAR WASH (Continued)

U003949023

Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: BHASKER PATEL
Entity Title: CEO
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner
Entity Name: 23100 Partners,LLC
Entity Title: Not reported
Affiliation Address: 3550 Wilshire Blvd. Suit: 310
Affiliation City: Los Angeles
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 90010
Affiliation Phone: (951) 489-8453

Affiliation Type Desc: Environmental Contact
Entity Name: BHASKER PATEL
Entity Title: Not reported
Affiliation Address: 23100 Alessandro Blvd
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92553
Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker
Entity Name: SHARON BOLTINGHOUSE - RIVERSIDE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 3880 LEMON ST SUITE 200
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9519558980

Affiliation Type Desc: Operator
Entity Name: BHASKER PATEL
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (951) 489-8453

Affiliation Type Desc: Parent Corporation
Entity Name: Plaza Hand Car Wash
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

PLAZA HAND CAR WASH (Continued)

U003949023

Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: Riverside Cnty Env Health
Entity Title: Not reported
Affiliation Address: 4065 County Circle Drive, Room 104
Affiliation City: Riverside
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92503
Affiliation Phone: (951) 358-5055

Affiliation Type Desc: Document Preparer
Entity Name: Bhasker Patel
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 23100 Alessandro Blvd
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92553
Affiliation Phone: Not reported

Name: PLAZA HAND CAR WASH
Address: 23100 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 144159
CERS ID: T0606563337
CERS Description: Leaking Underground Storage Tank Cleanup Site

Violations:

Site ID: 144159
Site Name: Plaza Hand Car Wash
Violation Date: 07-05-2017
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2

Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violation Notes: Not reported
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 144159

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

PLAZA HAND CAR WASH (Continued)**U003949023**

Site Name: Plaza Hand Car Wash
Violation Date: 04-03-2014
Citation: HSC 6.5 25250.7 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.7
Violation Description: Failure to handle contaminated used oil (other than minimal amounts of vehicle fuel) as a hazardous waste.
Violation Notes: Returned to compliance on 04/14/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 144159
Site Name: Plaza Hand Car Wash
Violation Date: 04-03-2014
Citation: HSC 6.95 25505(c) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(c)
Violation Description: Failure to review, revise, and recertify the business plan at least once every three years.
Violation Notes: Returned to compliance on 04/07/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-03-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-03-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-07-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-05-2017
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

PLAZA HAND CAR WASH (Continued)

U003949023

Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-02-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: CERS
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Enforcement Action:

Site ID: 144159
Site Name: Plaza Hand Car Wash
Site Address: 23100 ALESSANDRO BLVD
Site City: MORENO VALLEY
Site Zip: 92553
Enf Action Date: 04-03-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Site ID: 144159
Site Name: Plaza Hand Car Wash
Site Address: 23100 ALESSANDRO BLVD
Site City: MORENO VALLEY
Site Zip: 92553
Enf Action Date: 04-03-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: HW
Enf Action Source: CERS

Coordinates:

Site ID: 144159
Facility Name: Plaza Hand Car Wash
Env Int Type Code: HMBP
Program ID: 10316167
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 33.917930
Longitude: -117.259290

Affiliation:

Affiliation Type Desc: Legal Owner
Entity Name: Amkush Investments/D. Patel
Entity Title: Not reported
Affiliation Address: 23100 Alessandro Blvd
Affiliation City: Moreno Valley
Affiliation State: CA

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

PLAZA HAND CAR WASH (Continued)

U003949023

Affiliation Country: United States
Affiliation Zip: 92553
Affiliation Phone: (909) 697-4420

Affiliation Type Desc: Regional Board Caseworker
Entity Name: Ken Williams - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: BHASKER PATEL
Entity Title: CEO
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner
Entity Name: 23100 Partners,LLC
Entity Title: Not reported
Affiliation Address: 3550 Wilshire Blvd. Suit: 310
Affiliation City: Los Angeles
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 90010
Affiliation Phone: (951) 489-8453

Affiliation Type Desc: Environmental Contact
Entity Name: BHASKER PATEL
Entity Title: Not reported
Affiliation Address: 23100 Alessandro Blvd
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92553
Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker
Entity Name: SHARON BOLTINGHOUSE - RIVERSIDE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 3880 LEMON ST SUITE 200
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9519558980

Affiliation Type Desc: Operator
Entity Name: BHASKER PATEL
Entity Title: Not reported

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

PLAZA HAND CAR WASH (Continued)

U003949023

Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (951) 489-8453

Affiliation Type Desc: Parent Corporation
Entity Name: Plaza Hand Car Wash
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: Riverside Cnty Env Health
Entity Title: Not reported
Affiliation Address: 4065 County Circle Drive, Room 104
Affiliation City: Riverside
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92503
Affiliation Phone: (951) 358-5055

Affiliation Type Desc: Document Preparer
Entity Name: Bhasker Patel
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 23100 Alessandro Blvd
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92553
Affiliation Phone: Not reported

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

A3
 NW
 < 1/8
 0.032 mi.
 171 ft.

PLAZA HAND CAR WASH
23100 ALESSANDRO B
MORENO VALLEY, CA 92553

SWEEPS UST S106874112
 N/A

Site 3 of 15 in cluster A

Relative:
Higher

SWEEPS UST:

Actual:
1575 ft.

Name: PLAZA HAND CAR WASH
 Address: 23100 ALESSANDRO B
 City: MORENO VALLEY
 Status: Active
 Comp Number: 300
 Number: 3
 Board Of Equalization: Not reported
 Referral Date: 06-29-94
 Action Date: 06-29-94
 Created Date: 06-29-94
 Owner Tank Id: Not reported
 SWRCB Tank Id: 33-000-000300-000001
 Tank Status: A
 Capacity: 10000
 Active Date: 06-16-94
 Tank Use: M.V. FUEL
 STG: P
 Content: REG UNLEADED
 Number Of Tanks: 3

Name: PLAZA HAND CAR WASH
 Address: 23100 ALESSANDRO B
 City: MORENO VALLEY
 Status: Active
 Comp Number: 300
 Number: 3
 Board Of Equalization: Not reported
 Referral Date: 06-29-94
 Action Date: 06-29-94
 Created Date: 06-29-94
 Owner Tank Id: Not reported
 SWRCB Tank Id: 33-000-000300-000002
 Tank Status: A
 Capacity: 5000
 Active Date: 06-10-94
 Tank Use: M.V. FUEL
 STG: P
 Content: PRM UNLEADED
 Number Of Tanks: Not reported

Name: PLAZA HAND CAR WASH
 Address: 23100 ALESSANDRO B
 City: MORENO VALLEY
 Status: Active
 Comp Number: 300
 Number: 3
 Board Of Equalization: Not reported
 Referral Date: 06-29-94
 Action Date: 06-29-94
 Created Date: 06-29-94
 Owner Tank Id: Not reported
 SWRCB Tank Id: 33-000-000300-000003

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

PLAZA HAND CAR WASH (Continued)

S106874112

Tank Status: A
Capacity: 5000
Active Date: 06-16-94
Tank Use: M.V. FUEL
STG: P
Content: PRM UNLEADED
Number Of Tanks: Not reported

A4 NW < 1/8 0.049 mi. 259 ft. **M & M CLEANERS, SANGUOURN THONG DBA** **DRYCLEANERS** **S121695594**
23080 ALESSANDRO BLVD STE 220 **N/A**
MORENO VALLEY, CA 92553

Site 4 of 15 in cluster A

Relative: Higher DRYCLEAN SOUTH COAST:
Actual: 1574 ft. Name: M & M CLEANERS, SANGUOURN THONG DBA
Address: 23080 ALESSANDRO BLVD STE 220
City,State,Zip: MORENO VALLEY, CA 92553
Facility ID: 142837
Application Number: 437866
Permit Number: Not reported
Status: I
Representative Name: SANGVOURN THONG
Representative Telephone: 619 9204720
Permit Status: Not reported
BCAT Number: 000603
BCAT Description: DRY CLEANING, DRY-TO-DRY NV, W/ SIC, PERC
CCAT Number: Not reported
CCAT Description: Not reported
UTM East: 476.88000488
UTM North: 3752

A5 NW < 1/8 0.049 mi. 259 ft. **EXPEDIENT CLEANERS INC DBA M&M CLEANERS** **DRYCLEANERS** **S103644023**
23080 ALESSANDRO BLVD STE 220 **N/A**
MORENO VALLEY, CA 92553

Site 5 of 15 in cluster A

Relative: Higher DRYCLEANERS:
Actual: 1574 ft. Name: EXPEDIENT CLEANERS INC DBA M&M CLEANERS
Address: 23080 ALESSANDRO BLVD STE 220
City,State,Zip: MORENO VALLEY, CA 925539675
EPA Id: CAL000303565
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7211
SIC Description: Power Laundries, Family and Commercial
Create Date: 02/17/2006
Facility Active: No
Inactive Date: 06/30/2006
Facility Addr2: Not reported
Owner Name: EXPEDIENT CLEANERS INC
Owner Address: 15657 LANYARD LN
Owner Address 2: Not reported
Owner Telephone: 9095393341
Contact Name: KEVIN TANG

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

EXPEDIENT CLEANERS INC DBA M&M CLEANERS (Continued)

S103644023

Contact Address: 15657 LANYARD LN
 Contact Address 2: Not reported
 Contact Telephone: 9095393341
 Mailing Name: Not reported
 Mailing Address 1: 15657 LANYARD LN
 Mailing Address 2: Not reported
 Mailing City: CHINO HILLS
 Mailing State: CA
 Mailing Zip: 917098707
 Owner Fax: Not reported
 Region Code: 4

A6
NW
< 1/8
0.049 mi.
259 ft.

**M & M CLEANERS, TAN TRAN DBA
23080 ALESSANDRO BLVD STE 220
MORENO VALLEY, CA 92553**

**DRYCLEANERS S121696059
N/A**

Site 6 of 15 in cluster A

**Relative:
Higher**

DRYCLEAN SOUTH COAST:

**Actual:
1574 ft.**

Name: M & M CLEANERS, TAN TRAN DBA
 Address: 23080 ALESSANDRO BLVD STE 220
 City,State,Zip: MORENO VALLEY, CA 92553
 Facility ID: 150793
 Application Number: 465041
 Permit Number: F87795
 Status: A
 Representative Name: TAN TRAN
 Representative Telephone: 951 8135526
 Permit Status: INACTIVE
 BCAT Number: 000603
 BCAT Description: DRY CLEANING,DRY-TO-DRY NV,W/ SIC,PERC
 CCAT Number: Not reported
 CCAT Description: Not reported
 UTM East: 475.98999023
 UTM North: 3752.8200684

Name: M & M CLEANERS, TAN TRAN DBA
 Address: 23080 ALESSANDRO BLVD STE 220
 City,State,Zip: MORENO VALLEY, CA 92553
 Facility ID: 150793
 Application Number: 472847
 Permit Number: F92693
 Status: A
 Representative Name: TAN TRAN
 Representative Telephone: 951 8135526
 Permit Status: INACTIVE
 BCAT Number: 000603
 BCAT Description: DRY CLEANING,DRY-TO-DRY NV,W/ SIC,PERC
 CCAT Number: Not reported
 CCAT Description: Not reported
 UTM East: 475.98999023
 UTM North: 3752.8200684

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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A7 NW < 1/8 0.049 mi. 259 ft.	M & M CLEANERS 23080 ALESSANDRO BLVD #220 MORENO VALLEY, CA 92553	CERS HAZ WASTE HAZNET	S113796396 N/A
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Relative: Higher
Actual: 1574 ft.

Site 7 of 15 in cluster A

CERS HAZ WASTE:

Name: M & M CLEANERS
Address: 23080 ALESSANDRO BLVD #220
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 45613
CERS ID: 10315945
CERS Description: Hazardous Waste Generator

Affiliation:

Affiliation Type Desc: CUPA District
Entity Name: Riverside Cnty Env Health
Entity Title: Not reported
Affiliation Address: 4065 County Circle Drive, Room 104
Affiliation City: Riverside
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92503
Affiliation Phone: (951) 358-5055

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 23080 Alessandro Blvd
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92553
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: M & M Cleaners
Entity Title: Not reported
Affiliation Address: 23080 Alessandro Blvd
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92553
Affiliation Phone: (909) 242-6828

Affiliation Type Desc: Parent Corporation
Entity Name: M & M Cleaners
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

HAZNET:

Name: MORENO VALLEY CLINIC MEDICA FAMILIAR
Address: 23080 ALESSANDRO BLVD #202

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

M & M CLEANERS (Continued)

S113796396

City,State,Zip: MORENO VALLEY, CA 925530000
Year: 2017
GEPaid: CAL000125718
Contact: NAIM A. OLACHEA
Telephone: 9516977866
Mailing Name: Not reported
Mailing Address: 23080 ALESSANDRO BLVD STE 202
Mailing City,St,Zip: MORENO VALLEY, CA 925539674
Gen County: Riverside
TSD EPA ID: CAD008364432
TSD County: Los Angeles
Tons: 0.027
CA Waste Code: 311-Pharmaceutical waste
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Riverside

Name: MORENO VALLEY CLINIC MEDICA FAMILIAR
Address: 23080 ALESSANDRO BLVD #202
City,State,Zip: MORENO VALLEY, CA 925530000
Year: 2012
GEPaid: CAL000125718
Contact: NAIM A OLACHEA
Telephone: 9516977866
Mailing Name: Not reported
Mailing Address: 23080 ALESSANDRO BLVD STE 202
Mailing City,St,Zip: MORENO VALLEY, CA 925539674
Gen County: Riverside
TSD EPA ID: INR000110197
TSD County: Not reported
Tons: 0.01
CA Waste Code: -
Method: -
Facility County: Riverside

Name: MORENO VALLEY CLINIC MEDICA FAMILIAR
Address: 23080 ALESSANDRO BLVD #202
City,State,Zip: MORENO VALLEY, CA 925530000
Year: 2012
GEPaid: CAL000125718
Contact: NAIM A OLACHEA
Telephone: 9516977866
Mailing Name: Not reported
Mailing Address: 23080 ALESSANDRO BLVD STE 202
Mailing City,St,Zip: MORENO VALLEY, CA 925539674
Gen County: Riverside
TSD EPA ID: INR000110197
TSD County: Not reported
Tons: 0.0045
CA Waste Code: 214-Unspecified solvent mixture
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Riverside

Name: MORENO VALLEY CLINIC MEDICA FAMILIAR
Address: 23080 ALESSANDRO BLVD #202
City,State,Zip: MORENO VALLEY, CA 925530000

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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M & M CLEANERS (Continued)

S113796396

Year: 2012
 GEPAID: CAL000125718
 Contact: NAIM A OLACHEA
 Telephone: 9516977866
 Mailing Name: Not reported
 Mailing Address: 23080 ALESSANDRO BLVD STE 202
 Mailing City,St,Zip: MORENO VALLEY, CA 925539674
 Gen County: Riverside
 TSD EPA ID: INR000110197
 TSD County: Not reported
 Tons: 0.002
 CA Waste Code: 311-Pharmaceutical waste
 Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery
 (H010-H129) Or (H131-H135)
 Facility County: Riverside

A8 NW < 1/8 0.049 mi. 259 ft.	MORENO VALLEY CLINIC MEDICA FAMILIAR 23080 ALESSANDRO BLVD #202 MORENO VALLEY, CA 92553	RCRA NonGen / NLR	1024792737 CAL000125718
	Site 8 of 15 in cluster A		

**Relative:
Higher**

RCRA NonGen / NLR:

**Actual:
1574 ft.**

Date form received by agency: 1996-07-09 00:00:00.0
 Facility name: MORENO VALLEY CLINIC MEDICA FAMILIAR
 Facility address: 23080 ALESSANDRO BLVD #202
 MORENO VALLEY, CA 92553-0000
 EPA ID: CAL000125718
 Mailing address: 23080 ALESSANDRO BLVD STE 202
 MORENO VALLEY, CA 92553-9674
 Contact: NAIM A. OLACHEA
 Contact address: 23080 ALESSANDRO BLVD SUITE 202
 MORENO VALLEY, CA 92553-9674
 Contact country: Not reported
 Contact telephone: 951-697-7866
 Contact email: NAIMM/CMF@AOL.COM
 EPA Region: 09
 Classification: Non-Generator
 Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: OCTAVIO RUIZ-VILLALPANDO MD
 Owner/operator address: 5088 ARTIC PL
 RANCHO CUCAMONGA, CA 91739
 Owner/operator country: Not reported
 Owner/operator telephone: 909-815-1991
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Other
 Owner/Operator Type: Owner
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Owner/operator name: NAIM A. OLACHEA
 Owner/operator address: 23080 ALESSANDRO BLVD SUITE 202
 MORENO VALLEY, CA 92553

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

MORENO VALLEY CLINIC MEDICA FAMILIAR (Continued)

1024792737

Owner/operator country: Not reported
 Owner/operator telephone: 951-697-7866
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Other
 Owner/Operator Type: Operator
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
 Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: Yes
 Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No
 Used oil Specification marketer: No
 Used oil transfer facility: No
 Used oil transporter: No

Violation Status: No violations found

A9
NW
< 1/8
0.049 mi.
259 ft.

M&M DRY CLEANERS
23080 ALESSANDRO BOULEVARD, UNIT 220
MORENO VALLEY, CA 92553

CPS-SLIC S112274195
 BROWNFIELDS N/A
 CERS

Site 9 of 15 in cluster A

Relative:
Higher
Actual:
1574 ft.

CPS-SLIC:
 Name: M&M DRY CLEANERS
 Address: 23080 ALESSANDRO BOULEVARD, UNIT 220
 City,State,Zip: MORENO VALLEY, CA 92553
 Region: STATE
Facility Status: Open - Remediation
 Status Date: 05/08/2017
 Global Id: T10000004432
 Lead Agency: SANTA ANA RWQCB (REGION 8)
 Lead Agency Case Number: Not reported
 Latitude: 33.9187890255534
 Longitude: -117.259790647816
 Case Type: Cleanup Program Site
 Case Worker: JML
 Local Agency: Not reported
 RB Case Number: 2080099
 File Location: All Files are on GeoTracker or in the Local Agency Database
 Potential Media Affected: Indoor Air, Other Groundwater (uses other than drinking water), Soil, Soil Vapor
 Potential Contaminants of Concern: Tetrachloroethylene (PCE)
 Site History: The M&M Cleaners is located at 23080 Alessandro Boulevard, Moreno Valley, California, and occupies Unit No. 220 of the shopping center. In 2012 and 2013, preliminary investigations identified the presence

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

M&M DRY CLEANERS (Continued)**S112274195**

of the dry cleaning solvent, tetrachloroethene (also known as perchloroethylene or PCE), in soil and groundwater under the M&M Cleaners, the alley located north of the Property, and under the parking lot located to the south. However, these initial investigations have not been able to determine how far the PCE may have migrated since it was released. Soil gas investigations that were conducted in 2013 and early 2014 detected the presence of elevated concentrations of PCE in the soil vapor beneath the dry cleaners, adjacent units of the shopping center, the alley behind the shopping center, and the parking area of the Sienna Pointe apartments. Mitigation of the soil vapor intrusion risk is a driving factor in the selection of remediation technologies and is the current focus of work at the Site.

[Click here to access the California GeoTracker records for this facility:](#)

BROWNFIELDS:

Name: M&M DRY CLEANERS
Address: 23080 ALESSANDRO BOULEVARD, UNIT 220
City,State,Zip: MORENO VALLEY, CA 92553
Global ID: T1000004432
Latitude: 33.918789026
Longitude: -117.25979065
Project Type: Cleanup Program Site
Status: Open - Remediation
Status Date: 05/08/2017
Lead Agency: SANTA ANA RWQCB (REGION 8)
Last Correspondence Date: 06/14/2019
Release Type: Clarifier / Dry Cleaning Unit / Vapor Degreaser, Unknown
Contaminant(s) of Concern: Tetrachloroethylene (PCE)
Media of Concern: Indoor Air, Other Groundwater (uses other than drinking water), Soil, Soil Vapor

Past Use(s) that Caused Contamination: DRY CLEANING
Human Health Exposure Controlled: INSUFFICIENT DATA
Human Health Exposure Controlled Date: Not reported
Groundwater Migration Controlled: UNDETERMINED
Groundwater Migration Controlled Date: Not reported
Primary Caseworker Name: JESSICA LAW
Primary Caseworker Organization Name: SANTA ANA RWQCB (REGION 8)
Primary Caseworker Phone Number: 951-782-4381
Primary Caseworker Address: 3737 MAIN STREET, SUITE 500
Primary Caseworker Address: RIVERSIDE
Primary Caseworker Address: CA
Primary Caseworker Email: jessica.law@waterboards.ca.gov

CERS:

Name: M&M DRY CLEANERS
Address: 23080 ALESSANDRO BOULEVARD, UNIT 220
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 231926
CERS ID: T1000004432
CERS Description: Cleanup Program Site

Affiliation:

Affiliation Type Desc: Regional Board Caseworker
Entity Name: JESSICA LAW - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

M&M DRY CLEANERS (Continued)

S112274195

Affiliation Address: 3737 Main Street, Suite 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824381

A10 NW < 1/8 0.049 mi. 259 ft. **M & M CLEANERS, EXPEDIENT CLEANERS DBA** **DRYCLEANERS** **S121695771**
23080 ALESSANDRO BLVD STE 220 **N/A**
MORENO VALLEY, CA 92553

Site 10 of 15 in cluster A

Relative: DRYCLEAN SOUTH COAST:
Higher Name: M & M CLEANERS, EXPEDIENT CLEANERS DBA
Address: 23080 ALESSANDRO BLVD STE 220
Actual: City,State,Zip: MORENO VALLEY, CA 92553
1574 ft. Facility ID: 145685
Application Number: 448080
Permit Number: F77931
Status: S
Representative Name: KEVIN TANG
Representative Telephone: 951 6564131
Permit Status: INACTIVE
BCAT Number: 000603
BCAT Description: DRY CLEANING, DRY-TO-DRY NV, W/ SIC, PERC
CCAT Number: Not reported
CCAT Description: Not reported
UTM East: 476.88000488
UTM North: 3752

A11 NW < 1/8 0.049 mi. 259 ft. **A-1 CLEANERS** **DRYCLEANERS** **S121695050**
23080 ALESSANDRO BLVD STE 220 **N/A**
MORENO VALLEY, CA 92553

Site 11 of 15 in cluster A

Relative: DRYCLEAN SOUTH COAST:
Higher Name: A-1 CLEANERS
Address: 23080 ALESSANDRO BLVD STE 220
Actual: City,State,Zip: MORENO VALLEY, CA 92553
1574 ft. Facility ID: 133331
Application Number: 404148
Permit Number: F53779
Status: S
Representative Name: WON HO LEE
Representative Telephone: 951 6564131
Permit Status: INACTIVE
BCAT Number: 000234
BCAT Description: DRY CLEANING EQUIP PERCHLOROETHYLENE
CCAT Number: Not reported
CCAT Description: Not reported
UTM East: 476.88000488
UTM North: 3752

MAP FINDINGS

Map ID Direction Distance Elevation Site Database(s) EDR ID Number EPA ID Number

A12 NW < 1/8 0.049 mi. 259 ft. **M & M CLEANERS, HIEU NGUYEN DBA 23080 ALESSANDRO BLVD STE 220 MORENO VALLEY, CA 92553** **DRYCLEANERS** **S121695415 N/A**
Site 12 of 15 in cluster A

Relative: Higher DRYCLEAN SOUTH COAST:
Actual: 1574 ft. Name: M & M CLEANERS, HIEU NGUYEN DBA
 Address: 23080 ALESSANDRO BLVD STE 220
 City,State,Zip: MORENO VALLEY, CA 92553
 Facility ID: 139674
 Application Number: 426119
 Permit Number: F67568
 Status: S
 Representative Name: HIEU NGUYEN
 Representative Telephone: 951 6564131
 Permit Status: INACTIVE
 BCAT Number: 000601
 BCAT Description: DRY CLEANING, DRY-TO-DRY NON-VENT, PERC
 CCAT Number: Not reported
 CCAT Description: Not reported
 UTM East: 476.88000488
 UTM North: 3752

Name: M & M CLEANERS, HIEU NGUYEN DBA
 Address: 23080 ALESSANDRO BLVD STE 220
 City,State,Zip: MORENO VALLEY, CA 92553
 Facility ID: 139674
 Application Number: 436606
 Permit Number: F72025
 Status: S
 Representative Name: HIEU NGUYEN
 Representative Telephone: 951 6564131
 Permit Status: INACTIVE
 BCAT Number: 000603
 BCAT Description: DRY CLEANING, DRY-TO-DRY NV, W/ SIC, PERC
 CCAT Number: Not reported
 CCAT Description: Not reported
 UTM East: 476.88000488
 UTM North: 3752

A13 NW < 1/8 0.049 mi. 259 ft. **A 1 CLEANERS 23080 ALESSADRO BLVD MORENO VALLEY, CA 92553** **RCRA-SQG FINDS ECHO** **1000598304 CAD983613001**
Site 13 of 15 in cluster A

Relative: Higher RCRA-SQG:
Actual: 1574 ft. Date form received by agency: 1992-02-27 00:00:00.0
 Facility name: A 1 CLEANERS
 Facility address: 23080 ALESSADRO BLVD MORENO VALLEY, CA 92553
 EPA ID: CAD983613001
 Contact: JOSEPH ORR
 Contact address: 23080 ALESSADRO BLVD MORENO VALLEY, CA 92553
 Contact country: US
 Contact telephone: 714-656-4131
 Contact email: Not reported
 EPA Region: 09

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A 1 CLEANERS (Continued)

1000598304

Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: JOSEPH ORR
Owner/operator address: 23080 ALESSADRO BLVD
MORENO VALLEY, CA 92553
Owner/operator country: Not reported
Owner/operator telephone: 714-656-4131
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110006482635

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

A 1 CLEANERS (Continued)

1000598304

ECHO:

Envid: 1000598304
Registry ID: 110006482635
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110006482635>

**A14
NW
< 1/8
0.049 mi.
259 ft.**

**A-1 CLEANER'S
23080 ALESSANDRO BLVD STE 220
MORENO VALLEY, CA 92553**

**DRYCLEANERS S121700092
N/A**

Site 14 of 15 in cluster A

**Relative:
Higher
Actual:
1574 ft.**

DRYCLEAN SOUTH COAST:
Name: A-1 CLEANER'S
Address: 23080 ALESSANDRO BLVD STE 220
City,State,Zip: MORENO VALLEY, CA 92553
Facility ID: 88088
Application Number: 255782
Permit Number: D44995
Status: S
Representative Name: JOSEPH ORR
Representative Telephone: 714 6564131
Permit Status: INACTIVE
BCAT Number: 000234
BCAT Description: DRY CLEANING EQUIP PERCHLOROETHYLENE
CCAT Number: Not reported
CCAT Description: Not reported
UTM East: 476.00601196
UTM North: 3752.8210449

**A15
NW
< 1/8
0.049 mi.
259 ft.**

**A1 CLEANERS
23080 ALESSANDRO BLVD
MORENO VALLEY, CA 92553**

**EDR Hist Cleaner 1018725121
N/A**

Site 15 of 15 in cluster A

**Relative:
Higher
Actual:
1574 ft.**

EDR Hist Cleaner

Year:	Name:	Type:
1995	A1 CLEANERS	Drycleaning Plants, Except Rugs, NEC
1996	A1 CLEANERS	Drycleaning Plants, Except Rugs, NEC
1997	A1 CLEANERS	Drycleaning Plants, Except Rugs, NEC
1998	A1 CLEANERS	Drycleaning Plants, Except Rugs, NEC
1999	A1 CLEANERS	Drycleaning Plants, Except Rugs, NEC
2000	A1 CLEANERS	Drycleaning Plants, Except Rugs, NEC
2001	A1 CLEANERS	Drycleaning Plants, Except Rugs, NEC
2002	A1 CLEANERS	Drycleaning Plants, Except Rugs, NEC
2003	A1 CLEANERS	Drycleaning Plants, Except Rugs, NEC
2007	TANLAN CLEANERS INC	Drycleaning Plants, Except Rugs, NEC
2008	TANLAN CLEANERS INC	Drycleaning Plants, Except Rugs, NEC
2009	TANLAN CLEANERS INC	Drycleaning Plants, Except Rugs, NEC

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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B16				RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES	RCRA NonGen / NLR	1024804837	
WSW				14290 FREDERICK ST			CAL000260330
1/8-1/4				MORENO VALLEY, CA 92553			
0.134 mi.							
707 ft.				Site 1 of 4 in cluster B			

Relative: RCRA NonGen / NLR:
Lower Date form received by agency: 2002-10-04 00:00:00
Actual: Facility name: RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES
1564 ft. Facility address: 14290 FREDERICK ST
 MORENO VALLEY, CA 92553
 EPA ID: CAL000260330
 Mailing address: 14310 FREDERICK ST
 MORENO VALLEY, CA 92553
 Contact: LISA THOMPSON
 Contact address: 14310 FREDERICK STREET
 MORENO VALLEY, CA 92553
 Contact country: Not reported
 Contact telephone: 951-486-3200
 Contact email: ETHOMPSON@RIVCO.ORG
 EPA Region: 09
 Classification: Non-Generator
 Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
 Owner/operator name: RIVERSIDE COUNTY DEPT. OF WASTE RES
 Owner/operator address: 14310 FREDERICK ST
 MORENO VALLEY, CA 92553
 Owner/operator country: Not reported
 Owner/operator telephone: 951-486-3200
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Other
 Owner/Operator Type: Owner
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Owner/operator name: LISA THOMPSON
 Owner/operator address: 14310 FREDERICK STREET
 MORENO VALLEY, CA 92553
 Owner/operator country: Not reported
 Owner/operator telephone: 951-486-3200
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Other
 Owner/Operator Type: Operator
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Handler Activities Summary:
 U.S. importer of hazardous waste: No
 Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: No
 Treater, storer or disposer of HW: No
 Underground injection activity: No

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES (Continued)

1024804837

On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

B17
WSW
1/8-1/4
0.134 mi.
707 ft.

RIVERSIDE COUNTY WASTE MANAGEMENT DEPT
14290 FREDERICK ST
MORENO VALLEY, CA 92553

Site 2 of 4 in cluster B

HAULERS S113122539
CERS HAZ WASTE N/A
CERS TANKS
HAZNET
CERS

Relative:
Lower

Actual:
1564 ft.

HAULERS:
Name: RIVERSIDE COUNTY WASTE MGMT DEPT
Address: 14290 FREDERICK ST
City: MORENO VALLEY
Facility ID: 1274054
Facility Phone: Not reported
Business Email Address: Not reported
Contact Person: Emily Chau
Mailing Address: 14290 Frederick St
Mailing City: Moreno Valley
Mailing State: CA
Mailing Zip: 92553-9054
Mailing County: Riverside
Mailing Phone: Not reported
Waste Tire Permit Summary: No Permit record for this business.

CERS HAZ WASTE:
Name: RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES (HEADQUARTERS)
Address: 14290 FREDERICK ST
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 400775
CERS ID: 10321675
CERS Description: Hazardous Waste Generator

CERS TANKS:
Name: RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES (HEADQUARTERS)
Address: 14290 FREDERICK ST
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 400775
CERS ID: 10321675
CERS Description: Aboveground Petroleum Storage

Name: RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES (HEADQUARTERS)
Address: 14290 FREDERICK ST
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 400775
CERS ID: 10321675
CERS Description: Underground Storage Tank

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

RIVERSIDE COUNTY WASTE MANAGEMENT DEPT (Continued)

S113122539

HAZNET:

Name: RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES
Address: 14290 FREDERICK ST
City,State,Zip: MORENO VALLEY, CA 92553
Year: 2017
GEPaid: CAL000260330
Contact: LISA THOMPSON
Telephone: 9514863200
Mailing Name: Not reported
Mailing Address: 14310 FREDERICK ST
Mailing City,St,Zip: MORENO VALLEY, CA 92553
Gen County: Riverside
TSD EPA ID: CAD044429835
TSD County: Los Angeles
Tons: 0.363
CA Waste Code: 331-Off-specification, aged or surplus organics
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery
(H010-H129) Or (H131-H135)
Facility County: Riverside

Name: RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES
Address: 14290 FREDERICK ST
City,State,Zip: MORENO VALLEY, CA 92553
Year: 2017
GEPaid: CAL000260330
Contact: LISA THOMPSON
Telephone: 9514863200
Mailing Name: Not reported
Mailing Address: 14310 FREDERICK ST
Mailing City,St,Zip: MORENO VALLEY, CA 92553
Gen County: Riverside
TSD EPA ID: CAD982444481
TSD County: San Bernardino
Tons: 0.861
CA Waste Code: 135-Unspecified aqueous solution
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery
(H010-H129) Or (H131-H135)
Facility County: Riverside

Name: RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES
Address: 14290 FREDERICK ST
City,State,Zip: MORENO VALLEY, CA 92553
Year: 2017
GEPaid: CAL000260330
Contact: LISA THOMPSON
Telephone: 9514863200
Mailing Name: Not reported
Mailing Address: 14310 FREDERICK ST
Mailing City,St,Zip: MORENO VALLEY, CA 92553
Gen County: Riverside
TSD EPA ID: CAD982444481
TSD County: San Bernardino
Tons: 0.525
CA Waste Code: 352-Other organic solids
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery
(H010-H129) Or (H131-H135)
Facility County: Riverside

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

RIVERSIDE COUNTY WASTE MANAGEMENT DEPT (Continued)**S113122539**

Name: RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES
Address: 14290 FREDERICK ST
City,State,Zip: MORENO VALLEY, CA 92553
Year: 2017
GEPAID: CAL000260330
Contact: LISA THOMPSON
Telephone: 9514863200
Mailing Name: Not reported
Mailing Address: 14310 FREDERICK ST
Mailing City,St,Zip: MORENO VALLEY, CA 92553
Gen County: Riverside
TSD EPA ID: CAD982444481
TSD County: San Bernardino
Tons: 0.25
CA Waste Code: 352-Other organic solids
Method: H010-Metals Recovery Including Retoring,Smelting,Chemicals,Ect
Facility County: Riverside

Name: RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES
Address: 14290 FREDERICK ST
City,State,Zip: MORENO VALLEY, CA 92553
Year: 2017
GEPAID: CAL000260330
Contact: LISA THOMPSON
Telephone: 9514863200
Mailing Name: Not reported
Mailing Address: 14310 FREDERICK ST
Mailing City,St,Zip: MORENO VALLEY, CA 92553
Gen County: Riverside
TSD EPA ID: CAD982444481
TSD County: San Bernardino
Tons: 8.81955
CA Waste Code: 223-Unspecified oil-containing waste
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery
(H010-H129) Or (H131-H135)
Facility County: Riverside

[Click this hyperlink](#) while viewing on your computer to access
57 additional CA_HAZNET: record(s) in the EDR Site Report.

CERS:

Name: RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES (HEADQUARTERS)
Address: 14290 FREDERICK ST
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 400775
CERS ID: 10321675
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 400775
Site Name: Riverside County Department of Waste Resources (Headquarters)
Violation Date: 05-16-2019
Citation: 23 CCR 16 2712 - California Code of Regulations, Title 23, Chapter 16,
Section(s) 2712
Violation Description: Failure to comply with any of the applicable requirements of the
permit issued for the operation of the UST system.
Violation Notes: Returned to compliance on 05/22/2019.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

RIVERSIDE COUNTY WASTE MANAGEMENT DEPT (Continued)

S113122539

Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 400775
Site Name: Riverside County Department of Waste Resources (Headquarters)
Violation Date: 05-16-2019
Citation: 23 CCR 16 2665(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665(b)

Violation Description: "Failure to submit a copy of the overfill prevention equipment inspection results on the ?Overfill Prevention Equipment Inspection Report Form? to the UPA within 30 days after the inspection. "

Violation Notes: Returned to compliance on 05/22/2019.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 400775
Site Name: Riverside County Department of Waste Resources (Headquarters)
Violation Date: 05-16-2019
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)

Violation Description: Failure to comply with one or more of the following overfill prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1,?2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October?1,?2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months.

Violation Notes: Not reported
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-18-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Travel included

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

RIVERSIDE COUNTY WASTE MANAGEMENT DEPT (Continued)

S113122539

Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-19-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-19-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-19-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-19-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-20-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: File review CERS completeness
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-22-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

RIVERSIDE COUNTY WASTE MANAGEMENT DEPT (Continued)

S113122539

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-23-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-23-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-23-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-23-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-23-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-16-2019
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-01-2019
Violations Found: No

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

RIVERSIDE COUNTY WASTE MANAGEMENT DEPT (Continued)**S113122539**

Eval Type: Other, not routine, done by local agency
Eval Notes: Overfill NOV/Email
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Affiliation:

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 14310 Frederick St
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92553
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: LISA THOMPSON
Entity Title: PROGRAM ADMINISTRATOR
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner
Entity Name: Riverside County Department of Waste Resources
Entity Title: Not reported
Affiliation Address: 14310 Frederick St.
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92553
Affiliation Phone: (951) 486-3200

Affiliation Type Desc: Environmental Contact
Entity Name: LISA THOMPSON
Entity Title: Not reported
Affiliation Address: 14310 Frederick St
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92553
Affiliation Phone: Not reported

Affiliation Type Desc: Operator
Entity Name: Riverside County Department of Waste Resources
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (951) 486-3200

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

RIVERSIDE COUNTY WASTE MANAGEMENT DEPT (Continued)**S113122539**

Affiliation Type Desc:	UST Permit Applicant
Entity Name:	Lisa Thompson
Entity Title:	Program Coordinator
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(951) 486-3265
Affiliation Type Desc:	Legal Owner
Entity Name:	Riverside County Department of Waste Resources
Entity Title:	Not reported
Affiliation Address:	14310 Frederick St
Affiliation City:	Moreno Valley
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92553
Affiliation Phone:	(951) 486-3200
Affiliation Type Desc:	UST Tank Operator
Entity Name:	Riverside County Department of Waste Resources
Entity Title:	Not reported
Affiliation Address:	14310 Frederick Street
Affiliation City:	Moreno Valley
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92553
Affiliation Phone:	(951) 486-3200
Affiliation Type Desc:	UST Tank Owner
Entity Name:	Riverside County Department of Waste Resources
Entity Title:	Not reported
Affiliation Address:	14310 Frederick St.
Affiliation City:	Moreno Valley
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92553
Affiliation Phone:	(951) 486-3200
Affiliation Type Desc:	CUPA District
Entity Name:	Riverside Cnty Env Health
Entity Title:	Not reported
Affiliation Address:	4065 County Circle Drive, Room 104
Affiliation City:	Riverside
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92503
Affiliation Phone:	(951) 358-5055
Affiliation Type Desc:	Document Preparer
Entity Name:	LISA THOMPSON
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

RIVERSIDE COUNTY WASTE MANAGEMENT DEPT (Continued)

S113122539

Affiliation Zip: Not reported
 Affiliation Phone: Not reported

 Affiliation Type Desc: Parent Corporation
 Entity Name: Riverside County Department of Waste Resources
 Entity Title: Not reported
 Affiliation Address: Not reported
 Affiliation City: Not reported
 Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: Not reported

 Affiliation Type Desc: UST Property Owner Name
 Entity Name: Riverside County Department of Waste Resources
 Entity Title: Not reported
 Affiliation Address: 14310 Frederick St.
 Affiliation City: Moreno Valley
 Affiliation State: CA
 Affiliation Country: United States
 Affiliation Zip: 92553
 Affiliation Phone: (951) 486-3200

B18
WSW
1/8-1/4
0.134 mi.
707 ft.

COUNTY OF RIVERSIDE WASTE MANAGEMNT
14290 FREDERICK ST
MORENO VALLEY, CA 92553

UST U003839113
N/A

Site 3 of 4 in cluster B

Relative:
Lower
Actual:
1564 ft.

RIVERSIDE CO. UST:
 Name: COUNTY OF RIVERSIDE WASTE MANAGEMNT
 Address: 14290 FREDERICK ST
 City,State,Zip: MORENO VALLEY, CA 92553
 Region: RIVERSIDE
 Total Tanks: 2

UST:
 Name: RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES (HEADQUARTERS)
 Address: 14290 FREDERICK ST
 City,State,Zip: MORENO VALLEY, CA 92553
 Facility ID: FA0023076
 Permitting Agency: Riverside County Department of Environmental Health
 Latitude: 33.93304
 Longitude: -117.26141

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

B19
WSW
1/8-1/4
0.136 mi.
720 ft.

RIVERSIDE COUNTY DEPT OF WASTE RESOURCES
14310 FREDERICK STREET
MORENO VALLEY, CA 92553

ENVIROSTOR **S109348567**
HWT **N/A**

Site 4 of 4 in cluster B

Relative:
Lower

ENVIROSTOR:

Actual:
1564 ft.

Name: MARCH FIELD
Address: 14310 FREDERICK STREET
City,State,Zip: MORENO VALLEY, CA 92533
Facility ID: 80000870
Status: Inactive - Action Required
Status Date: 08/15/2018
Site Code: 401438
Site Type: Military Evaluation
Site Type Detailed: FUDS
Acres: 53.3
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Daniel Cordero
Supervisor: Eileen Mananian
Division Branch: Cleanup Cypress
Assembly: 61
Senate: 31
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: DERA
Latitude: 33.89166
Longitude: -117.2597
APN: NONE SPECIFIED
Past Use: FIRING RANGE - SMALL ARMS ETC...
Potential COC: Explosives (UXO, MEC Munitions Debris (MD
Confirmed COC: 30011-NO 32000-NO
Potential Description: SOIL
Alias Name: CA99799F999100
Alias Type: Federal Facility ID
Alias Name: J09CA7168
Alias Type: INPR
Alias Name: 401438
Alias Type: Project Code (Site Code)
Alias Name: 80000870
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 09/14/1998
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Tech Memo
Completed Date: 03/02/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

RIVERSIDE COUNTY DEPT OF WASTE RESOURCES (Continued)

S109348567

Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 07/02/2009
Comments: Final site specific work plan received.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment/Site Inspection Report (PA/SI)
Completed Date: 07/22/2009
Comments: Comments included the SI phase of this project is done.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HWT:

Name: RIVERSIDE COUNTY DEPT OF WASTE RESOURCES
Address: 14310 FREDERICK STREET
City,State,Zip: MORENO VALLEY, CA 92553
Reg Num: 3450
Expiration Date: 06/30/2020

**C20
WNW
1/8-1/4
0.150 mi.
792 ft.**

**TESORO (USA) 63348
22990 ALESSANDRO BLVD
MORENO VALLEY, CA 92553**

Site 1 of 6 in cluster C

**CERS HAZ WASTE
CERS TANKS
HAZNET
CERS**

**S113798386
N/A**

**Relative:
Higher
Actual:
1571 ft.**

CERS HAZ WASTE:
Name: TESORO (USA) 63348
Address: 22990 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 160369
CERS ID: 10329877
CERS Description: Hazardous Waste Generator

CERS TANKS:
Name: TESORO (USA) 63348
Address: 22990 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 160369
CERS ID: 10329877
CERS Description: Underground Storage Tank

HAZNET:
Name: HRMP CORP THRIFTY GAS 9718
Address: 22990 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 925538553
Year: 2012
GEPAID: CAL000347454
Contact: FARO TAHERY

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

TESORO (USA) 63348 (Continued)

S113798386

Telephone: 3109617799
Mailing Name: Not reported
Mailing Address: 1294 UNIVERSITY AVE
Mailing City,St,Zip: RIVERSIDE, CA 925074567
Gen County: Riverside
TSD EPA ID: NVT330010000
TSD County: 99
Tons: 0.15
CA Waste Code: 352-Other organic solids
Method: H132-Landfill Or Surface Impoundment That Will Be Closed As Landfill(
To Include On-Site Treatment And/Or Stabilization)
Facility County: Riverside

CERS:

Name: TESORO (USA) 63348
Address: 22990 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 160369
CERS ID: 10329877
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 160369
Site Name: TESORO (USA) 63348
Violation Date: 03-06-2014
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter
16, Section(s) 2636(f)
Violation Description: Failure to continuously monitor the interstitial space of the tank,
piping and/or sumps sump such that the leak detection activates an
audible/visual alarm when a leak is detected.
Violation Notes: Returned to compliance on 03/10/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 160369
Site Name: TESORO (USA) 63348
Violation Date: 02-18-2015
Citation: HSC 6.7 25291 - California Health and Safety Code, Chapter 6.7,
Section(s) 25291
Violation Description: Failure to maintain under-dispenser containment, sumps, and/or other
secondary containment in good condition and/or free of debris/liquid.
Violation Notes: Returned to compliance on 02/18/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 160369
Site Name: TESORO (USA) 63348
Violation Date: 02-10-2016
Citation: HSC 6.7 25291 - California Health and Safety Code, Chapter 6.7,
Section(s) 25291
Violation Description: Failure to maintain under-dispenser containment, sumps, and/or other
secondary containment in good condition and/or free of debris/liquid.
Violation Notes: Returned to compliance on 02/10/2016. 87 Auxiliary STP
Violation Division: Riverside County Department of Env Health
Violation Program: UST

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

TESORO (USA) 63348 (Continued)

S113798386

Violation Source: CERS

Site ID: 160369
Site Name: TESORO (USA) 63348
Violation Date: 02-10-2016
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)

Violation Description: Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.

Violation Notes: Returned to compliance on 02/10/2016. 91 tank annular sensor

Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-10-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-24-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Annual monitoring cert.
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-02-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-02-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-02-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TESORO (USA) 63348 (Continued)

S113798386

Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-10-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-18-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-06-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-06-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-06-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Enforcement Action:
Site ID: 160369
Site Name: TESORO (USA) 63348
Site Address: 22990 ALESSANDRO BLVD
Site City: MORENO VALLEY
Site Zip: 92553
Enf Action Date: 02-10-2016
Enf Action Type: Notice of Violation (Unified Program)

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

TESORO (USA) 63348 (Continued)**S113798386**

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: UST
Enf Action Source: CERS

Site ID: 160369
Site Name: TESORO (USA) 63348
Site Address: 22990 ALESSANDRO BLVD
Site City: MORENO VALLEY
Site Zip: 92553
Enf Action Date: 02-18-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: UST
Enf Action Source: CERS

Site ID: 160369
Site Name: TESORO (USA) 63348
Site Address: 22990 ALESSANDRO BLVD
Site City: MORENO VALLEY
Site Zip: 92553
Enf Action Date: 03-06-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: UST
Enf Action Source: CERS

Coordinates:

Site ID: 160369
Facility Name: TESORO (USA) 63348
Env Int Type Code: HWG
Program ID: 10329877
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 33.917550
Longitude: -117.261510

Affiliation:

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 19100 RIDGEWOOD PKWY, MS: TX1-022
Affiliation City: SAN ANTONIO
Affiliation State: TX
Affiliation Country: Not reported
Affiliation Zip: 78259
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Operator
Entity Name: TMSO INC (JULIET FLORES)
Entity Title: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

TESORO (USA) 63348 (Continued)

S113798386

Affiliation Address: 22990 ALESSANDRO BLVD
Affiliation City: MORENO VALLEY
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92553
Affiliation Phone: (909) 394-4728

Affiliation Type Desc: Environmental Contact
Entity Name: JANET WAGER
Entity Title: Not reported
Affiliation Address: 301 OCEAN BLVD., SUITE 1600
Affiliation City: LONG BEACH
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 90802
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner
Entity Name: THRIFTY OIL COMPANY
Entity Title: Not reported
Affiliation Address: 13116 IMPERIAL HIGHWAY
Affiliation City: SANTA FE SPRINGS
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 90670
Affiliation Phone: (562) 921-3581

Affiliation Type Desc: UST Permit Applicant
Entity Name: TERESA A. MILES
Entity Title: ENVIRONMENTAL COMPLIANCE SUPERVISOR
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (562) 495-6850

Affiliation Type Desc: UST Property Owner Name
Entity Name: THRIFTY OIL COMPANY
Entity Title: Not reported
Affiliation Address: 13116 IMPERIAL HIGHWAY
Affiliation City: SANTA FE SPRINGS
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 90670
Affiliation Phone: (562) 921-3581

Affiliation Type Desc: Identification Signer
Entity Name: TERESA A. MILES
Entity Title: ENVIRONMENTAL COMPLIANCE SUPERVISOR
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

TESORO (USA) 63348 (Continued)

S113798386

Affiliation Type Desc: Parent Corporation
Entity Name: Tesoro Refining and Marketing Company LLC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Owner
Entity Name: Thrifty Oil Company
Entity Title: Not reported
Affiliation Address: 13116 IMPERIAL HIGHWAY
Affiliation City: SANTA FE SPRINGS
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 90670
Affiliation Phone: (562) 921-3581

Affiliation Type Desc: CUPA District
Entity Name: Riverside Cnty Env Health
Entity Title: Not reported
Affiliation Address: 4065 County Circle Drive, Room 104
Affiliation City: Riverside
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92503
Affiliation Phone: (951) 358-5055

Affiliation Type Desc: Document Preparer
Entity Name: BELSHIRE ENVIRONMENTAL SERVICES, INC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: Tesoro Refining & Marketing Company LLC
Entity Title: Not reported
Affiliation Address: 19100 RIDGEWOOD PKWY, MS: TX1-022
Affiliation City: SAN ANTONIO
Affiliation State: TX
Affiliation Country: United States
Affiliation Zip: 78259
Affiliation Phone: (210) 626-6153

Affiliation Type Desc: Operator
Entity Name: Tesoro Refining & Marketing Company LLC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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TESORO (USA) 63348 (Continued)

S113798386

Affiliation Zip: Not reported
 Affiliation Phone: (210) 626-6153

C21	TESORO USA 63348	RCRA NonGen / NLR	1024833549
WNW	22990 ALESSANDRO BLVD		CAL000372977
1/8-1/4	MORENO VALLEY, CA 92553		
0.150 mi.	Site 2 of 6 in cluster C		
792 ft.			

**Relative:
Higher**

RCRA NonGen / NLR:

**Actual:
1571 ft.**

Date form received by agency: 2012-03-22 00:00:00.0
 Facility name: TESORO USA 63348
 Facility address: 22990 ALESSANDRO BLVD
 MORENO VALLEY, CA 92553
 EPA ID: CAL000372977
 Mailing address: 19100 RIDGEWOOD PKWY
 SAN ANTONIO, TX 78259-0000
 Contact: BRENDA RAMIREZ
 Contact address: 19100 RIDGEWOOD PKWY
 SAN ANTONIO, TX 78259
 Contact country: Not reported
 Contact telephone: 210-626-5153
 Contact email: BRENDA.RAMIREZ@TSOCORP.COM
 EPA Region: 09
 Classification: Non-Generator
 Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: TESORO REFINING & MARKETING COMPANY
 Owner/operator address: 19100 RIDGEWOOD PKWY
 SAN ANTONIO, TX 78259
 Owner/operator country: Not reported
 Owner/operator telephone: 210-626-6153
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Other
 Owner/Operator Type: Owner
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Owner/operator name: BRENDA RAMIREZ
 Owner/operator address: 19100 RIDGEWOOD PKWY
 SAN ANTONIO, TX 78259
 Owner/operator country: Not reported
 Owner/operator telephone: 210-626-5153
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Other
 Owner/Operator Type: Operator
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

TESORO USA 63348 (Continued)

1024833549

Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: Yes
 Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No
 Used oil Specification marketer: No
 Used oil transfer facility: No
 Used oil transporter: No

Violation Status: No violations found

C22
WNW
1/8-1/4
0.150 mi.
792 ft.

THRIFTY OIL #348
22990 ALESSANDRO BLVD
MORENO VALLEY, CA 92508

Site 3 of 6 in cluster C

LUST S101589927
SWEEPS UST N/A
CA FID UST
HIST CORTESE

Relative:
Higher
Actual:
1571 ft.

LUST REG 8:
 Name: THRIFTY OIL #348
 Address: 22990 ALESSANDRO BLVD
 City: MORENO VALLEY
 Region: 8
 County: Riverside
 Regional Board: Santa Ana Region
 Facility Status: Preliminary site assessment underway
 Case Number: 083302648T
 Local Case Num: 95137
 Case Type: Soil only
 Substance: Gasoline
 Qty Leaked: Not reported
 Abate Method: Not reported
 Cross Street: FREDERICK
 Enf Type: Not reported
 Funding: Not reported
 How Discovered: Tank Closure
 How Stopped: Not reported
 Leak Cause: UNK
 Leak Source: UNK
 Global ID: T0606500421
 How Stopped Date: 1/30/1995
 Enter Date: 4/20/1995
 Date Confirmation of Leak Began: 2/15/1995
 Date Preliminary Assessment Began: 6/3/1996
 Discover Date: 1/30/1995
 Enforcement Date: Not reported
 Close Date: Not reported
 Date Prelim Assessment Workplan Submitted: 5/9/1996
 Date Pollution Characterization Began: Not reported
 Date Remediation Plan Submitted: Not reported
 Date Remedial Action Underway: Not reported
 Date Post Remedial Action Monitoring: Not reported
 Enter Date: 4/20/1995
 GW Qualifies: =

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFTY OIL #348 (Continued)**S101589927**

Soil Qualifies:	ND
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.9173103
Longitude:	-117.2614274
MTBE Date:	9/12/2001
Max MTBE GW:	45
MTBE Concentration:	0
Max MTBE Soil:	0
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	VJJ
Staff Initials:	SCB
Lead Agency:	Local Agency
Local Agency:	33000L
Hydr Basin #:	SAN JACINTO (8-5)
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

RIVERSIDE CO. LUST:

Name:	THRIFTY #348
Address:	22990 ALESSANDRO BLVD
City,State,Zip:	MORENO VALLEY, CA
Region:	RIVERSIDE
Facility ID:	95137
Employee:	Boltinghous-LOP
Site Closed:	Yes
Case Type:	Drinking Water Aquifer affected
Facility Status:	closed/action completed
Casetype Decode:	An Aquifer used for Drinking Water supply has been contaminated.
Fstatus Decode:	Closed/Action completed

SWEEPS UST:

Name:	THRIFTY OIL #348
Address:	22990 ALESSANDRO BLVD
City:	MORENO VALLEY
Status:	Active
Comp Number:	4735
Number:	1
Board Of Equalization:	44-010930
Referral Date:	11-19-92
Action Date:	11-19-92
Created Date:	08-25-89
Owner Tank Id:	348-1
SWRCB Tank Id:	33-000-004735-000001
Tank Status:	A
Capacity:	10000
Active Date:	11-19-92
Tank Use:	M.V. FUEL
STG:	P

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFTY OIL #348 (Continued)**S101589927**

Content: LEADED
Number Of Tanks: 3

Name: THRIFTY OIL #348
Address: 22990 ALESSANDRO BLVD
City: MORENO VALLEY
Status: Active
Comp Number: 4735
Number: 1
Board Of Equalization: 44-010930
Referral Date: 11-19-92
Action Date: 11-19-92
Created Date: 08-25-89
Owner Tank Id: 348-2
SWRCB Tank Id: 33-000-004735-000002
Tank Status: A
Capacity: 10000
Active Date: 11-19-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: THRIFTY OIL #348
Address: 22990 ALESSANDRO BLVD
City: MORENO VALLEY
Status: Active
Comp Number: 4735
Number: 1
Board Of Equalization: 44-010930
Referral Date: 11-19-92
Action Date: 11-19-92
Created Date: 08-25-89
Owner Tank Id: 348-3
SWRCB Tank Id: 33-000-004735-000003
Tank Status: A
Capacity: 10000
Active Date: 11-19-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

CA FID UST:

Facility ID: 33001092
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7146539919
Mail To: Not reported
Mailing Address: 10000 LAKEWOOD BLVD
Mailing Address 2: Not reported
Mailing City,St,Zip: MORENO VALLEY 92388
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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THRIFTY OIL #348 (Continued)

S101589927

NPDES Number: Not reported
 EPA ID: Not reported
 Comments: Not reported
 Status: Active

HIST CORTESE:

edr_fname: THRIFTY OIL #348
 edr_fadd1: 22990
 City,State,Zip: MORENO VALLEY, CA 92508
 Region: CORTESE
 Facility County Code: 33
 Reg By: LTNKA
 Reg Id: 083302648T

C23
 WNW
 1/8-1/4
 0.150 mi.
 792 ft.

ARCO FACILITY NO 09718
22990 ALLESANDRO BLVD
MORENO VALLEY, CA 92553

RCRA-SQG 1004677900
 FINDS CAR000102798
 ECHO

Site 4 of 6 in cluster C

Relative:
Higher

RCRA-SQG:

Actual:
1571 ft.

Date form received by agency: 2002-07-15 00:00:00.0
 Facility name: ARCO FACILITY NO 09718
 Facility address: 22990 ALLESANDRO BLVD
 MORENO VALLEY, CA 92553
 EPA ID: CAR000102798
 Mailing address: P O BOX 6038
 ARTESIA, CA 90702-6038
 Contact: JACK OMAN
 Contact address: P O BOX 6038
 ARTESIA, CA 90702-6038
 Contact country: US
 Contact telephone: 714-690-2425
 Contact email: Not reported
 EPA Region: 09
 Classification: Small Small Quantity Generator
 Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: B P W COAST PRODUCTS LLC
 Owner/operator address: P O BOX 6038
 ARTESIA, CA 90702
 Owner/operator country: Not reported
 Owner/operator telephone: 714-690-2425
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Private
 Owner/Operator Type: Owner
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

ARCO FACILITY NO 09718 (Continued)**1004677900**

Handler Activities Summary:

U.S. importer of hazardous waste: No
 Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: No
 Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No
 Used oil Specification marketer: No
 Used oil transfer facility: No
 Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D000
 . Waste name: Not Defined

. Waste code: D001
 . Waste name: IGNITABLE WASTE

. Waste code: D018
 . Waste name: BENZENE

Violation Status: No violations found

FINDS:

Registry ID: 110012215753

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1004677900
 Registry ID: 110012215753
 DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110012215753>

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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C24	TESORO (USA) 63348				UST	U003839089	
WNW	22990 ALESSANDRO BLVD					N/A	
1/8-1/4	MORENO VALLEY, CA 92553						
0.150 mi.							
792 ft.	Site 5 of 6 in cluster C						

Relative: RIVERSIDE CO. UST:
Higher Name: TESORO (USA) 63348
Address: 22990 ALESSANDRO BLVD
Actual: City,State,Zip: MORENO VALLEY, CA 92553
1571 ft. Region: RIVERSIDE
Total Tanks: 3

UST:
Name: TESORO (USA) 63348
Address: 22990 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Facility ID: FA0038095
Permitting Agency: Riverside County Department of Environmental Health
Latitude: 33.91755
Longitude: -117.26151

Name: ARCO #9718
Address: 22990 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Facility ID: 68
Permitting Agency: RIVERSIDE COUNTY
Latitude: 33.918903
Longitude: -117.260162

C25	THRIFTY OIL STN 348				LUST	U001576570	
WNW	22990 ALESSANDRO				HIST UST	N/A	
1/8-1/4	EDGEMONT, CA 92508				CERS		
0.150 mi.							
792 ft.	Site 6 of 6 in cluster C						

Relative: LUST:
Higher Name: THRIFTY OIL #348
Address: 22990 ALESSANDRO BLVD
Actual: City,State,Zip: MORENO VALLEY, CA 92508
1571 ft. Lead Agency: RIVERSIDE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500421
Global Id: T0606500421
Latitude: 33.9176348419259
Longitude: -117.261419145998
Status: Completed - Case Closed
Status Date: 12/06/2004
Case Worker: SCB
RB Case Number: 083302648T
Local Agency: RIVERSIDE COUNTY LOP
File Location: Not reported
Local Case Number: 95137
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0606500421
Contact Type: Local Agency Caseworker

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFTY OIL STN 348 (Continued)

U001576570

Contact Name: SHARON BOLTINGHOUSE
Organization Name: RIVERSIDE COUNTY LOP
Address: 3880 LEMON ST SUITE 200
City: RIVERSIDE
Email: sbolting@rivco.org
Phone Number: 9519558980

Global Id: T0606500421
Contact Type: Regional Board Caseworker
Contact Name: VALERIE JAHN-BULL
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: valerie.jahn-bull@waterboards.ca.gov
Phone Number: 9517824903

LUST:

Global Id: T0606500421
Action Type: Other
Date: 01/30/1995
Action: Leak Discovery

Global Id: T0606500421
Action Type: ENFORCEMENT
Date: 12/06/2004
Action: Closure/No Further Action Letter - #Riv Co Closure

Global Id: T0606500421
Action Type: Other
Date: 01/30/1995
Action: Leak Stopped

Global Id: T0606500421
Action Type: ENFORCEMENT
Date: 12/05/2004
Action: File review - #RCDEH Upload Site File 10/27/2015

Global Id: T0606500421
Action Type: Other
Date: 02/15/1995
Action: Leak Reported

LUST:

Global Id: T0606500421
Status: Open - Case Begin Date
Status Date: 01/30/1995

Global Id: T0606500421
Status: Open - Site Assessment
Status Date: 02/15/1995

Global Id: T0606500421
Status: Open - Site Assessment
Status Date: 05/09/1996

Global Id: T0606500421

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFTY OIL STN 348 (Continued)

U001576570

Status: Open - Site Assessment
Status Date: 06/03/1996

Global Id: T0606500421
Status: Completed - Case Closed
Status Date: 12/06/2004

HIST UST:

Name: THRIFTY OIL STN 348
Address: 22990 ALESSANDRO
City,State,Zip: EDMONT, CA 92508
File Number: 0002A7FD
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002A7FD.pdf>
Region: STATE
Facility ID: 00000004735
Facility Type: Gas Station
Other Type: Not reported
Contact Name: Not reported
Telephone: 2139239876
Owner Name: THRIFTY OIL CO.
Owner Address: 10000 LAKEWOOD BLVD.
Owner City,St,Zip: DOWNEY, CA 90240
Total Tanks: 0004

Tank Num: 001
Container Num: 348-1
Year Installed: Not reported
Tank Capacity: 00010164
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: 1/4
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 348-2
Year Installed: Not reported
Tank Capacity: 00010164
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: 1/4
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 348-3
Year Installed: Not reported
Tank Capacity: 00010164
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Container Construction Thickness: 1/4
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: 348-10
Year Installed: Not reported
Tank Capacity: 00000280
Tank Used for: WASTE

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

THRIFTY OIL STN 348 (Continued)

U001576570

Type of Fuel: WASTE OIL
Container Construction Thickness: 12
Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

CERS:

Name: THRIFTY OIL #348
Address: 22990 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92508
Site ID: 230225
CERS ID: T0606500421
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Local Agency Caseworker
Entity Name: SHARON BOLTINGHOUSE - RIVERSIDE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 3880 LEMON ST SUITE 200
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9519558980

Affiliation Type Desc: Regional Board Caseworker
Entity Name: VALERIE JAHN-BULL - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824903

D26
East
1/8-1/4
0.166 mi.
875 ft.

ALESSANDRO ARCO AM/PM
23501 ALESSANDRO BLVD
MORENO VALLEY, CA 92553

Site 1 of 7 in cluster D

LUST **U002244640**
UST **N/A**
CERS

Relative:
Higher

LUST REG 8:

Actual:
1573 ft.

Name: ARCO #5344
Address: 23501 ALESSANDRO BLVD
City: MORENO VALLEY
Region: 8
County: Riverside
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083303648T
Local Case Num: Not reported
Case Type: Soil only
Substance: Gasoline
Qty Leaked: Not reported
Abate Method: Not reported
Cross Street: GRAHAM
Enf Type: Not reported

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

ALESSANDRO ARCO AM/PM (Continued)

U002244640

Funding:	Not reported
How Discovered:	OM
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0606500632
How Stopped Date:	9/26/1998
Enter Date:	3/9/2000
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	9/25/1998
Discover Date:	9/25/1998
Enforcement Date:	Not reported
Close Date:	7/11/2001
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	3/9/2000
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.916963
Longitude:	-117.252416
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	VJJ
Staff Initials:	BER
Lead Agency:	Local Agency
Local Agency:	33000L
Hydr Basin #:	SAN JACINTO (8-5)
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	No
Summary:	Not reported

LUST:

Name:	ARCO #5344
Address:	23501 ALESSANDRO BLVD
City,State,Zip:	MORENO VALLEY, CA 92553
Lead Agency:	RIVERSIDE COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500632
Global Id:	T0606500632
Latitude:	33.916901618079
Longitude:	-117.251977458826
Status:	Completed - Case Closed
Status Date:	07/11/2001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ALESSANDRO ARCO AM/PM (Continued)

U002244640

Case Worker: RIV
RB Case Number: 083303648T
Local Agency: RIVERSIDE COUNTY LOP
File Location: Local Agency Warehouse
Local Case Number: 200016218
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:

Global Id: T0606500632
Contact Type: Regional Board Caseworker
Contact Name: VALERIE JAHN-BULL
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: valerie.jahn-bull@waterboards.ca.gov
Phone Number: 9517824903

LUST:

Global Id: T0606500632
Action Type: Other
Date: 09/25/1998
Action: Leak Discovery

Global Id: T0606500632
Action Type: Other
Date: 09/26/1998
Action: Leak Stopped

Global Id: T0606500632
Action Type: Other
Date: 04/12/2000
Action: Leak Reported

Global Id: T0606500632
Action Type: ENFORCEMENT
Date: 04/02/2009
Action: Closure/No Further Action Letter - #Site Closure

Global Id: T0606500632
Action Type: ENFORCEMENT
Date: 04/01/2009
Action: File review - #RCDEH upload site file 5/29/2015

LUST:

Global Id: T0606500632
Status: Open - Case Begin Date
Status Date: 09/25/1998

Global Id: T0606500632
Status: Open - Site Assessment
Status Date: 09/25/1998

Global Id: T0606500632
Status: Completed - Case Closed
Status Date: 07/11/2001

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

ALESSANDRO ARCO AM/PM (Continued)

U002244640

RIVERSIDE CO. LUST:

Name: ARCO #5344
Address: 23501 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA
Region: RIVERSIDE
Facility ID: 200016218
Employee: Boltinghous-LOP
Site Closed: Yes
Case Type: Soil only
Facility Status: closed/action completed
Casetype Decode: Soil only is impacted
Fstatus Decode: Closed/Action completed

UST:

Name: ALESSANDRO ARCO AM/PM
Address: 23501 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Facility ID: PR24412
Permitting Agency: Riverside County Department of Environme
Latitude: 33.91713
Longitude: -117.25226

CERS:

Name: ARCO #5344
Address: 23501 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 196507
CERS ID: T0606500632
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Regional Board Caseworker
Entity Name: VALERIE JAHN-BULL - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824903

D27
East
1/8-1/4
0.166 mi.
875 ft.

TABASSI INC DBA ALESSANDRO ARCO AM/PM
23501 ALESSANDRO BLVD
MORENO VALLEY, CA 92553

RCRA NonGen / NLR

1024828531
CAL000360320

Site 2 of 7 in cluster D

Relative:
Higher
Actual:
1573 ft.

RCRA NonGen / NLR:
Date form received by agency: 2011-01-13 00:00:00.0
Facility name: TABASSI INC DBA ALESSANDRO ARCO AM/PM
Facility address: 23501 ALESSANDRO BLVD
MORENO VALLEY, CA 92553-8833
EPA ID: CAL000360320
Mailing address: 830 E. KATELLA AVE.
ORANGE, CA 92867-0000
Contact: AHMAD TABASSI

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TABASSI INC DBA ALESSANDRO ARCO AM/PM (Continued)

1024828531

Contact address: 30542 N HAMPTON RD
LAGUNA NIGUEL, CA 92677

Contact country: Not reported

Contact telephone: 714-609-4611

Contact email: ATABASSI1@YAHOO.COM

EPA Region: 09

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: TABASSI INC

Owner/operator address: 830 E. KATELLA AVE
ORANGE, CA 92867

Owner/operator country: Not reported

Owner/operator telephone: 714-771-6990

Owner/operator email: Not reported

Owner/operator fax: Not reported

Owner/operator extension: Not reported

Legal status: Other

Owner/Operator Type: Owner

Owner/Op start date: Not reported

Owner/Op end date: Not reported

Owner/operator name: AHMAD TABASSI

Owner/operator address: 30542 N HAMPTON RD
LAGUNA NIGUEL, CA 92677

Owner/operator country: Not reported

Owner/operator telephone: 714-609-4611

Owner/operator email: Not reported

Owner/operator fax: Not reported

Owner/operator extension: Not reported

Legal status: Other

Owner/Operator Type: Operator

Owner/Op start date: Not reported

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No

Mixed waste (haz. and radioactive): No

Recycler of hazardous waste: No

Transporter of hazardous waste: Yes

Treater, storer or disposer of HW: No

Underground injection activity: No

On-site burner exemption: No

Furnace exemption: No

Used oil fuel burner: No

Used oil processor: No

User oil refiner: No

Used oil fuel marketer to burner: No

Used oil Specification marketer: No

Used oil transfer facility: No

Used oil transporter: No

Violation Status: No violations found

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

SHAMAAH INC DBA ARCO AMPM (Continued)

1024859024

Owner/operator name: CLAUDE SHAMAAH
 Owner/operator address: 484 S RIVERSIDE AVE
 RIALTO, CA 92376
 Owner/operator country: Not reported
 Owner/operator telephone: 909-820-6607
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Other
 Owner/Operator Type: Owner
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
 Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: Yes
 Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No
 Used oil Specification marketer: No
 Used oil transfer facility: No
 Used oil transporter: No

Violation Status: No violations found

D30
East
1/8-1/4
0.166 mi.
875 ft.

ARCO AM/PM MINI MARKET #5128
23501 ALESSANDRO BLVD
MORENO VALLEY, CA 92388
 Site 5 of 7 in cluster D

CERS HAZ WASTE S101590125
SWEEPS UST N/A
CERS TANKS
CA FID UST
HAZNET
HIST CORTESE
CERS

Relative:
Higher

Actual:
1573 ft.

CERS HAZ WASTE:
 Name: SHAMAAH, INC.
 Address: 23501 ALESSANDRO BLVD
 City,State,Zip: MORENO VALLEY, CA 92553
 Site ID: 90741
 CERS ID: 10315960
 CERS Description: Hazardous Waste Generator

SWEEPS UST:

Name: ARCO AM/PM MINI MARKET #5128
 Address: 23501 ALESSANDRO BLVD
 City: MORENO VALLEY
 Status: Active
 Comp Number: 17
 Number: 1
 Board Of Equalization: 44-000506
 Referral Date: 10-21-92
 Action Date: 10-21-92

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

Created Date: 09-14-88
 Owner Tank Id: 000077
 SWRCB Tank Id: 33-000-000017-000001
 Tank Status: A
 Capacity: 12000
 Active Date: 10-21-92
 Tank Use: M.V. FUEL
 STG: P
 Content: REG UNLEADED
 Number Of Tanks: 3

Name: ARCO AM/PM MINI MARKET #5128
 Address: 23501 ALESSANDRO BLVD
 City: MORENO VALLEY
 Status: Active
 Comp Number: 17
 Number: 1
 Board Of Equalization: 44-000506
 Referral Date: 10-21-92
 Action Date: 10-21-92
 Created Date: 09-14-88
 Owner Tank Id: 000077
 SWRCB Tank Id: 33-000-000017-000002
 Tank Status: A
 Capacity: 12000
 Active Date: 10-21-92
 Tank Use: M.V. FUEL
 STG: P
 Content: LEADED
 Number Of Tanks: Not reported

Name: ARCO AM/PM MINI MARKET #5128
 Address: 23501 ALESSANDRO BLVD
 City: MORENO VALLEY
 Status: Active
 Comp Number: 17
 Number: 1
 Board Of Equalization: 44-000506
 Referral Date: 10-21-92
 Action Date: 10-21-92
 Created Date: 09-14-88
 Owner Tank Id: 000077
 SWRCB Tank Id: 33-000-000017-000003
 Tank Status: A
 Capacity: 12000
 Active Date: 10-21-92
 Tank Use: M.V. FUEL
 STG: P
 Content: REG UNLEADED
 Number Of Tanks: Not reported

CERS TANKS:

Name: SHAMAAH, INC.
 Address: 23501 ALESSANDRO BLVD
 City,State,Zip: MORENO VALLEY, CA 92553
 Site ID: 90741
 CERS ID: 10315960

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

CERS Description: Underground Storage Tank

CA FID UST:

Facility ID: 33004554
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 17315 STUDEBAKER RD
Mailing Address 2: Not reported
Mailing City,St,Zip: MORENO VALLEY 92388
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

HAZNET:

Name: SHAMAAH INC. DBA ARCO AMPM
Address: 23501 ALESSANDRO BLVD.
City,State,Zip: MORENO VALLEY, CA 92553
Year: 2017
GEPaid: CAC002901727
Contact: CLAUDE SHAMAAH
Telephone: 7144787718
Mailing Name: Not reported
Mailing Address: 23501 ALESSANDRO BLVD.
Mailing City,St,Zip: MORENO VALLEY, CA 92553
Gen County: Riverside
TSD EPA ID: CAD982444481
TSD County: San Bernardino
Tons: 0.32935
CA Waste Code: 352-Other organic solids
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Riverside

HIST CORTESE:

edr_fname: ARCO #5344
edr_fadd1: 23501
City,State,Zip: MORENO VALLEY, CA 92553
Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 083303648T

CERS:

Name: SHAMAAH, INC.
Address: 23501 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 90741

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

CERS ID: 10315960
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: Un-Specified
Violation Description: Business Plan Program - Operations/Maintenance - General Local Ordinance

Violation Notes: Returned to compliance on 03/15/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-27-2019
Citation: 23 CCR 16 2665(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665(b)
Violation Description: "Failure to submit a copy of the overfill prevention equipment inspection results on the ?Overfill Prevention Equipment Inspection Report Form? to the UPA within 30 days after the inspection. "
Violation Notes: Returned to compliance on 05/21/2019. OBSERVATION: An "Overfill Prevention Equipment Inspection Report Form"" was not submitted to this Department within 30 days after the completion of the test. CORRECTIVE ACTION: Owner/operator shall immediately submit to this Department a complete and accurate copy of the Overfill Prevention Equipment Inspection Report Form. Testing conducted today.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: 23 CCR 16 2712 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712
Violation Description: Failure to comply with any of the applicable requirements of the permit issued for the operation of the UST system.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: HW

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: HSC 6.95 25505(c) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(c)

Violation Description: Failure to have a business plan readily available to personnel of the business or the unified program facility with responsibilities for emergency response or training.

Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507

Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.

Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173

Violation Description: Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 02-18-2014
Citation: HSC 6.95 25504(b) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(b)

Violation Description: Failure to include adequate emergency response procedures in the business plan for a release or threatened release.

Violation Notes: Returned to compliance on 08/13/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

Site Name: Shamaah, Inc.
Violation Date: 02-18-2014
Citation: HSC 6.95 25505(c) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(c)
Violation Description: Failure to review, revise, and recertify the business plan at least once every three years.
Violation Notes: Returned to compliance on 08/13/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-16-2016
Citation: HSC 6.7 25291 - California Health and Safety Code, Chapter 6.7, Section(s) 25291
Violation Description: Failure to maintain under-dispenser containment, sumps, and/or other secondary containment in good condition and/or free of debris/liquid.
Violation Notes: Returned to compliance on 03/16/2016. Liquid in 91 Fill Sumps.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Description: Failure to have a UST Response Plan available on site.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: UST

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-27-2019
Citation: 23 CCR 16 2637(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2637(f)
Violation Description: Failure to submit a copy of the secondary containment test results on the ?Secondary Containment Testing report Form? to the UPA within 30 days after the test.
Violation Notes: Returned to compliance on 04/15/2019. OBSERVATION: Secondary containment testing was not conducted on 3/16/2019. Observed that owner/operator failed to submit test results to the CUPA within 30 days of testing. CORRECTIVE ACTION: Owner/operator shall submit test results for secondary containment testing conducted on 3/16/2019 to the CUPA within 30 days. Documents must be provided on state-approved forms.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 02-18-2014
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Training - General
Violation Notes: Returned to compliance on 08/13/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 06-12-2017
Citation: 23 CCR 16 2712 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712
Violation Description: Failure to comply with any of the applicable requirements of the permit issued for the operation of the UST system.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-27-2019
Citation: 23 CCR 16 2632(c)(2)(A)&(B) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2632(c)(2)(A)&(B)
Violation Description: Failure to continuously monitor the interstitial space of a double-walled tank with an audible and visual alarm system.
Violation Notes: Returned to compliance on 04/16/2019. OBSERVATION: Observed the L1 87 Main Annular 407 sensor fail to activate an audible and visual alarm when tested. After todays inspection and reviewing work order from 9/4/2018 it appears that there may be potential liquid/fuel in the annular space. CORRECTIVE ACTION: Owner/operator shall repair/replace inoperable L1 87 Main Annular 407 sensor and certify that sensor will activate an audible visual alarm when a leak is detected. Due to potential liquid/fuel in the annular space owner/operator will need to conduct a tank integrity test to verify if there is a leak in the primary and submit results to this department.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 02-18-2014
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 03/06/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: 23 CCR 16 2632(d)(1)(C), 2641(h), 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2632(d)(1)(C), 2641(h), 2711(a)(8)
Violation Description: Failure to submit or update a plot plan.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-27-2019
Citation: 23 CCR 16 2712(b)(1)(F) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(F)
Violation Description: "Failure to conduct secondary containment testing, or one or more of the following requirements: Perform the test of the secondary containment system upon installation, within six months of installation and every 36 months thereafter. Perform the test of a secondary containment component within 30 days of a repair or

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

discontinuing vacuum, pressure or hydrostatic monitoring. Use a procedure that demonstrates the system works as well as at installation. Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval. Performed by a certified service technician. Maintain records of secondary containment testing for 36 months."

Violation Notes: Returned to compliance on 04/15/2019. OBSERVATION: Owner/operator failed to conduct required secondary containment testing every 36 months. Secondary containment testing last conducted on 3/16/2016 and is past due. CORRECTIVE ACTION: Owner/operator shall immediately schedule and conduct required secondary containment testing. Anniversary date does not change due to late testing and will be required to be completed by 3/16/2019 .

Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 02-18-2014
Citation: 22 CCR 15 66265.31 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.31

Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment.

Violation Notes: Returned to compliance on 03/06/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 02-18-2014
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173

Violation Description: Failure to properly close hazardous waste containers when not in active use.

Violation Notes: Returned to compliance on 03/06/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)

Violation Description: Failure to have a UST Monitoring Plan available on site.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

Violation Date: 03-16-2016
Citation: HSC 6.7 25291 - California Health and Safety Code, Chapter 6.7, Section(s) 25291
Violation Description: Failure to maintain under-dispenser containment, sumps, and/or other secondary containment in good condition and/or free of debris/liquid.
Violation Notes: Returned to compliance on 03/16/2016. Liquid in 81 Fill Sumps
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 06-12-2017
Citation: HSC 6.95 25505(c) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(c)
Violation Description: Failure to have a business plan readily available to personnel of the business or the unified program facility with responsibilities for emergency response or training.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 02-18-2014
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 08/13/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-27-2019
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Description: Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.
Violation Notes: Returned to compliance on 03/27/2019. OBSERVATION: Observed sensor located in 87 Main annular space fail to function properly when tested. Sensor failed to go into alarm. Technician on site sprayed QD electric cleaner retested and passed. CORRECTIVE ACTION: Owner/operator shall repair/replace failed leak detection equipment and certify that equipment functions properly. Corrected on site.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-27-2019
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)
Violation Description: Failure to comply with one or more of the following overflow

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, 2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October 1, 2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months.

Violation Notes: Returned to compliance on 06/27/2019. OBSERVATION: An overfill equipment inspection was not completed by the October 13, 2018 deadline. CORRECTIVE ACTION: Owner/operator shall immediately schedule and complete an overfill equipment inspection providing the required 48 hour notification prior to conducting the inspection. Inspection results and all supporting documentation (inspection procedures used, tank charts, printouts, etc.) must be submitted to this Department within 30 days upon completion of the inspection. Testing is being conducted today.

Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 02-18-2014
Citation: 22 CCR 15 66265.174 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.174

Violation Description: Failure to inspect hazardous waste storage areas at least weekly.
Violation Notes: Returned to compliance on 03/06/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-16-2016
Citation: HSC 6.7 25291 - California Health and Safety Code, Chapter 6.7, Section(s) 25291

Violation Description: Failure to maintain under-dispenser containment, sumps, and/or other secondary containment in good condition and/or free of debris/liquid.
Violation Notes: Returned to compliance on 03/16/2016. Liquid in Dispensers 1/2 & 5/6 UDCs.
Violation Division: Riverside County Department of Env Health

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 02-18-2014
Citation: 22 CCR 12 66262.34(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(a)
Violation Description: Failure to obtain a permit or grant of interim status to accumulate hazardous waste longer than 90 days.
Violation Notes: Returned to compliance on 03/06/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-15-2017
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)
Violation Description: Failure to have an approved UST Monitoring Plan.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 06-12-2017
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Description: Failure to have a UST Response Plan available on site.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 02-18-2014
Citation: 19 CCR 4 2729.2(a)(3) - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.2(a)(3)
Violation Description: Failure to complete and/or submit an annotated site map if required by CUPA.

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)**S101590125**

Violation Notes: Returned to compliance on 08/13/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 02-18-2014
Citation: HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description: UST Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 03/06/2014.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 06-12-2017
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Description: Failure to have a UST Monitoring Plan available on site.
Violation Notes: Returned to compliance on 06/12/2017.
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Violation Date: 03-16-2016
Citation: HSC 6.7 25291 - California Health and Safety Code, Chapter 6.7, Section(s) 25291
Violation Description: Failure to maintain under-dispenser containment, sumps, and/or other secondary containment in good condition and/or free of debris/liquid.
Violation Notes: Returned to compliance on 03/16/2016. Liquid in Aux Fill Sumps
Violation Division: Riverside County Department of Env Health
Violation Program: UST
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-18-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-18-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-18-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-06-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 03-06-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-14-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-15-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-15-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-15-2017
Violations Found: Yes

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)**S101590125**

Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-16-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-27-2019
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Annual Monitoring Certification today. Orange County Tank Testing on site for testing. Please note historically there are no leak detection sensors in the 87 main, 87 Siphon and 91 Fill sumps.
Eval Division:	Riverside County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-08-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	04-24-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	06-12-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	06-12-2017
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)**S101590125**

Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-12-2017
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: UST
Eval Source: CERS

Enforcement Action:

Site ID: 90741
Site Name: Shamaah, Inc.
Site Address: 23501 ALESSANDRO BLVD
Site City: MORENO VALLEY
Site Zip: 92553
Enf Action Date: 03-16-2016
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: UST
Enf Action Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Site Address: 23501 ALESSANDRO BLVD
Site City: MORENO VALLEY
Site Zip: 92553
Enf Action Date: 02-18-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Site Address: 23501 ALESSANDRO BLVD
Site City: MORENO VALLEY
Site Zip: 92553
Enf Action Date: 02-18-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: HW
Enf Action Source: CERS

Site ID: 90741
Site Name: Shamaah, Inc.
Site Address: 23501 ALESSANDRO BLVD

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)**S101590125**

Site City: MORENO VALLEY
 Site Zip: 92553
 Enf Action Date: 02-18-2014
 Enf Action Type: Notice of Violation (Unified Program)
 Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
 Enf Action Notes: Not reported
 Enf Action Division: Riverside County Department of Env Health
 Enf Action Program: UST
 Enf Action Source: CERS

Coordinates:

Site ID: 90741
 Facility Name: Shamaah, Inc.
 Env Int Type Code: HWG
 Program ID: 10315960
 Coord Name: Not reported
 Ref Point Type Desc: Center of a facility or station.
 Latitude: 33.917130
 Longitude: -117.252260

Affiliation:

Affiliation Type Desc: Identification Signer
 Entity Name: CLAUDE SHAMAHAH
 Entity Title: OWNER
 Affiliation Address: Not reported
 Affiliation City: Not reported
 Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: Not reported

Affiliation Type Desc: UST Permit Applicant
 Entity Name: Claude Shamaah
 Entity Title: Owner
 Affiliation Address: Not reported
 Affiliation City: Not reported
 Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: (714) 478-7718

Affiliation Type Desc: Operator
 Entity Name: Shamaah, Inc.
 Entity Title: Not reported
 Affiliation Address: Not reported
 Affiliation City: Not reported
 Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: (714) 478-7718

Affiliation Type Desc: Parent Corporation
 Entity Name: Shamaah, Inc.
 Entity Title: Not reported
 Affiliation Address: Not reported
 Affiliation City: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: UST Tank Operator
Entity Name: Shamaah Inc.
Entity Title: Not reported
Affiliation Address: 23501 Alessandro Blvd
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92553
Affiliation Phone: (714) 478-7718

Affiliation Type Desc: UST Tank Owner
Entity Name: Shamaah Inc.
Entity Title: Not reported
Affiliation Address: 23501 Alessandro Blvd
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92553
Affiliation Phone: (714) 478-7718

Affiliation Type Desc: Environmental Contact
Entity Name: Claude Shamaah
Entity Title: Not reported
Affiliation Address: 23501 ALESSANDRO BLVD.
Affiliation City: MORENO VALLEY
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92553
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: Claude Shamaah
Entity Title: Not reported
Affiliation Address: 23501 ALESSANDRO BLVD.
Affiliation City: MORENO VALLEY
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92553
Affiliation Phone: (714) 478-7718

Affiliation Type Desc: CUPA District
Entity Name: Riverside Cnty Env Health
Entity Title: Not reported
Affiliation Address: 4065 County Circle Drive, Room 104
Affiliation City: Riverside
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92503
Affiliation Phone: (951) 358-5055

Affiliation Type Desc: Document Preparer
Entity Name: Sam Stevenson

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

ARCO AM/PM MINI MARKET #5128 (Continued)

S101590125

Entity Title: Not reported
 Affiliation Address: Not reported
 Affiliation City: Not reported
 Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
 Entity Name: Mailing Address
 Entity Title: Not reported
 Affiliation Address: 23501 ALESSANDRO BLVD.
 Affiliation City: MORENO VALLEY
 Affiliation State: CA
 Affiliation Country: Not reported
 Affiliation Zip: 92553
 Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner
 Entity Name: Shamaah, Inc.
 Entity Title: Not reported
 Affiliation Address: 23501 ALESSANDRO BLVD.
 Affiliation City: MORENO VALLEY
 Affiliation State: CA
 Affiliation Country: United States
 Affiliation Zip: 92553
 Affiliation Phone: (714) 478-7718

Affiliation Type Desc: UST Property Owner Name
 Entity Name: Shamaah Inc.
 Entity Title: Not reported
 Affiliation Address: 23501 Alessandro Blvd
 Affiliation City: Moreno Valley
 Affiliation State: CA
 Affiliation Country: United States
 Affiliation Zip: 92553
 Affiliation Phone: (714) 478-7718

D31
East
1/8-1/4
0.166 mi.
875 ft.

PRESTIGE STATIONS INC NO 5128
23501 ALESSANDRO BLVD
MORENO VALLEY, CA 92553
Site 6 of 7 in cluster D

RCRA NonGen / NLR 1004677813
FINDS CAR000101832
ECHO

Relative:
Higher

RCRA NonGen / NLR:
 Date form received by agency: 2002-07-19 00:00:00.0
 Facility name: PRESTIGE STATIONS INC NO 5128
 Facility address: 23501 ALESSANDRO BLVD
 MORENO VALLEY, CA 92553
 EPA ID: CAR000101832
 Mailing address: P O BOX 6038
 ARTESIA, CA 90702-6038
 Contact: SHARON ZUNIGA
 Contact address: 25422 TRABUCO RD NO 105
 LAKE FOREST, CA 92630-2797
 Contact country: US
 Contact telephone: 949-450-1010

Actual:
1573 ft.

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

PRESTIGE STATIONS INC NO 5128 (Continued)

1004677813

Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: ARCO PRODUCTS COMPANY
Owner/operator address: P O BOX 6038
ARTESIA, CA 90702
Owner/operator country: Not reported
Owner/operator telephone: 714-670-5402
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

FINDS:

Registry ID: 110012189657

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

PRESTIGE STATIONS INC NO 5128 (Continued)

1004677813

corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1004677813
Registry ID: 110012189657
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110012189657>

D32
ENE
1/8-1/4
0.205 mi.
1084 ft.

U S POST OFFICE-MORENO VALLEY
23580 ALESSANDRO BLVD
MORENO VALLEY, CA 92388

SWEEPS UST S101590248
CA FID UST N/A

Site 7 of 7 in cluster D

Relative:
Higher
Actual:
1573 ft.

SWEEPS UST:
Name: U S POST OFFICE-MORENO VALLEY
Address: 23580 ALESSANDRO BLVD
City: MORENO VALLEY
Status: Active
Comp Number: 11115
Number: 7
Board Of Equalization: Not reported
Referral Date: 04-30-90
Action Date: 04-30-90
Created Date: 01-26-89
Owner Tank Id: 058971
SWRCB Tank Id: 33-000-011115-000001
Tank Status: A
Capacity: 10000
Active Date: 04-30-90
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 1

CA FID UST:

Facility ID: 33006873
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7146562590
Mail To: Not reported
Mailing Address: 2535 MIDWAY DR
Mailing Address 2: Not reported
Mailing City,St,Zip: MORENO VALLEY 92388
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
E33 SW 1/8-1/4 0.207 mi. 1094 ft.	MARCH FIELD SKEET RANGE MARCH AIR FORCE BASE, CA Site 1 of 2 in cluster E	UXO	1024714068 N/A
Relative: Lower	UXO: DoD Component: FUDS Installation Name: MARCH FIELD Facility Address 2: Not reported Site ID: 010EW Site Type: Trap and Skeet Range Latitude: 33.91379899999997 Longitude: -117.262001		
Actual: 1563 ft.			
E34 SW 1/8-1/4 0.207 mi. 1094 ft.	MARCH FIELD MARCH AIR FORCE BASE, CA Site 2 of 2 in cluster E	FUDS	1024903924 N/A
Relative: Lower	FUDS: EPA Region: 9 Installation ID: CA99799F999100 Congressional District Number: 41 Facility Name: MARCH FIELD FUDS Number: J09CA7168 City: MARCH AIR FORCE BASE State: CA County: RIVERSIDE Telephone: 213-452-3920 USACE Division: South Pacific Division (SPD) USACE District: Los Angeles District (SPL) Status: Properties with projects Current Owner: Other X Coord: -117.262000999745 Y Coord: 33.913799000324502 Latitude: 33.913798999999997 Longitude: -117.262001		
Actual: 1563 ft.			
	FUDS Detail as of Jan 2015: Fiscal Year: 2013 Federal Facility ID: CA9799F9991 RAB: Not reported NPL Status: Not Listed Description: March Field is located in Riverside County, CA approximately 10 miles south of the City fo Riverside and immediately south of the City of Moreno Valley. History: The U.S. Army acquired use of 640 acres in 1918 and established March Field. Initially, the airfield was used for primary flight training. During WWII, the airfield was used for bomber training. The Army Air Corps leased a total of 654.61 acres immediately north of the base. Skeet and shotgun ranges were established on the center portion of this parcel. No ordnance debris is known to have been discovered in this area, but remains of clay pigeons are abundant. Based on available documentation, the eastern and western ends of this parcel were inactive during the entire lease period. None of the military improvements remain and portions of the parcel, especially the western half, have undergone commercial development. Two parcels on the south side of the base, one 4.28ac. and the other 4.90ac., were aquired		

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH FIELD (Continued)

1024903924

during runway expansion but never used. No military improvements were ever constructed on either parcel. They are now open field and idle. A 0.14-acre parcel was quitclaimed to a local utility company on 4 Jan 1944.

CTC: 2208.1999999999998
Current Program: Not reported
Future Program: Not reported
Institutional ID: 53630

MRA:
Inst ID: 53630
FUDS Number: J09CA7168
Facility Name: MARCH FIELD
PHASE: 4
ARC: Y
DIST: SPL
MMRP: Y
MRA ID: J09CA716801R01

MRS:
Inst ID: 53630
FUDS Number: J09CA7168
Facility Name: MARCH FIELD
PHASE: 4
Site ID: 01
DIST: SPL
MMRP: Y
MRA ID: J09CA716801R01
PROJ NO: J09CA716801

35
SE
1/8-1/4
0.234 mi.
1236 ft.

FRAZEE PAINT
14300 GRAHAM ST
MORENO VALLEY, CA 92553

RCRA-SQG 1014387395
CERS HAZ WASTE CAR000209171
HAZNET
NPDES
CIWQS
CERS

Relative:
Lower
Actual:
1558 ft.

RCRA-SQG:
Date form received by agency: 2010-06-29 00:00:00.0
Facility name: FRAZEE PAINT
Facility address: 14300 GRAHAM ST
MORENO VALLEY, CA 92553
EPA ID: CAR000209171
Mailing address: 6625 MIRAMAR RD
SAN DIEGO, CA 92121
Contact: STEVE EATON
Contact address: 6625 MIRAMAR RD
SAN DIEGO, CA 92121
Contact country: US
Contact telephone: 858-626-3383
Contact email: SEATON@FRAZEE.COM
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FRAZEE PAINT (Continued)

1014387395

waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: RICH MORENO VALLEY LLC
Owner/operator address: 201 COVINA AVE STE 8
LONG BEACH, CA 90803
Owner/operator country: US
Owner/operator telephone: 562-856-3819
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 2007-01-01 00:00:00.0
Owner/Op end date: Not reported

Owner/operator name: FRAZEE PAINT
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 2010-06-16 00:00:00.0
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Universal Waste Summary:

Waste type: Thermostats
Accumulated waste on-site: Yes
Generated waste on-site: Not reported
Waste type: Lamps
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

FRAZEE PAINT (Continued)

1014387395

Waste type: Pesticides
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Hazardous Waste Summary:

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

CERS HAZ WASTE:

Name: FRAZEE INDUSTRIES, MORENO VALLEY
Address: 14300 GRAHAM ST
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 117839
CERS ID: 10487083
CERS Description: Hazardous Waste Generator

HAZNET:

Name: FRAZEE PAINT
Address: 14300 GRAHAM ST
City,State,Zip: MORENO VALLEY, CA 925530000
Year: 2017
GEPaid: CAR000209171
Contact: CAROL F. DOE
Telephone: 2165661710
Mailing Name: Not reported
Mailing Address: 101 W PROSPECT AVE

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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FRAZEE PAINT (Continued)

1014387395

Mailing City,St,Zip: CLEVELAND, OH 441151027
 Gen County: Riverside
 TSD EPA ID: KSD980633259
 TSD County: 99
 Tons: 0.198
 CA Waste Code: 214-Unspecified solvent mixture
 Method: H061-Fuel Blending Prior To Energy Recovery At Another Site
 Facility County: Riverside

Name: FRAZEE PAINT
 Address: 14300 GRAHAM ST
 City,State,Zip: MORENO VALLEY, CA 925530000
 Year: 2016
 GEPAID: CAR000209171
 Contact: BECKY LEONE
 Telephone: 5102747547
 Mailing Name: Not reported
 Mailing Address: 101 W PROSPECT AVE
 Mailing City,St,Zip: CLEVELAND, OH 441151027
 Gen County: Riverside
 TSD EPA ID: KSD980633259
 TSD County: 99
 Tons: 0.03
 CA Waste Code: 352-Other organic solids
 Method: H061-Fuel Blending Prior To Energy Recovery At Another Site
 Facility County: Riverside

Name: FRAZEE PAINT
 Address: 14300 GRAHAM ST
 City,State,Zip: MORENO VALLEY, CA 925530000
 Year: 2015
 GEPAID: CAR000209171
 Contact: SHAY ROSEMAN
 Telephone: 2165661710
 Mailing Name: Not reported
 Mailing Address: 101 W PROSPECT AVE
 Mailing City,St,Zip: CLEVELAND, OH 441151027
 Gen County: Riverside
 TSD EPA ID: KSD980633259
 TSD County: 99
 Tons: 0.075
 CA Waste Code: 352-Other organic solids
 Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery
 (H010-H129) Or (H131-H135)
 Facility County: Riverside

Name: FRAZEE PAINT
 Address: 14300 GRAHAM ST
 City,State,Zip: MORENO VALLEY, CA 925530000
 Year: 2015
 GEPAID: CAR000209171
 Contact: SHAY ROSEMAN
 Telephone: 2165661710
 Mailing Name: Not reported
 Mailing Address: 101 W PROSPECT AVE
 Mailing City,St,Zip: CLEVELAND, OH 441151027
 Gen County: Riverside

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FRAZEE PAINT (Continued)

1014387395

TSD EPA ID: KSD980633259
TSD County: 99
Tons: 0.234
CA Waste Code: 214-Unspecified solvent mixture
Method: H061-Fuel Blending Prior To Energy Recovery At Another Site
Facility County: Riverside

Name: FRAZEE PAINT
Address: 14300 GRAHAM ST
City,State,Zip: MORENO VALLEY, CA 925530000
Year: 2015
GEPaid: CAR000209171
Contact: SHAY ROSEMAN
Telephone: 2165661710
Mailing Name: Not reported
Mailing Address: 101 W PROSPECT AVE
Mailing City,St,Zip: CLEVELAND, OH 441151027
Gen County: Riverside
TSD EPA ID: KSD980633259
TSD County: 99
Tons: 0.05
CA Waste Code: 352-Other organic solids
Method: H061-Fuel Blending Prior To Energy Recovery At Another Site
Facility County: Riverside

[Click this hyperlink](#) while viewing on your computer to access
17 additional CA_HAZNET: record(s) in the EDR Site Report.

NPDES:

Name: SHERWIN WILLIAMS
Address: 14300 GRAHAM ST
City,State,Zip: MORENO VALLEY, CA 92553
Facility Status: Active
NPDES Number: CAS000001
Region: 8
Agency Number: 0
Regulatory Measure ID: 458214
Place ID: Not reported
Order Number: 97-03-DWQ
WDID: 8 33NEC000379
Regulatory Measure Type: Enrollee
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 08/17/2015
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: 14300 Graham Street
Discharge Name: Sherwin Williams
Discharge City: Moreno Valley
Discharge State: California
Discharge Zip: 92553
Status: Not reported
Status Date: Not reported
Operator Name: Not reported
Operator Address: Not reported
Operator City: Not reported
Operator State: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FRAZEE PAINT (Continued)

1014387395

Operator Zip: Not reported

NPDES as of 03/2018:

NPDES Number: CAS000001

Status: Active

Agency Number: 0

Region: 8

Regulatory Measure ID: 458214

Order Number: 97-03-DWQ

Regulatory Measure Type: Enrollee

Place ID: Not reported

WDID: 8 33NEC000379

Program Type: Industrial

Adoption Date Of Regulatory Measure: Not reported

Effective Date Of Regulatory Measure: 08/17/2015

Expiration Date Of Regulatory Measure: Not reported

Termination Date Of Regulatory Measure: Not reported

Discharge Name: Sherwin Williams

Discharge Address: 14300 Graham Street

Discharge City: Moreno Valley

Discharge State: California

Discharge Zip: 92553

Received Date: Not reported

Processed Date: Not reported

Status: Not reported

Status Date: Not reported

Place Size: Not reported

Place Size Unit: Not reported

Contact: Not reported

Contact Title: Not reported

Contact Phone: Not reported

Contact Phone Ext: Not reported

Contact Email: Not reported

Operator Name: Not reported

Operator Address: Not reported

Operator City: Not reported

Operator State: Not reported

Operator Zip: Not reported

Operator Contact: Not reported

Operator Contact Title: Not reported

Operator Contact Phone: Not reported

Operator Contact Phone Ext: Not reported

Operator Contact Email: Not reported

Operator Type: Not reported

Developer: Not reported

Developer Address: Not reported

Developer City: Not reported

Developer State: Not reported

Developer Zip: Not reported

Developer Contact: Not reported

Developer Contact Title: Not reported

Constype Linear Utility Ind: Not reported

Emergency Phone: Not reported

Emergency Phone Ext: Not reported

Constype Above Ground Ind: Not reported

Constype Below Ground Ind: Not reported

Constype Cable Line Ind: Not reported

Constype Comm Line Ind: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

FRAZEE PAINT (Continued)

1014387395

Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	458214
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 33NEC000379
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	07/24/2015
Processed Date:	08/17/2015
Status:	Active
Status Date:	08/17/2015
Place Size:	8.78
Place Size Unit:	Acres
Contact:	Darrell Schmittler
Contact Title:	Manager
Contact Phone:	951-571-3698
Contact Phone Ext:	Not reported
Contact Email:	dschmittler@sherwin.com
Operator Name:	Sherwin Williams
Operator Address:	14300 Graham Street
Operator City:	Moreno Valley
Operator State:	California
Operator Zip:	92553
Operator Contact:	Darrell Schmittler

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FRAZEE PAINT (Continued)

1014387395

Operator Contact Title: Ops. Manager
 Operator Contact Phone: 951-571-3698
 Operator Contact Phone Ext: Not reported
 Operator Contact Email: dschmittler@sherwin.com
 Operator Type: Private Business
 Developer: Not reported
 Developer Address: Not reported
 Developer City: Not reported
 Developer State: California
 Developer Zip: Not reported
 Developer Contact: Not reported
 Developer Contact Title: Not reported
 Constype Linear Utility Ind: Not reported
 Emergency Phone: Not reported
 Emergency Phone Ext: Not reported
 Constype Above Ground Ind: Not reported
 Constype Below Ground Ind: Not reported
 Constype Cable Line Ind: Not reported
 Constype Comm Line Ind: Not reported
 Constype Commercial Ind: Not reported
 Constype Electrical Line Ind: Not reported
 Constype Gas Line Ind: Not reported
 Constype Industrial Ind: Not reported
 Constype Other Description: Not reported
 Constype Other Ind: Not reported
 Constype Recons Ind: Not reported
 Constype Residential Ind: Not reported
 Constype Transport Ind: Not reported
 Constype Utility Description: Not reported
 Constype Utility Ind: Not reported
 Constype Water Sewer Ind: Not reported
 Dir Discharge Uswater Ind: Not reported
 Receiving Water Name: Not reported
 Certifier: Darrell Schmittler
 Certifier Title: Operations Manager
 Certification Date: 20-SEP-16
 Primary Sic: 4225-General Warehousing and Storage
 Secondary Sic: Not reported
 Tertiary Sic: Not reported

Name: SHERWIN WILLIAMS
 Address: 14300 GRAHAM ST
 City,State,Zip: MORENO VALLEY, CA 92553
 Facility Status: Not reported
 NPDES Number: Not reported
 Region: Not reported
 Agency Number: Not reported
 Regulatory Measure ID: Not reported
 Place ID: Not reported
 Order Number: Not reported
 WDID: 8 33NEC000379
 Regulatory Measure Type: Industrial
 Program Type: Not reported
 Adoption Date Of Regulatory Measure: Not reported
 Effective Date Of Regulatory Measure: Not reported
 Termination Date Of Regulatory Measure: Not reported

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

FRAZEE PAINT (Continued)

1014387395

Expiration Date Of Regulatory Measure: Not reported
 Discharge Address: Not reported
 Discharge Name: Not reported
 Discharge City: Not reported
 Discharge State: Not reported
 Discharge Zip: Not reported
 Status: Active
 Status Date: 08/17/2015
 Operator Name: Sherwin Williams
 Operator Address: 14300 Graham Street
 Operator City: Moreno Valley
 Operator State: California
 Operator Zip: 92553

NPDES as of 03/2018:
 NPDES Number: CAS000001
 Status: Active
 Agency Number: 0
 Region: 8
 Regulatory Measure ID: 458214
 Order Number: 97-03-DWQ
 Regulatory Measure Type: Enrollee
 Place ID: Not reported
 WDID: 8 33NEC000379
 Program Type: Industrial
 Adoption Date Of Regulatory Measure: Not reported
 Effective Date Of Regulatory Measure: 08/17/2015
 Expiration Date Of Regulatory Measure: Not reported
 Termination Date Of Regulatory Measure: Not reported
 Discharge Name: Sherwin Williams
 Discharge Address: 14300 Graham Street
 Discharge City: Moreno Valley
 Discharge State: California
 Discharge Zip: 92553
 Received Date: Not reported
 Processed Date: Not reported
 Status: Not reported
 Status Date: Not reported
 Place Size: Not reported
 Place Size Unit: Not reported
 Contact: Not reported
 Contact Title: Not reported
 Contact Phone: Not reported
 Contact Phone Ext: Not reported
 Contact Email: Not reported
 Operator Name: Not reported
 Operator Address: Not reported
 Operator City: Not reported
 Operator State: Not reported
 Operator Zip: Not reported
 Operator Contact: Not reported
 Operator Contact Title: Not reported
 Operator Contact Phone: Not reported
 Operator Contact Phone Ext: Not reported
 Operator Contact Email: Not reported
 Operator Type: Not reported
 Developer: Not reported
 Developer Address: Not reported

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

FRAZEE PAINT (Continued)

1014387395

Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	458214
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 33NEC000379
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	07/24/2015
Processed Date:	08/17/2015
Status:	Active
Status Date:	08/17/2015
Place Size:	8.78

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

FRAZEE PAINT (Continued)

1014387395

Place Size Unit: Acres
 Contact: Darrell Schmittler
 Contact Title: Manager
 Contact Phone: 951-571-3698
 Contact Phone Ext: Not reported
 Contact Email: dschmittler@sherwin.com
 Operator Name: Sherwin Williams
 Operator Address: 14300 Graham Street
 Operator City: Moreno Valley
 Operator State: California
 Operator Zip: 92553
 Operator Contact: Darrell Schmittler
 Operator Contact Title: Ops. Manager
 Operator Contact Phone: 951-571-3698
 Operator Contact Phone Ext: Not reported
 Operator Contact Email: dschmittler@sherwin.com
 Operator Type: Private Business
 Developer: Not reported
 Developer Address: Not reported
 Developer City: Not reported
 Developer State: California
 Developer Zip: Not reported
 Developer Contact: Not reported
 Developer Contact Title: Not reported
 Constype Linear Utility Ind: Not reported
 Emergency Phone: Not reported
 Emergency Phone Ext: Not reported
 Constype Above Ground Ind: Not reported
 Constype Below Ground Ind: Not reported
 Constype Cable Line Ind: Not reported
 Constype Comm Line Ind: Not reported
 Constype Commercial Ind: Not reported
 Constype Electrical Line Ind: Not reported
 Constype Gas Line Ind: Not reported
 Constype Industrial Ind: Not reported
 Constype Other Description: Not reported
 Constype Other Ind: Not reported
 Constype Recons Ind: Not reported
 Constype Residential Ind: Not reported
 Constype Transport Ind: Not reported
 Constype Utility Description: Not reported
 Constype Utility Ind: Not reported
 Constype Water Sewer Ind: Not reported
 Dir Discharge Uswater Ind: Not reported
 Receiving Water Name: Not reported
 Certifier: Darrell Schmittler
 Certifier Title: Operations Manager
 Certification Date: 20-SEP-16
 Primary Sic: 4225-General Warehousing and Storage
 Secondary Sic: Not reported
 Tertiary Sic: Not reported

CIWQS:

Name: SHERWIN WILLIAMS
 Address: 14300 GRAHAM ST
 City,State,Zip: MORENO VALLEY, CA 92553

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FRAZEE PAINT (Continued)

1014387395

Agency: Sherwin Williams
 Agency Address: 14300 Graham Street, Moreno Valley, CA 92553
 Place/Project Type: Industrial - General Warehousing and Storage
 SIC/NAICS: 4225
 Region: 8
 Program: INDSTW
 Regulatory Measure Status: Active
 Regulatory Measure Type: Storm water industrial
 Order Number: 2014-0057-DWQ
 WDID: 8 33NEC000379
 NPDES Number: CAS000001
 Adoption Date: Not reported
 Effective Date: 08/17/2015
 Termination Date: Not reported
 Expiration/Review Date: Not reported
 Design Flow: Not reported
 Major/Minor: Not reported
 Complexity: Not reported
 TTWQ: Not reported
 Enforcement Actions within 5 years: 0
 Violations within 5 years: 0
 Latitude: 33.91268
 Longitude: -117.25126

CERS:

Name: SHERWIN WILLIAMS
 Address: 14300 GRAHAM ST
 City,State,Zip: MORENO VALLEY, CA 92553
 Site ID: 542340
 CERS ID: 837470
 CERS Description: Industrial Facility Storm Water

Affiliation:

Affiliation Type Desc: Owner/Operator
 Entity Name: Sherwin Williams
 Entity Title: Operator
 Affiliation Address: 14300 Graham Street
 Affiliation City: Moreno Valley
 Affiliation State: CA
 Affiliation Country: Not reported
 Affiliation Zip: 92553
 Affiliation Phone: Not reported

Name: FRAZEE INDUSTRIES, MORENO VALLEY
 Address: 14300 GRAHAM ST
 City,State,Zip: MORENO VALLEY, CA 92553
 Site ID: 117839
 CERS ID: 10487083
 CERS Description: Chemical Storage Facilities

Violations:

Site ID: 117839
 Site Name: Frazee Industries, Moreno Valley
 Violation Date: 04-02-2014
 Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95,
 Section(s) Multiple
 Violation Description: Business Plan Program - Administration/Documentation - General

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

FRAZEE PAINT (Continued)

1014387395

Violation Notes: Returned to compliance on 04/28/2014. [LOCAL ORDINANCE VIOLATION 104A]
 NFPA 704 sign(s) have been posted appropriately.
 Violation Division: Riverside County Department of Env Health
 Violation Program: HMRRP
 Violation Source: CERS

Site ID: 117839
 Site Name: Frazee Industries, Moreno Valley
 Violation Date: 04-02-2014
 Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple

Violation Description: Business Plan Program - Administration/Documentation - General
 Violation Notes: Returned to compliance on 04/28/2014.
 Violation Division: Riverside County Department of Env Health
 Violation Program: HMRRP
 Violation Source: CERS

Site ID: 117839
 Site Name: Frazee Industries, Moreno Valley
 Violation Date: 04-02-2014
 Citation: HSC 6.11 25404.1 - California Health and Safety Code, Chapter 6.11, Section(s) 25404.1

Violation Description: Failure to obtain and/or maintain an active hazardous waste generator permit.
 Violation Notes: Returned to compliance on 04/28/2014.
 Violation Division: Riverside County Department of Env Health
 Violation Program: HW
 Violation Source: CERS

Site ID: 117839
 Site Name: Frazee Industries, Moreno Valley
 Violation Date: 04-02-2014
 Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple

Violation Description: Business Plan Program - Administration/Documentation - General
 Violation Notes: Returned to compliance on 04/14/2014.
 Violation Division: Riverside County Department of Env Health
 Violation Program: HMRRP
 Violation Source: CERS

Evaluation:
 Eval General Type: Compliance Evaluation Inspection
 Eval Date: 04-02-2014
 Violations Found: Yes
 Eval Type: Routine done by local agency
 Eval Notes: Frazee Industries, 14300 Graham St, Moreno Valley, CA
 Eval Division: Riverside County Department of Env Health
 Eval Program: HMRRP
 Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
 Eval Date: 04-02-2014
 Violations Found: Yes
 Eval Type: Routine done by local agency
 Eval Notes: Frazee Industries, 14300 Graham St, Moreno Valley, CA
 Eval Division: Riverside County Department of Env Health
 Eval Program: HW

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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FRAZEE PAINT (Continued)

1014387395

Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-10-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-10-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Enforcement Action:	
Site ID:	117839
Site Name:	Frazee Industries, Moreno Valley
Site Address:	14300 GRAHAM ST
Site City:	MORENO VALLEY
Site Zip:	92553
Enf Action Date:	04-02-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Riverside County Department of Env Health
Enf Action Program:	HMRRP
Enf Action Source:	CERS
Site ID:	117839
Site Name:	Frazee Industries, Moreno Valley
Site Address:	14300 GRAHAM ST
Site City:	MORENO VALLEY
Site Zip:	92553
Enf Action Date:	04-02-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Riverside County Department of Env Health
Enf Action Program:	HW
Enf Action Source:	CERS
Coordinates:	
Site ID:	117839
Facility Name:	Frazee Industries, Moreno Valley
Env Int Type Code:	HWG
Program ID:	10487083
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	33.912680
Longitude:	-117.251260

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

FRAZEE PAINT (Continued)

1014387395

Affiliation:

Affiliation Type Desc: Identification Signer
Entity Name: Haxhi Shala
Entity Title: EHS Coordinator
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: The Sherwin-Williams Company
Entity Title: Not reported
Affiliation Address: 101 Prospect Ave. W
Affiliation City: Cleveland
Affiliation State: OH
Affiliation Country: United States
Affiliation Zip: 44115
Affiliation Phone: (858) 626-3466

Affiliation Type Desc: Operator
Entity Name: The Sherwin-Williams Company
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (951) 571-3003

Affiliation Type Desc: Document Preparer
Entity Name: Haxhi Shala
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 14300 Graham St
Affiliation City: Moreno Valley
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92553
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Haxhi Shala
Entity Title: Not reported
Affiliation Address: 14300 Graham St
Affiliation City: Moreno Valley
Affiliation State: CA

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

FRAZEE PAINT (Continued)

1014387395

Affiliation Country: Not reported
 Affiliation Zip: 92553
 Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner
 Entity Name: The Sherwin-Williams Manufacturing Company
 Entity Title: Not reported
 Affiliation Address: 101 West Prospect Avenue
 Affiliation City: Cleveland
 Affiliation State: OH
 Affiliation Country: United States
 Affiliation Zip: 44115
 Affiliation Phone: (216) 566-2000

Affiliation Type Desc: CUPA District
 Entity Name: Riverside Cnty Env Health
 Entity Title: Not reported
 Affiliation Address: 4065 County Circle Drive, Room 104
 Affiliation City: Riverside
 Affiliation State: CA
 Affiliation Country: Not reported
 Affiliation Zip: 92503
 Affiliation Phone: (951) 358-5055

Affiliation Type Desc: Parent Corporation
 Entity Name: The Sherwin-Williams Company - Moreno Valley
 Entity Title: Not reported
 Affiliation Address: Not reported
 Affiliation City: Not reported
 Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: Not reported

F36
East
1/8-1/4
0.237 mi.
1254 ft.

CHASE AUTO TECH
23615 ALESSANDRO BLVD STE B
MORENO VALLEY, CA 92553

RCRA NonGen / NLR

1024836208
 CAL000379257

Site 1 of 3 in cluster F

Relative:
Higher

RCRA NonGen / NLR:

Actual:
1571 ft.

Date form received by agency: 2012-10-26 00:00:00.0
 Facility name: CHASE AUTO TECH
 Facility address: 23615 ALESSANDRO BLVD STE B
 MORENO VALLEY, CA 92553-8807
 EPA ID: CAL000379257
 Contact: JESUS GOMEZ CASTELLANOS
 Contact address: 23615 ALESSANDRO BLVD STE B
 MORENO VALLEY, CA 92553
 Contact country: Not reported
 Contact telephone: 951-653-6767
 Contact email: CHASEAUTOTECH@LIVE.COM
 EPA Region: 09
 Classification: Non-Generator
 Description: Handler: Non-Generators do not presently generate hazardous waste

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

CHASE AUTO TECH (Continued)

1024836208

Owner/Operator Summary:

Owner/operator name: JESUS GOMEZ CASTELLANOS
 Owner/operator address: 23615 ALESSANDRO BLVD STE B
 MORENO VALLEY, CA 92553
 Owner/operator country: Not reported
 Owner/operator telephone: 951-653-6767
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Other
 Owner/Operator Type: Operator
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Owner/operator name: JESUS GOMEZ CASTELLANOS
 Owner/operator address: 22807 KINROSS LN
 MORENO VALLEY, CA 92557
 Owner/operator country: Not reported
 Owner/operator telephone: 951-653-6767
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Other
 Owner/Operator Type: Owner
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
 Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: Yes
 Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No
 Used oil Specification marketer: No
 Used oil transfer facility: No
 Used oil transporter: No

Violation Status: No violations found

F37
East
1/8-1/4
0.237 mi.
1254 ft.
Relative:
Higher
Actual:
1571 ft.

CHASE AUTO TECH
23615 ALESSANDRO BLVD STE B
MORENO VALLEY, CA 92553
Site 2 of 3 in cluster F

CERS HAZ WASTE S121018949
CERS N/A

CERS HAZ WASTE:
 Name: CHASE AUTO TECH
 Address: 23615 ALESSANDRO BLVD STE B
 City,State,Zip: MORENO VALLEY, CA 92553
 Site ID: 104598
 CERS ID: 10328614

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

CHASE AUTO TECH (Continued)

S121018949

CERS Description: Hazardous Waste Generator

Name: SPEEDY MOBILE LUBE
Address: 23615 ALESSANDRO BLVD STE C
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 356032
CERS ID: 10639048
CERS Description: Hazardous Waste Generator

CERS:
Name: SPEEDY MOBILE LUBE
Address: 23615 ALESSANDRO BLVD STE C
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 356032
CERS ID: 10639048
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 356032
Site Name: Speedy Mobile lube
Violation Date: 08-10-2015
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 08/10/2015. [LOCAL ORDINANCE VIOLATION 100] Facility has a current Environmental Health permit and is posted appropriately.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 356032
Site Name: Speedy Mobile lube
Violation Date: 08-10-2015
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 08/10/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 356032
Site Name: Speedy Mobile lube
Violation Date: 08-10-2015
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes: Returned to compliance on 08/10/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 356032

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

CHASE AUTO TECH (Continued)

S121018949

Site Name: Speedy Mobile lube
Violation Date: 08-10-2015
Citation: HSC 6.95 25505.1 - California Health and Safety Code, Chapter 6.95, Section(s) 25505.1
Violation Description: Failure to provide a copy of the business plan to the owner or the owner's agent within five working days after receiving a request for a copy from the owner or the owner's agent.
Violation Notes: Returned to compliance on 08/10/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 356032
Site Name: Speedy Mobile lube
Violation Date: 08-10-2015
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 08/10/2015. [LOCAL ORDINANCE VIOLATION 101C] Approved HMBP accessible on site and available for review.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 356032
Site Name: Speedy Mobile lube
Violation Date: 08-10-2015
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes: Returned to compliance on 08/10/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 356032
Site Name: Speedy Mobile lube
Violation Date: 08-10-2015
Citation: 19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.
Violation Notes: Returned to compliance on 08/10/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 356032
Site Name: Speedy Mobile lube
Violation Date: 08-10-2015
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description: Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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CHASE AUTO TECH (Continued)**S121018949**

Violation Notes: Returned to compliance on 08/10/2015.
 Violation Division: Riverside County Department of Env Health
 Violation Program: HMRRP
 Violation Source: CERS

Site ID: 356032
 Site Name: Speedy Mobile lube
 Violation Date: 08-10-2015
 Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
 Violation Description: Failure to establish and electronically submit an adequate training program in safety procedures in the event of a release or threatened release of a hazardous material.

Violation Notes: Returned to compliance on 08/10/2015.
 Violation Division: Riverside County Department of Env Health
 Violation Program: HMRRP
 Violation Source: CERS

Site ID: 356032
 Site Name: Speedy Mobile lube
 Violation Date: 08-10-2015
 Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
 Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.

Violation Notes: Returned to compliance on 08/10/2015.
 Violation Division: Riverside County Department of Env Health
 Violation Program: HMRRP
 Violation Source: CERS

Site ID: 356032
 Site Name: Speedy Mobile lube
 Violation Date: 08-10-2015
 Citation: HSC 6.11 25404.1 - California Health and Safety Code, Chapter 6.11, Section(s) 25404.1
 Violation Description: Failure to obtain and/or maintain an active hazardous waste generator permit.

Violation Notes: Returned to compliance on 08/10/2015.
 Violation Division: Riverside County Department of Env Health
 Violation Program: HW
 Violation Source: CERS

Site ID: 356032
 Site Name: Speedy Mobile lube
 Violation Date: 08-10-2015
 Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
 Violation Description: Failure to complete and electronically submit a site map with all required content.

Violation Notes: Returned to compliance on 08/10/2015.
 Violation Division: Riverside County Department of Env Health
 Violation Program: HMRRP
 Violation Source: CERS

Evaluation:
 Eval General Type: Compliance Evaluation Inspection

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

CHASE AUTO TECH (Continued)**S121018949**

Eval Date: 08-10-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Put under permit
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Speedy Mobile Lube 23615 Alessandro Blvd. Ste C Moreno Valley PLACED UNDER PERMIT
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Enforcement Action:

Site ID: 356032
Site Name: Speedy Mobile lube
Site Address: 23615 ALESSANDRO BLVD STE C
Site City: MORENO VALLEY
Site Zip: 92553
Enf Action Date: 08-10-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Site ID: 356032
Site Name: Speedy Mobile lube
Site Address: 23615 ALESSANDRO BLVD STE C
Site City: MORENO VALLEY
Site Zip: 92553
Enf Action Date: 08-10-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: HW
Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: Operator
Entity Name: Chidi Uzuakpunwa
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (951) 732-0095

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

CHASE AUTO TECH (Continued)

S121018949

Affiliation Type Desc:	Parent Corporation
Entity Name:	Speedy Mobile lube
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Document Preparer
Entity Name:	Chidi Uzuakpunwa
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	23615 ALESSANDRO BLVD SUITE C
Affiliation City:	MORENO VALLEY
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92553
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Chidi Uzuakpunwa
Entity Title:	Not reported
Affiliation Address:	speedymobilelube@yahoo.com
Affiliation City:	Moreno Valley
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92553
Affiliation Phone:	(951) 732-0095
Affiliation Type Desc:	CUPA District
Entity Name:	Riverside Cnty Env Health
Entity Title:	Not reported
Affiliation Address:	4065 County Circle Drive, Room 104
Affiliation City:	Riverside
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92503
Affiliation Phone:	(951) 358-5055
Affiliation Type Desc:	Environmental Contact
Entity Name:	Chidi Uzuakpunwa
Entity Title:	Not reported
Affiliation Address:	23615 ALESSANDRO BLVD SUITE C
Affiliation City:	MORENO VALLEY
Affiliation State:	CA
Affiliation Country:	Not reported

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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CHASE AUTO TECH (Continued)

S121018949

Affiliation Zip: 92553
 Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
 Entity Name: Chidi Uzuakpunwa
 Entity Title: owner
 Affiliation Address: Not reported
 Affiliation City: Not reported
 Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: Not reported

F38 **SPEEDY MOBILE LUBE**
East **23615 ALESSANDRO BLVD STE B**
1/8-1/4 **MORENO VALLEY, CA 92553**

RCRA NonGen / NLR **1024829515**
CAL000362865

0.237 mi.
1254 ft.

Site 3 of 3 in cluster F

Relative:
Higher
Actual:
1571 ft.

RCRA NonGen / NLR:
 Date form received by agency: 2011-04-13 00:00:00
 Facility name: SPEEDY MOBILE LUBE
 Facility address: 23615 ALESSANDRO BLVD STE B
 MORENO VALLEY, CA 92553-8807
 EPA ID: CAL000362865
 Mailing address: 23615 ALESSANDRO BLVD STE C
 MORENO VALLEY, CA 92553-0000
 Contact: CHIDI UZUAKPUNWA
 Contact address: 23615 ALESSANDRO BLVD STE C
 MORENO VALLEY, CA 92553
 Contact country: Not reported
 Contact telephone: 951-653-2500
 Contact email: SPEEDYMOBILELUBE@YAHOO.COM
 EPA Region: 09
 Classification: Non-Generator
 Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: CHIDI UZUAKPUNWA
 Owner/operator address: 23615 ALESSANDRO BLVD STE C
 MORENO VALLEY, CA 92553

Owner/operator country: Not reported
 Owner/operator telephone: 951-653-2500
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Other
 Owner/Operator Type: Owner
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Owner/operator name: CHIDI UZUAKPUNWA
 Owner/operator address: 23615 ALESSANDRO BLVD STE C
 MORENO VALLEY, CA 92553

Owner/operator country: Not reported
 Owner/operator telephone: 951-653-2500

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

SPEEDY MOBILE LUBE (Continued)

1024829515

Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Other
 Owner/Operator Type: Operator
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
 Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: Yes
 Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No
 Used oil Specification marketer: No
 Used oil transfer facility: No
 Used oil transporter: No

Violation Status: No violations found

39
WNW
1/8-1/4
0.244 mi.
1289 ft.

SOUTHERN AUTO SUPPLY
22886 ALESSANDRO BLVD
MORENO VLY, CA 92553

RCRA-SQG 1004675685
 CAR000075945

Relative:
Higher
Actual:
1571 ft.

RCRA-SQG:
 Date form received by agency: 2000-06-20 00:00:00.0
 Facility name: SOUTHERN AUTO SUPPLY
 Facility address: 22886 ALESSANDRO BLVD
 MORENO VLY, CA 92553
 EPA ID: CAR000075945
 Mailing address: 351 E PENNSYLVANIA AVE
 ESCONDIDO, CA 92025
 Contact: DONNA LABBE
 Contact address: 22886 ALESSANDRO BLVD
 MORENO VLY, CA 92553
 Contact country: US
 Contact telephone: 909-697-6678
 Contact email: Not reported
 EPA Region: 09
 Classification: Small Small Quantity Generator
 Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
 Owner/operator name: AUTO PARTS WHOLESale
 Owner/operator address: P O BOX 3289

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

SOUTHERN AUTO SUPPLY (Continued)

1004675685

BAKERSFIELD, CA 93304

Owner/operator country: Not reported
 Owner/operator telephone: 800-524-1149
 Owner/operator email: Not reported
 Owner/operator fax: Not reported
 Owner/operator extension: Not reported
 Legal status: Private
 Owner/Operator Type: Owner
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
 Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: No
 Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No
 Used oil Specification marketer: No
 Used oil transfer facility: No
 Used oil transporter: No

Hazardous Waste Summary:

Waste code: D039
 Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

40
 West
 1/4-1/2
 0.342 mi.
 1807 ft.

CIRCLE K (FORMER)
22790 ALESSANDRO BLVD
MORENO VALLEY, CA 92553

LUST S101619611
 SWEEPS UST N/A
 CA FID UST
 HIST CORTESE
 CERS

Relative:
 Higher
 Actual:
 1570 ft.

LUST REG 8:
 Name: CIRCLE K (FORMER)
 Address: 22790 ALESSANDRO BLVD
 City: MORENO VALLEY
 Region: 8
 County: Riverside
 Regional Board: Santa Ana Region
 Facility Status: Case Closed
 Case Number: 083301110T
 Local Case Num: 911020
 Case Type: Soil only
 Substance: Gasoline
 Qty Leaked: Not reported
 Abate Method: Not reported
 Cross Street: VULTEE
 Enf Type: CLOS
 Funding: Not reported

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

CIRCLE K (FORMER) (Continued)**S101619611**

How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0606500109
How Stopped Date:	10/26/1992
Enter Date:	1/6/1993
Date Confirmation of Leak Began:	11/4/1992
Date Preliminary Assessment Began:	7/13/1993
Discover Date:	10/26/1992
Enforcement Date:	Not reported
Close Date:	9/10/1998
Date Prelim Assessment Workplan Submitted:	11/4/1992
Date Pollution Characterization Began:	10/31/1994
Date Remediation Plan Submitted:	3/7/1995
Date Remedial Action Underway:	2/9/1996
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	1/6/1993
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.9171412
Longitude:	-117.2651675
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE. Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	CAB
Staff Initials:	UNK
Lead Agency:	Local Agency
Local Agency:	33000L
Hydr Basin #:	SAN JACINTO (8-5)
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

LUST:

Name:	CIRCLE K (FORMER)
Address:	22790 ALESSANDRO BLVD
City,State,Zip:	MORENO VALLEY, CA 92553
Lead Agency:	RIVERSIDE COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500109
Global Id:	T0606500109
Latitude:	33.9174245000084
Longitude:	-117.264727617722
Status:	Completed - Case Closed
Status Date:	09/10/1998
Case Worker:	RIV

MAP FINDINGS

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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CIRCLE K (FORMER) (Continued)

S101619611

RB Case Number: 083301110T
 Local Agency: RIVERSIDE COUNTY LOP
 File Location: Local Agency Warehouse
 Local Case Number: 921020
 Potential Media Affect: Soil
 Potential Contaminants of Concern: Gasoline
 Site History: Not reported

LUST:

Global Id: T0606500109
 Contact Type: Regional Board Caseworker
 Contact Name: CARL BERNHARDT
 Organization Name: SANTA ANA RWQCB (REGION 8)
 Address: 3737 MAIN STREET, SUITE 500
 City: RIVERSIDE
 Email: carl.bernhardt@waterboards.ca.gov
 Phone Number: 9517824495

Global Id: T0606500109
 Contact Type: Local Agency Caseworker
 Contact Name: Riverside County LOP
 Organization Name: RIVERSIDE COUNTY LOP
 Address: 3880 LEMON ST SUITE 200
 City: RIVERSIDE
 Email: Not reported
 Phone Number: 9519558980

LUST:

Global Id: T0606500109
 Action Type: Other
 Date: 10/26/1992
 Action: Leak Stopped

Global Id: T0606500109
 Action Type: Other
 Date: 11/04/1992
 Action: Leak Reported

Global Id: T0606500109
 Action Type: ENFORCEMENT
 Date: 03/25/2009
 Action: Closure/No Further Action Letter - #Site Closure

Global Id: T0606500109
 Action Type: ENFORCEMENT
 Date: 03/24/2009
 Action: File review - #RCDEH Upload Site File 5/15/2015

Global Id: T0606500109
 Action Type: ENFORCEMENT
 Date: 09/10/1998
 Action: Closure/No Further Action Letter

Global Id: T0606500109
 Action Type: Other
 Date: 10/26/1992
 Action: Leak Discovery

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

CIRCLE K (FORMER) (Continued)

S101619611

LUST:

Global Id: T0606500109
 Status: Open - Case Begin Date
 Status Date: 10/26/1992

Global Id: T0606500109
 Status: Open - Site Assessment
 Status Date: 11/04/1992

Global Id: T0606500109
 Status: Open - Site Assessment
 Status Date: 07/13/1993

Global Id: T0606500109
 Status: Open - Site Assessment
 Status Date: 10/31/1994

Global Id: T0606500109
 Status: Open - Remediation
 Status Date: 03/07/1995

Global Id: T0606500109
 Status: Open - Remediation
 Status Date: 02/09/1996

Global Id: T0606500109
 Status: Completed - Case Closed
 Status Date: 09/10/1998

RIVERSIDE CO. LUST:

Name: FORMER CIRCLE K
 Address: 22790 ALESSANDRO BLVD
 City,State,Zip: MORENO VALLEY, CA
 Region: RIVERSIDE
 Facility ID: 921020
 Employee: Boltinghous-LOP
 Site Closed: Yes
 Case Type: Soil only
 Facility Status: closed/action completed
 Casetype Decode: Soil only is impacted
 Fstatus Decode: Closed/Action completed

SWEEPS UST:

Name: CIRCLE K #300
 Address: 22790 ALESSANDRO BLVD
 City: MORENO VALLEY
 Status: Active
 Comp Number: 13650
 Number: 1
 Board Of Equalization: 44-017983
 Referral Date: 10-28-92
 Action Date: 10-28-92
 Created Date: 02-29-88
 Owner Tank Id: 000035
 SWRCB Tank Id: 33-000-013650-000001

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

CIRCLE K (FORMER) (Continued)

S101619611

Tank Status: A
Capacity: 9940
Active Date: 10-28-92
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: 2

Name: CIRCLE K #300
Address: 22790 ALESSANDRO BLVD
City: MORENO VALLEY
Status: Active
Comp Number: 13650
Number: 1
Board Of Equalization: 44-017983
Referral Date: 10-28-92
Action Date: 10-28-92
Created Date: 02-29-88
Owner Tank Id: 000035
SWRCB Tank Id: 33-000-013650-000002
Tank Status: A
Capacity: 9940
Active Date: 10-28-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

CA FID UST:

Facility ID: 33000356
Regulated By: UTNKA
Regulated ID: 00013650
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7146534289
Mail To: Not reported
Mailing Address: P O BOX 52084
Mailing Address 2: Not reported
Mailing City,St,Zip: MORENO VALLEY 92388
Contact: Not reported
Contact Phone: Not reported
DUNS Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

HIST CORTESE:

edr_fname: CIRCLE K (FORMER)
edr_fadd1: 22790
City,State,Zip: MORENO VALLEY, CA 92553
Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 083301110T

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

CIRCLE K (FORMER) (Continued)

S101619611

CERS:

Name: CIRCLE K (FORMER)
Address: 22790 ALESSANDRO BLVD
City,State,Zip: MORENO VALLEY, CA 92553
Site ID: 226422
CERS ID: T0606500109
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Regional Board Caseworker
Entity Name: CARL BERNHARDT - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824495

Affiliation Type Desc: Local Agency Caseworker
Entity Name: Riverside County LOP - RIVERSIDE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 3880 LEMON ST SUITE 200
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9519558980

41
WSW
1/2-1
0.696 mi.
3677 ft.

ALPER CLEANERS
14420 ELSWORTH ST., SUITE 114
MORENO VALLEY, CA 92553

ENVIROSTOR S106797644
N/A

Relative:
Lower
Actual:
1553 ft.

ENVIROSTOR:

Name: ALPER CLEANERS
Address: 14420 ELSWORTH ST., SUITE 114
City,State,Zip: MORENO VALLEY, CA 92553
Facility ID: 33720002
Status: Refer: 1248 Local Agency
Status Date: 06/07/2004
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 0
NPL: NO
Regulatory Agencies: RIVERSIDE COUNTY
Lead Agency: RIVERSIDE COUNTY
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Cypress
Assembly: 61
Senate: 31
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

ALPER CLEANERS (Continued)

S106797644

Funding: Not Applicable
 Latitude: 33.91112
 Longitude: -117.2692
 APN: 297140026, 297150012
 Past Use: NONE SPECIFIED
 Potential COC: NONE SPECIFIED
 Confirmed COC: NONE SPECIFIED
 Potential Description: NONE SPECIFIED
 Alias Name: 297140026
 Alias Type: APN
 Alias Name: 297150012
 Alias Type: APN
 Alias Name: 33720002
 Alias Type: Envirostor ID Number

Completed Info:
 Completed Area Name: Not reported
 Completed Sub Area Name: Not reported
 Completed Document Type: Not reported
 Completed Date: Not reported
 Comments: Not reported

Future Area Name: Not reported
 Future Sub Area Name: Not reported
 Future Document Type: Not reported
 Future Due Date: Not reported
 Schedule Area Name: Not reported
 Schedule Sub Area Name: Not reported
 Schedule Document Type: Not reported
 Schedule Due Date: Not reported
 Schedule Revised Date: Not reported

42
 NW
 1/2-1
 0.994 mi.
 5248 ft.

**TOWNGATE ELEMENTARY SCHOOL
 ELSWORTH STREET/DRACAEA AVENUE
 MORENO VALLEY, CA 92553**

**ENVIROSTOR S118756735
 SCH N/A**

**Relative:
 Higher
 Actual:
 1572 ft.**

ENVIROSTOR:
 Name: TOWNGATE ELEMENTARY SCHOOL
 Address: ELSWORTH STREET/DRACAEA AVENUE
 City,State,Zip: MORENO VALLEY, CA 92553
 Facility ID: 33650012
 Status: No Action Required
 Status Date: 09/20/2002
 Site Code: 404379
 Site Type: School Investigation
 Site Type Detailed: School
 Acres: 8
 NPL: NO
 Regulatory Agencies: SMBRP
 Lead Agency: SMBRP
 Program Manager: Not reported
 Supervisor: Shahir Haddad
 Division Branch: Southern California Schools & Brownfields Outreach
 Assembly: 61
 Senate: 31
 Special Program: Not reported

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOWNGATE ELEMENTARY SCHOOL (Continued)

S118756735

Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 33.9283
Longitude: -117.2698
APN: NONE SPECIFIED
Past Use: NONE
Potential COC: NONE SPECIFIED No Contaminants found
Confirmed COC: NONE SPECIFIED
Potential Description: NMA
Alias Name: MORENO VALLEY USD-TOWNGATE ELEM SCHOOL
Alias Type: Alternate Name
Alias Name: TOWNGATE ELEMENTARY SCHOOL
Alias Type: Alternate Name
Alias Name: 404379
Alias Type: Project Code (Site Code)
Alias Name: 33650012
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 09/20/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 11/25/2002
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: TOWNGATE ELEMENTARY SCHOOL
Address: ELSWORTH STREET/DRACAEA AVENUE
City,State,Zip: MORENO VALLEY, CA 92553
Facility ID: 33650012
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 8
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TOWNGATE ELEMENTARY SCHOOL (Continued)

S118756735

Supervisor: Shahir Haddad
 Division Branch: Southern California Schools & Brownfields Outreach
 Site Code: 404379
 Assembly: 61
 Senate: 31
 Special Program Status: Not reported
 Status: No Action Required
 Status Date: 09/20/2002
 Restricted Use: NO
 Funding: School District
 Latitude: 33.9283
 Longitude: -117.2698
 APN: NONE SPECIFIED
 Past Use: NONE
 Potential COC: NONE SPECIFIED, No Contaminants found
 Confirmed COC: NONE SPECIFIED
 Potential Description: NMA
 Alias Name: MORENO VALLEY USD-TOWNGATE ELEM SCHOOL
 Alias Type: Alternate Name
 Alias Name: TOWNGATE ELEMENTARY SCHOOL
 Alias Type: Alternate Name
 Alias Name: 404379
 Alias Type: Project Code (Site Code)
 Alias Name: 33650012
 Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Phase 1
 Completed Date: 09/20/2002
 Comments: Not reported

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Cost Recovery Closeout Memo
 Completed Date: 11/25/2002
 Comments: Not reported

Future Area Name: Not reported
 Future Sub Area Name: Not reported
 Future Document Type: Not reported
 Future Due Date: Not reported
 Schedule Area Name: Not reported
 Schedule Sub Area Name: Not reported
 Schedule Document Type: Not reported
 Schedule Due Date: Not reported
 Schedule Revised Date: Not reported

Count: 4 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
MORENO VALLEY	S124442407	HARBOR FREIGHT TOOLS, BRODIAEA WAR	23450 BRODIAEA AVE	92553	CERS HAZ WASTE, CERS
MORENO VALLEY	S108985918	U.S. AIR FORCE - MARCH AFB (FORMER	N/A GRAHAM		CPS-SLIC
RIVERSIDE	S108985920	RIVERSIDE PLUME	N/A RIVERSIDE II BASIN		CPS-SLIC
RIVERSIDE	S104970783	UCR - PARKING LOT 6	UNIVERSITY OF CALIF, RIVERSIDE		LUST

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119,

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: N/A
Date Made Active in Reports: 11/20/2019	Last EDR Contact: 11/07/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/13/2020
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: N/A
Date Made Active in Reports: 11/20/2019	Last EDR Contact: 11/07/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/13/2020
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
 Date Data Arrived at EDR: 02/02/1994
 Date Made Active in Reports: 03/30/1994
 Number of Days to Update: 56

Source: EPA
 Telephone: 202-564-4267
 Last EDR Contact: 08/15/2011
 Next Scheduled EDR Contact: 11/28/2011
 Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/25/2019
 Date Data Arrived at EDR: 11/07/2019
 Date Made Active in Reports: 11/20/2019
 Number of Days to Update: 13

Source: EPA
 Telephone: N/A
 Last EDR Contact: 11/07/2019
 Next Scheduled EDR Contact: 01/13/2020
 Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
 Date Data Arrived at EDR: 04/05/2019
 Date Made Active in Reports: 05/14/2019
 Number of Days to Update: 39

Source: Environmental Protection Agency
 Telephone: 703-603-8704
 Last EDR Contact: 10/04/2019
 Next Scheduled EDR Contact: 01/13/2020
 Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2019
 Date Data Arrived at EDR: 11/07/2019
 Date Made Active in Reports: 11/21/2019
 Number of Days to Update: 14

Source: EPA
 Telephone: 800-424-9346
 Last EDR Contact: 11/07/2019
 Next Scheduled EDR Contact: 01/27/2020
 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: 800-424-9346
Date Made Active in Reports: 11/21/2019	Last EDR Contact: 11/07/2019
Number of Days to Update: 14	Next Scheduled EDR Contact: 01/27/2020
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/24/2019	Source: EPA
Date Data Arrived at EDR: 06/26/2019	Telephone: 800-424-9346
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/28/2019
Number of Days to Update: 113	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/24/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/26/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/28/2019
Number of Days to Update: 113	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/24/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/26/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/28/2019
Number of Days to Update: 113	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/24/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/26/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/28/2019
Number of Days to Update: 113	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/24/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/26/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/28/2019
Number of Days to Update: 113	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/13/2019	Source: Department of the Navy
Date Data Arrived at EDR: 08/20/2019	Telephone: 843-820-7326
Date Made Active in Reports: 08/26/2019	Last EDR Contact: 11/07/2019
Number of Days to Update: 6	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/19/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/20/2019	Telephone: 703-603-0695
Date Made Active in Reports: 08/26/2019	Last EDR Contact: 11/22/2019
Number of Days to Update: 6	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/19/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/20/2019	Telephone: 703-603-0695
Date Made Active in Reports: 08/26/2019	Last EDR Contact: 11/22/2019
Number of Days to Update: 6	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/09/2019

Date Data Arrived at EDR: 09/09/2019

Date Made Active in Reports: 09/23/2019

Number of Days to Update: 14

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 09/09/2019

Next Scheduled EDR Contact: 01/06/2020

Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/29/2019

Date Data Arrived at EDR: 07/31/2019

Date Made Active in Reports: 10/08/2019

Number of Days to Update: 69

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/29/2019

Next Scheduled EDR Contact: 02/10/2020

Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/29/2019

Date Data Arrived at EDR: 07/31/2019

Date Made Active in Reports: 10/08/2019

Number of Days to Update: 69

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/29/2019

Next Scheduled EDR Contact: 02/10/2020

Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/12/2019

Date Data Arrived at EDR: 08/13/2019

Date Made Active in Reports: 10/09/2019

Number of Days to Update: 57

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 11/12/2019

Next Scheduled EDR Contact: 02/24/2020

Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: see region list
Date Made Active in Reports: 10/31/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 909-782-4496
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 07/22/2008	Telephone: 916-464-4834
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 07/01/2011
Number of Days to Update: 9	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/19/2003	Telephone: 805-542-4786
Date Made Active in Reports: 06/02/2003	Last EDR Contact: 07/18/2011
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/29/2019	Telephone: 415-972-3372
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/01/2019	Source: EPA Region 6
Date Data Arrived at EDR: 07/29/2019	Telephone: 214-665-6597
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/16/2019	Source: EPA Region 10
Date Data Arrived at EDR: 07/29/2019	Telephone: 206-553-2857
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 07/02/2019	Source: EPA Region 7
Date Data Arrived at EDR: 10/16/2019	Telephone: 913-551-7003
Date Made Active in Reports: 10/24/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 8	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/12/2019	Source: EPA Region 4
Date Data Arrived at EDR: 07/29/2019	Telephone: 404-562-8677
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/08/2019	Source: EPA, Region 5
Date Data Arrived at EDR: 07/30/2019	Telephone: 312-886-7439
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/02/2019	Source: EPA Region 8
Date Data Arrived at EDR: 10/22/2019	Telephone: 303-312-6271
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 20	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/11/2019	Source: EPA Region 1
Date Data Arrived at EDR: 07/29/2019	Telephone: 617-918-1313
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
 Date Data Arrived at EDR: 04/07/2003
 Date Made Active in Reports: 04/25/2003
 Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
 Telephone: 707-576-2220
 Last EDR Contact: 08/01/2011
 Next Scheduled EDR Contact: 11/14/2011
 Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
 Date Data Arrived at EDR: 10/20/2004
 Date Made Active in Reports: 11/19/2004
 Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
 Telephone: 510-286-0457
 Last EDR Contact: 09/19/2011
 Next Scheduled EDR Contact: 01/02/2012
 Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
 Date Data Arrived at EDR: 05/18/2006
 Date Made Active in Reports: 06/15/2006
 Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
 Telephone: 805-549-3147
 Last EDR Contact: 07/18/2011
 Next Scheduled EDR Contact: 10/31/2011
 Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
 Date Data Arrived at EDR: 11/18/2004
 Date Made Active in Reports: 01/04/2005
 Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
 Telephone: 213-576-6600
 Last EDR Contact: 07/01/2011
 Next Scheduled EDR Contact: 10/17/2011
 Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
 Date Data Arrived at EDR: 04/05/2005
 Date Made Active in Reports: 04/21/2005
 Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
 Telephone: 916-464-3291
 Last EDR Contact: 09/12/2011
 Next Scheduled EDR Contact: 12/26/2011
 Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
 Date Data Arrived at EDR: 05/25/2005
 Date Made Active in Reports: 06/16/2005
 Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
 Telephone: 619-241-6583
 Last EDR Contact: 08/15/2011
 Next Scheduled EDR Contact: 11/28/2011
 Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
 Date Data Arrived at EDR: 09/07/2004
 Date Made Active in Reports: 10/12/2004
 Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
 Telephone: 530-542-5574
 Last EDR Contact: 08/15/2011
 Next Scheduled EDR Contact: 11/28/2011
 Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
 Date Data Arrived at EDR: 11/29/2004
 Date Made Active in Reports: 01/04/2005
 Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
 Telephone: 760-346-7491
 Last EDR Contact: 08/01/2011
 Next Scheduled EDR Contact: 11/14/2011
 Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
 Date Data Arrived at EDR: 04/03/2008
 Date Made Active in Reports: 04/14/2008
 Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
 Telephone: 951-782-3298
 Last EDR Contact: 09/12/2011
 Next Scheduled EDR Contact: 12/26/2011
 Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
 Date Data Arrived at EDR: 09/11/2007
 Date Made Active in Reports: 09/28/2007
 Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
 Telephone: 858-467-2980
 Last EDR Contact: 08/08/2011
 Next Scheduled EDR Contact: 11/21/2011
 Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 08/27/2019
 Date Data Arrived at EDR: 08/28/2019
 Date Made Active in Reports: 11/11/2019
 Number of Days to Update: 75

Source: FEMA
 Telephone: 202-646-5797
 Last EDR Contact: 10/11/2019
 Next Scheduled EDR Contact: 01/20/2020
 Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/09/2019
 Date Data Arrived at EDR: 09/09/2019
 Date Made Active in Reports: 10/31/2019
 Number of Days to Update: 52

Source: SWRCB
 Telephone: 916-341-5851
 Last EDR Contact: 09/09/2019
 Next Scheduled EDR Contact: 12/23/2019
 Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 09/06/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-327-7844
Date Made Active in Reports: 10/31/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/01/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 09/12/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 12/30/2019
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2019	Source: EPA Region 9
Date Data Arrived at EDR: 07/29/2019	Telephone: 415-972-3368
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/02/2019	Source: EPA Region 8
Date Data Arrived at EDR: 10/22/2019	Telephone: 303-312-6137
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 20	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/01/2019	Source: EPA Region 6
Date Data Arrived at EDR: 07/29/2019	Telephone: 214-665-7591
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/08/2019	Source: EPA Region 5
Date Data Arrived at EDR: 07/29/2019	Telephone: 312-886-6136
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/12/2019	Source: EPA Region 4
Date Data Arrived at EDR: 07/29/2019	Telephone: 404-562-9424
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2019	Source: EPA Region 7
Date Data Arrived at EDR: 07/29/2019	Telephone: 913-551-7003
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/11/2019	Source: EPA, Region 1
Date Data Arrived at EDR: 07/30/2019	Telephone: 617-918-1313
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/16/2019	Source: EPA Region 10
Date Data Arrived at EDR: 07/30/2019	Telephone: 206-553-2857
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/29/2019
 Date Data Arrived at EDR: 07/31/2019
 Date Made Active in Reports: 10/08/2019
 Number of Days to Update: 69

Source: Department of Toxic Substances Control
 Telephone: 916-323-3400
 Last EDR Contact: 10/29/2019
 Next Scheduled EDR Contact: 02/10/2020
 Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
 Date Data Arrived at EDR: 09/29/2015
 Date Made Active in Reports: 02/18/2016
 Number of Days to Update: 142

Source: EPA, Region 1
 Telephone: 617-918-1102
 Last EDR Contact: 09/19/2019
 Next Scheduled EDR Contact: 01/06/2020
 Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
 Date Data Arrived at EDR: 04/22/2008
 Date Made Active in Reports: 05/19/2008
 Number of Days to Update: 27

Source: EPA, Region 7
 Telephone: 913-551-7365
 Last EDR Contact: 04/20/2009
 Next Scheduled EDR Contact: 07/20/2009
 Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/23/2019
 Date Data Arrived at EDR: 09/24/2019
 Date Made Active in Reports: 11/06/2019
 Number of Days to Update: 43

Source: State Water Resources Control Board
 Telephone: 916-323-7905
 Last EDR Contact: 09/24/2019
 Next Scheduled EDR Contact: 01/06/2020
 Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/03/2019
 Date Data Arrived at EDR: 06/04/2019
 Date Made Active in Reports: 08/26/2019
 Number of Days to Update: 83

Source: Environmental Protection Agency
 Telephone: 202-566-2777
 Last EDR Contact: 09/19/2019
 Next Scheduled EDR Contact: 12/30/2019
 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2000
 Date Data Arrived at EDR: 04/10/2000
 Date Made Active in Reports: 05/10/2000
 Number of Days to Update: 30

Source: State Water Resources Control Board
 Telephone: 916-227-4448
 Last EDR Contact: 10/25/2019
 Next Scheduled EDR Contact: 02/10/2020
 Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/09/2019
 Date Data Arrived at EDR: 09/09/2019
 Date Made Active in Reports: 11/07/2019
 Number of Days to Update: 59

Source: Department of Conservation
 Telephone: 916-323-3836
 Last EDR Contact: 09/09/2019
 Next Scheduled EDR Contact: 12/23/2019
 Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 03/26/2019
 Date Data Arrived at EDR: 03/27/2019
 Date Made Active in Reports: 04/30/2019
 Number of Days to Update: 34

Source: Integrated Waste Management Board
 Telephone: 916-341-6422
 Last EDR Contact: 11/07/2019
 Next Scheduled EDR Contact: 02/24/2020
 Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
 Date Data Arrived at EDR: 12/03/2007
 Date Made Active in Reports: 01/24/2008
 Number of Days to Update: 52

Source: Environmental Protection Agency
 Telephone: 703-308-8245
 Last EDR Contact: 10/28/2019
 Next Scheduled EDR Contact: 02/10/2020
 Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
 Date Data Arrived at EDR: 08/09/2004
 Date Made Active in Reports: 09/17/2004
 Number of Days to Update: 39

Source: Environmental Protection Agency
 Telephone: 800-424-9346
 Last EDR Contact: 06/09/2004
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
 Date Data Arrived at EDR: 05/07/2009
 Date Made Active in Reports: 09/21/2009
 Number of Days to Update: 137

Source: EPA, Region 9
 Telephone: 415-947-4219
 Last EDR Contact: 10/17/2019
 Next Scheduled EDR Contact: 02/03/2020
 Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
 Date Data Arrived at EDR: 08/06/2014
 Date Made Active in Reports: 01/29/2015
 Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
 Telephone: 301-443-1452
 Last EDR Contact: 11/01/2019
 Next Scheduled EDR Contact: 02/10/2020
 Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 06/11/2019	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 06/13/2019	Telephone: 202-307-1000
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 11/20/2019
Number of Days to Update: 82	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/29/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/31/2019	Telephone: 916-323-3400
Date Made Active in Reports: 10/08/2019	Last EDR Contact: 10/29/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 02/10/2020
	Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/16/2019	Telephone: 916-255-6504
Date Made Active in Reports: 09/24/2019	Last EDR Contact: 09/24/2019
Number of Days to Update: 70	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/30/1995	Telephone: 916-227-4364
Date Made Active in Reports: 09/26/1995	Last EDR Contact: 01/26/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/27/2009
	Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/14/2019
 Date Data Arrived at EDR: 08/14/2019
 Date Made Active in Reports: 08/21/2019
 Number of Days to Update: 7

Source: CalEPA
 Telephone: 916-323-2514
 Last EDR Contact: 10/22/2019
 Next Scheduled EDR Contact: 02/03/2020
 Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/11/2019
 Date Data Arrived at EDR: 06/13/2019
 Date Made Active in Reports: 09/03/2019
 Number of Days to Update: 82

Source: Drug Enforcement Administration
 Telephone: 202-307-1000
 Last EDR Contact: 11/20/2019
 Next Scheduled EDR Contact: 03/09/2020
 Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 09/09/2019
 Date Data Arrived at EDR: 09/09/2019
 Date Made Active in Reports: 11/05/2019
 Number of Days to Update: 57

Source: State Water Resources Control Board
 Telephone: 866-480-1028
 Last EDR Contact: 09/09/2019
 Next Scheduled EDR Contact: 12/23/2019
 Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
 Date Data Arrived at EDR: 07/07/2005
 Date Made Active in Reports: 08/11/2005
 Number of Days to Update: 35

Source: State Water Resources Control Board
 Telephone: N/A
 Last EDR Contact: 06/03/2005
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 08/20/2019
 Date Data Arrived at EDR: 09/09/2019
 Date Made Active in Reports: 10/31/2019
 Number of Days to Update: 52

Source: Department of Public Health
 Telephone: 707-463-4466
 Last EDR Contact: 11/20/2019
 Next Scheduled EDR Contact: 03/09/2020
 Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
 Date Data Arrived at EDR: 01/25/1991
 Date Made Active in Reports: 02/12/1991
 Number of Days to Update: 18

Source: State Water Resources Control Board
 Telephone: 916-341-5851
 Last EDR Contact: 07/26/2001
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 08/01/2019
 Date Data Arrived at EDR: 08/02/2019
 Date Made Active in Reports: 10/11/2019
 Number of Days to Update: 70

Source: San Francisco County Department of Public Health
 Telephone: 415-252-3896
 Last EDR Contact: 10/31/2019
 Next Scheduled EDR Contact: 02/17/2020
 Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 08/14/2019
 Date Data Arrived at EDR: 08/14/2019
 Date Made Active in Reports: 08/21/2019
 Number of Days to Update: 7

Source: California Environmental Protection Agency
 Telephone: 916-323-2514
 Last EDR Contact: 10/22/2019
 Next Scheduled EDR Contact: 02/03/2020
 Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
 Date Data Arrived at EDR: 09/05/1995
 Date Made Active in Reports: 09/29/1995
 Number of Days to Update: 24

Source: California Environmental Protection Agency
 Telephone: 916-341-5851
 Last EDR Contact: 12/28/1998
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/29/2019
 Date Data Arrived at EDR: 08/30/2019
 Date Made Active in Reports: 10/29/2019
 Number of Days to Update: 60

Source: Department of Toxic Substances Control
 Telephone: 916-323-3400
 Last EDR Contact: 08/28/2019
 Next Scheduled EDR Contact: 12/16/2019
 Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 10/25/2019
 Date Data Arrived at EDR: 11/07/2019
 Date Made Active in Reports: 11/20/2019
 Number of Days to Update: 13

Source: Environmental Protection Agency
 Telephone: 202-564-6023
 Last EDR Contact: 11/07/2019
 Next Scheduled EDR Contact: 01/13/2020
 Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/03/2019	Source: DTSC and SWRCB
Date Data Arrived at EDR: 09/04/2019	Telephone: 916-323-3400
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 09/04/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2019	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/26/2019	Telephone: 202-366-4555
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 09/24/2019
Number of Days to Update: 89	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 05/15/2019	Source: Office of Emergency Services
Date Data Arrived at EDR: 06/24/2019	Telephone: 916-845-8400
Date Made Active in Reports: 08/21/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019	Source: State Water Quality Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/24/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/26/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/28/2019
Number of Days to Update: 113	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/15/2019	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 05/21/2019	Telephone: 202-528-4285
Date Made Active in Reports: 08/08/2019	Last EDR Contact: 11/19/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/11/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018	Source: U.S. Geological Survey
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 10/07/2019
Number of Days to Update: 574	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/03/2017	Telephone: 615-532-8599
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 11/22/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/24/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/26/2019	Telephone: 202-566-1917
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 09/24/2019
Number of Days to Update: 89	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 10/31/2019
Number of Days to Update: 88	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 11/08/2019
Number of Days to Update: 73	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/21/2017	Telephone: 202-260-5521
Date Made Active in Reports: 01/05/2018	Last EDR Contact: 09/19/2019
Number of Days to Update: 198	Next Scheduled EDR Contact: 12/30/2019
	Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2017
 Date Data Arrived at EDR: 11/16/2018
 Date Made Active in Reports: 11/21/2019
 Number of Days to Update: 370

Source: EPA
 Telephone: 202-566-0250
 Last EDR Contact: 11/22/2019
 Next Scheduled EDR Contact: 03/02/2020
 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 09/30/2018
 Date Data Arrived at EDR: 04/24/2019
 Date Made Active in Reports: 08/08/2019
 Number of Days to Update: 106

Source: EPA
 Telephone: 202-564-4203
 Last EDR Contact: 10/23/2019
 Next Scheduled EDR Contact: 02/03/2020
 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/25/2019
 Date Data Arrived at EDR: 11/07/2019
 Date Made Active in Reports: 11/20/2019
 Number of Days to Update: 13

Source: EPA
 Telephone: 703-416-0223
 Last EDR Contact: 11/07/2019
 Next Scheduled EDR Contact: 02/17/2020
 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019
 Date Data Arrived at EDR: 05/02/2019
 Date Made Active in Reports: 05/23/2019
 Number of Days to Update: 21

Source: Environmental Protection Agency
 Telephone: 202-564-8600
 Last EDR Contact: 10/21/2019
 Next Scheduled EDR Contact: 02/03/2020
 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
 Date Data Arrived at EDR: 07/03/1995
 Date Made Active in Reports: 08/07/1995
 Number of Days to Update: 35

Source: EPA
 Telephone: 202-564-4104
 Last EDR Contact: 06/02/2008
 Next Scheduled EDR Contact: 09/01/2008
 Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: 202-564-6023
Date Made Active in Reports: 11/21/2019	Last EDR Contact: 11/07/2019
Number of Days to Update: 14	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2019	Source: EPA
Date Data Arrived at EDR: 04/10/2019	Telephone: 202-566-0500
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 10/11/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 10/07/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/20/2019	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 06/20/2019	Telephone: 301-415-7169
Date Made Active in Reports: 08/08/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 11/06/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 11/25/2019
Number of Days to Update: 251	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 11/06/2019
Number of Days to Update: 15	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 11/12/2019
Number of Days to Update: 84	Next Scheduled EDR Contact: 01/13/2020
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
 Date Data Arrived at EDR: 03/01/2007
 Date Made Active in Reports: 04/10/2007
 Number of Days to Update: 40

Source: Environmental Protection Agency
 Telephone: 202-564-2501
 Last EDR Contact: 12/17/2008
 Next Scheduled EDR Contact: 03/17/2008
 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/01/2019
 Date Data Arrived at EDR: 07/31/2019
 Date Made Active in Reports: 10/24/2019
 Number of Days to Update: 85

Source: Department of Transportation, Office of Pipeline Safety
 Telephone: 202-366-4595
 Last EDR Contact: 10/29/2019
 Next Scheduled EDR Contact: 02/10/2020
 Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2019
 Date Data Arrived at EDR: 07/16/2019
 Date Made Active in Reports: 10/02/2019
 Number of Days to Update: 78

Source: Department of Justice, Consent Decree Library
 Telephone: Varies
 Last EDR Contact: 10/02/2019
 Next Scheduled EDR Contact: 01/20/2020
 Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
 Date Data Arrived at EDR: 02/22/2017
 Date Made Active in Reports: 09/28/2017
 Number of Days to Update: 218

Source: EPA/NTIS
 Telephone: 800-424-9346
 Last EDR Contact: 09/16/2019
 Next Scheduled EDR Contact: 01/06/2020
 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
 Date Data Arrived at EDR: 07/14/2015
 Date Made Active in Reports: 01/10/2017
 Number of Days to Update: 546

Source: USGS
 Telephone: 202-208-3710
 Last EDR Contact: 10/06/2019
 Next Scheduled EDR Contact: 01/19/2020
 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
 Date Data Arrived at EDR: 09/11/2018
 Date Made Active in Reports: 09/14/2018
 Number of Days to Update: 3

Source: Department of Energy
 Telephone: 202-586-3559
 Last EDR Contact: 11/04/2019
 Next Scheduled EDR Contact: 02/17/2020
 Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/2019
 Date Data Arrived at EDR: 08/21/2019
 Date Made Active in Reports: 11/11/2019
 Number of Days to Update: 82

Source: Department of Energy
 Telephone: 505-845-0011
 Last EDR Contact: 11/15/2019
 Next Scheduled EDR Contact: 03/02/2020
 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/25/2019
 Date Data Arrived at EDR: 11/07/2019
 Date Made Active in Reports: 11/20/2019
 Number of Days to Update: 13

Source: Environmental Protection Agency
 Telephone: 703-603-8787
 Last EDR Contact: 11/07/2019
 Next Scheduled EDR Contact: 01/13/2020
 Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
 Date Data Arrived at EDR: 10/27/2010
 Date Made Active in Reports: 12/02/2010
 Number of Days to Update: 36

Source: American Journal of Public Health
 Telephone: 703-305-6451
 Last EDR Contact: 12/02/2009
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
 Date Data Arrived at EDR: 10/26/2016
 Date Made Active in Reports: 02/03/2017
 Number of Days to Update: 100

Source: EPA
 Telephone: 202-564-2496
 Last EDR Contact: 09/26/2017
 Next Scheduled EDR Contact: 01/08/2018
 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
 Date Data Arrived at EDR: 10/26/2016
 Date Made Active in Reports: 02/03/2017
 Number of Days to Update: 100

Source: EPA
 Telephone: 202-564-2496
 Last EDR Contact: 09/26/2017
 Next Scheduled EDR Contact: 01/08/2018
 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2019
 Date Data Arrived at EDR: 08/27/2019
 Date Made Active in Reports: 11/11/2019
 Number of Days to Update: 76

Source: Department of Labor, Mine Safety and Health Administration
 Telephone: 303-231-5959
 Last EDR Contact: 08/27/2019
 Next Scheduled EDR Contact: 12/09/2019
 Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/06/2019	Source: DOL, Mine Safety & Health Admi
Date Data Arrived at EDR: 06/06/2019	Telephone: 202-693-9424
Date Made Active in Reports: 10/24/2019	Last EDR Contact: 09/12/2019
Number of Days to Update: 140	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005	Source: USGS
Date Data Arrived at EDR: 02/29/2008	Telephone: 703-648-7709
Date Made Active in Reports: 04/18/2008	Last EDR Contact: 11/22/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 11/22/2019
Number of Days to Update: 97	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2019	Source: Department of Interior
Date Data Arrived at EDR: 09/10/2019	Telephone: 202-208-2609
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 09/10/2019
Number of Days to Update: 37	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/03/2019	Source: EPA
Date Data Arrived at EDR: 06/05/2019	Telephone: (415) 947-8000
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 09/04/2019
Number of Days to Update: 90	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2018	Telephone: 202-564-0527
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 11/20/2019
Number of Days to Update: 71	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017	Source: Department of Defense
Date Data Arrived at EDR: 01/17/2019	Telephone: 703-704-1564
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 10/10/2019
Number of Days to Update: 74	Next Scheduled EDR Contact: 01/27/2020
	Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 07/06/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/09/2019	Telephone: 202-564-2280
Date Made Active in Reports: 10/02/2019	Last EDR Contact: 10/08/2019
Number of Days to Update: 85	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/19/2019	Source: EPA
Date Data Arrived at EDR: 08/20/2019	Telephone: 800-385-6164
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 11/19/2019
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/23/2019	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 09/24/2019	Telephone: 916-323-3400
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 09/24/2019
Number of Days to Update: 43	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Quarterly

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 08/01/2019	Source: San Francisco County Department of Environmental Health
Date Data Arrived at EDR: 08/02/2019	Telephone: 415-252-3896
Date Made Active in Reports: 10/09/2019	Last EDR Contact: 10/31/2019
Number of Days to Update: 68	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Varies

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/01/2019
 Date Data Arrived at EDR: 05/14/2019
 Date Made Active in Reports: 07/17/2019
 Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
 Telephone: 925-454-2361
 Last EDR Contact: 11/14/2019
 Next Scheduled EDR Contact: 02/24/2020
 Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 06/04/2019
 Date Data Arrived at EDR: 06/28/2019
 Date Made Active in Reports: 08/22/2019
 Number of Days to Update: 55

Source: Department of Toxic Substance Control
 Telephone: 916-327-4498
 Last EDR Contact: 08/28/2019
 Next Scheduled EDR Contact: 12/16/2019
 Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 08/28/2019
 Date Data Arrived at EDR: 08/30/2019
 Date Made Active in Reports: 10/29/2019
 Number of Days to Update: 60

Source: Antelope Valley Air Quality Management District
 Telephone: 661-723-8070
 Last EDR Contact: 08/28/2019
 Next Scheduled EDR Contact: 12/16/2019
 Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 09/27/2019
 Date Data Arrived at EDR: 10/01/2019
 Date Made Active in Reports: 11/07/2019
 Number of Days to Update: 37

Source: South Coast Air Quality Management District
 Telephone: 909-396-3211
 Last EDR Contact: 11/20/2019
 Next Scheduled EDR Contact: 03/09/2020
 Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017
 Date Data Arrived at EDR: 06/24/2019
 Date Made Active in Reports: 08/22/2019
 Number of Days to Update: 59

Source: California Air Resources Board
 Telephone: 916-322-2990
 Last EDR Contact: 09/18/2019
 Next Scheduled EDR Contact: 12/30/2019
 Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/19/2019
 Date Data Arrived at EDR: 07/22/2019
 Date Made Active in Reports: 09/26/2019
 Number of Days to Update: 66

Source: State Water Resources Control Board
 Telephone: 916-445-9379
 Last EDR Contact: 10/30/2019
 Next Scheduled EDR Contact: 02/02/2020
 Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 07/19/2019
 Date Data Arrived at EDR: 07/23/2019
 Date Made Active in Reports: 09/30/2019
 Number of Days to Update: 69

Source: Department of Toxic Substances Control
 Telephone: 916-255-3628
 Last EDR Contact: 10/17/2019
 Next Scheduled EDR Contact: 02/03/2020
 Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/16/2019	Source: California Integrated Waste Management Board
Date Data Arrived at EDR: 08/20/2019	Telephone: 916-341-6066
Date Made Active in Reports: 10/18/2019	Last EDR Contact: 11/07/2019
Number of Days to Update: 59	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 05/29/2019	Telephone: 916-255-1136
Date Made Active in Reports: 07/22/2019	Last EDR Contact: 10/11/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/19/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/20/2019	Telephone: 877-786-9427
Date Made Active in Reports: 10/18/2019	Last EDR Contact: 11/19/2019
Number of Days to Update: 59	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 04/08/2009	Last EDR Contact: 01/22/2009
Number of Days to Update: 76	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/19/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/20/2019	Telephone: 916-323-3400
Date Made Active in Reports: 10/18/2019	Last EDR Contact: 11/19/2019
Number of Days to Update: 59	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/07/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/08/2019	Telephone: 916-440-7145
Date Made Active in Reports: 11/07/2019	Last EDR Contact: 10/08/2019
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/09/2019	Source: Department of Conservation
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-322-1080
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 07/19/2019	Source: Department of Public Health
Date Data Arrived at EDR: 09/04/2019	Telephone: 916-558-1784
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 09/04/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/12/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/13/2019	Telephone: 916-445-9379
Date Made Active in Reports: 10/16/2019	Last EDR Contact: 11/12/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 09/03/2019	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 09/04/2019	Telephone: 916-445-4038
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 09/04/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 09/09/2019	Source: Department of Conservation
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-323-3836
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/16/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/18/2019	Telephone: 916-445-3846
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 09/16/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 12/30/2019
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 08/20/2019	Source: Department of Conservation
Date Data Arrived at EDR: 08/20/2019	Telephone: 916-445-2408
Date Made Active in Reports: 11/18/2019	Last EDR Contact: 08/20/2019
Number of Days to Update: 90	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 09/09/2019	Source: State Water Resource Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/01/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 07/11/2018	Telephone: 559-445-5577
Date Made Active in Reports: 09/13/2018	Last EDR Contact: 10/11/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 11/14/2019
Number of Days to Update: 9	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 09/19/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/01/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/09/2019
 Date Data Arrived at EDR: 09/09/2019
 Date Made Active in Reports: 11/01/2019
 Number of Days to Update: 53

Source: State Water Resources Control Board
 Telephone: 866-480-1028
 Last EDR Contact: 09/09/2019
 Next Scheduled EDR Contact: 12/23/2019
 Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/09/2019
 Date Data Arrived at EDR: 09/09/2019
 Date Made Active in Reports: 11/06/2019
 Number of Days to Update: 58

Source: State Water Resources Control Board
 Telephone: 916-341-5810
 Last EDR Contact: 09/09/2019
 Next Scheduled EDR Contact: 12/23/2019
 Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 09/03/2019
 Date Data Arrived at EDR: 09/04/2019
 Date Made Active in Reports: 11/05/2019
 Number of Days to Update: 62

Source: State Water Resources Control Board
 Telephone: 866-794-4977
 Last EDR Contact: 09/04/2019
 Next Scheduled EDR Contact: 12/16/2019
 Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 08/14/2019
 Date Data Arrived at EDR: 08/14/2019
 Date Made Active in Reports: 08/21/2019
 Number of Days to Update: 7

Source: California Environmental Protection Agency
 Telephone: 916-323-2514
 Last EDR Contact: 10/22/2019
 Next Scheduled EDR Contact: 02/03/2020
 Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 09/09/2019
 Date Data Arrived at EDR: 09/09/2019
 Date Made Active in Reports: 11/01/2019
 Number of Days to Update: 53

Source: State Water Resources Control Board
 Telephone: 866-480-1028
 Last EDR Contact: 09/09/2019
 Next Scheduled EDR Contact: 12/23/2019
 Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 09/09/2019
 Date Data Arrived at EDR: 09/09/2019
 Date Made Active in Reports: 11/01/2019
 Number of Days to Update: 53

Source: State Water Resources Control Board
 Telephone: 866-480-1028
 Last EDR Contact: 09/09/2019
 Next Scheduled EDR Contact: 12/23/2019
 Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/01/2019
Number of Days to Update: 53

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 11/22/2019
Next Scheduled EDR Contact: 03/09/2020
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
 Date Data Arrived at EDR: N/A
 Date Made Active in Reports: N/A
 Number of Days to Update: N/A

Source: EDR, Inc.
 Telephone: N/A
 Last EDR Contact: N/A
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
 Date Data Arrived at EDR: N/A
 Date Made Active in Reports: N/A
 Number of Days to Update: N/A

Source: EDR, Inc.
 Telephone: N/A
 Last EDR Contact: N/A
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
 Date Data Arrived at EDR: 07/01/2013
 Date Made Active in Reports: 01/13/2014
 Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
 Telephone: N/A
 Last EDR Contact: 06/01/2012
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
 Date Data Arrived at EDR: 07/01/2013
 Date Made Active in Reports: 12/30/2013
 Number of Days to Update: 182

Source: State Water Resources Control Board
 Telephone: N/A
 Last EDR Contact: 06/01/2012
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
 Date Data Arrived at EDR: 01/11/2019
 Date Made Active in Reports: 03/05/2019
 Number of Days to Update: 53

Source: Alameda County Environmental Health Services
 Telephone: 510-567-6700
 Last EDR Contact: 10/02/2019
 Next Scheduled EDR Contact: 01/20/2020
 Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/02/2019
 Date Data Arrived at EDR: 10/03/2019
 Date Made Active in Reports: 11/06/2019
 Number of Days to Update: 34

Source: Alameda County Environmental Health Services
 Telephone: 510-567-6700
 Last EDR Contact: 10/02/2019
 Next Scheduled EDR Contact: 04/24/2047
 Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 09/06/2019
 Date Data Arrived at EDR: 09/10/2019
 Date Made Active in Reports: 10/31/2019
 Number of Days to Update: 51

Source: Amador County Environmental Health
 Telephone: 209-223-6439
 Last EDR Contact: 08/28/2019
 Next Scheduled EDR Contact: 12/16/2019
 Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing Cupa facility list.

Date of Government Version: 04/21/2017
 Date Data Arrived at EDR: 04/25/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 106

Source: Public Health Department
 Telephone: 530-538-7149
 Last EDR Contact: 10/02/2019
 Next Scheduled EDR Contact: 01/20/2020
 Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 08/05/2019
 Date Data Arrived at EDR: 08/07/2019
 Date Made Active in Reports: 10/09/2019
 Number of Days to Update: 63

Source: Calveras County Environmental Health
 Telephone: 209-754-6399
 Last EDR Contact: 09/23/2019
 Next Scheduled EDR Contact: 01/06/2020
 Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 08/14/2019
 Date Data Arrived at EDR: 08/20/2019
 Date Made Active in Reports: 10/18/2019
 Number of Days to Update: 59

Source: Health & Human Services
 Telephone: 530-458-0396
 Last EDR Contact: 10/31/2019
 Next Scheduled EDR Contact: 02/17/2020
 Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/20/2019
 Date Data Arrived at EDR: 08/23/2019
 Date Made Active in Reports: 10/22/2019
 Number of Days to Update: 60

Source: Contra Costa Health Services Department
 Telephone: 925-646-2286
 Last EDR Contact: 10/28/2019
 Next Scheduled EDR Contact: 02/10/2020
 Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List

Cupa Facility list

Date of Government Version: 07/30/2019
 Date Data Arrived at EDR: 08/02/2019
 Date Made Active in Reports: 10/09/2019
 Number of Days to Update: 68

Source: Del Norte County Environmental Health Division
 Telephone: 707-465-0426
 Last EDR Contact: 10/25/2019
 Next Scheduled EDR Contact: 02/10/2020
 Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List

CUPA facility list.

Date of Government Version: 09/06/2019
 Date Data Arrived at EDR: 09/12/2019
 Date Made Active in Reports: 10/31/2019
 Number of Days to Update: 49

Source: El Dorado County Environmental Management Department
 Telephone: 530-621-6623
 Last EDR Contact: 10/28/2019
 Next Scheduled EDR Contact: 02/10/2020
 Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/11/2019
 Date Data Arrived at EDR: 07/11/2019
 Date Made Active in Reports: 09/20/2019
 Number of Days to Update: 71

Source: Dept. of Community Health
 Telephone: 559-445-3271
 Last EDR Contact: 10/09/2019
 Next Scheduled EDR Contact: 01/13/2020
 Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List

Cupa facility list

Date of Government Version: 01/22/2018
 Date Data Arrived at EDR: 01/24/2018
 Date Made Active in Reports: 03/14/2018
 Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
 Telephone: 830-934-6500
 Last EDR Contact: 10/17/2019
 Next Scheduled EDR Contact: 02/03/2020
 Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 07/08/2019
Date Data Arrived at EDR: 07/10/2019
Date Made Active in Reports: 09/20/2019
Number of Days to Update: 72

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 10/30/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/23/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 65

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 06/04/2018
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 08/01/2019
Date Data Arrived at EDR: 08/06/2019
Date Made Active in Reports: 10/08/2019
Number of Days to Update: 63

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/14/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 11/25/2019
Next Scheduled EDR Contact: 03/02/2020
Data Release Frequency: Varies

LAKE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 08/16/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/15/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 07/22/2019
Date Data Arrived at EDR: 07/23/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 65

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/12/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 09/26/2019
Date Data Arrived at EDR: 10/04/2019
Date Made Active in Reports: 11/07/2019
Number of Days to Update: 34

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/15/2019
Date Data Arrived at EDR: 07/17/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 71

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/16/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/09/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 09/27/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/17/2019	Telephone: 626-458-6973
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 10/18/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 01/27/2020
	Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 09/27/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 09/27/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 07/15/2019	Source: Community Health Services
Date Data Arrived at EDR: 07/17/2019	Telephone: 323-890-7806
Date Made Active in Reports: 08/05/2019	Last EDR Contact: 10/29/2019
Number of Days to Update: 19	Next Scheduled EDR Contact: 01/27/2020
	Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 10/09/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/27/2020
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 10/17/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 07/30/2019	Telephone: 310-618-2973
Date Made Active in Reports: 10/02/2019	Last EDR Contact: 10/17/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/22/2019	Source: Madera County Environmental Health
Date Data Arrived at EDR: 08/26/2019	Telephone: 559-675-7823
Date Made Active in Reports: 10/29/2019	Last EDR Contact: 11/14/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 09/25/2019
Number of Days to Update: 29	Next Scheduled EDR Contact: 01/13/2020
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/29/2019	Source: Merced County Environmental Health
Date Data Arrived at EDR: 05/30/2019	Telephone: 209-381-1094
Date Made Active in Reports: 07/22/2019	Last EDR Contact: 11/14/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Varies

MONO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA MONO: CUPA Facility List CUPA Facility List

Date of Government Version: 08/21/2019
Date Data Arrived at EDR: 09/03/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 58

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 11/20/2019
Next Scheduled EDR Contact: 03/09/2020
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/25/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/30/2019
Number of Days to Update: 58

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 09/30/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/20/2019
Next Scheduled EDR Contact: 03/09/2020
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/20/2019
Next Scheduled EDR Contact: 03/09/2020
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List CUPA facility list.

Date of Government Version: 07/23/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 64

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/25/2019
Next Scheduled EDR Contact: 02/10/2020
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups Petroleum and non-petroleum spills.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/10/2019	Source: Health Care Agency
Date Data Arrived at EDR: 08/07/2019	Telephone: 714-834-3446
Date Made Active in Reports: 10/09/2019	Last EDR Contact: 11/04/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/10/2019	Source: Health Care Agency
Date Data Arrived at EDR: 08/09/2019	Telephone: 714-834-3446
Date Made Active in Reports: 10/09/2019	Last EDR Contact: 11/04/2019
Number of Days to Update: 61	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/10/2019	Source: Health Care Agency
Date Data Arrived at EDR: 08/06/2019	Telephone: 714-834-3446
Date Made Active in Reports: 10/09/2019	Last EDR Contact: 11/05/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/03/2019	Source: Placer County Health and Human Services
Date Data Arrived at EDR: 09/05/2019	Telephone: 530-745-2363
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 08/28/2019
Number of Days to Update: 61	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019	Source: Plumas County Environmental Health
Date Data Arrived at EDR: 04/23/2019	Telephone: 530-283-6355
Date Made Active in Reports: 06/26/2019	Last EDR Contact: 10/17/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/10/2019	Source: Department of Environmental Health
Date Data Arrived at EDR: 07/11/2019	Telephone: 951-358-5055
Date Made Active in Reports: 09/20/2019	Last EDR Contact: 09/16/2019
Number of Days to Update: 71	Next Scheduled EDR Contact: 12/30/2019
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 07/10/2019	Source: Department of Environmental Health
Date Data Arrived at EDR: 07/11/2019	Telephone: 951-358-5055
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 09/16/2019
Number of Days to Update: 74	Next Scheduled EDR Contact: 12/30/2019
	Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/06/2019	Source: Sacramento County Environmental Management
Date Data Arrived at EDR: 10/01/2019	Telephone: 916-875-8406
Date Made Active in Reports: 11/07/2019	Last EDR Contact: 10/01/2019
Number of Days to Update: 37	Next Scheduled EDR Contact: 01/13/2020
	Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/07/2019	Source: Sacramento County Environmental Management
Date Data Arrived at EDR: 10/01/2019	Telephone: 916-875-8406
Date Made Active in Reports: 11/08/2019	Last EDR Contact: 10/01/2019
Number of Days to Update: 38	Next Scheduled EDR Contact: 01/13/2020
	Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 07/16/2019	Source: San Benito County Environmental Health
Date Data Arrived at EDR: 07/16/2019	Telephone: N/A
Date Made Active in Reports: 09/24/2019	Last EDR Contact: 11/14/2019
Number of Days to Update: 70	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/29/2019	Source: San Bernardino County Fire Department Hazardous Materials Division
Date Data Arrived at EDR: 08/30/2019	Telephone: 909-387-3041
Date Made Active in Reports: 10/29/2019	Last EDR Contact: 11/04/2019
Number of Days to Update: 60	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/03/2019
Date Data Arrived at EDR: 09/04/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 62

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 09/04/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/16/2019
Date Data Arrived at EDR: 07/23/2019
Date Made Active in Reports: 09/30/2019
Number of Days to Update: 69

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 11/25/2019
Next Scheduled EDR Contact: 03/16/2020
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 10/31/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/2019
 Date Data Arrived at EDR: 08/02/2019
 Date Made Active in Reports: 10/08/2019
 Number of Days to Update: 67

Source: Department of Public Health
 Telephone: 415-252-3920
 Last EDR Contact: 10/31/2019
 Next Scheduled EDR Contact: 02/17/2020
 Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
 Date Data Arrived at EDR: 06/26/2018
 Date Made Active in Reports: 07/11/2018
 Number of Days to Update: 15

Source: Environmental Health Department
 Telephone: N/A
 Last EDR Contact: 09/11/2019
 Next Scheduled EDR Contact: 12/29/2019
 Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 08/14/2019
 Date Data Arrived at EDR: 08/20/2019
 Date Made Active in Reports: 10/18/2019
 Number of Days to Update: 59

Source: San Luis Obispo County Public Health Department
 Telephone: 805-781-5596
 Last EDR Contact: 11/25/2019
 Next Scheduled EDR Contact: 03/02/2020
 Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 09/03/2019
 Date Data Arrived at EDR: 09/09/2019
 Date Made Active in Reports: 11/05/2019
 Number of Days to Update: 57

Source: San Mateo County Environmental Health Services Division
 Telephone: 650-363-1921
 Last EDR Contact: 09/09/2019
 Next Scheduled EDR Contact: 12/23/2019
 Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
 Date Data Arrived at EDR: 03/29/2019
 Date Made Active in Reports: 05/29/2019
 Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
 Telephone: 650-363-1921
 Last EDR Contact: 09/05/2019
 Next Scheduled EDR Contact: 12/23/2019
 Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
 Date Data Arrived at EDR: 09/09/2011
 Date Made Active in Reports: 10/07/2011
 Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
 Telephone: 805-686-8167
 Last EDR Contact: 11/14/2019
 Next Scheduled EDR Contact: 03/02/2020
 Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 08/14/2019
 Date Data Arrived at EDR: 08/20/2019
 Date Made Active in Reports: 10/18/2019
 Number of Days to Update: 59

Source: Department of Environmental Health
 Telephone: 408-918-1973
 Last EDR Contact: 11/14/2019
 Next Scheduled EDR Contact: 03/02/2020
 Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
 Date Data Arrived at EDR: 03/30/2005
 Date Made Active in Reports: 04/21/2005
 Number of Days to Update: 22

Source: Santa Clara Valley Water District
 Telephone: 408-265-2600
 Last EDR Contact: 03/23/2009
 Next Scheduled EDR Contact: 06/22/2009
 Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
 Date Data Arrived at EDR: 03/05/2014
 Date Made Active in Reports: 03/18/2014
 Number of Days to Update: 13

Source: Department of Environmental Health
 Telephone: 408-918-3417
 Last EDR Contact: 11/20/2019
 Next Scheduled EDR Contact: 03/09/2020
 Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 07/30/2019
 Date Data Arrived at EDR: 08/02/2019
 Date Made Active in Reports: 10/08/2019
 Number of Days to Update: 67

Source: City of San Jose Fire Department
 Telephone: 408-535-7694
 Last EDR Contact: 10/31/2019
 Next Scheduled EDR Contact: 02/17/2020
 Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017
 Date Data Arrived at EDR: 02/22/2017
 Date Made Active in Reports: 05/23/2017
 Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
 Telephone: 831-464-2761
 Last EDR Contact: 11/14/2019
 Next Scheduled EDR Contact: 03/02/2020
 Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/15/2017
 Date Data Arrived at EDR: 06/19/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 51

Source: Shasta County Department of Resource Management
 Telephone: 530-225-5789
 Last EDR Contact: 11/14/2019
 Next Scheduled EDR Contact: 03/02/2020
 Data Release Frequency: Varies

SOLANO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING**LUST SOLANO: Leaking Underground Storage Tanks**

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
 Date Data Arrived at EDR: 06/06/2019
 Date Made Active in Reports: 08/13/2019
 Number of Days to Update: 68

Source: Solano County Department of Environmental Management
 Telephone: 707-784-6770
 Last EDR Contact: 11/25/2019
 Next Scheduled EDR Contact: 03/16/2020
 Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 08/28/2019
 Date Data Arrived at EDR: 08/30/2019
 Date Made Active in Reports: 10/29/2019
 Number of Days to Update: 60

Source: Solano County Department of Environmental Management
 Telephone: 707-784-6770
 Last EDR Contact: 08/28/2019
 Next Scheduled EDR Contact: 12/16/2019
 Data Release Frequency: Quarterly

SONOMA COUNTY:**CUPA SONOMA: Cupa Facility List**

Cupa Facility list

Date of Government Version: 06/18/2019
 Date Data Arrived at EDR: 06/25/2019
 Date Made Active in Reports: 07/24/2019
 Number of Days to Update: 29

Source: County of Sonoma Fire & Emergency Services Department
 Telephone: 707-565-1174
 Last EDR Contact: 11/14/2019
 Next Scheduled EDR Contact: 01/06/2020
 Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/01/2019
 Date Data Arrived at EDR: 10/02/2019
 Date Made Active in Reports: 11/07/2019
 Number of Days to Update: 36

Source: Department of Health Services
 Telephone: 707-565-6565
 Last EDR Contact: 09/19/2019
 Next Scheduled EDR Contact: 01/06/2020
 Data Release Frequency: Quarterly

STANISLAUS COUNTY:**CUPA STANISLAUS: CUPA Facility List**

Cupa facility list

Date of Government Version: 07/18/2019
 Date Data Arrived at EDR: 07/18/2019
 Date Made Active in Reports: 09/26/2019
 Number of Days to Update: 70

Source: Stanislaus County Department of Environmental Protection
 Telephone: 209-525-6751
 Last EDR Contact: 10/28/2019
 Next Scheduled EDR Contact: 01/27/2020
 Data Release Frequency: Varies

SUTTER COUNTY:**UST SUTTER: Underground Storage Tanks**

Underground storage tank sites located in Sutter county.

Date of Government Version: 08/29/2019
 Date Data Arrived at EDR: 09/03/2019
 Date Made Active in Reports: 11/06/2019
 Number of Days to Update: 64

Source: Sutter County Environmental Health Services
 Telephone: 530-822-7500
 Last EDR Contact: 08/28/2019
 Next Scheduled EDR Contact: 12/16/2019
 Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 11/14/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List Cupa facility list

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/23/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 65

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/14/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 64

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 11/04/2019
Next Scheduled EDR Contact: 02/17/2020
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 05/29/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 09/30/2019
Number of Days to Update: 63

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/21/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/01/2011
 Date Data Arrived at EDR: 12/01/2011
 Date Made Active in Reports: 01/19/2012
 Number of Days to Update: 49

Source: Environmental Health Division
 Telephone: 805-654-2813
 Last EDR Contact: 09/25/2019
 Next Scheduled EDR Contact: 01/13/2020
 Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
 Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
 Date Data Arrived at EDR: 06/24/2008
 Date Made Active in Reports: 07/31/2008
 Number of Days to Update: 37

Source: Environmental Health Division
 Telephone: 805-654-2813
 Last EDR Contact: 11/07/2019
 Next Scheduled EDR Contact: 02/24/2020
 Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 05/29/2019
 Date Data Arrived at EDR: 07/29/2019
 Date Made Active in Reports: 09/30/2019
 Number of Days to Update: 63

Source: Ventura County Resource Management Agency
 Telephone: 805-654-2813
 Last EDR Contact: 10/21/2019
 Next Scheduled EDR Contact: 02/03/2020
 Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 07/26/2019
 Date Data Arrived at EDR: 09/09/2019
 Date Made Active in Reports: 10/31/2019
 Number of Days to Update: 52

Source: Environmental Health Division
 Telephone: 805-654-2813
 Last EDR Contact: 09/09/2019
 Next Scheduled EDR Contact: 12/23/2019
 Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 09/25/2019
 Date Data Arrived at EDR: 10/01/2019
 Date Made Active in Reports: 10/31/2019
 Number of Days to Update: 30

Source: Yolo County Department of Health
 Telephone: 530-666-8646
 Last EDR Contact: 09/25/2019
 Next Scheduled EDR Contact: 01/13/2020
 Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 07/26/2019
 Date Data Arrived at EDR: 07/31/2019
 Date Made Active in Reports: 10/08/2019
 Number of Days to Update: 69

Source: Yuba County Environmental Health Department
 Telephone: 530-749-7523
 Last EDR Contact: 10/25/2019
 Next Scheduled EDR Contact: 02/10/2020
 Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/14/2019	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 05/14/2019	Telephone: 860-424-3375
Date Made Active in Reports: 08/05/2019	Last EDR Contact: 11/11/2019
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/10/2019	Telephone: N/A
Date Made Active in Reports: 05/16/2019	Last EDR Contact: 10/02/2019
Number of Days to Update: 36	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 05/01/2019	Telephone: 518-402-8651
Date Made Active in Reports: 06/21/2019	Last EDR Contact: 10/29/2019
Number of Days to Update: 51	Next Scheduled EDR Contact: 02/10/2020
	Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/19/2019	Telephone: 717-783-8990
Date Made Active in Reports: 09/10/2019	Last EDR Contact: 10/09/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 12/07/2020
	Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017	Source: Department of Environmental Management
Date Data Arrived at EDR: 02/23/2018	Telephone: 401-222-2797
Date Made Active in Reports: 04/09/2018	Last EDR Contact: 11/14/2019
Number of Days to Update: 45	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018	Source: Department of Natural Resources
Date Data Arrived at EDR: 06/19/2019	Telephone: N/A
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 09/06/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

17.7 ACRE
 APN 297-170-002, AND 297-170-003
 MORENO VALLEY, CA 92553

TARGET PROPERTY COORDINATES

Latitude (North):	33.91625 - 33° 54' 58.50"
Longitude (West):	117.257877 - 117° 15' 28.36"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	476161.7
UTM Y (Meters):	3752705.8
Elevation:	1570 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5641312 RIVERSIDE EAST, CA
Version Date:	2012
East Map:	5641326 SUNNYMEAD, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

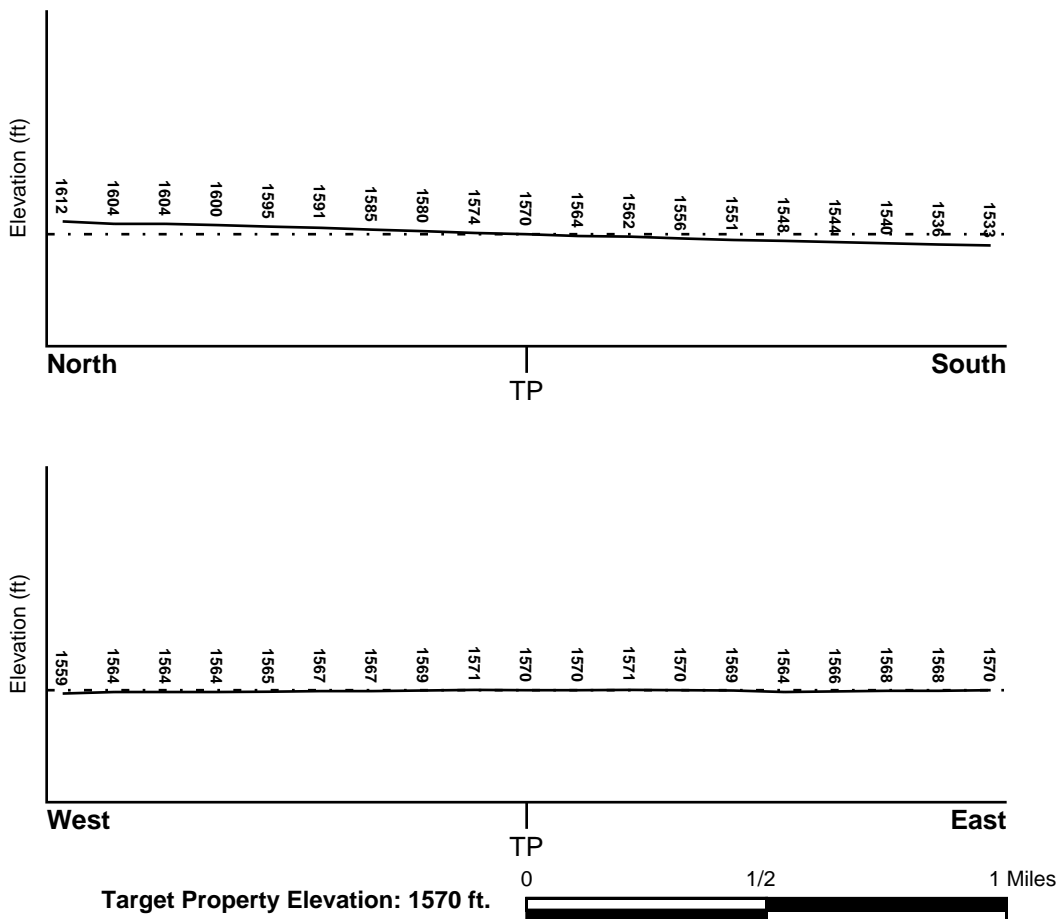
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06065C0745G	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06065C0761G	FEMA FIRM Flood data
06065C0765G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
1	1/8 - 1/4 Mile WNW	Not Reported
1G	1/8 - 1/4 Mile WNW	Not Reported

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

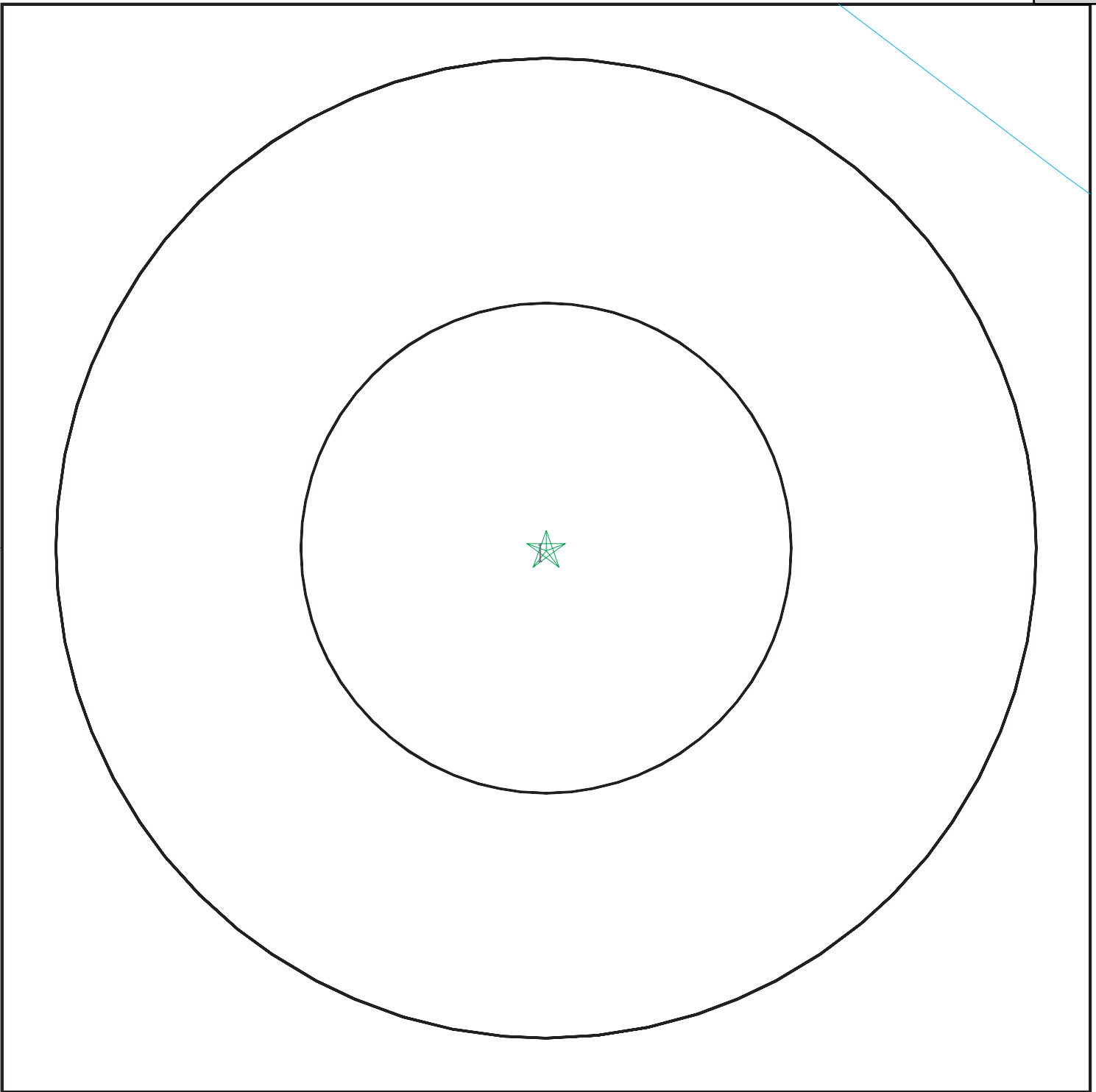
ROCK STRATIGRAPHIC UNIT

Era:	Mesozoic
System:	Cretaceous
Series:	Cretaceous granitic rocks
Code:	Kg (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

SITE NAME: 17.7 Acre
 ADDRESS: APN 297-170-002, and 297-170-003
 MORENO VALLEY CA 92553
 LAT/LONG: 33.91625 / 117.257877

CLIENT: Partner Engineering and Science, Inc.
 CONTACT: Roy Zamarripa
 INQUIRY #: 5885406.2s
 DATE: November 26, 2019 4:12 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: MONSERATE

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6
2	9 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6
3	27 inches	44 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6
4	44 inches	57 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
5	57 inches	70 inches	loamy coarse sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
2	3523	1/2 - 1 Mile SSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

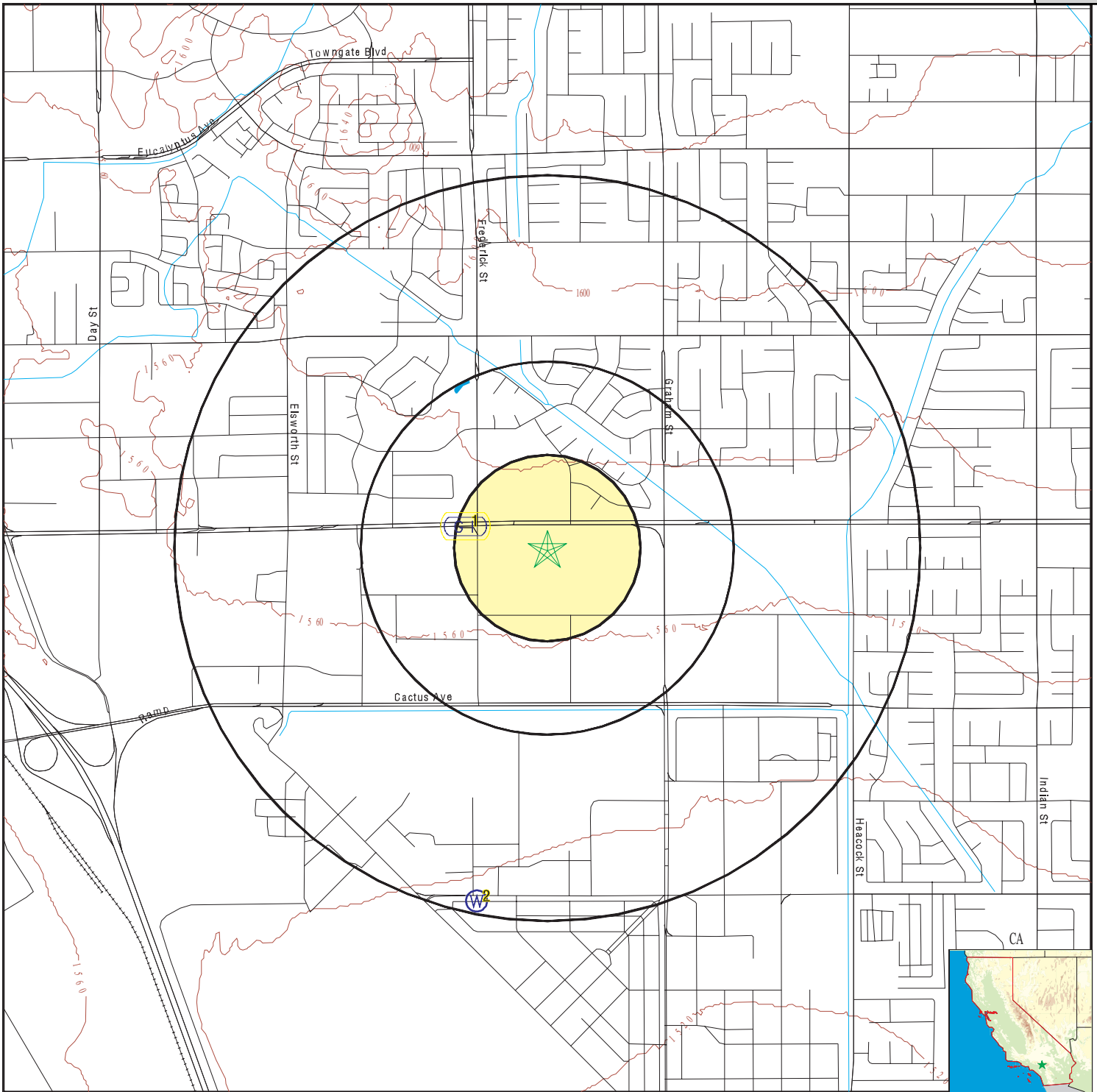
STATE DATABASE WELL INFORMATION

MAP ID

WELL ID

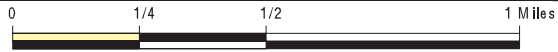
LOCATION
FROM TP

Attachment: Appendix G-Phase I Environmental Site Assessment Report (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: 17.7 Acre
 ADDRESS: APN 297-170-002, and 297-170-003
 MORENO VALLEY CA 92553
 LAT/LONG: 33.91625 / 117.257877

CLIENT: Partner Engineering and Science, Inc.
 CONTACT: Roy Zamarripa
 INQUIRY #: 5885406.2s
 DATE: November 26, 2019 4:12 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

Map ID	Direction	Distance	Elevation	Database	EDR ID Number
1					
WNW				AQUIFLOW	50177
1/8 - 1/4 Mile					
Higher					
Site ID:			083302648T		
Groundwater Flow:			Not Reported		
Shallow Water Depth:			100		
Deep Water Depth:			Not Reported		
Average Water Depth:			Not Reported		
Date:			08/21/1996		
<hr/>					
2					
SSW				CA WELLS	3523
1/2 - 1 Mile					
Lower					
Seq:		3523		Prim sta c:	03S/04W-24D01 S
Frds no:		3310700001		County:	33
District:		14		User id:	WAT
System no:		3310700		Water type:	G
Source nam:		WELL 01 - ABANDONED		Station ty:	WELL/AMBNT
Latitude:		335409.0		Longitude:	1171537.0
Precision:		2		Status:	AB
Comment 1:		Not Reported		Comment 2:	Not Reported
Comment 3:		Not Reported		Comment 4:	Not Reported
Comment 5:		Not Reported		Comment 6:	Not Reported
Comment 7:		Not Reported			
System no:		3310700		System nam:	March Afb
Hqname:		MARCH AFB		Address:	722 CES/CC 840 MACDILL,BLD2506
City:		MARCH AFB		State:	CA
Zip:		92518		Zip ext:	Not Reported
Pop serv:		8186		Connection:	2348
Area serve:		MARCH AFB			
<hr/>					
1G					
WNW				AQUIFLOW	50177
1/8 - 1/4 Mile					
Lower					
Site ID:			083302648T		
Groundwater Flow:			Not Reported		
Shallow Water Depth:			100		
Deep Water Depth:			Not Reported		
Average Water Depth:			Not Reported		
Date:			08/21/1996		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92553	13	0

Federal EPA Radon Zone for RIVERSIDE County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.117 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.450 pCi/L	100%	0%	0%
Basement	1.700 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX D: QUALIFICATIONS/INSURANCE

Education

Associate of Science, Computer Networking Technology, Westwood College

Registrations

Asbestos Building Inspector, ABIR0302180005N17522

Training

Asbestos Building Inspector Initial Course DOSH #: CA-015-06

2015 Compliance Training: Hazard Communicator, Asbestos, Lead, and Mold Awareness, Chemical Inventory, Personal Protective Equipment

Highlights

7 years of experience in the environmental consulting industry

Phase I Environmental Site Assessments

Records Search Risk Assessment Reports

Experience Summary

Mr. Vejar has over 7 years of experience in the environmental consulting industry conducting Database Reviews (DR), Records Search Risk Assessment Reports (RSRA), Historical Records Review (HRR), Historical Records and Database Review (HRDR), Extended Database Search (EDS), Environmental Transaction Screen (ETS), Phase I Environmental Site Assessments (ESA), Asbestos Sampling and Radon Screenings and other related environmental assessments. He is knowledgeable with various property types, including apartment buildings/complexes, commercial office buildings, shopping centers, multi-tenant commercial complexes, industrial warehouses, manufacturing facilities, gasoline service stations, and dry cleaning operations.

Project Experience

Phase I ESA, Santa Fe Springs Marketplace, Santa Fe Springs, California. A 100,133 SF retail center on 13.07 acres including restaurants, retail, and an active drycleaner release site with ongoing remediation.

Phase I ESA, Harbor Auto Care Center, Santa Ana, California. An eleven tenant automotive repair and service center with storage of hazardous materials and generated hazardous waste.

Phase I ESA, Mass Kansas, Riverside, California. A 102,742 SF fiberglass and composite manufacturing of below ground enclosures on a 14.42 acre facility. Impacted with volatile organic compounds (VOCs) from historic manufacturing an industrial operations that operated from the facility since the 1940s.

Phase I ESA, Park @ VNY, Van Nuys, California. A 37.34 acre historic Former Used Defense Site during World War II occupied by the United States Army between 1942 and 1946 and by the California Air National Guard between 1954 and 1989.

Phase I ESA, Montclair, California. A 1.24 acre property with a gasoline service station and car wash building. The site was identified with an open release case and ongoing Santa Ana Regional Water Quality Control Board (RWQCB) oversight.

Ramiro Vejar

Phase I ESA, Bellflower, California. A six parcel commercial property with three multistory buildings which was historically occupied by two gasoline stations in the 1920s and 1930s prior to the redevelopment of the retail structures in 1946 and 1957. Phase II subsurface investigation was recommended which included advancing borings for soil analysis and geophysical surveys to identify potential Underground Storage Tanks (USTs) or backfill anomalies.

Phase I ESA, Moon Valley Nursery, Hemet, California. An 80 acre nursery property with barns, residential living, pesticide and herbicide storage, and related horticultural activities.

Phase I ESA, Gasser Olds Bronze, Vernon, California. A 24,375SF bronze foundry and metal plaque manufacturing facility operating since 1982 from a building which has been historically occupied for industrial use since it was constructed in 1941.

Contact

rvejar@partneresi.com

Sarah Vosovic
Project Manager



Education

B.S., Environmental Science, California State University, Chico

Registrations

OSHA 40-Hour HAZWOPER

AHERA Building Inspector training

California Department of Health Services/USEPA Lead Inspector/Assessor training

Summary of Professional Experience

Ms. Vosovic has more than 14 years of experience in the environmental consulting field and has worked in various disciplines, including environmental due diligence, NEPA compliance, lead-based paint and asbestos assessment, and LUST monitoring and reporting. Ms. Vosovic has performed hundreds of Phase I ESAs. She has also served as senior reviewer for NEPA compliance documents, with thousands of reports reviewed. She has tracked and managed the regulatory compliance for hundreds of microwave sites for a major telecommunications carrier.

Ms. Vosovic is well versed in EPA's All Appropriate Inquiry and ASTM E1527-13. She is knowledgeable in due diligence reporting standards, including Fannie Mae DUS, Freddie Mac, and HUD. Ms. Vosovic has conducted Phase I ESAs on a wide range of properties. Site assessment experience includes agricultural properties, semiconductor manufacturing facilities, fueling and automobile repair facilities, chemical distribution facilities, landfills, oil well fields, telecommunications sites, and shopping centers with dry cleaning facilities. She has scoped projects, mentored field personnel, identified environmental risks, and regularly provides detailed reports within demanding deadlines.

Ms. Vosovic is responsible for conducting all aspects of Phase I Environmental Site Assessments including proposal writing, staffing projects, client liaison, site reconnaissance and record reviews. Ms. Vosovic also provides management and QA/QC review of Phase I ESAs and Transaction Screens, and is focused on providing exemplary client service. Ms. Vosovic is responsible for ensuring consistency and quality of due diligence services and ensuring that client-specific requirements are met, as well as the requirements of ASTM and AAI standards. Ms. Vosovic displays excellent technical writing and editing skills, attention to detail, and excels at providing concise, logical conclusions and recommendations.

Project experience for Ms. Vosovic includes the following:

- Provided senior review for thousands of NEPA Screening Reports, Environmental Assessments, Section 106 Reports, SHPO consultation packets, NEPA Audit Reports, and

Sarah Vosovic



other related documents for various telecommunications industry clients. NEPA Technical Manager for multiple telecommunications industry clients in the western United States. Served as the primary point of contact with multiple state and federal agencies.

- Assisted in subsurface investigations at heavily industrialized and commercially developed properties. Subsurface investigations included the installation of soil borings, characterization of soils, and subsequent sampling of soil and groundwater. Oversaw geophysical surveys.
- Evaluated proposed microwave installations, LTE installations and underlying support structures for compliance with environmental, FAA, and FCC regulations. Tracked and managed over 700 microwave sites in two markets. Worked closely with the client, construction managers, turf vendors, engineers, and RF safety engineers to obtain and track regulatory compliance documentation.
- Managed a database and scheduled quarterly reporting for 45 leaking underground storage tank (LUST) cases under regulatory direction. Prepared Groundwater Monitoring Reports, NPDES Quarterly Reports, Subsurface Investigation Reports, Remediation Work Plans, Sensitive Receptor Surveys, and UST Cleanup Fund submittals. Collected soil and groundwater samples for laboratory analysis.
- Performed regulatory compliance audits for a major telecommunications carrier. Provided solutions and established protocols for ensuring compliance.
- Laboratory Instructor for Introductory Geology and Environmental Science courses at California State University, Chico.

Sarah Vosovic
(Continued)

PARTNER

Education

Bachelor of Arts, Public Administration & Economics, San Diego State University
Executive MBA Program, 2000-2003

Highlights

Over 20 years of experience in the environmental and engineering consulting industry
Property Condition Assessments (PCAs)
Fannie Mae, Freddie Mac, and HUD due diligence

Experience Summary

Mr. Lambson is a true veteran of the commercial real estate services industry. He has over 20 years of experience managing and performing environmental and engineering consulting projects on a national level. Mr. Lambson serves as a Principal for Partner and is located in Partner's San Diego County office. Mr. Lambson currently provides client management and consulting to a nationwide client base and specializes in advising "equity" clients during the acquisition phase of commercial property transactions in the U.S., Mexico, and Canada.

Mr. Lambson has assisted clients on over 10,000 commercial real estate transactions throughout his career. His due diligence resume includes experience at all levels, and includes advising REITs, developers, property managers, retail companies, commercial real estate brokers, mortgage brokers, attorneys, lenders, universities, and real estate investment groups with the following nationwide services:

- Property Condition Assessments (PCAs)
- Individual Building System Inspections for Roof, Mechanical Electrical Plumbing (MEP), Elevator, Structure, Façade, and ADA/Accessibility
- Phase I Environmental Site Assessments (ESAs)
- Phase II Subsurface Investigations (Soil and groundwater sampling and analysis)
- Phase III Environmental Remediation Services
- Asbestos, Lead, Radon, Mold Sampling
- Seismic and Structural Assessments (PMLs)
- Energy Audits, Benchmarking, AB1103 Energy Disclosure, and LEED-related services
- Hydrology, Water Conservation and Efficiency
- Fannie Mae / Freddie Mac / HUD Due Diligence
- Geotechnical and Soils Reports
- Zoning Reports
- ALTA Surveys

Building Sciences

Property Condition Assessment, MEP Report, Roof Report, Elevator Report, Structural and Seismic Assessment for a high-profile Class A office campus acquisition in the San Francisco Bay Area

ADA Compliance and Accessibility Reviews for a national bank branch portfolio

Fannie Mae Property Condition / Physical Needs Assessment services for a 5400-unit multifamily portfolio in Nevada

Mark Lambson

Environmental Assessments

Phase I and Phase II Environmental Assessments for a 75-acre aerospace facility in the Northwest United States

Over 500 Phase I Environmental Site Assessments for a national fast-food chain

Environmental consulting for over 1 million acres of desert land in California, Nevada, and Arizona

Land Surveys

ALTA Surveys for 2400-unit apartment portfolio in the Midwest

Multi-Site Portfolios

113-site office portfolio acquisition for a national REIT

122-site hotel portfolio for a national lending institution

55-site hotel portfolio acquisition for a private investment group

68-site healthcare portfolio acquisition for a national REIT

50-site country club/golf course acquisition for a private investment group

Energy and Water Efficiency

Energy & Water consulting for a national property owner that operates and manages 30 retail and office centers on the West Coast and Texas

Affiliations

National Association of Real Estate Investment Trusts (NAREIT)

International Council of Shopping Centers (ICSC)

U.S Green Building Council (USGBC)

Society of Industrial and Office Realtors, San Diego County (SIOR)

National Association of Industrial & Office Parks, Southern California (NAIOP)

San Diego Habitat Conservancy, Board of Directors. 2010 - 2014

Speaking

Bisnow Conference, Panel Moderator, La Jolla, CA, October 2014. Moderated panel on Southern California Real Estate Trends.

Globestreet, ICSC Western States Conference, San Diego, CA May 2013. Video interview regarding retail real estate trends and due diligence.

Publications

Shopping Centers Today, 2010. Authored article on LEED applications for shopping centers and retail assets.

Contact

mlambson@partneresi.com

PALEONTOLOGICAL ASSESSMENT FOR THE COMPASS DANBE CENTERPOINTE PROJECT

MORENO VALLEY, RIVERSIDE COUNTY

APNs 297-170-002 and -003

Prepared for:

T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, California 92602

Submitted to:

City of Moreno Valley
Community Development Department
Planning Division
14177 Frederick Street
Moreno Valley, California 92552

Prepared by:

Brian F. Smith and Associates, Inc.
14010 Poway Road, Suite A
Poway, California 92064



September 28, 2020

Paleontological Database Information

Author: Todd A. Wirths, M.S., Senior Paleontologist, California Professional Geologist No. 7588

Consulting Firm: Brian F. Smith and Associates, Inc.
14010 Poway Road, Suite A
Poway, California 92064
(858) 484-0915

Report Date: September 28, 2020

Report Title: Paleontological Assessment for the Compass Danbe Centerpointe Project, Moreno Valley, Riverside County (APNs 297-170-002 and -003)

Prepared for: T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, California 92602

Submitted to: City of Moreno Valley
Community Development Department
Planning Division
14177 Frederick Street
Moreno Valley, California 92552

Prepared by: Brian F. Smith and Associates, Inc.
14010 Poway Road, Suite A
Poway, California 92064

USGS Quadrangle: *Riverside East, California (7.5 minute)*

Study Area: 17.7 acres

Key Words: Paleontological assessment; High paleontological resource sensitivity; Riverside County; city of Moreno Valley.

Table of Contents

<u>Section</u>	<u>Page</u>
I. INTRODUCTION AND LOCATION	1
II. REGULATORY SETTING	1
<i>State of California</i>	1
<i>City of Moreno Valley</i>	4
III. GEOLOGY	4
IV. PALEONTOLOGICAL RESOURCES	6
<i>Definition</i>	6
<i>Fossil Records Search</i>	6
V. PALEONTOLOGICAL SENSITIVITY	7
<i>Overview</i>	7
<i>Professional Standard</i>	7
<i>Riverside County Assessment</i>	8
<i>City of Moreno Valley Assessment</i>	8
VI. RECOMMENDATIONS	10
VII. CERTIFICATION	12
VIII. REFERENCES	12

Appendices

- Appendix A – Qualifications of Key Personnel
Appendix B – Record Search Report

List of Figures

<u>Figure</u>	<u>Page</u>
Figure 1 General Location Map	2
Figure 2 Project Location Map	3
Figure 3 Geologic Map	5
Figure 4 Paleontological Sensitivity Map	9

I. INTRODUCTION AND LOCATION

This paleontological assessment report has been completed for the Compass Danbe Centerpointe Project, identified as Assessor's Parcel Numbers 297-170-002 and -003, is located along the south side of Alessandro Boulevard between Frederick and Graham streets in the city of Moreno Valley, Riverside County, California (Figures 1 and 2). On the U.S. Geological Survey, 7.5-minute, 1:24,000-scale *Riverside East, California* topographic quadrangle map, the project is located in the northeast quarter of Section 13, Township 3 South, Range 4 West, San Bernardino Base and Meridian, at an elevation of approximately 1,570 feet. Proposed improvements, which will cover approximately 17.7 acres of the project, include the construction of two industrial warehouse buildings with associated parking and infrastructure.

II. REGULATORY SETTING

The California Environmental Quality Act (CEQA), which is patterned after the National Environmental Policy Act, is the overriding environmental document that sets the requirement for protecting California's cultural and paleontological resources. The document does not establish specific rules that must be followed but mandates that governing permitting agencies (lead agencies) set their own guidelines for the protection of nonrenewable paleontological resources under their jurisdiction.

State of California

Under the Guidelines for the Implementation of CEQA, as amended March 29, 1999 (Title 1, Chapter 3, California Code of Regulations: 15000 et seq.), procedures define the type of activities, persons, and public agencies required to comply with CEQA. In the Environmental Checklist, one of the questions to answer is, "Will the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (Section 15023, Appendix G, Section XIV, Part a). California Public Resources Code Section 5097.5 states:

- a) No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.
- b) As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

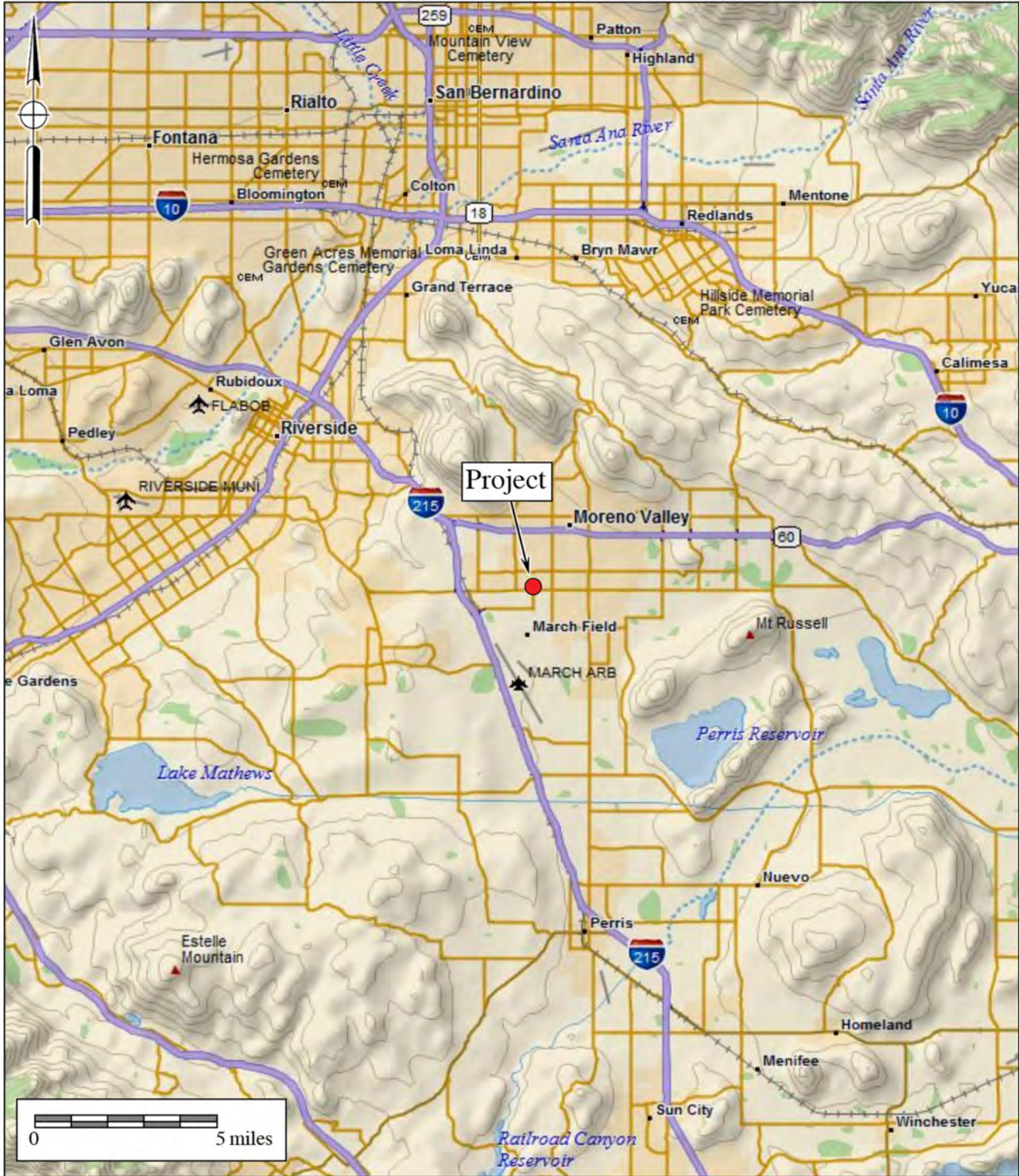


Figure 1

General Location Map

The Compass Danbe Centerpoint Project

DeLorme (1:250,000)



Attachment: Appendix H-Paleontological Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

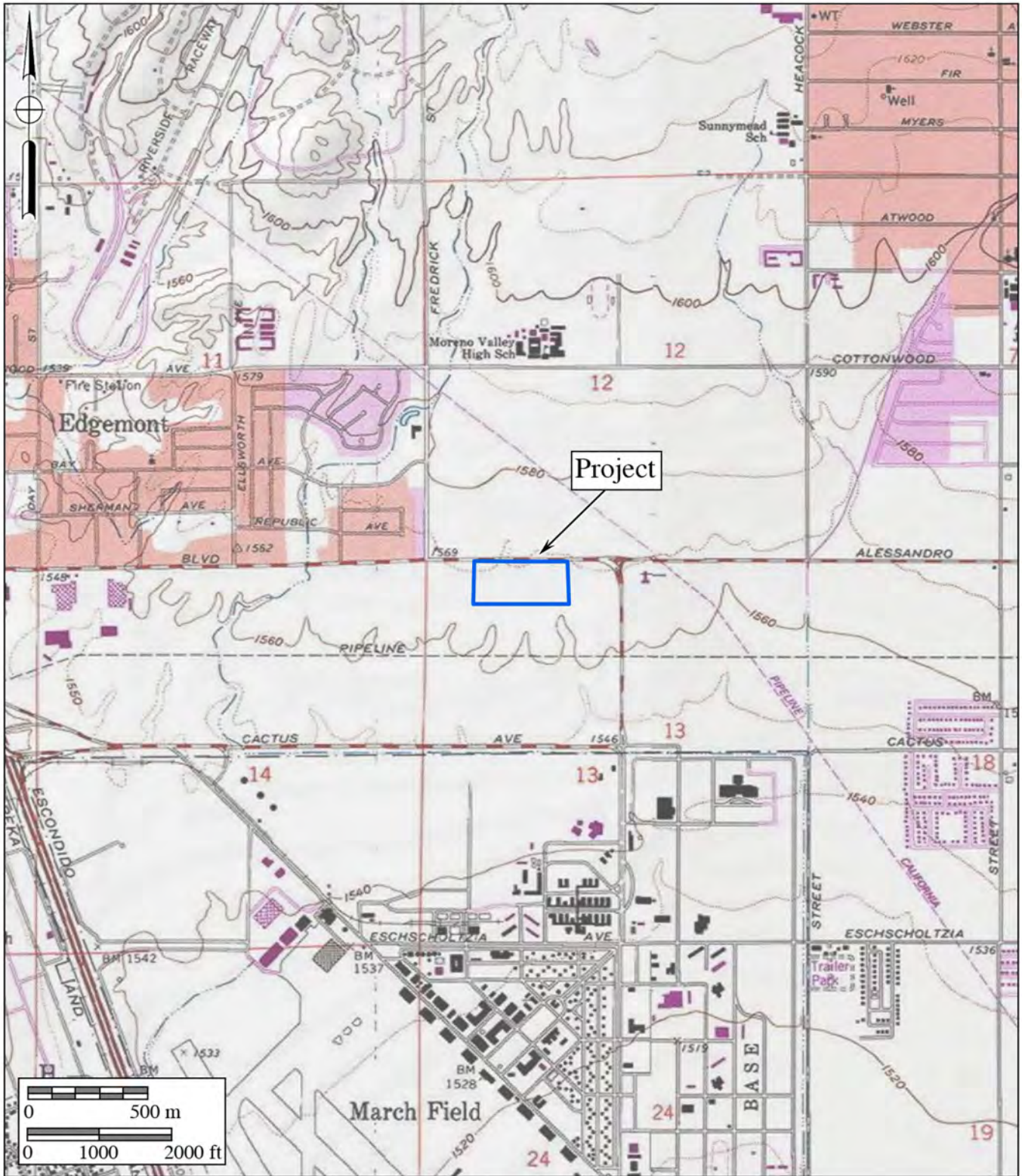


Figure 2

Project Location Map

The Compass Danbe Centerpoint Project

USGS Riverside East and Sunnymead Quadrangles (7.5-minute series)



Attachment: Appendix H-Paleontological Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

City of Moreno Valley

The treatment of paleontological resources and applicable mitigation measures are outlined in Section 5.10 of the City of Moreno Valley’s Final Environmental Impact Report (FEIR) (City of Moreno Valley 2006). In the FEIR, “Paleontological Resource Sensitive Areas” are presented as Figure 5.10-3. In Figure 5.10-3, all areas west of Gilman Springs Road, and therefore most of the city limits including the project property, are shown as having a “low potential” for fossil resources; however, what constitutes an area of “low potential” is not provided. The areas with a “high potential” are limited to the outcrops of the fossiliferous Mt. Eden Formation and San Timoteo Formation, which occur in the San Timoteo Badlands (*i.e.*, east of Gilman Springs Road). Since significant impacts to paleontological resources could potentially occur if the City of Moreno Valley’s General Plan is implemented, the FEIR presents a mitigation measure that would reduce impacts to a level below that of significant. This measure is presented in Section VI of this report.

III. GEOLOGY

The geology mapped underlying the project and immediate area indicates that the property is underlain by lower Pleistocene (approximately 1.8 million- to perhaps 200,000- to 300,000-year-old), very old, sandy alluvial fan deposits (areas labeled “Qvof_a” and shown in brown on Figure 3 [after Morton and Cox 2001; Morton and Matti 2001]). These sedimentary deposits are described as:

... mostly well dissected, well-indurated, reddish-brown sand deposits. Commonly contains duripans and locally silcretes. Forms widespread deposits north and south of Moreno Valley, flanking bedrock areas. Deposits on older erosion surfaces lack diagnostic features, and may or may not be alluvial fan deposits. (Morton and Matti 2001)

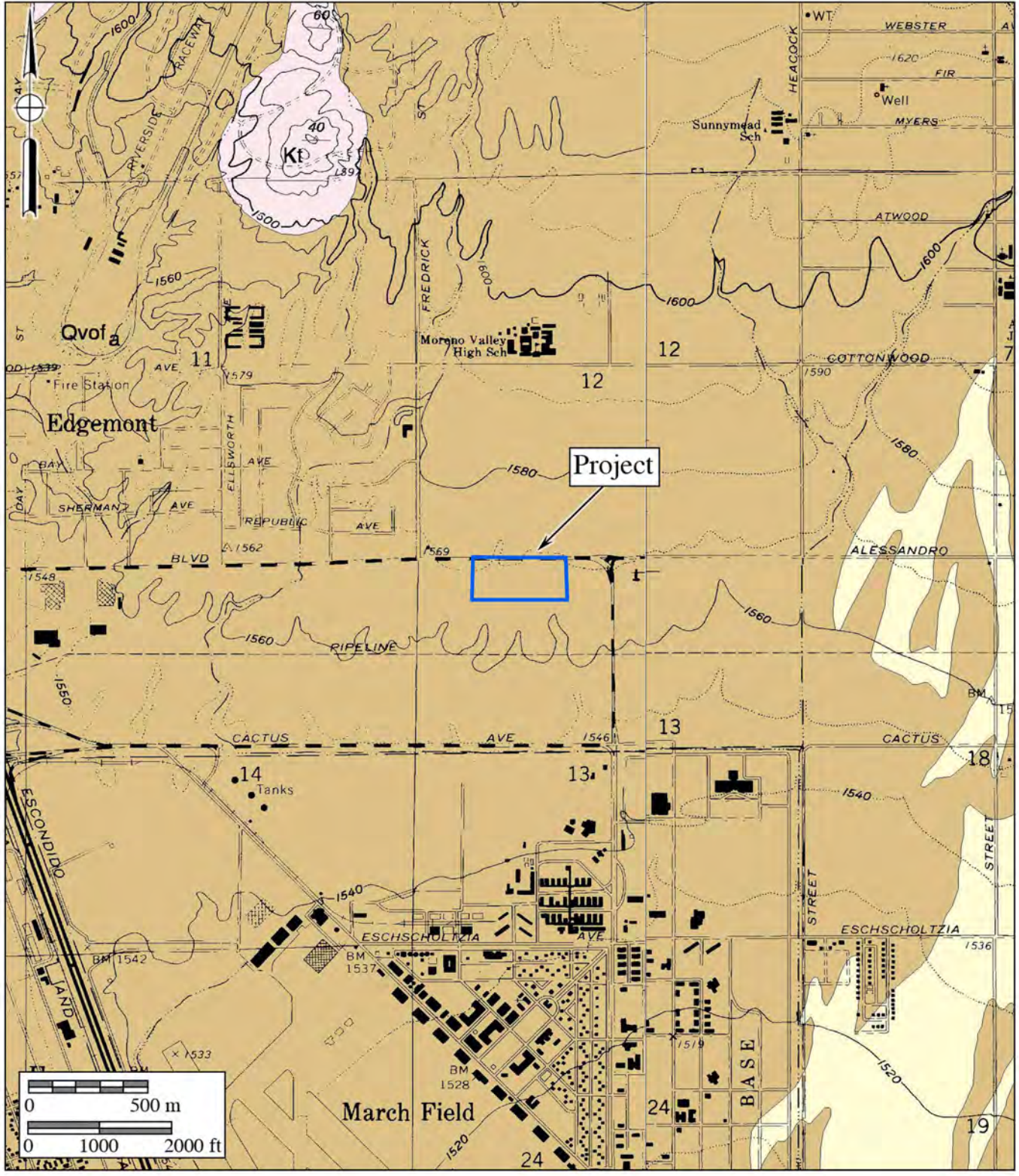


Figure 3
Geologic Map

The Compass Danbe Centerpointe Project
Geology after Morton and Cox (2001) and Morton and Matti (2001)



Attachment: Appendix H-Paleontological Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

IV. PALEONTOLOGICAL RESOURCES

Definition

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2010), but may include younger remains (subfossils), for example, when viewed in the context of local extinction of the organism or habitat. Fossils are considered a nonrenewable resource under state, county, and city guidelines (see Section II of this report).

Fossil Records Search

Based upon a paleontological literature review and a collections and records search conducted by the Geological Sciences Division of the San Bernardino County Museum in Redlands, California for the nearby Moreno Valley Logistics Center Project, older Pleistocene alluvial fan deposits (“Qvof_a” on Figure 3) have a high potential to contain significant nonrenewable paleontological resources (*i.e.*, fossils) and were assigned a “high paleontological resource sensitivity” (see Scott 2015 in Appendix B). Similar older Pleistocene sediments throughout the lowland (valley) areas of western Riverside County and the Inland Empire have been reported to yield significant fossils of extinct terrestrial mammals from the last Ice Age (see references in Scott 2015), such as mammoths, mastodons, giant ground sloths, dire wolves, short-faced bears, saber-toothed cats, large and small horses, camels, and bison.

A fossil records search for the Canyon Steele Industrial Building Project, which is about 4.5 miles south of the subject property in the city of Perris, was performed by the Western Science Center (WSC) in Hemet, California, as part of a paleontological assessment conducted by CRM Tech (Radford 2018). Radford (2018) indicates that the closest WSC fossil localities to the Canyon Steele Industrial Building Project are from the Aldi Distribution Center, which is located southwest of Highway 60 and Redlands Boulevard in Moreno Valley, approximately five and a half miles east-northeast of the Compass Danbe Centerpointe Project. These localities include WSC locs. 192, 193, and 194, all of late Pleistocene age, which consist of the remains of a horse (*Equus* sp.), a giant ground sloth (*Megalonyx jeffersonii*), and a llama (*Hemiauchenia* sp.), animals that became extinct in North America at or soon after the end of the Pleistocene epoch, about 11,700 years ago (Darla Radford, personal communication 2020). The depths of the fossils ranged from approximately 11 to 13 feet below the surface. On the geologic map of Morton and Matti (2001), these fossil localities are situated in an area mapped as Quaternary (Holocene and late Pleistocene), sandy, gravely, young alluvial fan deposits (“Qyf”) at the surface, which suggests deposits of late Pleistocene age and older (greater than 11,700 years) are present beginning at a depth of less than 11 feet below the surface.

V. PALEONTOLOGICAL SENSITIVITY

Overview

The degree of paleontological sensitivity of any particular area is based on a number of factors, including the documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that might have become fossilized over time. Late Quaternary (Holocene, or “modern”) alluvium is generally considered to be geologically too young to contain significant, nonrenewable paleontological resources (*i.e.*, fossils), and is thus typically assigned a Low paleontological sensitivity. Older Pleistocene (greater than 11,700 years old) alluvial and alluvial fan deposits in the Inland Empire, however, often yield important Ice Age terrestrial vertebrate fossils, such as extinct mammoths, mastodons, giant ground sloths, extinct species of horse, bison, and camel, saber-toothed cats, and others (Scott 2015). These Pleistocene sediments are thus accorded a High paleontological resource sensitivity.

Professional Standard

The Society of Vertebrate Paleontology (2010) drafted guidelines outlining procedures that include:

[E]valuating the potential for impacts of a proposed action on paleontological resources and for mitigating those impacts. Impact mitigation includes pre-project survey and salvage, monitoring and screen washing during excavation to salvage fossils, conservation and inventory, and final reports and specimen curation. The objective of these procedures is to offer standard methods for assessing potential impacts to fossils and mitigating these impacts.

The guidelines include four categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, as listed below:

- High Potential: Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered.
- Undetermined Potential: Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment, and that further study is needed to determine the potential of the rock unit.
- Low Potential: Rock units that are poorly represented by fossil specimens in institutional collections or based upon a general scientific consensus that only preserve fossils in rare circumstances.
- No Potential: Rock units that have no potential to contain significant paleontological

resources, such as high-grade metamorphic rocks and plutonic igneous rocks.

Riverside County Assessment

A “paleontological sensitivity map” generated by the Riverside County Transportation and Land Management Agency in September 2020 (see Figure 4) ranks the entire project as having a High Paleontological Potential/Sensitivity (High B), which is:

[E]quivalent to High A, but is based on the occurrence of fossils at a specified depth below the surface. The category High B indicates that fossils are likely to be encountered at or below four feet of depth, and may be impacted during excavation by construction activities. (County of Riverside 2020)

The category “High B” indicates that fossils are likely to be encountered at or below four feet of depth and may be impacted during excavation by construction activities. Alluvial valley sediments and very old alluvial fan sediments with a High Potential/Sensitivity (High B) to yield nonrenewable paleontological resources (*i.e.*, fossils) are shown in amber tint on Figure 4.

City of Moreno Valley Assessment

The City of Moreno Valley General Plan acknowledges that significant impacts to paleontological resources could potentially occur as a result of development within the city limits (City of Moreno Valley 2006). As a result, Mitigation Measure C1 (City of Moreno Valley 2006:5.10-15; see Section VI, below) is provided to reduce potential impacts to fossil resources (as well as historic and prehistoric archeological sites) to a level below significant during earth disturbance activities. However, the FEIR’s statement addressing potential impacts to paleontological resources is not entirely clear as to whether the mitigation measures are stipulated exclusively for the fossiliferous, geologic formations that occur in the Badlands areas at the far eastern extent of the city limits (specifically, the Mt. Eden Formation and San Timoteo Formation), or for the greater Moreno Valley area. In addition, the FEIR seems to state that the Mt. Eden Formation and San Timoteo Formation underlie the alluvium found across much of the city, when it is most likely granitic rocks, such as the outcrop of tonalite about a mile north of the project, that comprise the bedrock formation. Furthermore, the FEIR assumes the age of the surficial alluvial deposits is “recent,” which is incorrect (see Section III, above).

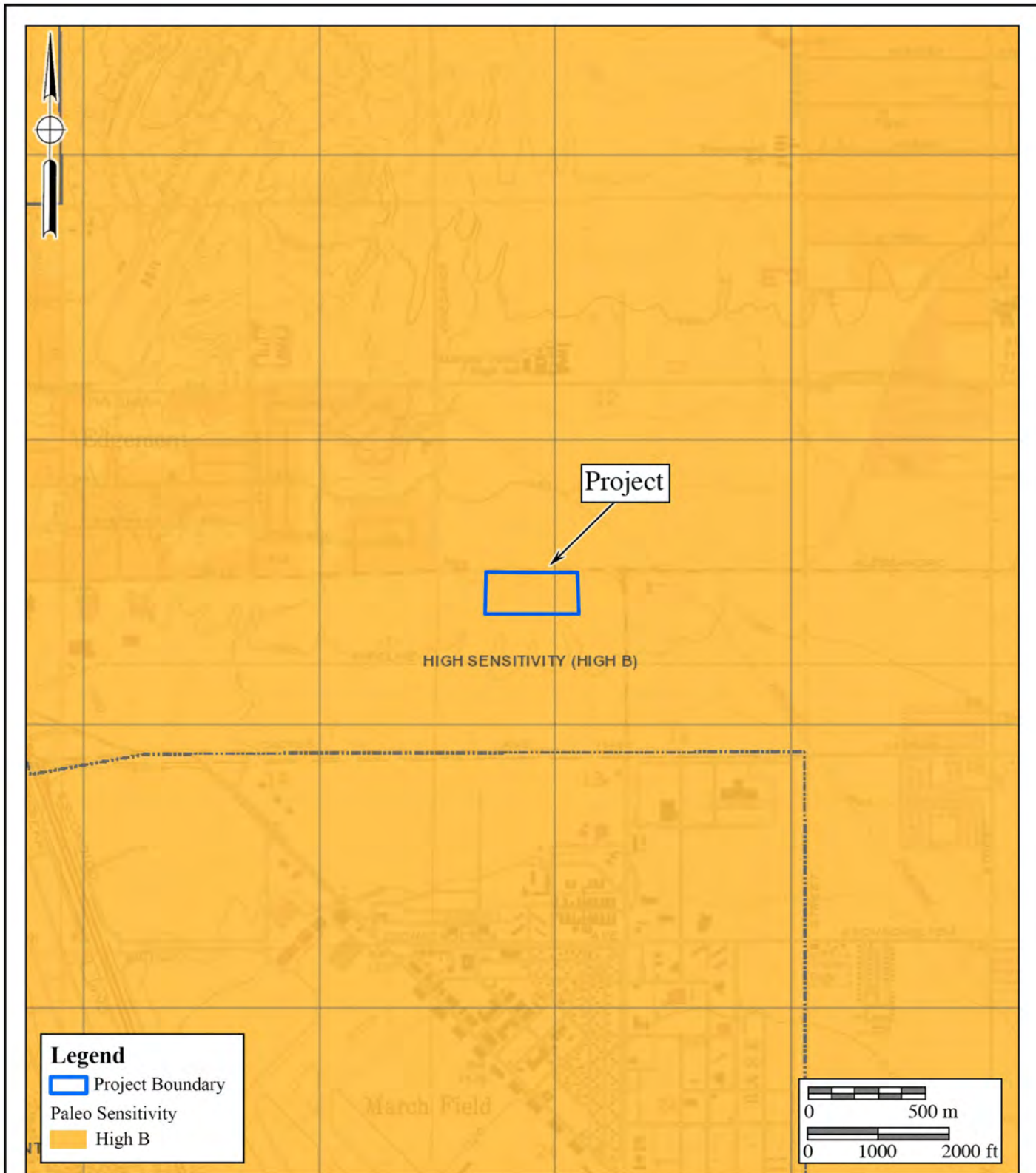


Figure 4

Paleontological Sensitivity Map

The Compass Danbe Centerpointe Project
After Riverside County Land Information System



VI. RECOMMENDATIONS

The existence of potentially fossiliferous Quaternary very old alluvial fan deposits mapped across the project (Qvof_a on Figure 3 in Appendix B); the known occurrence of terrestrial vertebrate fossils at relatively shallow depths from Quaternary older alluvial fan sediments across the Inland Empire of western Riverside County; and the High Paleontological Potential/Sensitivity (High B) typically assigned to Quaternary older alluvial fan sediments all support the recommendation that paleontological monitoring be required during mass grading, trenching, and excavation activities in undisturbed, Quaternary, older alluvial fan sediments in order to mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources. Monitoring is recommended on a full-time basis for excavations exceeding five feet in depth in undisturbed deposits at the Compass Danbe Centerpointe Project. Mitigation Measure C1 listed in the City of Moreno Valley's FEIR is presented below:

- C1.** Prior to the approval of a project, the City will assess potential impacts to significant historic, prehistoric archaeological, and paleontological [*sic*] resources, including impacts to human remains, pursuant to Section 15064.5 of the California Environmental Quality Act Guidelines. If significant impacts are identified, the City will require the project to be modified to avoid the impacts, or require measures to mitigate the impacts. Mitigation may involve monitoring, resource recovery, documentation or other measures. (City of Moreno Valley 2006:5.10-16)

Should the City of Moreno Valley Planning Division identify a potential for impacts to paleontological resources at a level above significant at the project, a proposed Mitigation Monitoring and Reporting Program (MMRP) is proposed below. When implemented with the provisions of CEQA, Scott (2015), the City of Moreno Valley (2006), and the Society of Vertebrate Paleontology (2010), this proposed MMRP would mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources (fossils), if present, to a level below significant. The proposed MMRP is as follows:

- 1) Monitoring of mass grading and excavation activities in areas identified as likely to contain paleontological resources by a qualified paleontologist or paleontological monitor. Full-time monitoring will be conducted in areas of grading or excavation in undisturbed, very old alluvial fan sediments (Qvof_a on Figure 3), starting at a depth of five feet below the surface. Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment

- to allow for the removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have a low potential to contain or yield fossil resources.
- 2) Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils are collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Notes are taken on the map location and stratigraphy of the site, and the site is photographed before it is vacated and the fossils are removed to a safe place. On mass grading projects, any discovered fossil site is protected by red flagging to prevent it from being overrun by earthmovers (scrapers) before salvage begins. Fossils are collected in a similar manner, with notes and photographs being taken before removing the fossils. Precise location of the site is determined with the use of handheld Global Positioning System units. If the site involves a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, Brian F. Smith and Associates, Inc. (BFSA) will send a fossil recovery crew in to excavate around the find, encase the find within a plaster jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment is solicited to help remove the jacket to a safe location before it is returned to the BFSA laboratory facility for preparation.
 - 3) Particularly small invertebrate fossils typically represent multiple specimens of a limited number of organisms, and a scientifically suitable sample can be obtained from one to several five-gallon buckets of fossiliferous sediment. If it is possible to dry-screen the sediment in the field, a concentrated sample may consist of one or two buckets of material. For vertebrate fossils, the test is usually the observed presence of small pieces of bones within the sediments. If present, as many as 20 to 40 five-gallon buckets of sediment can be collected and returned to a separate facility to wet-screen the sediment. In the laboratory, individual fossils are cleaned of extraneous matrix, any breaks are repaired, and the specimen, if needed, is stabilized by soaking in an archivally approved acrylic hardener (*e.g.*, a solution of acetone and Paraloid B-72).
 - 4) Preparation of recovered specimens to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Preparation of individual vertebrate fossils is often more time-consuming than for accumulations of invertebrate fossils.
 - 5) Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (*e.g.*, the WSC, 2345 Searl Parkway, Hemet, California 92543). The paleontological program should include a written repository agreement prior to the initiation of mitigation activities.

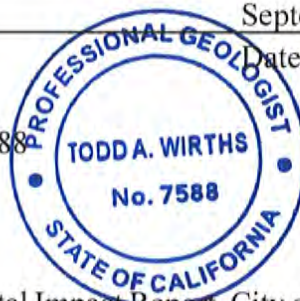
- 6) Preparation of a final monitoring and mitigation report of findings and significance, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location. The report, when submitted to the appropriate lead agency (City of Moreno Valley), will signify satisfactory completion of the project program to mitigate impacts to any paleontological resources.
- 7) Decisions regarding the intensity of the MMRP will be made by the project paleontologist based upon the significance of the paleontological resources and their biostratigraphic, biochronologic, paleoecologic, taphonomic, and taxonomic attributes, not upon the ability of a project proponent to fund the MMRP.

VII. CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this paleontological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief, and have been compiled in accordance with CEQA criteria.

Todd A. Wirths
Senior Paleontologist
California Professional Geologist No. 7588

September 28, 2020



VIII. REFERENCES

- City of Moreno Valley. 2006. Final Environmental Impact Report, City of Moreno Valley General Plan, Volume I, July 2006, SCH# 200091075. Electronic document, http://www.moreno-valley.ca.us/city_hall/general-plan/06gpfinal/ieir/eir-tot.pdf.
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- Morton, D.M. and Matti, J.C. 2001. Geologic Map of the Sunnymead 7.5' quadrangle, Riverside County, California: U.S. Geological Survey Open-File Report 01-450, scale 1:24,000.
- Radford, D. 2018. Untitled letter of fossil record search results for the Canyon Steele Industrial Building Project, in Appendix 2 of Quinn, H.M., and Richards, M.D., 2018, Paleontological Resources Assessment, Canyon Steele Industrial Building Project, City of Perris, Riverside County, California. Unpublished consulting report prepared for Carter

Group Architects, Inc., San Clemente, California, by CRM Tech, Colton, California.

Scott, E.G. 2015. Paleontology literature and records review, Moreno Valley Logistics Center, City of Moreno Valley, Riverside County, California. Unpublished report prepared for Brian F. Smith and Associates, Poway, by the Division of Geological Sciences, San Bernardino County Museum, Redlands (attached).

Society of Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources; by the SVP Impact Mitigation Guidelines Revision Committee. Electronic document, http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx.

APPENDIX A

Qualifications of Key Personnel

Todd A. Wirths, MS, PG No. 7588

Senior Paleontologist

Brian F. Smith and Associates, Inc.

14010 Poway Road • Suite A •

Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: twirths@bfsa-ca.com



Education

Master of Science, Geological Sciences, San Diego State University, California	1995
Bachelor of Arts, Earth Sciences, University of California, Santa Cruz	1992

Professional Certifications

California Professional Geologist #7588, 2003
 Riverside County Approved Paleontologist
 San Diego County Qualified Paleontologist
 Orange County Certified Paleontologist
 OSHA HAZWOPER 40-hour trained; current 8-hour annual refresher

Professional Memberships

Board member, San Diego Geological Society
 San Diego Association of Geologists; past President (2012) and Vice President (2011)
 South Coast Geological Society
 Southern California Paleontological Society

Experience

Mr. Wirths has more than a dozen years of professional experience as a senior-level paleontologist throughout southern California. He is also a certified California Professional Geologist. At BFSa, Mr. Wirths conducts on-site paleontological monitoring, trains and supervises junior staff, and performs all research and reporting duties for locations throughout Los Angeles, Ventura, San Bernardino, Riverside, Orange, San Diego, and Imperial Counties. Mr. Wirths was formerly a senior project manager conducting environmental investigations and remediation projects for petroleum hydrocarbon-impacted sites across southern California.

Selected Recent Reports

- 2019 *Paleontological Assessment for the Eastvale Self Storage Project, City of Eastvale, Riverside County, California.* Prepared for Gossett Development, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Resource Impact Mitigation Monitoring Program for the IPT Perris DC III Western/Nandina Project, Perris, Riverside County, California.* Prepared for IPT/Black Creek Group. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

- 2019 *Paleontological Assessment for the 10407 Elm Avenue Project, City of Fontana, San Bernardino County, California.* Prepared for Advantage Environmental Consultants, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Assessment for the 10575 Foothill Boulevard Project, City of Rancho Cucamonga, San Bernardino County, California.* Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Resource Impact Mitigation Program (PRIMP) for the Speedway TPM 37676 Project, Temescal Valley, Riverside County, California.* Prepared for Speedway Development. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Assessment for the Natwar Project, Perris, Riverside County, California.* Prepared for Advantage Environmental Consultants, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Resource and Mitigation Monitoring Assessment, Beyond Food Mart, City of Perris, Riverside County, California.* Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Assessment for the MorningStar Marguerite Project, Mission Viejo, Orange County, California.* Prepared for T&B Planning. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Monitoring Report for the West Markham Project (TR 33587), City of Perris, Riverside County, California.* Prepared for Markham JP/ARA, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Monitoring and Mitigation Report for the Artesa at Menifee Town Center Project Site, Sherman Road and La Piedra Road, Menifee, Riverside County, California.* Prepared for MBK Real Estate. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Monitoring Report, Diarq Residence, La Jolla, City of San Diego, San Diego County, California.* Prepared for West Way Drive, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Monitoring Report for the Nimitz Crossing Project, City of San Diego.* Prepared for Voltaire 24, LP. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Resource Impact Mitigation Program (PRIMP) for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California.* Prepared for JRT BP 1, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Monitoring Report for the Oceanside Beachfront Resort Project, Oceanside, San California.* Prepared for S.D. Malkin Properties. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Resource Impact Mitigation Program for the Nakase Project, Lake Forest, Orange County, San California.* Prepared for Glenn Lukos Associates, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

APPENDIX B

Record Search Report



Museum

Leonard X. Hernandez
Interim Museum Director

12 March 2015

Brian F. Smith and Associates
attn: George L. Kennedy, Ph.D., Senior Paleontologist
14010 Poway Road, Suite A
Poway, CA 92064

re: **PALEONTOLOGY LITERATURE AND RECORDS REVIEW, MORENO VALLEY LOGISTICS CENTER, CITY OF MORENO VALLEY, RIVERSIDE COUNTY, CALIFORNIA**

Dear Dr. Kennedy,

The Division of Geological Sciences of the San Bernardino County Museum (SBCM) has completed a literature review and records search for the above-named project in the City of Moreno Valley, Riverside County, California. Specifically, the proposed study area is located in the southwestern quadrant of section 30, Township 3 South, Range 3 West, San Bernardino Base and Meridian, as seen on the Perris, California and the Sunnymead, California 7.5' United States Geological Survey topographic quadrangle maps (1967 editions, photorevised 1973 and 1980, respectively).

Previous mapping of the proposed property (Rogers, 1965; Morton and Matti, 2001; Morton, 2003) indicates that the study area is situated entirely upon surface exposures of early Pleistocene alluvial fan deposits (= unit **Qvof_a**). These Pleistocene fan deposits may have high paleontologic sensitivity, depending upon their lithology. Pleistocene alluvium elsewhere throughout Riverside County and the Inland Empire has repeatedly been reported to yield significant fossils of extinct animals from the Ice Age (Jefferson, 1991; Reynolds, 1991; Anderson and others, 2002; Scott and Cox, 2008; Springer and others, 2009, 2010; Scott, 2010). Fossils recovered from these Pleistocene sediments represent extinct taxa including mammoths, mastodons, ground sloths, dire wolves, sabre-toothed cats, large and small horses, large and small camels, and bison (Jefferson, 1991; Reynolds, 1991; Scott and Cox, 2008; Springer and others, 2009, 2010; Scott, 2010), as well as plant macro- and microfossils (Anderson and others, 2002). If not previously disturbed by development, and depending upon the lithology exhibited, these sediments have high potential to contain significant nonrenewable paleontologic resources.

For this review, I conducted a search of the Regional Paleontologic Locality Inventory (RPLI) at the SBCM. The results of this search indicate that no previously-recorded fossil resource

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localities from Pleistocene older alluvium are present within the boundaries of the proposed development property, nor from at least within one mile in any direction.

Recommendations

The results of the literature review and the search of the RPLI at the SBCM demonstrate that the proposed study area is situated upon Pleistocene older alluvial deposits that, if not previously disturbed by development and depending upon their lithology, have high potential to contain paleontologic resources. Excavation in this older alluvium therefore has high potential to impact paleontologic resources. A qualified vertebrate paleontologist must develop a program to mitigate impacts to nonrenewable paleontologic resources. This mitigation program must be consistent with the provisions of the California Environmental Quality Act (Scott and Springer, 2003), as well as with regulations currently implemented by the County of Riverside. This program should include, but not be limited to:

1. Monitoring of excavation in areas identified as likely to contain paleontologic resources by a qualified paleontologic monitor. Areas requiring monitoring include all previously-undisturbed Pleistocene older alluvial sediments present, at the surface or at depth, within the boundaries of the property. Paleontologic monitors should be equipped to salvage fossils as they are unearthed, to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced or eliminated if the potentially-fossiliferous units described herein are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.
2. Preparation of recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils are essential in order to fully mitigate adverse impacts to the resources (Scott and others, 2004).
3. Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation (Scott and others, 2004) and CEQA compliance (Scott and Springer, 2003). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not complete until such curation into an established, accredited museum repository has been fully completed and documented.
4. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into an established, accredited museum

repository, would signify completion of the program to mitigate impacts to paleontologic resources.

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Please do not hesitate to contact us with any further questions you may have.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Scott". The signature is written in a cursive style with a large, looping initial "E".

Eric Scott, Curator of Paleontology
Division of Geological Sciences
San Bernardino County Museum

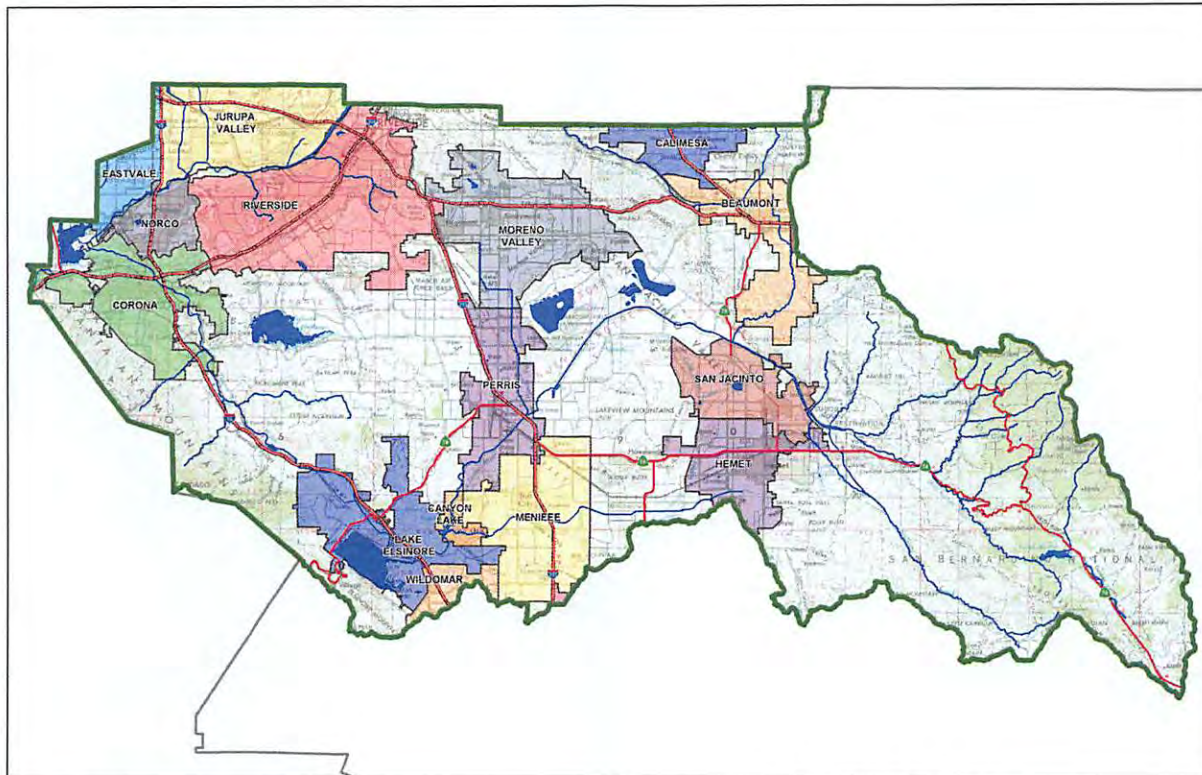
Project Specific Water Quality Management Plan

A Template for Projects located within the **Santa Ana Watershed** Region of Riverside County

Project Title: Compass Danbe Centerpointe, Proposed Industrial Warehouse Facility, South side of Alessandro Blvd. between Frederick Street and Graham Street, City of Moreno Valley

Development No: PM 37944 PEN 20-0120/0121

Design Review/Case No: LWQ 20--0018



- Preliminary
 Final

Original Date Prepared 10/5/2020

Revision Date(s):

Prepared for Compliance with
 Regional Board Order No. **R8-2010-0033**

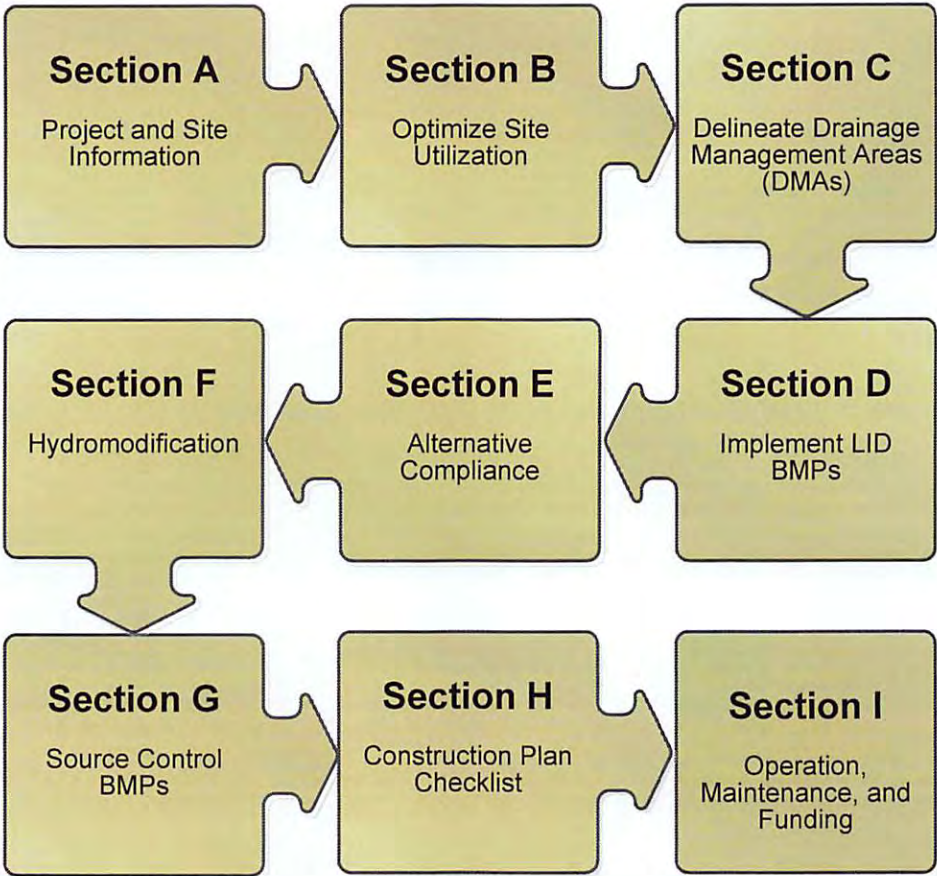
Contact Information:

Prepared for:
 CDRE HOLDINGS 17 LLC
 Attn: Mark Bachli
 523 Main Street
 El Segundo, CA 90245
 (310) 428-3302

Prepared by:
 Thatcher Engineering and Associates, Inc.
 1461 Ford Street Suite 105
 Redlands, CA 92373
 (909) 748-7777

A Brief Introduction

This Project-Specific WQMP Template for the **Santa Ana Region** has been prepared to help guide you in documenting compliance for your project. Because this document has been designed to specifically document compliance, you will need to utilize the WQMP Guidance Document as your “how-to” manual to help guide you through this process. Both the Template and Guidance Document go hand-in-hand, and will help facilitate a well prepared Project-Specific WQMP. Below is a flowchart for the layout of this Template that will provide the steps required to document compliance.



OWNER’S CERTIFICATION

This Project-Specific Water Quality Management Plan (WQMP) has been prepared for CDRE HOLDINGS 17 LLC by Thatcher Engineering and Associates, Inc. for Compass Danbe Centerpointe.

This WQMP is intended to comply with the requirements of City of Moreno Valley for Water Quality Ordinance (Municipal code Section 9.10.080) which includes the requirement for the preparation and implementation of a Project-Specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation and funding of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. In addition, the property owner accepts responsibility for interim operation and maintenance of Stormwater BMPs until such time as this responsibility is formally transferred to a subsequent owner. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity. The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under City of Moreno Valley Water Quality Ordinance (Municipal Code Section 9.10.080).

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

Owner’s Signature

Date

Owner’s Printed Name

Owner’s Title/Position

PREPARER’S CERTIFICATION

“The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan meet the requirements of Regional Water Quality Control Board Order No. R8-2010-0033 and any subsequent amendments thereto.”

Preparer’s Signature

Date

Patrick C. Flanagan Jr.
Preparer’s Printed Name

Professional Engineer
Preparer’s Title/Position

Preparer’s Licensure:

Table of Contents

Section A: Project and Site Information	6
A.1 Maps and Site Plans	6
A.2 Identify Receiving Waters	8
A.3 Additional Permits/Approvals required for the Project:.....	9
Section B: Optimize Site Utilization (LID Principles).....	10
Section C: Delineate Drainage Management Areas (DMAs)	11
Section D: Implement LID BMPs.....	13
D.1 Infiltration Applicability	13
D.2 Harvest and Use Assessment	14
D.3 Bioretention and Biotreatment Assessment	16
D.4 Feasibility Assessment Summaries	17
D.5 LID BMP Sizing.....	18
Section E: Alternative Compliance (LID Waiver Program)	20
E.1 Identify Pollutants of Concern.....	21
E.2 Stormwater Credits	22
E.3 Sizing Criteria	22
E.4 Treatment Control BMP Selection.....	23
Section F: Hydromodification.....	24
F.1 Hydrologic Conditions of Concern (HCOC) Analysis	24
F.2 HCOC Mitigation	26
Section G: Source Control BMPs	27
Section H: Construction Plan Checklist	30
Section I: Operation, Maintenance and Funding	31

List of Tables

Table A.1 Identification of Receiving Waters8

Table A.2 Other Applicable Permits9

Table C.1 DMA Classifications11

Table C.2 Type ‘A’, Self-Treating Areas11

Table C.3 Type ‘B’, Self-Retaining Areas.....12

Table C.4 Type ‘C’, Areas that Drain to Self-Retaining Areas12

Table C.5 Type ‘D’, Areas Draining to BMPs.....12

Table D.1 Infiltration Feasibility13

Table D.2 LID Prioritization Summary Matrix.....17

Table D.3 DCV Calculations for LID BMPs.....18

Table E.1 Potential Pollutants by Land Use Type21

Table E.2 Water Quality Credits22

Table E.3 Treatment Control BMP Sizing22

Table E.4 Treatment Control BMP Selection.....23

Table F.1 Hydrologic Conditions of Concern Summary.....25

Table G.1 Permanent and Operational Source Control Measures.....27

Table H.1 Construction Plan Cross-reference30

List of Appendices

Appendix 1: Maps and Site Plans32

Appendix 2: Construction Plans33

Appendix 3: Soils Information34

Appendix 4: Historical Site Conditions35

Appendix 5: LID Infeasibility36

Appendix 6: BMP Design Details37

Appendix 7: Hydromodification38

Appendix 8: Source Control.....39

Appendix 9: O&M.....40

Appendix 10: Educational Materials41

Section A: Project and Site Information

PROJECT INFORMATION	
Type of Project:	Industrial Warehouse Facility
Planning Area:	N/A
Community Name:	N/A
Development Name:	Compass Danbe Centerpointe, Proposed Industrial Warehouse Facility, South side of Alessandro Blvd. between Frederick Street and Graham Street, City of Moreno Valley
PROJECT LOCATION	
Latitude & Longitude (DMS):	33.916171, -117.256090
Project Watershed and Sub-Watershed:	San Jacinto River/ Lake Elsinore
APN(s):	297-170-002 and 003
Map Book and Page No.:	Book 11, Page 10
PROJECT CHARACTERISTICS	
Proposed or Potential Land Use(s)	Industrial Warehouse
Proposed or Potential SIC Code(s)	1541
Area of Project Footprint (SF)	995,188
Total Area of <u>proposed</u> Impervious Surfaces within the Project Limits (SF)/or Replacement	793,767 SF
Does the project consist of offsite road improvements?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Does the project propose to construct unpaved roads?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Is the project part of a larger common plan of development (phased project)?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
EXISTING SITE CHARACTERISTICS	
Total area of <u>existing</u> Impervious Surfaces within the project limits (SF)	47,725 (Alessandro Blvd)
Is the project located within any MSHCP Criteria Cell?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
If so, identify the Cell number:	
Are there any natural hydrologic features on the project site?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Is a Geotechnical Report attached?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
If no Geotech. Report, list the NRCS soils type(s) present on the site (A, B, C and/or D)	
What is the Water Quality Design Storm Depth for the project?	0.67

The project site is currently vacant, and consists of two parcels. The site is located on the south side of Alessandro Blvd. between Frederick Street and Graham Street in the City of Moreno Valley. The site generally drains from north to south.

The project proposes to develop the site as an industrial warehouse facility with related access from Alessandro Blvd. and landscape improvements. The development will also include street improvements along Alessandro Boulevard.

The total existing net area of the site is approximately 17.67 acres. After dedication for public right of way, the proposed net area of the site is approximately 17.65 acres. The project area, including proposed offsite improvements and vacant area runoff, and existing offsite improvements tributary to the project's BMPs is 995,188 SF.

Drainage Area 1 includes Parcel 1 onsite areas and offsite tributary runoff totaling 558,536 SF. Flows generated onsite from Parcel 1 and offsite tributary runoff will be directed to an underground detention tank. From here the required treatment volume will be pumped to Biotreatment Device 1 (a Modular Wetland). Treated flows will discharge (gravity flow) to the City of Moreno Valley's storm drain system. Flows from larger storms in excess of water quality treatment volume will be pumped out at rates less than pre-development rates from the detention tank to the storm drain. From here, flows continue via City of Moreno Valley Storm Drain to Perris Valley Channel and Canyon Lake as they do historically.

Drainage Area 2 includes Parcel 2 onsite areas and offsite tributary runoff totaling 346,029 SF. Flows generated onsite from Parcel 2 and offsite tributary runoff will be directed to an underground detention tank. From here the required treatment volume will be pumped to Biotreatment Device 2 (a Modular Wetland). Treated flows will discharge (gravity flow) to the City of Moreno Valley's storm drain system. Flows from larger storms in excess of water quality treatment volume will be pumped out at rates less than pre-development rates from the detention tank to the storm drain. From here, flows continue via City of Moreno Valley Storm Drain to Perris Valley Channel and Canyon Lake as they do historically.

Drainage Area 3 includes the westerly portion of the Alessandro frontage, adjacent and adjacent parkway totaling 27,680 SF. Bioretention Swale 3 is proposed to provide treatment of the area. Runoff from Alessandro Boulevard will be directed to the swale via curb openings. Once treated in the soil media, runoff will enter an underdrain, ultimately directing flows to a proposed catch basin and into a City of Moreno Valley storm drain which is proposed to be routed through the site. From here, flows continue via City of Moreno Valley Storm Drain to Perris Valley Channel and Canyon Lake as they do historically.

Drainage Area 4 includes the center portion of the Alessandro frontage, adjacent and adjacent parkway totaling 27,994 SF. Bioretention Swale 4 is proposed to provide treatment of the area. Runoff from Alessandro Boulevard will be directed to the swale via curb openings. Once treated in the soil media, runoff will enter an underdrain, ultimately directing flows to a proposed catch basin and into a City of Moreno Valley storm drain which is proposed to be routed through the site. From here, flows continue via City of Moreno Valley Storm Drain to Perris Valley Channel and Canyon Lake as they do historically.

Drainage Area 5 includes the easterly portion of the Alessandro frontage, adjacent and adjacent parkway totaling 34,949 SF. Bioretention Swale 5 is proposed to provide treatment of the area. Runoff from Alessandro Boulevard will be directed to the swale via curb openings. Once treated in the soil media, runoff will enter an underdrain, ultimately directing flows to a proposed catch basin and into a City of Moreno Valley storm drain which is proposed to be routed through the site. From here, flows continue via City of Moreno Valley Storm Drain to Perris Valley Channel and Canyon Lake as they do historically.

The Owner will maintain all BMPs including onsite biotreatment devices and offsite bioretention swales.

A.1 Maps and Site Plans

When completing your Project-Specific WQMP, include a map of the local vicinity and existing site. In addition, include all grading, drainage, landscape/plant palette and other pertinent construction plans in Appendix 2. At a minimum, your WQMP Site Plan should include the following:

- Drainage Management Areas
- Proposed Structural BMPs
- Drainage Path
- Drainage Infrastructure, Inlets, Overflows
- Source Control BMPs
- Buildings, Roof Lines, Downspouts
- Impervious Surfaces
- Standard Labeling

Use your discretion on whether or not you may need to create multiple sheets or can appropriately accommodate these features on one or two sheets. Keep in mind that the Co-Permittee plan reviewer must be able to easily analyze your project utilizing this template and its associated site plans and maps.

A.2 Identify Receiving Waters

Using Table A.1 below, list in order of upstream to downstream, the receiving waters that the project site is tributary to. Continue to fill each row with the Receiving Water's 303(d) listed impairments (if any), designated beneficial uses, and proximity, if any, to a RARE beneficial use. Include a map of the receiving waters in Appendix 1.

Table A.1 Identification of Receiving Waters

Receiving Waters	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
Perris Valley Channel	None	None	N/A
San Jacinto River (Reach 3)	None	MUN-AGR-GWR-REC1-REC2-WARM-WILD-RARE	11.6 Miles
Canyon Lake (aka San Jacinto River Reach 2)	Nutrients	MUN-AGR-GWR-REC1-REC2-WARM-WILD	N/A
San Jacinto River (Reach 1)	None	MUN-AGR-GWR-REC1-REC2-WARM-WILD-RARE	18.8 Miles
Lake Elsinore	Nutrients, DDT, PCBs, Organic Enrichment/Low Dissolved Oxygen	REC1-REC2-WARM-WILD	N/A
Temescal Creek (Reach 5)	None	AGR-GWR-REC1-REC2-WARM-WILD-RARE	24.4 Miles
Temescal Creek (Reach 4)	None	AGR-GWR-REC1-REC2-WARM-WILD-RARE	37.3 Miles
Temescal Creek (Reach 3)	None	AGR-IND-GWR-REC1-REC2-WARM-WILD	N/A
Temescal Creek (Reach 2)	None	AGR-IND-GWR-REC1-REC2-WARM-LWRM	N/A
Temescal Creek (Reach 1)	pH	REC1-REC2-WARM-WILD	N/A
Santa Ana River (Reach 3)	Copper, Lead, Pathogens	AGR-GWR-REC1-REC2-WARM-WILD-RARE-SPWN	60.7 Miles
Prado Basin Management Zone	pH	REC1-REC2-WARM-WILD-RARE	46.3 Miles
Santa Ana River (Reach 2)	None	AGR-GWR-REC1-REC2-WARM-WILD-RARE	65.7 Miles
Santa Ana River (Reach 1)	None	REC1-REC2-WARM-WILD	N/A
Tidal Prism of Santa Ana River (to within 1000' of Victoria Street) and Newport Slough	None	None	N/A

A.3 Additional Permits/Approvals required for the Project:

Table A.2 Other Applicable Permits

Agency	Permit Required	
State Department of Fish and Game, 1602 Streambed Alteration Agreement	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Cert.	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
US Army Corps of Engineers, CWA Section 404 Permit	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
US Fish and Wildlife, Endangered Species Act Section 7 Biological Opinion	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Statewide Construction General Permit Coverage	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Statewide Industrial General Permit Coverage	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Western Riverside MSHCP Consistency Approval (e.g., JPR, DBESP)	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Other <i>(please list in the space below as required)</i> City of Moreno Valley Permits	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N

If yes is answered to any of the questions above, the Co-Permittee may require proof of approval/coverage from those agencies as applicable including documentation of any associated requirements that may affect this Project-Specific WQMP.

Section B: Optimize Site Utilization (LID Principles)

Review of the information collected in Section 'A' will aid in identifying the principal constraints on site design and selection of LID BMPs as well as opportunities to reduce imperviousness and incorporate LID Principles into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, utility locations or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention BMPs), and differences in elevation (which can provide hydraulic head). Prepare a brief narrative for each of the site optimization strategies described below. This narrative will help you as you proceed with your LID design and explain your design decisions to others.

The 2010 Santa Ana MS4 Permit further requires that LID Retention BMPs (Infiltration Only or Harvest and Use) be used unless it can be shown that those BMPs are infeasible. Therefore, it is important that your narrative identify and justify if there are any constraints that would prevent the use of those categories of LID BMPs. Similarly, you should also note opportunities that exist which will be utilized during project design. Upon completion of identifying Constraints and Opportunities, include these on your WQMP Site plan in Appendix 1.

Site Optimization

The following questions are based upon Section 3.2 of the WQMP Guidance Document. Review of the WQMP Guidance Document will help you determine how best to optimize your site and subsequently identify opportunities and/or constraints, and document compliance.

Did you identify and preserve existing drainage patterns? If so, how? If not, why?

No. The entire site will be mass graded. Runoff from onsite areas is directed to one of the biotreatment devices for treatment, prior to exiting the site to the City storm drain as it does historically.

Did you identify and protect existing vegetation? If so, how? If not, why?

No. The entire site will be mass graded to accommodate the development, so it is not feasible to protect existing vegetation.

Did you identify and preserve natural infiltration capacity? If so, how? If not, why?

No. The measured infiltration rates were too low to allow for the use of an infiltration BMP. Instead, biotreatment BMPs are proposed.

Did you identify and minimize impervious area? If so, how? If not, why?

Yes. Impervious areas are limited to required streets, sidewalks and buildings. No decorative hardscape is proposed.

Did you identify and disperse runoff to adjacent pervious areas? If so, how? If not, why?

Yes. Alessandro Boulevard runoff will be directed to bioretention swales for treatment.

Section C: Delineate Drainage Management Areas (DMAs)

Utilizing the procedure in Section 3.3 of the WQMP Guidance Document which discusses the methods of delineating and mapping your project site into individual DMAs, complete Table C.1 below to appropriately categorize the types of classification (e.g., Type A, Type B, etc.) per DMA for your project site. Upon completion of this table, this information will then be used to populate and tabulate the corresponding tables for their respective DMA classifications.

Table C.1 DMA Classifications

DMA Name or ID	Surface Type(s) ¹	Area (Sq. Ft.)	DMA Type
1A	Concrete /Asphalt/ Roof	502,471	Type D
1B	Ornamental Landscaping	40,593	Type D
1C	Natural	15,472	Type D
2A	Concrete /Asphalt/ Roof	221,281	Type D
2B	Ornamental Landscaping	24,599	Type D
2C	Natural	100,149	Type D
3A	Concrete /Asphalt	21,819	Type D
3B	Ornamental Landscaping	5,861	Type D
4A	Concrete /Asphalt	21,407	Type D
4B	Ornamental Landscaping	6,587	Type D
5A	Concrete /Asphalt	26,789	Type D
5B	Ornamental Landscaping	8,160	Type D

¹Reference Table 2-1 in the WQMP Guidance Document to populate this column

Table C.2 Type 'A', Self-Treating Areas

DMA Name or ID	Area (Sq. Ft.)	Stabilization Type	Irrigation Type (if any)
N/A	N/A	N/A	N/A

Table C.3 Type 'B', Self-Retaining Areas

Self-Retaining Area				Type 'C' DMAs that are draining to the Self-Retaining Area		
DMA Name/ ID	Post-project surface type	Area (square feet) [A]	Storm Depth (inches) [B]	DMA Name / ID	[C] from Table C.4 = [C]	Required Retention Depth (inches) [D]
N/A	N/A	N/A	N/A	N/A	N/A	N/A

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

Table C.4 Type 'C', Areas that Drain to Self-Retaining Areas

DMA					Receiving Self-Retaining DMA		
DMA Name/ ID	Area (square feet) [A]	Post-project surface type	Runoff factor [B]	Product [C] = [A] x [B]	DMA name /ID	Area (square feet) [D]	Ratio [C]/[D]
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table C.5 Type 'D', Areas Draining to BMPs

DMA Name or ID	BMP Name or ID
1A and 1B	Underground Detention and Biotreatment Device 1
2A and 2B	Underground Detention and Biotreatment Device 2
3A and 3B	Bioretention Swale 3
4A and 4B	Bioretention Swale 4
5A and 5B	Bioretention Swale 5

Note: More than one drainage management area can drain to a single LID BMP, however, one drainage management area may not drain to more than one BMP.

Section D: Implement LID BMPs

D.1 Infiltration Applicability

Is there an approved downstream 'Highest and Best Use' for stormwater runoff (see discussion in Chapter 2.4.4 of the WQMP Guidance Document for further details)? Y N

If yes has been checked, Infiltration BMPs shall not be used for the site. If no, continue working through this section to implement your LID BMPs. It is recommended that you contact your Co-Permittee to verify whether or not your project discharges to an approved downstream 'Highest and Best Use' feature.

Geotechnical Report

A Geotechnical Report or Phase I Environmental Site Assessment may be required by the Copermitee to confirm present and past site characteristics that may affect the use of Infiltration BMPs. In addition, the Co-Permittee, at their discretion, may not require a geotechnical report for small projects as described in Chapter 2 of the WQMP Guidance Document. If a geotechnical report has been prepared, include it in Appendix 3. In addition, if a Phase I Environmental Site Assessment has been prepared, include it in Appendix 4.

Is this project classified as a small project consistent with the requirements of Chapter 2 of the WQMP Guidance Document? Y N

Infiltration Feasibility

Table D.1 below is meant to provide a simple means of assessing which DMAs on your site support Infiltration BMPs and is discussed in the WQMP Guidance Document in Chapter 2.4.5. Check the appropriate box for each question and then list affected DMAs as applicable. If additional space is needed, add a row below the corresponding answer.

Table D.1 Infiltration Feasibility

Does the project site...	YES	NO
...have any DMAs with a seasonal high groundwater mark shallower than 10 feet? If Yes, list affected DMAs:		X
...have any DMAs located within 100 feet of a water supply well? If Yes, list affected DMAs:		X
...have any areas identified by the geotechnical report as posing a public safety risk where infiltration of stormwater could have a negative impact? If Yes, list affected DMAs:		X
...have measured in-situ infiltration rates of less than 1.6 inches / hour? If Yes, list affected DMAs: ALL	X	
...have significant cut and/or fill conditions that would preclude in-situ testing of infiltration rates at the final infiltration surface? If Yes, list affected DMAs:		X
...geotechnical report identify other site-specific factors that would preclude effective and safe infiltration? Describe here:		X

If you answered "Yes" to any of the questions above for any DMA, Infiltration BMPs should not be used for those DMAs and you should proceed to the assessment for Harvest and Use below.

D.2 Harvest and Use Assessment

Please check what applies: None of the below apply. Therefore, Harvest and Use has been assessed.

- Reclaimed water will be used for the non-potable water demands for the project.
- Downstream water rights may be impacted by Harvest and Use as approved by the Regional Board (verify with the Copermittee).
- The Design Capture Volume will be addressed using Infiltration Only BMPs. In such a case, Harvest and Use BMPs are still encouraged, but it would not be required if the Design Capture Volume will be infiltrated or evapotranspired.

If any of the above boxes have been checked, Harvest and Use BMPs need not be assessed for the site. If neither of the above criteria applies, follow the steps below to assess the feasibility of irrigation use, toilet use and other non-potable uses (e.g., industrial use).

Irrigation Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for Irrigation Use BMPs on your site:

Step 1: Identify the total area of irrigated landscape on the site, and the type of landscaping used.

Total Area of Irrigated Landscape: 2.01 acres

Type of Landscaping (Conservation Design or Active Turf): Conservation Design

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for irrigation use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: 18.22 acres

Step 3: Cross reference the Design Storm depth for the project site (see Exhibit A of the WQMP Guidance Document) with the left column of Table 2-3 in Chapter 2 to determine the minimum area of Effective Irrigated Area per Tributary Impervious Area (EIATIA).

Enter your EIATIA factor: 1.158

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum irrigated area that would be required.

Minimum required irrigated area: 21.10

Step 5: Determine if harvesting stormwater runoff for irrigation use is feasible for the project by comparing the total area of irrigated landscape (Step 1) to the minimum required irrigated area (Step 4).

Minimum required irrigated area (Step 4)	Available Irrigated Landscape (Step 1)
21.10	2.01

Toilet Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for toilet flushing uses on your site:

- Step 1: Identify the projected total number of daily toilet users during the wet season, and account for any periodic shut downs or other lapses in occupancy:

Projected Number of Daily Toilet Users:

Project Type: Industrial

- Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for toilet use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: 18.22 acres

- Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-1 in Chapter 2 to determine the minimum number of toilet users per tributary impervious acre (TUTIA).

Enter your TUTIA factor: 190

- Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum number of toilet users that would be required.

Minimum number of toilet users: 3,462

- Step 5: Determine if harvesting stormwater runoff for toilet flushing use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

Minimum required Toilet Users (Step 4)	Projected number of toilet users (Step 1)
3,462	914

Other Non-Potable Use Feasibility

Are there other non-potable uses for stormwater runoff on the site (e.g. industrial use)? See Chapter 2 of the Guidance for further information. If yes, describe below. If no, write N/A.

N/A

- Step 1: Identify the projected average daily non-potable demand, in gallons per day, during the wet season and accounting for any periodic shut downs or other lapses in occupancy or operation.

Average Daily Demand:

- Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for the identified non-potable use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces:

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-3 in Chapter 2 to determine the minimum demand for non-potable uses per tributary impervious acre.

Enter the factor from Table 2-3:

Step 4: Multiply the unit value obtained from Step 4 by the total of impervious areas from Step 3 to develop the minimum number of gallons per day of non-potable use that would be required.

Minimum required use:

Step 5: Determine if harvesting stormwater runoff for other non-potable use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

Minimum required non-potable use (Step 4)	Projected average daily use (Step 1)

If Irrigation, Toilet and Other Use feasibility anticipated demands are less than the applicable minimum values, Harvest and Use BMPs are not required and you should proceed to utilize LID Bioretention and Biotreatment, unless a site-specific analysis has been completed that demonstrates technical infeasibility as noted in D.3 below.

D.3 Bioretention and Biotreatment Assessment

Other LID Bioretention and Biotreatment BMPs as described in Chapter 2.4.7 of the WQMP Guidance Document are feasible on nearly all development sites with sufficient advance planning.

Select one of the following:

LID Bioretention/Biotreatment BMPs will be used for some or all DMAs of the project as noted below in Section D.4 (note the requirements of Section 3.4.2 in the WQMP Guidance Document).

A site-specific analysis demonstrating the technical infeasibility of all LID BMPs has been performed and is included in Appendix 5. If you plan to submit an analysis demonstrating the technical infeasibility of LID BMPs, request a pre-submittal meeting with the Copermittee to discuss this option. Proceed to Section E to document your alternative compliance measures.

D.4 Feasibility Assessment Summaries

From the Infiltration, Harvest and Use, Bioretention and Biotreatment Sections above, complete Table D.2 below to summarize which LID BMPs are technically feasible, and which are not, based upon the established hierarchy.

Table D.2 LID Prioritization Summary Matrix

DMA Name/ID	LID BMP Hierarchy				No LID (Alternative Compliance)
	1. Infiltration	2. Harvest and use	3. Bioretention	4. Biotreatment	
1A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3A	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4A	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5A	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For those DMAs where LID BMPs are not feasible, provide a brief narrative below summarizing why they are not feasible, include your technical infeasibility criteria in Appendix 5, and proceed to Section E below to document Alternative Compliance measures for those DMAs. Recall that each proposed DMA must pass through the LID BMP hierarchy before alternative compliance measures may be considered.

All DMAs are treated using a LID BMP. No alternative compliance is required or proposed.

D.5 LID BMP Sizing

Each LID BMP must be designed to ensure that the Design Capture Volume will be addressed by the selected BMPs. First, calculate the Design Capture Volume for each LID BMP using the V_{BMP} worksheet in Appendix F of the LID BMP Design Handbook. Second, design the LID BMP to meet the required V_{BMP} using a method approved by the Copermittee. Utilize the worksheets found in the LID BMP Design Handbook or consult with your Copermittee to assist you in correctly sizing your LID BMPs. Complete Table D.3 below to document the Design Capture Volume and the Proposed Volume for each LID BMP. Provide the completed design procedure sheets for each LID BMP in Appendix 6. You may add additional rows to the table below as needed.

Table D.3 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet) [A]	Post-Project Surface Type	Effective Impervious Fraction, I_f [B]	DMA Runoff Factor [C]	DMA Areas x Runoff Factor [A] x [C]	<i>Bioretention Device 1</i>		
1A	502471	Asphalt	1	0.89	448204.1			
1B	40593	Landscaping	0.1	0.11	4483.8			
1C	15472	Natural	0.3	0.23	3483.8			
$\Sigma =$								
$A_T = \Sigma$		558536			456171.7	0.67	25469.6	25470
						<i>Design Storm Depth (in)</i>	<i>Design Capture Volume, V_{BMP} (cubic feet)</i>	<i>Proposed Volume on Plans (cubic feet)</i>

DMA Type/ID	DMA Area (square feet) [A]	Post-Project Surface Type	Effective Impervious Fraction, I_f [B]	DMA Runoff Factor [C]	DMA Areas x Runoff Factor [A] x [C]	<i>Bioretention Device 2</i>		
2A	221281	Asphalt	1	0.89	197382.7			
2B	24599	Landscaping	0.1	0.11	2717.2			
2C	100149	Natural	0.3	0.23	22550.1			
$\Sigma =$								
$A_T = \Sigma$		346029			222650.0	0.67	12431.3	12432
						<i>Design Storm Depth (in)</i>	<i>Design Capture Volume, V_{BMP} (cubic feet)</i>	<i>Proposed Volume on Plans (cubic feet)</i>

DMA Type/ID	DMA Area (square feet) [A]	Post-Project Surface Type	Effective Impervious Fraction, I _f [B]	DMA Runoff Factor [C]	DMA Areas x Runoff Factor [A] x [C]	<i>Bioretention Swale 3</i>	Design Storm Depth (in)	Design Volume, V _{BMP} (cubic feet)	Capture V _{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
3A	21819	Asphalt	1	0.89	19462.5					
3B	5861	Landscaping	0.1	0.11	647.4					
A_T = Σ						27680				
Σ=						20109.9	0.67	1122.8		1123

DMA Type/ID	DMA Area (square feet) [A]	Post-Project Surface Type	Effective Impervious Fraction, I _f [B]	DMA Runoff Factor [C]	DMA Areas x Runoff Factor [A] x [C]	<i>Bioretention Swale 4</i>	Design Storm Depth (in)	Design Volume, V _{BMP} (cubic feet)	Capture V _{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
4A	21407	Asphalt	1	0.89	19095					
4B	6587	Landscaping	0.1	0.11	727.6					
A_T = Σ						27994				
Σ=						19822.6	0.67	1106.8		1107

DMA Type/ID	DMA Area (square feet) [A]	Post-Project Surface Type	Effective Impervious Fraction, I _f [B]	DMA Runoff Factor [C]	DMA Areas x Runoff Factor [A] x [C]	<i>Bioretention Swale 5</i>	Design Storm Depth (in)	Design Volume, V _{BMP} (cubic feet)	Capture V _{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
5A	26789	Asphalt	1	0.89	23895.8					
5B	8160	Landscaping	0.1	0.11	901.3					
A_T = Σ						34949				
Σ=						24797.1	0.67	1384.5		1385

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

Section E: Alternative Compliance (LID Waiver Program)

LID BMPs are expected to be feasible on virtually all projects. Where LID BMPs have been demonstrated to be infeasible as documented in Section D, other Treatment Control BMPs must be used (subject to LID waiver approval by the Copermittee). Check one of the following Boxes:

LID Principles and LID BMPs have been incorporated into the site design to fully address all Drainage Management Areas. No alternative compliance measures are required for this project and thus this Section is not required to be completed.

- Or -

The following Drainage Management Areas are unable to be addressed using LID BMPs. A site-specific analysis demonstrating technical infeasibility of LID BMPs has been approved by the Co-Permittee and included in Appendix 5. Additionally, no downstream regional and/or sub-regional LID BMPs exist or are available for use by the project. The following alternative compliance measures on the following pages are being implemented to ensure that any pollutant loads expected to be discharged by not incorporating LID BMPs, are fully mitigated.

E.1 Identify Pollutants of Concern

Utilizing Table A.1 from Section A above which noted your project's receiving waters and their associated EPA approved 303(d) listed impairments, cross reference this information with that of your selected Priority Development Project Category in Table E.1 below. If the identified General Pollutant Categories are the same as those listed for your receiving waters, then these will be your Pollutants of Concern and the appropriate box or boxes will be checked on the last row. The purpose of this is to document compliance and to help you appropriately plan for mitigating your Pollutants of Concern in lieu of implementing LID BMPs.

Table E.1 Potential Pollutants by Land Use Type

Priority Development Project Categories and/or Project Features (check those that apply)	General Pollutant Categories							
	Bacterial Indicators	Metals	Nutrients	Pesticides	Toxic Organic Compounds	Sediments	Trash & Debris	Oil & Grease
<input type="checkbox"/> Detached Residential Development	P	N	P	P	N	P	P	P
<input type="checkbox"/> Attached Residential Development	P	N	P	P	N	P	P	P ⁽²⁾
<input checked="" type="checkbox"/> Commercial/Industrial Development	P ⁽³⁾	P	P ⁽¹⁾	P ⁽¹⁾	P ⁽⁵⁾	P ⁽¹⁾	P	P
<input type="checkbox"/> Automotive Repair Shops	N	P	N	N	P ^(4, 5)	N	P	P
<input type="checkbox"/> Restaurants (>5,000 ft ²)	P	N	N	N	N	N	P	P
<input type="checkbox"/> Hillside Development (>5,000 ft ²)	P	N	P	P	N	P	P	P
<input type="checkbox"/> Parking Lots (>5,000 ft ²)	P ⁽⁶⁾	P	P ⁽¹⁾	P ⁽¹⁾	P ⁽⁴⁾	P ⁽¹⁾	P	P
<input type="checkbox"/> Retail Gasoline Outlets	N	P	N	N	P	N	P	P
Project Priority Pollutant(s) of Concern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

P = Potential

N = Not Potential

⁽¹⁾ A potential Pollutant if non-native landscaping exists or is proposed onsite; otherwise not expected

⁽²⁾ A potential Pollutant if the project includes uncovered parking areas; otherwise not expected

⁽³⁾ A potential Pollutant is land use involving animal waste

⁽⁴⁾ Specifically petroleum hydrocarbons

⁽⁵⁾ Specifically solvents

⁽⁶⁾ Bacterial indicators are routinely detected in pavement runoff

E.2 Stormwater Credits

Projects that cannot implement LID BMPs but nevertheless implement smart growth principles are potentially eligible for Stormwater Credits. Utilize Table 3-8 within the WQMP Guidance Document to identify your Project Category and its associated Water Quality Credit. If not applicable, write N/A.

N/A

Table E.2 Water Quality Credits

Qualifying Project Categories	Credit Percentage ²
<i>Total Credit Percentage¹</i>	

¹Cannot Exceed 50%

²Obtain corresponding data from Table 3-8 in the WQMP Guidance Document

E.3 Sizing Criteria

After you appropriately considered Stormwater Credits for your project, utilize Table E.3 below to appropriately size them to the DCV, or Design Flow Rate, as applicable. Please reference Chapter 3.5.2 of the WQMP Guidance Document for further information.

N/A

Table E.3 Treatment Control BMP Sizing

DMA Type/ID	DMA Area (square feet) [A]	Post-Project Surface Type	Effective Impervious Fraction, I _f [B]	DMA Runoff Factor [C]	DMA Area x Runoff Factor [A] x [C]	Enter BMP Name / Identifier Here
$A_T = \sum[A]$						$\Sigma = [D] \quad [E] \quad [F] = \frac{[D] \times [E]}{[G]} \quad [F] \times (1-[H]) \quad [I]$

[B], [C] is obtained as described in Section 2.3.1 from the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is for Flow-Based Treatment Control BMPs [G] = 43,560, for Volume-Based Control Treatment BMPs, [G] = 12

[H] is from the Total Credit Percentage as Calculated from Table E.2 above

[I] as obtained from a design procedure sheet from the BMP manufacturer and should be included in Appendix 6

E.4 Treatment Control BMP Selection

Treatment Control BMPs typically provide proprietary treatment mechanisms to treat potential pollutants in runoff, but do not sustain significant biological processes. Treatment Control BMPs must have a removal efficiency of a medium or high effectiveness as quantified below:

- **High:** equal to or greater than 80% removal efficiency
- **Medium:** between 40% and 80% removal efficiency

Such removal efficiency documentation (e.g., studies, reports, etc.) as further discussed in Chapter 3.5.2 of the WQMP Guidance Document, must be included in Appendix 6. In addition, ensure that proposed Treatment Control BMPs are properly identified on the WQMP Site Plan in Appendix 1.

N/A

Table E.4 Treatment Control BMP Selection

Selected Treatment Control BMP Name or ID ¹	Priority Pollutant(s) of Concern to Mitigate ²	Removal Percentage ³	Efficiency

¹ Treatment Control BMPs must not be constructed within Receiving Waters. In addition, a proposed Treatment Control BMP may be listed more than once if they possess more than one qualifying pollutant removal efficiency.

² Cross Reference Table E.1 above to populate this column.

³ As documented in a Co-Permittee Approved Study and provided in Appendix 6.

Section F: Hydromodification

F.1 Hydrologic Conditions of Concern (HCOC) Analysis

Once you have determined that the LID design is adequate to address water quality requirements, you will need to assess if the proposed LID Design may still create a HCOC. Review Chapters 2 and 3 (including Figure 3-7) of the WQMP Guidance Document to determine if your project must mitigate for Hydromodification impacts. If your project meets one of the following criteria which will be indicated by the check boxes below, you do not need to address Hydromodification at this time. However, if the project does not qualify for Exemptions 1, 2 or 3, then additional measures must be added to the design to comply with HCOC criteria. This is discussed in further detail below in Section F.2.

HCOC EXEMPTION 1: The Priority Development Project disturbs less than one acre. The Copermitttee has the discretion to require a Project-Specific WQMP to address HCOCs on projects less than one acre on a case by case basis. The disturbed area calculation should include all disturbances associated with larger common plans of development.

Does the project qualify for this HCOC Exemption? Y N

If Yes, HCOC criteria do not apply.

HCOC EXEMPTION 2: The volume and time of concentration¹ of storm water runoff for the post-development condition is not significantly different from the pre-development condition for a 2-year return frequency storm (a difference of 5% or less is considered insignificant) using one of the following methods to calculate:

- Riverside County Hydrology Manual
- Technical Release 55 (TR-55): Urban Hydrology for Small Watersheds (NRCS 1986), or derivatives thereof, such as the Santa Barbara Urban Hydrograph Method
- Other methods acceptable to the Co-Permittee

Does the project qualify for this HCOC Exemption? Y N

If Yes, report results in Table F.1 below and provide your substantiated hydrologic analysis in Appendix 7.

Table F.1 Hydrologic Conditions of Concern Summary (DA 1)

	2 year – 24 hour		
	Pre-condition	Post-condition	% Difference
Time of Concentration			
Volume (Cubic Feet)			

Table F.2 Hydrologic Conditions of Concern Summary (DA 2)

	2 year – 24 hour		
	Pre-condition	Post-condition	% Difference
Time of Concentration			
Volume (Cubic Feet)			

Table F.3 Hydrologic Conditions of Concern Summary (DA 3)

	2 year – 24 hour		
	Pre-condition	Post-condition	% Difference
Time of Concentration			
Volume (Cubic Feet)			

Table F.4 Hydrologic Conditions of Concern Summary (DA 4)

	2 year – 24 hour		
	Pre-condition	Post-condition	% Difference
Time of Concentration			
Volume (Cubic Feet)			

Table F.5 Hydrologic Conditions of Concern Summary (DA 5)

	2 year – 24 hour		
	Pre-condition	Post-condition	% Difference
Time of Concentration			
Volume (Cubic Feet)			

¹ Time of concentration is defined as the time after the beginning of the rainfall when all portions of the drainage basin are contributing to flow at the outlet.

HCOC EXEMPTION 3: All downstream conveyance channels to an adequate sump (for example, Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River, or other lake, reservoir or naturally erosion resistant feature) that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity; no sensitive stream habitat areas will be adversely affected; or are not identified on the Co-Permittees Hydromodification Sensitivity Maps.

Does the project qualify for this HCOC Exemption? Y N

If Yes, HCOC criteria do not apply and note below which adequate sump applies to this HCOC qualifier:

F.2 HCOC Mitigation

If none of the above HCOC Exemption Criteria are applicable, HCOC criteria is considered mitigated if they meet one of the following conditions:

- a. Additional LID BMPS are implemented onsite or offsite to mitigate potential erosion or habitat impacts as a result of HCOCs. This can be conducted by an evaluation of site-specific conditions utilizing accepted professional methodologies published by entities such as the California Stormwater Quality Association (CASQA), the Southern California Coastal Water Research Project (SCCRWP), or other Co-Permittee approved methodologies for site-specific HCOC analysis.
- b. The project is developed consistent with an approved Watershed Action Plan that addresses HCOC in Receiving Waters.
- c.** Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year peak flow.

Be sure to include all pertinent documentation used in your analysis of the items a, b or c in Appendix 7.

Section G: Source Control BMPs

Source control BMPs include permanent, structural features that may be required in your project plans — such as roofs over and berms around trash and recycling areas — and Operational BMPs, such as regular sweeping and “housekeeping”, that must be implemented by the site’s occupant or user. The MEP standard typically requires both types of BMPs. In general, Operational BMPs cannot be substituted for a feasible and effective permanent BMP. Using the Pollutant Sources/Source Control Checklist in Appendix 8, review the following procedure to specify Source Control BMPs for your site:

1. **Identify Pollutant Sources:** Review Column 1 in the Pollutant Sources/Source Control Checklist. Check off the potential sources of Pollutants that apply to your site.
2. **Note Locations on Project-Specific WQMP Exhibit:** Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist. Show the location of each Pollutant source and each permanent Source Control BMP in your Project-Specific WQMP Exhibit located in Appendix 1.
3. **Prepare a Table and Narrative:** Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist. In the left column of Table G.1 below, list each potential source of runoff Pollutants on your site (from those that you checked in the Pollutant Sources/Source Control Checklist). In the middle column, list the corresponding permanent, Structural Source Control BMPs (from Columns 2 and 3 of the Pollutant Sources/Source Control Checklist) used to prevent Pollutants from entering runoff. **Add additional narrative** in this column that explains any special features, materials or methods of construction that will be used to implement these permanent, Structural Source Control BMPs.
4. **Identify Operational Source Control BMPs:** To complete your table, refer once again to the Pollutant Sources/Source Control Checklist. List in the right column of your table the Operational BMPs that should be implemented as long as the anticipated activities continue at the site. Copermittee stormwater ordinances require that applicable Source Control BMPs be implemented; the same BMPs may also be required as a condition of a use permit or other revocable Discretionary Approval for use of the site.

Table G.1 Permanent and Operational Source Control Measures

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
Landscape/Outdoor Pesticide Use	Project plan designs maximize natural water storage and infiltration opportunities, and protect slopes and channels. Plants are grouped with similar water requirements in order to reduce excess irrigation runoff and promote surface infiltration. Landscaping correlates to the climate,	Landscape maintenance will begin upon construction completion and will occur on a monthly basis (or more frequently if desired) for all common areas. The Owners will be responsible for servicing all site landscaping and irrigation in common areas. Site trees

	<p>soil, related natural resources and existing vegetation of the site, as well as the type of development proposed. Irrigation methods will be utilized to minimize runoff of excess irrigation water across impervious surfaces. Such measures will include employing rain-triggered shutoff devices to eliminate or reduce irrigation during and immediately after precipitation, using mulches (such as wood chips) to minimize sediment in runoff and to maintain soil infiltration capacity, and coordinating design of the irrigation system and landscape to minimize overspray and runoff. Irrigation systems will use flow reducers or shutoff valves triggered by pressure drop to control water loss in the event of broken sprinkler heads or water supply lines. Water conservation devices such as programmable irrigation timers will be used.</p>	<p>and shrubs are to be trimmed as necessary and all wastes disposed of offsite. Wood mulch that has been disturbed is to be replaced. Ongoing maintenance shall be consistent with local guidelines, and fertilizer and pesticide usage shall be consistent with the instructions contained on product labels and with the regulations administered by the State Department of Pesticide Regulation. Clippings and yard waste shall be composted. Any adjustments to ensure that sprinklers are not overspraying should be made in a timely manner. Any breaks or leaks in piping must be repaired within 5 business days of report to the landscaper. Scrap pipe and extra materials shall be recycled if possible. All non-recyclable wastes shall be landfilled. Hazardous wastes shall be disposed of per County hazardous material disposal regulations.</p>
Refuse Area	<p>Drainage is not directed to the trash enclosures but away from it. The enclosures will be roofed.</p>	<p>This BMP will begin upon construction completion and will occur on a monthly basis or more frequently as dictated by volume of trash. The Owners will be responsible for having staff or contracting with a landscape maintenance service that will be responsible for litter control. They are to ensure that the entire site is trash free. Trash is to be removed and placed in bins. "No hazardous materials" signs will be posted in the trash enclosure areas.</p>
Loading Docks	<p>Loading docks drain to the biotreatment devices for treatment which will include pre-treatment.</p>	<p>Items shall be unloaded and loaded from docks as quickly as possible.</p>

<p>Sweeping of Sidewalks and Parking Lots</p>		<p>This BMP will begin upon construction completion and will occur on a bi-annual basis. The Owners will contract with a sweeping service to sweep the lot every every six months.</p>
<p>Roofing, Gutters, Trim</p>	<p>Roofing, gutters and trim made of copper or other unprotected metals will not be used.</p>	
<p>On-site Storm Drain Inlets</p>	<p>Stenciling adjacent to drop inlets will be provided.</p>	<p>This BMP will begin upon construction completion. Inspections will be done by Owner’s staff after the first storm of the rainy season and bi-monthly thereafter for the duration of the rainy season. The inspector is also required to clean the facility as needed or when filled to 25% capacity. Cleaning can be by pump or chopvac or by hand. Debris and trash shall be placed inside bins. Stenciling shall be refreshed as needed . The Owners shall provide stormwater pollution prevention information to new site owners, lessees and operators, and shall include the following language on the lease agreement: “Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains.”</p>

Section H: Construction Plan Checklist

Populate Table H.1 below to assist the plan checker in an expeditious review of your project. The first two columns will contain information that was prepared in previous steps, while the last column will be populated with the corresponding plan sheets. This table is to be completed with the submittal of your final Project-Specific WQMP.

Table H.1 Construction Plan Cross-reference

BMP No. or ID	BMP Identifier and Description	Corresponding Plan Sheet(s)
1	Bioretention Device 1	Conceptual Grading Plan
2	Bioretention Device 2	Conceptual Grading Plan
3	Bioretention Swale 3	Conceptual Grading Plan
4	Bioretention Swale 4	Conceptual Grading Plan
5	Bioretention Swale 5	Conceptual Grading Plan

Note that the updated table — or Construction Plan WQMP Checklist — is **only a reference tool** to facilitate an easy comparison of the construction plans to your Project-Specific WQMP. Co-Permittee staff can advise you regarding the process required to propose changes to the approved Project-Specific WQMP.

Section I: Operation, Maintenance and Funding

The Copermitttee will periodically verify that Stormwater BMPs on your site are maintained and continue to operate as designed. To make this possible, your Copermitttee will require that you include in Appendix 9 of this Project-Specific WQMP:

1. A means to finance and implement facility maintenance in perpetuity, including replacement cost.
2. Acceptance of responsibility for maintenance from the time the BMPs are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
3. An outline of general maintenance requirements for the Stormwater BMPs you have selected.
4. Figures delineating and designating pervious and impervious areas, location, and type of Stormwater BMP, and tables of pervious and impervious areas served by each facility. Geolocating the BMPs using a coordinate system of latitude and longitude is recommended to help facilitate a future statewide database system.
5. A separate list and location of self-retaining areas or areas addressed by LID Principles that do not require specialized O&M or inspections but will require typical landscape maintenance as noted in Chapter 5, pages 85-86, in the WQMP Guidance. Include a brief description of typical landscape maintenance for these areas.

Your local Co-Permitttee will also require that you prepare and submit a detailed Stormwater BMP Operation and Maintenance Plan that sets forth a maintenance schedule for each of the Stormwater BMPs built on your site. An agreement assigning responsibility for maintenance and providing for inspections and certification may also be required.

Details of these requirements and instructions for preparing a Stormwater BMP Operation and Maintenance Plan are in Chapter 5 of the WQMP Guidance Document.

Maintenance Mechanism: The Owners will maintain all BMPs including the offsite bioretention swales and onsite biotreatment devices.

Will the proposed BMPs be maintained by a Home Owners' Association (HOA) or Property Owners Association (POA)?

Y N

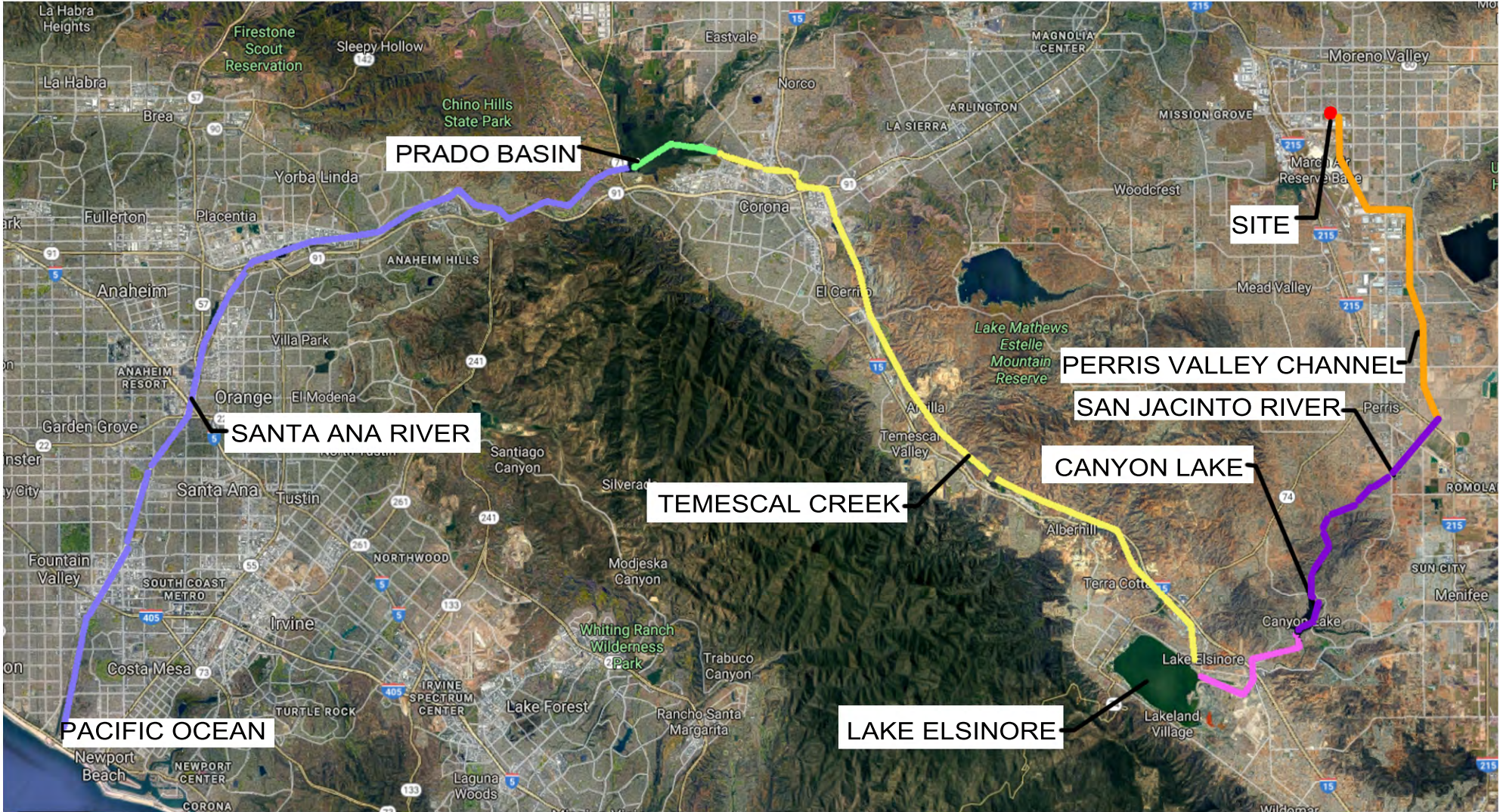
Include your Operation and Maintenance Plan and Maintenance Mechanism in Appendix 9. Additionally, include all pertinent forms of educational materials for those personnel that will be maintaining the proposed BMPs within this Project-Specific WQMP in Appendix 10.

Operation and Maintenance Plan and Maintenance Mechanism will be provided in the Final WQMP.

Appendix 1: Maps and Site Plans

WQMP Site Plan (includes Location Map) and Receiving Waters Map

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)



RECEIVING WATER BODIES EXHIBIT
N.T.S.

Attachment: Appendix I1--Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-

Appendix 2: Construction Plans

Conceptual Grading Plan

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD
 DIVISION OF WATER QUALITY- MUNICIPAL STORM WATER UNIT
 TRASH IMPLEMENTATION PROGRAM

**EXECUTIVE DIRECTOR DESIGNEE
 CERTIFICATION of TRASH FULL CAPTURE SYSTEMS**

<p>The Executive Director Designee of the State Water Resources Control Board certified¹ the initial Full Capture Systems List of Trash Treatment Control Devices on:</p>	<p>April 27, 2017</p>
<p>The Executive Director Designee of the State Water Resources Control Board certified the following:</p> <ul style="list-style-type: none"> • AquaShield was added to the Certified Full Capture Systems List of Trash Treatment Control Devices; and • The new Certified Trash Full Capture Systems List of Multi-Benefit Treatment Systems on: 	<p>August 4, 2017</p>
<p>The Executive Director Designee of the State Water Resources Control Board certified the following new Full Capture System Devices:</p> <ul style="list-style-type: none"> • Inventive Resources -Water Decontaminator (WD) • ADS FlexStorm - Full Capture Inserts • Bio Clean - Inlet and Grate Inlet Filters • Jensen Stormwater Systems - Jensen Deflective Separator (JDS) • Bio Clean - Debris Separating Baffle Box (DSBB) • CleanWay - Curb Inlet Filtration System • CleanWay - Drop Inlet Device • StormTrap - SiteSaver 	<p>March 15, 2018</p>
<p>The Executive Director Designee of the State Water Resources Control Board certified the following new Full Capture System Devices:</p> <ul style="list-style-type: none"> • Hydro International - Hydro DryScreen • Hydro International - Up-Flo Filter • Revel Environmental Manufacturing Inc. - Triton CPS-FTC • Revel Environmental Manufacturing Inc. - Triton PERF-FTC Insert Cartridge • Hydro International - Downstream Defender • BioClean - Modular Wetland System 	<p>July 10, 2018</p>

In accordance with the Trash Amendments², I do hereby certify that the Trash Treatment Control Devices/Systems in the Certified Full Capture Systems lists of Trash Treatment Control Devices and of Multi-Benefit Treatment Systems meet the Full Capture System definition, provided the device or system meets the conditions stated within these lists.



 Karen Mogus, Deputy Director of Water Quality
 Executive Director Designee

¹ Prior to installation, Full Capture Systems must be certified by the Executive Director, or designee, of the State Water Board. (See definition of Full Capture System in Trash Amendments Glossary)
² Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash (Ocean Plan) and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, And Estuaries Of California (ISWEBE Plan) adopted by the State Water Board.

CONCEPTUAL GRADING PLAN

COMPASS DANBE CENTERPOINTE - PROPOSED INDUSTRIAL WAREHOUSE FACILITY

SOUTH SIDE OF ALESSANDRO BOULEVARD

APN 297-170-002 & 003 - CITY OF MORENO VALLEY

LEGAL DESCRIPTION

PARCEL 1:
LOT 2, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA, EXCEPTING THEREFROM THAT PORTION OF ALESSANDRO BOULEVARD AS CONVEYED TO THE COUNTY OF RIVERSIDE BY DOCUMENT RECORDED NOVEMBER 28, 1972 AS INSTRUMENT NO. 157190, OFFICIAL RECORDS.

PARCEL 2:
LOT 3, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA, EXCEPTING THEREFROM THAT PORTION DESCRIBED IN THE DEED TO THE COUNTY OF RIVERSIDE DOCUMENT RECORDED MAY 30, 1972 AS INSTRUMENT NO. 69766, OFFICIAL RECORDS.

EASEMENTS

- THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "TEMPORARY DECLARATION OF EASEMENT FOR ACCEPTANCE OF DRAINAGE WATERS" RECORDED JANUARY 22, 2009 AS INSTRUMENT NO. 2009-06529343 OF OFFICIAL RECORDS, PER THE PROVISIONS OF THE EASEMENT DOCUMENT, SAID EASEMENT WILL BE ABANDONED UPON THE DEVELOPMENT OF THE PROPERTY.
- AN OFFER OF DEDICATION FOR FLOOD CONTROL AND INCIDENTAL PURPOSES, IN FAVOR OF RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT RECORDED DECEMBER 23, 2009 AS INSTRUMENT NO. 2009-0657601 OF OFFICIAL RECORDS.
- WATERS IN A DOCUMENT ENTITLED "DRAINAGE EASEMENT AGREEMENT" EXECUTED BY AND BETWEEN WILMA PACIFIC INC. AND THE CENTENNIAL GROUP INC., RECORDED DECEMBER 02, 1987 AS INSTRUMENT NO. 341821 OF OFFICIAL RECORDS, INCLUDING BUT NOT LIMITED TO COVENANTS, CONDITIONS, RESTRICTIONS, EASEMENTS, ASSESSMENTS, LIENS AND CHARGES.

NOTES

- EXISTING GROSS AREA: 871,608 SF = 20.01 AC
- EXISTING NET AREA: 769,571 SF = 17.67 AC
- PROPOSED DEDICATION: 890 SF = 0.02 AC
- PROPOSED NET AREA: 768,681 SF = 17.65 AC
- PROJECT SITE IS LOCATED WITHIN ZONE X (AREA OF MINIMAL FLOOD HAZARD PER FIRM MAP NO. 060650745G DATED AUGUST 28, 2008)
- SEE SITE PLAN FOR PARKING STALL DIMENSIONS.
- EXISTING FEATURES ARE TO REMAIN UNLESS OTHERWISE NOTED.

PROPOSED FEATURES

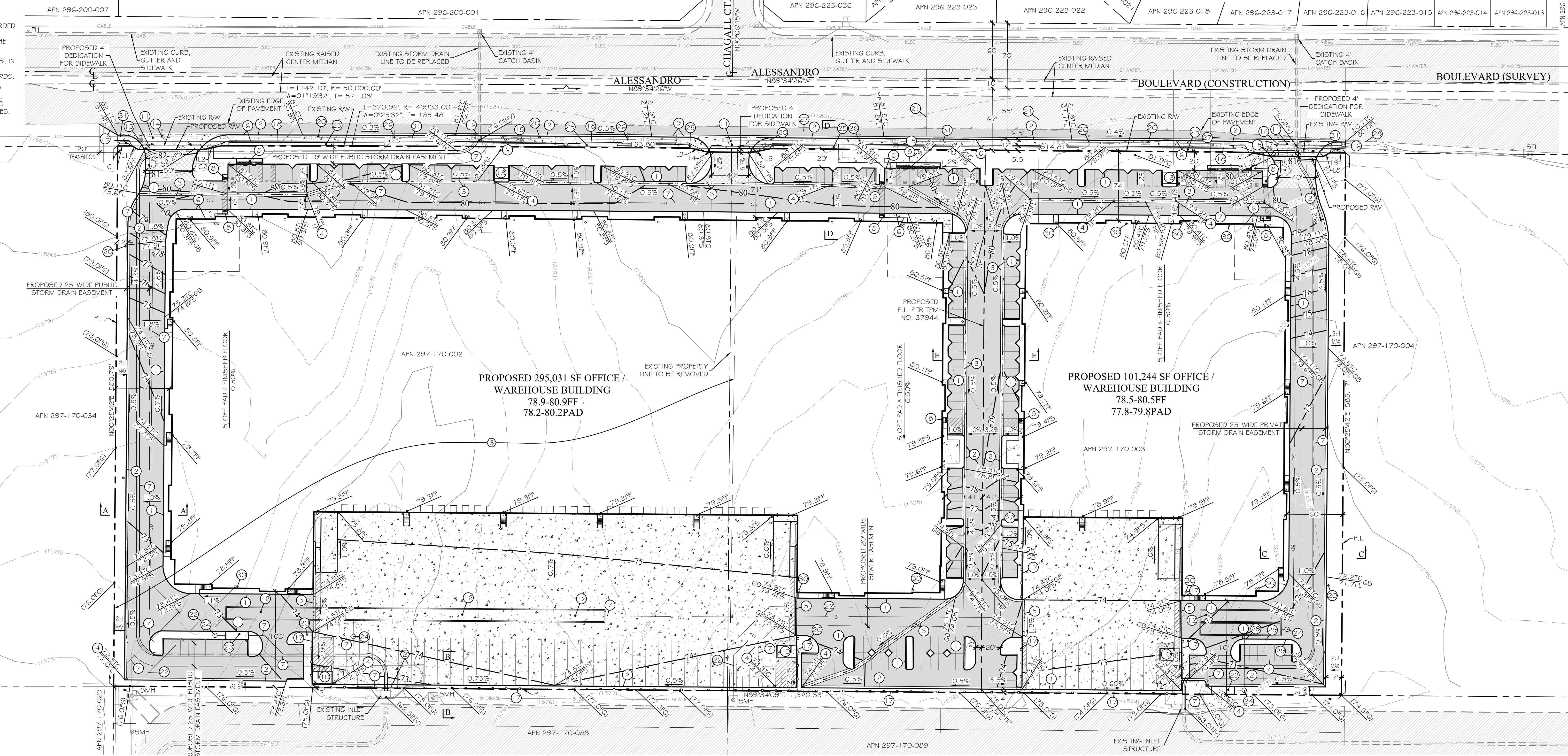
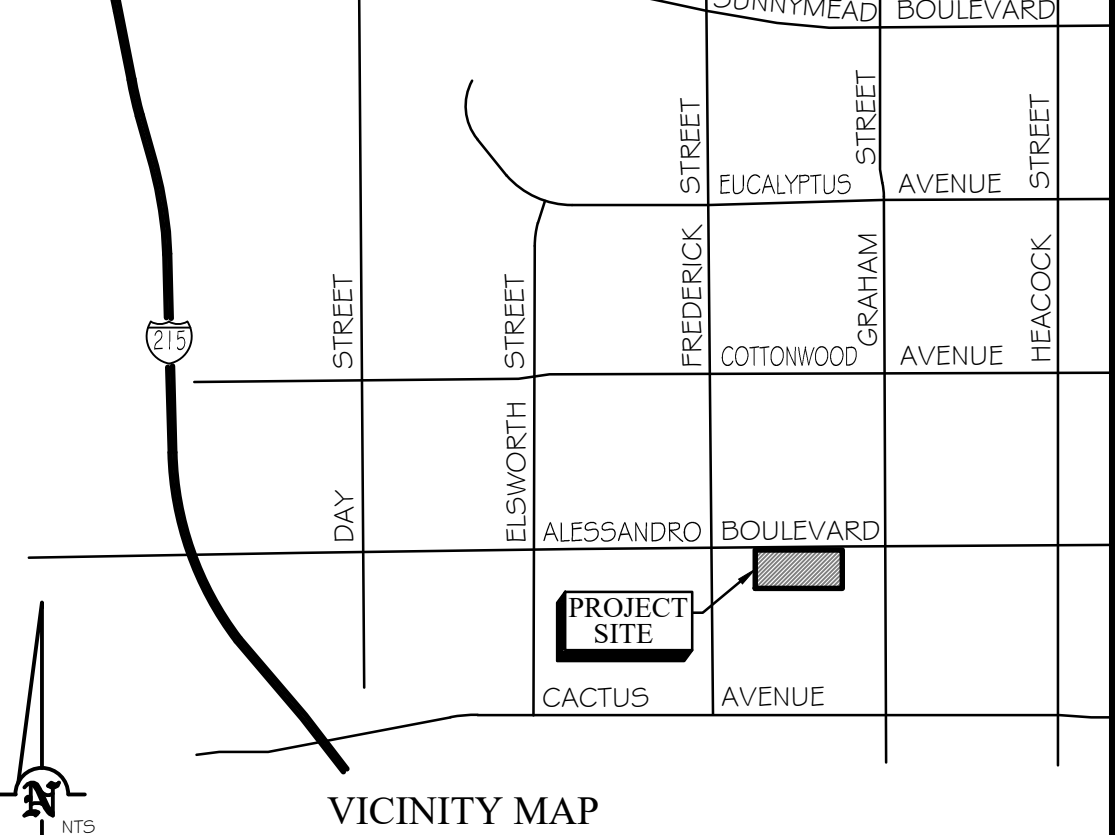
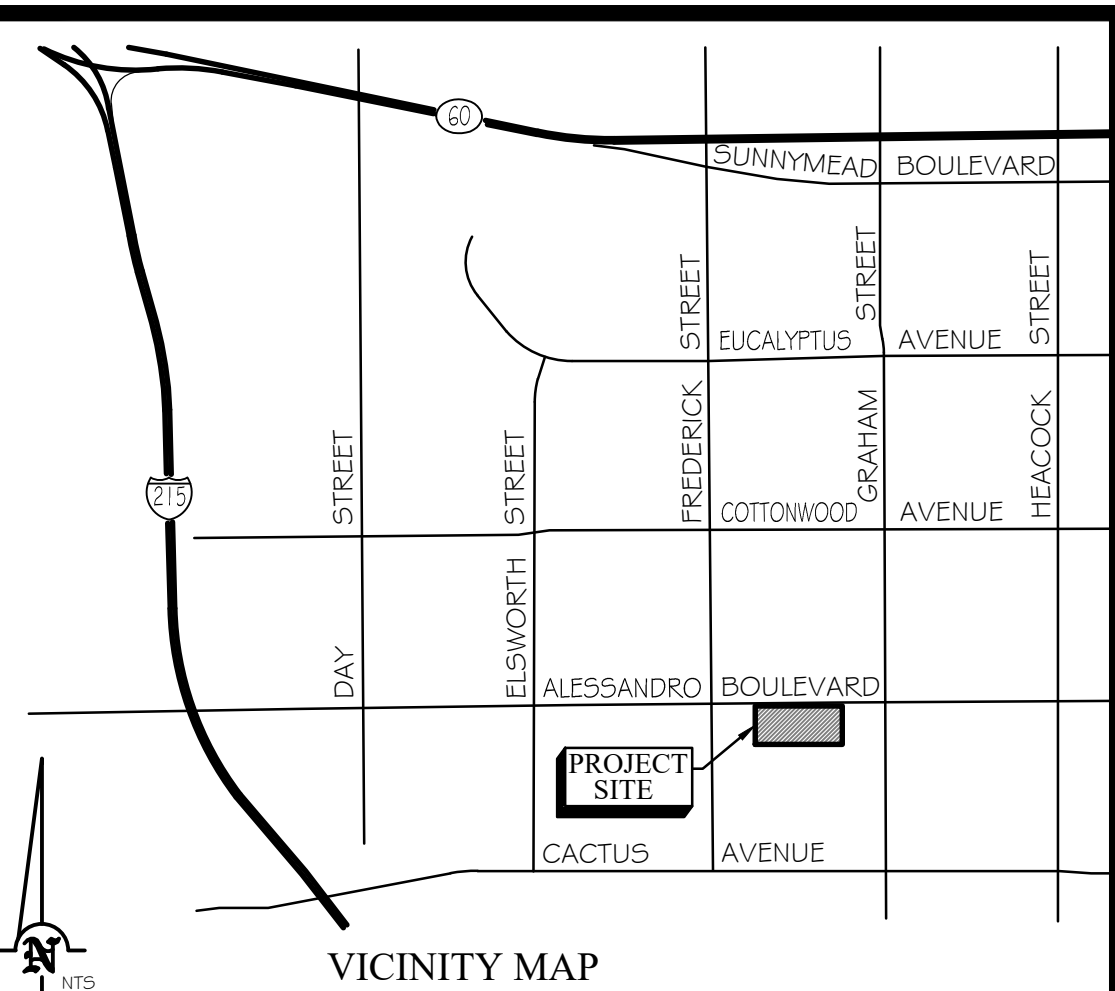
- PROPOSED CURB
- PROPOSED CURB & GUTTER
- PROPOSED RIBBON GUTTER
- PROPOSED DROP INLET
- PROPOSED ROLLING GATE
- PROPOSED SIDEWALK
- PROPOSED STORM DRAIN
- PROPOSED ADA RAMP
- EXISTING BUS STOP TO BE REMOVED
- PROPOSED TRASH ENCLOSURE
- PROPOSED DRIVEWAY
- PROPOSED UNDERGROUND DETENTION TANK
- PROPOSED TRANSFORMER
- EXISTING POWER POLE/STREET LIGHT TO BE RELOCATED
- EXISTING PULLBOX TO BE RELOCATED
- PROPOSED CATCH BASIN
- PROPOSED 8" HIGH TUBULAR STEEL FENCE
- PROPOSED COMMUNICATION CONDUIT PER CITY STANDARDS
- PROPOSED AC BERM
- PROPOSED FIRE HYDRANT
- PROPOSED WATER SERVICE
- PROPOSED SEWER SERVICE
- PROPOSED MODULAR WETLAND BIOTREATMENT DEVICE
- PROPOSED SUMP AND PUMP
- PROPOSED BIOTRETENTION SWALE
- EXISTING POWER POLE/STREET LIGHT TO REMAIN
- EXISTING SIGN TO BE RELOCATED
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CURB OPENING
- PROPOSED ROOF DRAIN

NOTE

THE CITY ENGINEER MAY REQUIRE THE REMOVAL AND REPLACEMENT OF THE STRUCTURAL SECTION FOR PAVEMENT TO HALF-STREET WIDTHS PLUS 1' OR PROVIDE CORE TEST RESULTS CONFIRMING THAT THE EXISTING PAVEMENT SECTION IS PER CURRENT CITY STANDARD.

PAVING LEGEND

- PROPOSED AC PAVING
- PROPOSED PCC PAVING
- PROPOSED DECORATIVE PAVING
- EXISTING AC PAVING
- EXISTING CURB & GUTTER
- EXISTING CONTOURS
- FLOWLINES
- CENTERLINE
- EXISTING RW
- PROPERTY LINE
- EXISTING UTILITY LINE
- PROPOSED BUILDING FOOTPRINT
- PROPOSED PRIVATE STORM DRAIN
- PROPOSED CITY STORM DRAIN



CURVE DATA

C	A	R	T	L
C1	0°0'0"04"	49933.00	7.71	15.41'
C2	0°0'0"45"1"	49929.00	35.23	70.46'

LINE DATA

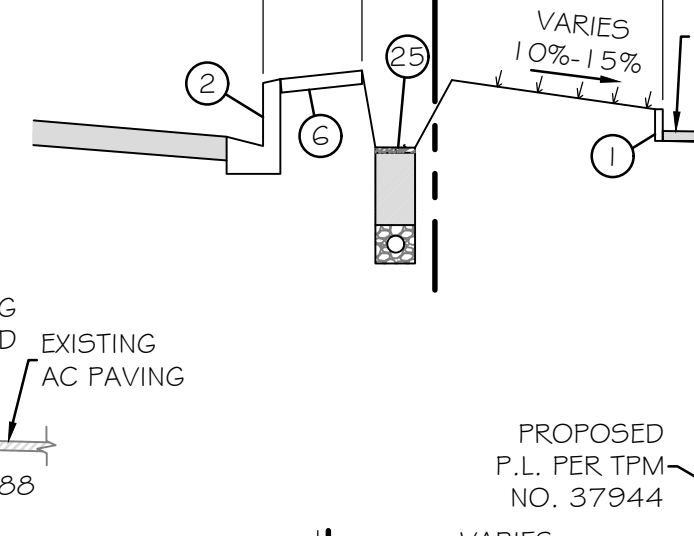
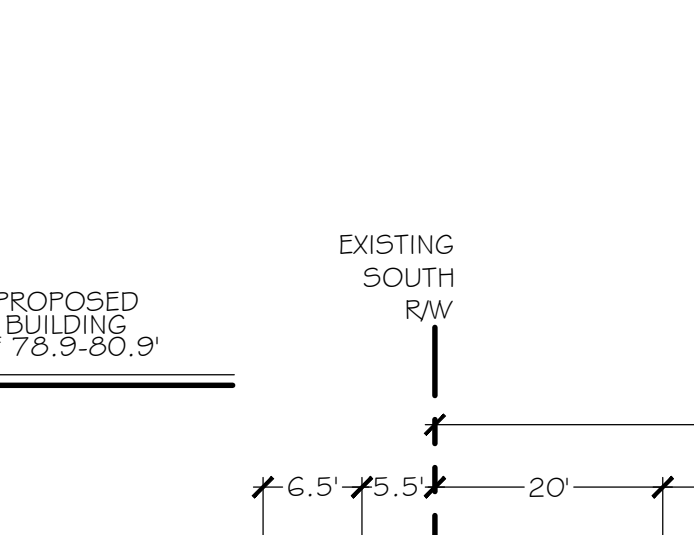
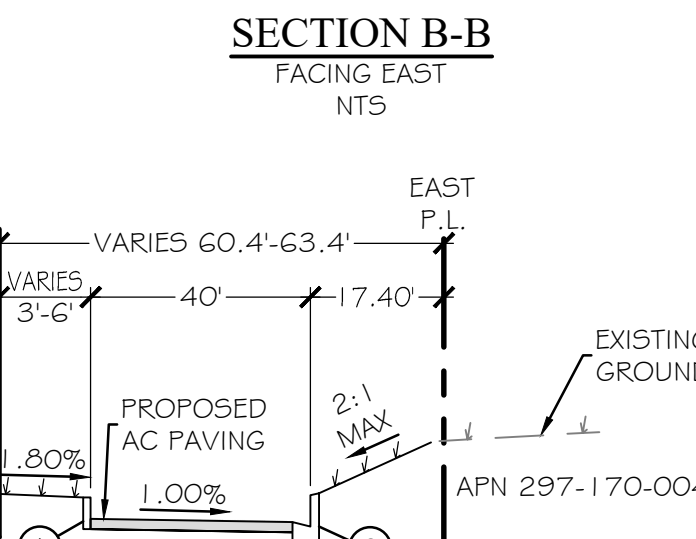
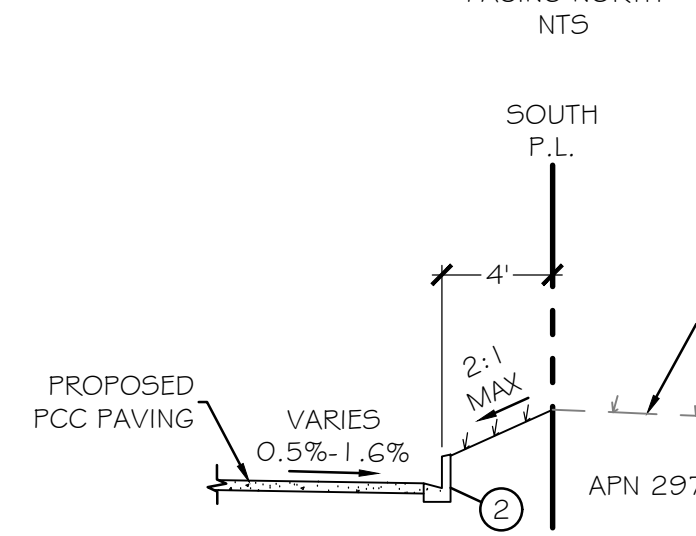
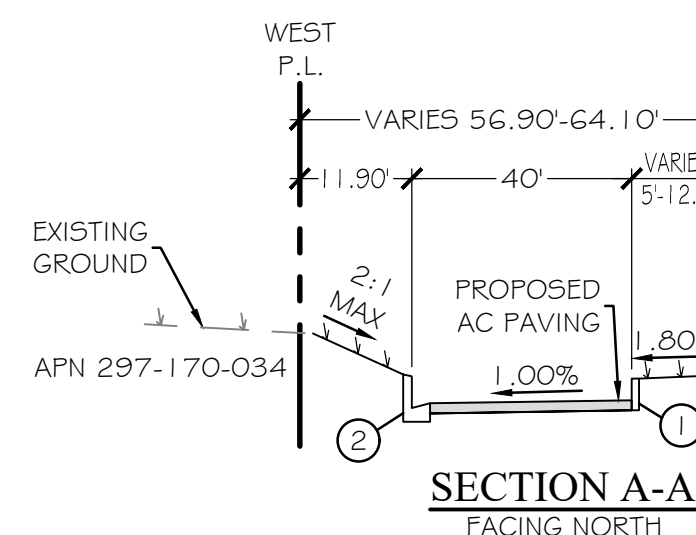
LINE	BEARING	DISTANCE
L1	N59°38'55"W	7.89'
L2	N77°40'05"E	18.75'
L3	N77°12'24"W	18.69'
L4	N89°34'26"W	49.33'
L5	N78°03'57"E	18.69'
L6	N79°46'02"E	23.49'
L7	N89°34'26"W	56.75'
L8	N6°53'25"E	8.11'
L9	N89°34'26"W	16.97'

BENCHMARK

TOP OF CONCRETE STORM DRAINAGE BASIN 268.58'
N88°21'35"W FROM THE SOUTHWEST CORNER OF THE PROPERTY.
ELEVATION = 1574.20'

BASIS OF BEARING

BASIS OF BEARING IS THE CENTER LINE OF BRODIAEA AVENUE, KNOWN AS N89°34'09"W, AS DESCRIBED IN PARCEL MAP NO. 36463, BOOK 238 PAGE 43, OF OFFICIAL RECORDS IN RIVERSIDE COUNTY, DATED DECEMBER 19, 2014.



SOURCE OF SURVEY

TOPOGRAPHIC SURVEY DATED JUNE 2020 AS CONDUCTED BY PARTNER ENGINEERING AND SCIENCE, INC. 1761 EAST GARRI AVENUE SANTA ANA, CA 92705 PHONE: (714) 477-8657

SOILS ENGINEER

REPORT DATED JANUARY 31, 2020 PROJECT NO. 21631-20 AS CONDUCTED BY NORCAL ENGINEERING 10641 HUMBOLT STREET Lodi Alameda, CA 95720 PHONE: (562) 799-9429 FAX: (562) 799-9459

PRELIMINARY EARTHWORK QUANTITIES

CUT 30,500 CY (RAW/UNADJUSTED)
FILL 26,000 CY (SITE EXPECTED TO BALANCE AFTER LOSSES)
NOTE: THE PROPOSED GRADING ON THIS PLAN IS STRICTLY CONCEPTUAL AND SHOULD ONLY BE USED FOR PLANNING PURPOSES.

SCHOOL DISTRICT

MORENO VALLEY UNIFIED SCHOOL DISTRICT 26634 ALESSANDRO BOULEVARD MORENO VALLEY, CA 92553 (951) 571-7500

UTILITIES

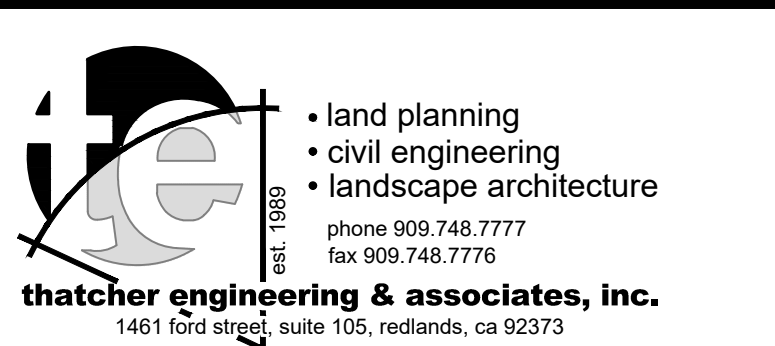
- ELECTRIC: SOUTHERN CALIFORNIA EDISON COMPANY 26100 MENIFEE ROAD ROMOLAND, CA 92585 (951) 928-8334
- WATER: EASTERN MUNICIPAL WATER DISTRICT 2270 TRUMBULE ROAD PERRIS, CA 92570 (951) 928-3777
- SEWER: EASTERN MUNICIPAL WATER DISTRICT 2270 TRUMBULE ROAD PERRIS, CA 92570 (951) 928-3777
- GAS: SOUTHERN CALIFORNIA GAS COMPANY 1981 WEST LUGONIA AVENUE REDLANDS, CA 92373 (909) 335-7837
- TELECOMMUNICATIONS: CHARTER COMMUNICATIONS 7337 CENTRAL AVE. RIVERSIDE, CA 92504 (951) 406-1666
- FRONTIER COMMUNICATIONS 9 S. 4TH STREET REDLANDS, CA 92373 (909) 748-6676
- AT&T 3939 E. CORONADO ST. 2ND FLOOR ANAHEIM, CA 92807 (714) 507-3526

PEN20-0120

TPM NO. 37944

PEN20-0121 - PLOT PLAN

CONCEPTUAL GRADING PLAN
APN 297-170-002 & 003
COMPASS DANBE CENTERPOINTE
PROPOSED INDUSTRIAL WAREHOUSE FACILITY
SOUTH SIDE OF ALESSANDRO BOULEVARD
CITY OF MORENO VALLEY



PROPERTY OWNER:
MORENO VALLEY CENTERPOINTE
CO CDRE HOLDINGS 17 LLC
ATTN: MARK BACHLI
523 MAIN STREET
EL SEGUNDO, CA 90245
(310) 428-3302

PREPARED FOR/APPLICANT:
CDRE HOLDINGS 17 LLC
ATTN: MARK BACHLI
523 MAIN STREET
EL SEGUNDO, CA 90245
(310) 428-3302

Appendix 3: Soils Information

Geotechnical Study and Other Infiltration Testing Data

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

NorCal Engineering

Soils and Geotechnical Consultants
 Los Alamitos, California 90720
 (562)799-9469 Fax (562)799-9459

September 22, 2020

Project Number 21631-20

CDREP LLC
 523 Main Street
 El Segundo, California 90245

Attn: Mr. Mark Bachli

RE: **Evaluation of Soils Infiltration Study** - Proposed Industrial Warehouse Development - Located at the Southeast and Southwest Corners of Alessandro Boulevard and Chagall Court, in the City of Moreno Valley, California

Dear Mr. Bachli:

Pursuant to your request, this firm has performed an evaluation of our soil infiltration study at the above referenced project. Based upon the results of our field testing as described in our Updated Soils Infiltration Study dated April 27, 2020, the soils have infiltration rates less than 0.8 in/hr in 7 of 8 pits, as listed below.

Test No.	Depth	Minimum Field Percolation Rate (in/hr)	Design Infiltration Rate (in/hr)
1	5'	4.72	1.57
2	2'	0.16	0.05
3	5'	0.16	0.05
4	3'	0.63	0.21
5	6'	0.79	0.26
6	7'	0.16	0.05
7	7'	0.16	0.05
8	4'	0.32	0.11

The actual water drop verses time was plotted by this firm for eight (8) percolation tests with the results shown in Appendix A. The minimum field percolation rate was computed based on the lowest water drop over a 3 hour testing period. For field percolation tests up to 6 hours long, lower percolation rates would typically occur. Since 7 out of 8 tests yield very low percolation rates, our final design recommendations are these fine-grained soils should not be used for percolation pits.

Based on a safety factor of 3.0, the subsurface soils encountered in the proposed on-site drainage disposal system have a design infiltration rate of less than 0.3 in/hr in 7 of 8 pits. Thus, these fine grained soils are not acceptable for percolation pits at the site.

Our Test No. 1 encountered an isolated area of sandy soil which did provide a favorable infiltration rate. It is our professional opinion, that the proposed on-site drainage disposal system shall not be utilized based on the predominately very stiff clayey conditions.

We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

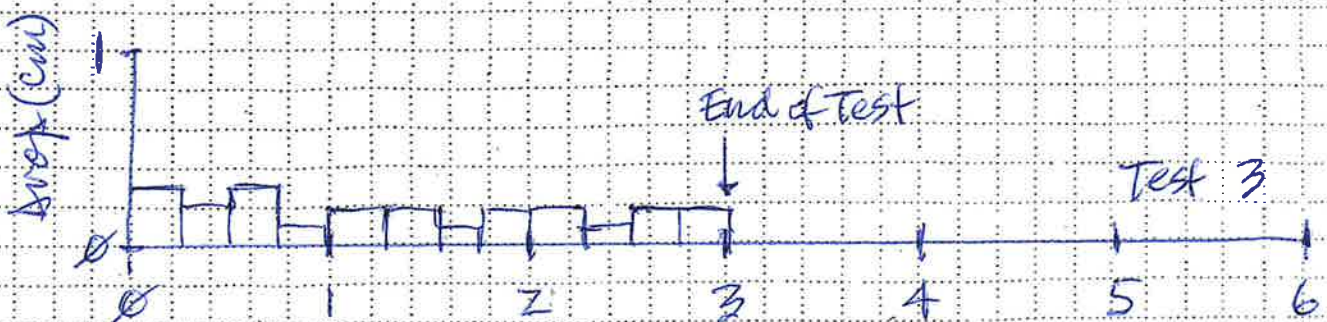
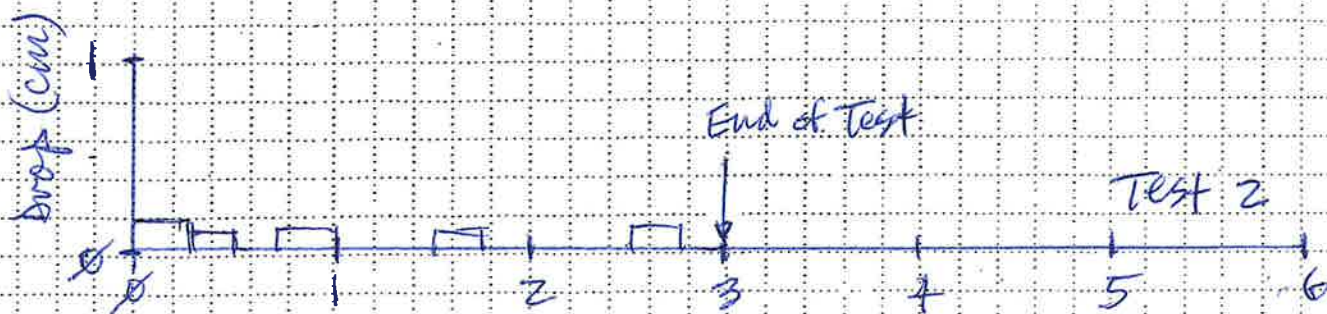
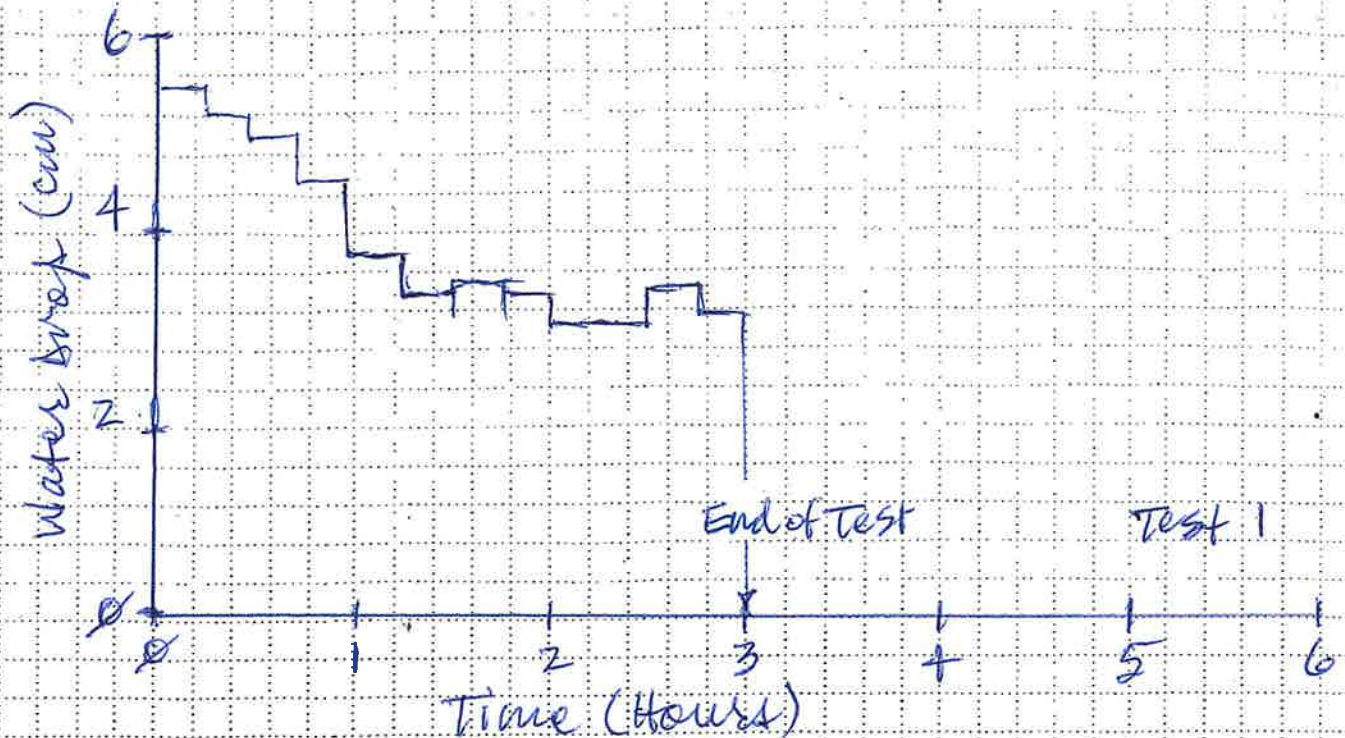


Keith D. Tucker
Project Engineer
R.G.E. 841



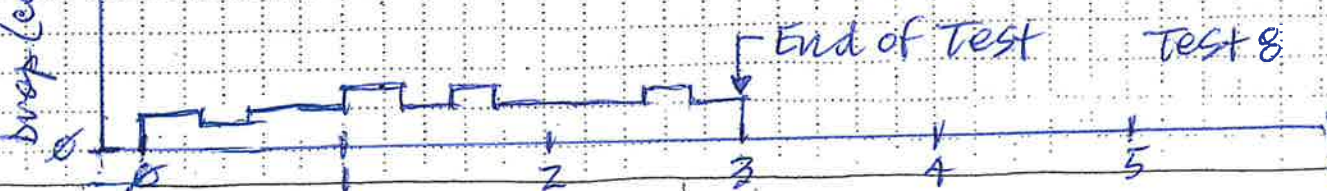
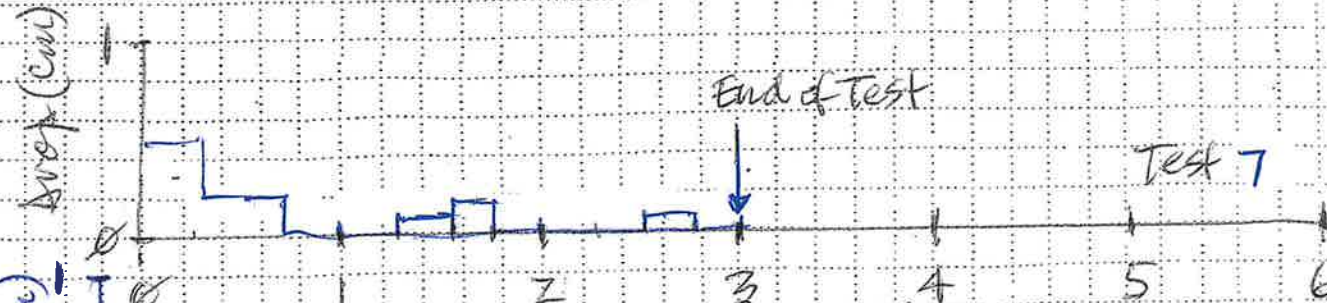
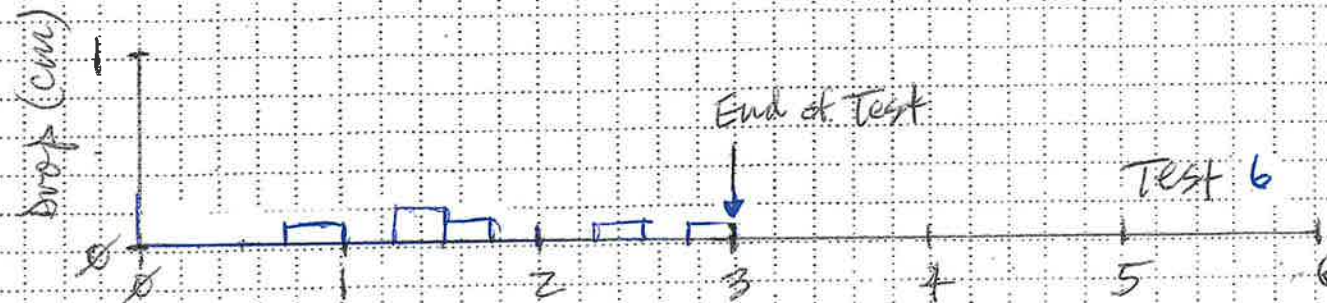
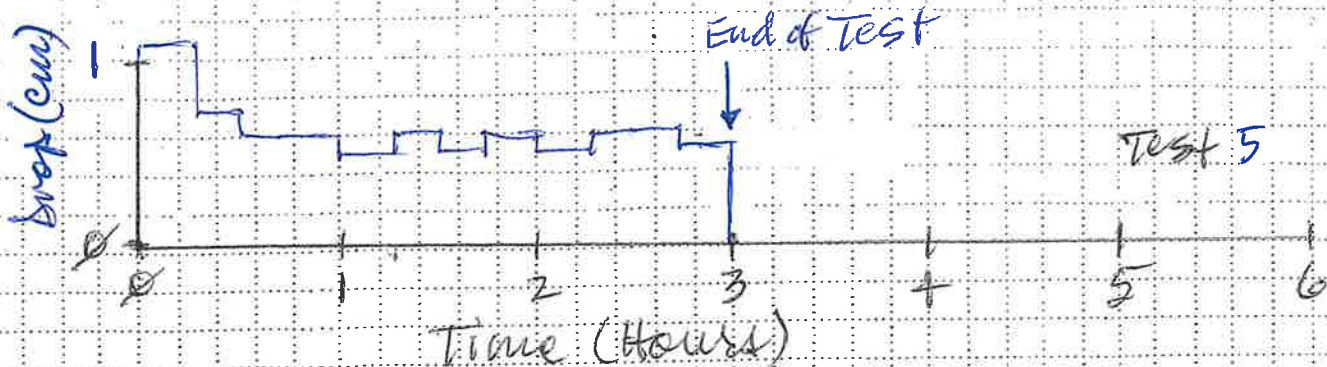
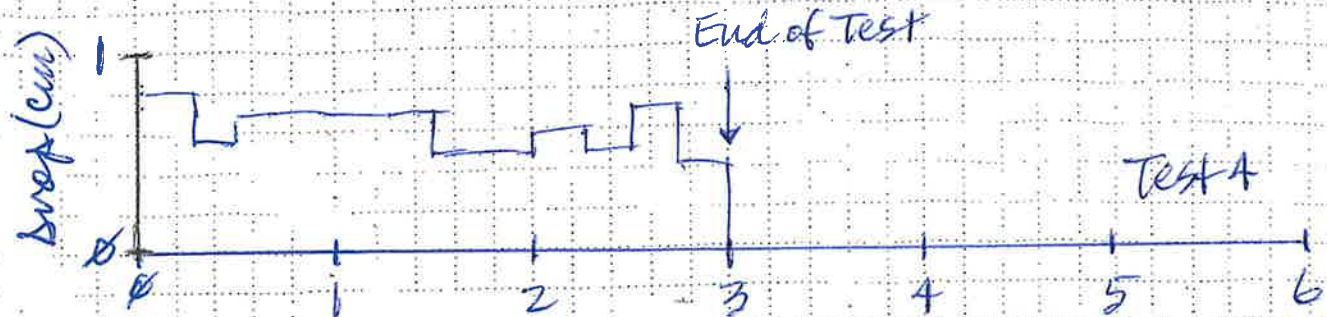
Scott D. Spensiero
Project Manager

Appendix A



NorCal Engineering
SOILS AND GEOTECHNICAL CONSULTANTS

DATE



NorCal Engineering
SOILS AND GEOTECHNICAL CONSULTANTS

DATE

Geotechnical Engineering Investigation

Proposed Industrial Warehouse Development
SE and SW Corners of Alessandro Blvd and Chagall Ct
Moreno Valley, California

CDREP LLC
523 Main Street
El Segundo, California 90245

Attn: Mr. Mark Bachli

Project Number 21631-20
January 31, 2019

NorCal Engineering

NorCal Engineering
Soils and Geotechnical Consultants
10641 Humbolt Street Los Alamitos, CA 90720
(562) 799-9469 Fax (562) 799-9459

January 31, 2020

Project Number 21631-20

CDREP LLC
523 Main Street
El Segundo, California 90245

Attn: Mr. Mark Bachli

RE: Geotechnical Engineering Investigation - Proposed Industrial Warehouse Development - Located at the Southeast and Southwest Corners of Alessandro Boulevard and Chagall Court, in the City of Moreno Valley, California

Dear Mr. Bachli:

Pursuant to your request, this firm has performed a Geotechnical Engineering Investigation for the above referenced project in accordance with your approval of our proposal dated January 13, 2020. The purpose of this investigation is to evaluate the geotechnical conditions of the subject site and to provide recommendations for the proposed industrial warehouse development.

The scope of work included the following: 1) site reconnaissance; 2) subsurface geotechnical exploration and sampling; 3) laboratory testing; 4) soil infiltration testing; 5) engineering analysis of field and laboratory data; 5) preparation of a geotechnical engineering report. It is the opinion of this firm that the proposed development is feasible from a geotechnical standpoint provided that the recommendations presented in this report are followed in the design and construction of the project.

1.0 Project Description

It is proposed to construct an industrial warehouse development consisting of a 102,669 and 295,470 square feet buildings as shown on the attached Site Plan by Herdman Architecture + Design dated December 18, 2019. The proposed concrete tilt-up buildings will be supported by a conventional slab-on-grade foundation system with perimeter-spread footings and isolated interior footings. Other improvements will include asphalt and concrete pavement areas, hardscape and landscaping.

It is assumed that the proposed grading for the development will include cut and fill procedures on the order of a few feet to achieve finished grade elevations. Final building plans shall be reviewed by this firm prior to submittal for city approval to determine the need for any additional study and revised recommendations pertinent to the proposed development, if necessary.

2.0 Site Description

The 18.05-acre subject property is located at the southeast and southwest corners of Alessandro Boulevard and Chagall Court, in the City of Moreno Valley. The generally rectangular-shaped parcel is elongated in an east to west direction with topography of the relatively level descending slightly from a north to south direction on the order of a few feet. The site is undeveloped parcel covered with a low vegetation growth of natural grasses and weeds.

3.0 Site Exploration

The investigation consisted of the placement of ten (10) subsurface exploratory trenches by a backhoe to depths ranging between 5 and 15 feet and two (2) exploratory borings by a truck mounted drill rig both to a depth of 50 feet below current ground elevations. The explorations were visually classified and logged by a field engineer with locations of the subsurface explorations shown on the attached plan. The exploratory trenches/borings revealed the existing earth materials to consist of fill and natural soil. Detailed descriptions of the subsurface conditions are listed on the trench and boring logs in Appendix A.

It should be noted that the transition from one soil type to another as shown on the trench logs is approximate and may in fact be a gradual transition. The soils encountered are described as follows:

Fill: A fill soil classifying as a brown, fine to medium grained, silty to clayey SAND was encountered across the site to depths ranging from 1 to 1½ feet below ground surface. These soils were noted to be loose and moist.

Natural: A natural undisturbed soil classifying as a brown, fine to medium grained, clayey to silty SAND to sandy CLAY was encountered beneath the upper fill soils. The native soils as encountered were observed to be dense/stiff to very dense/stiff and moist.

The overall engineering characteristics of the earth material were relatively uniform with each excavation. Groundwater was encountered to the depth of 33 and 39 feet ground surface in Borings B-1 and B-2 respectively, and no caving occurred.

4.0 Laboratory Tests

Relatively undisturbed samples of the subsurface soils were obtained to perform laboratory testing and analysis for direct shear, consolidation tests, and to determine in-place moisture/densities. These relatively undisturbed ring samples were obtained by driving a thin-walled steel sampler lined with one-inch long brass rings with an inside diameter of 2.42 inches into the undisturbed soils. Bulk bag samples were obtained in the upper soils for expansion index tests and maximum density tests. All test results are included in Appendix B, unless otherwise noted.

- 4.1 **Field Moisture Content** (ASTM: D 2216) and the dry density of the ring samples were determined in the laboratory. This data is listed on the logs of explorations.
- 4.2 **Maximum Density tests** (ASTM: D 1557) were performed on typical samples of the upper soils. Results of these tests are shown on Table I.

- 4.3 **Expansion Index tests** (ASTM: D 4829) were performed on remolded samples of the upper soils to determine expansive characteristics. Results of these tests are provided on Table II.
- 4.4 **Atterberg Limits** (ASTM: D 4318) consisting of liquid limit, plastic limit and plasticity index were performed on representative soil samples. Results are shown on Table III.
- 4.5 **Corrosion tests** consisting of sulfate, pH, resistivity and chloride analysis to determine potential corrosive effects of soils on concrete and underground utilities. Test results are provided on Table IV.
- 4.6 **R-Value test** per California Test Method 301 was performed on a representative sample, which may be anticipated to be near subgrade to determine pavement design. Results are provided within the pavement design section of the report.
- 4.7 **Direct Shear tests** (ASTM: D 3080) were performed on undisturbed and/or remolded samples of the subsurface soils. The test is performed under saturated conditions at loads of 1,000 lbs./sq.ft., 2,000 lbs./sq.ft., and 3,000 lbs./sq.ft. with results shown on Plates A and B.
- 4.8 **Consolidation tests** (ASTM: D 2435) were performed on undisturbed samples to determine the differential and total settlement which may be anticipated based upon the proposed loads. Water was added to the samples at a surcharge of one KSF and the settlement curves are plotted on Plates C to E.

5.0 Seismicity Evaluation

The proposed development lies outside of any Alquist Priolo Special Studies Zone and the potential for damage due to direct fault rupture is considered unlikely. The site is situated in an area of high regional seismicity and the San Jacinto (San Jacinto Valley) fault is located about 6 kilometers from the site. Ground shaking originating from earthquakes along other active faults in the region is expected to induce lower horizontal accelerations due to smaller anticipated earthquakes and/or greater distances to other faults.

NorCal Engineering

The seismic design parameters are provided below and are based on the 2019 California Building Code (CBC) Standard ASCE/SEI 7-16. The data was obtained from the American Society of Civil Engineers (ASCE) website, <https://asce7hazardtool.online/>. The ASCE 7 Hazards Report is attached in Appendix C.

Seismic Design Acceleration Parameters

Latitude	33.916
Longitude	-117.257
Site Class	D
Risk Category	I/II/III
Mapped Spectral Response Acceleration	$S_s = 1.500$ $S_1 = 0.600$
Adjusted Maximum Acceleration	$S_{MS} = 1.500$
Design Spectral Response Acceleration Parameters	$S_{DS} = 1.000$
Peak Ground Acceleration	$PGA_M = 0.674$

6.0 Liquefaction Evaluation

The site is expected to experience ground shaking and earthquake activity that is typical of Southern California area. It is during severe ground shaking that loose, granular soils below the groundwater table can liquefy. A review of the exploratory boring log and the laboratory test results on selected soil samples obtained indicate the following soil classifications, field blowcounts and amounts of fines passing through the No. 200 sieve.

Field Blowcount and Gradation Data

Boring No.	Classification	Blowcounts (blows/ft)	Relative Density	% Passing No. 200 Sieve
B-1 @ 5'	SC	>50	Very Dense	47
B-1 @ 10'	ML/CL	>50	Very Stiff	62
B-1 @ 15'	SC	82	Very Dense	45
B-1 @ 20'	SC	76	Very Dense	44
B-1 @ 25'	SC	>50	Very Dense	42
B-1 @ 30'	SC	34	Dense	42
B-1 @ 35'	SM	32	Dense	37
B-1 @ 40'	CL	65	Very Stiff	60
B-1 @ 45'	CL	42	Dense	61
B-1 @ 50'	CL	36	Stiff	56

NorCal Engineering

Boring No.	Classification	Blowcounts (blows/ft)	Relative Density	% Passing No. 200 Sieve
B-2 @ 5'	SM	>50	Very Dense	21
B-2 @ 10'	SC	36	Very Dense	47
B-2 @ 15'	SM	52	Very Dense	33
B-2 @ 20'	SM	30	Dense	14
B-2 @ 25'	SC	>50	Very Dense	46
B-2 @ 30'	SC	41	Very Dense	45
B-2 @ 35'	SC	42	Very Dense	40
B-2 @ 40'	SC	56	Very Dense	48
B-2 @ 45'	SC	46	Very Dense	47
B-2 @ 50'	SM	37	Dense	29

The analysis indicates the potential for liquefaction at this site to be low based on the density of the subsurface soils. The associated seismic-induced settlements would be on the order of less than 3/4 inch and would occur rather uniformly across the site. Differential settlements would be on the order of 1/2 inch over a 50-foot (horizontal) distance. Thus, the design of the proposed construction in conformance with the latest Building Code provisions for earthquake design is expected to provide mitigation of ground shaking hazards that are typical to Southern California.

7.0 Infiltration Characteristics

Infiltration tests within the site were performed to provide preliminary infiltration rates for the purpose of planning and design of an on-site water disposal system. The infiltration tests consisted of the double ring infiltration test per ASTM Method D 3385. The field infiltration rate was computed using a reduction factor – R_f based on the field measurements with our calculations given in Appendix D. Based upon the results of our testing, the soils encountered in the planned on-site drainage disposal system area exhibit the following infiltration rates.

Test No.	Depth	Soil Classification	Infiltration Rate
T-1	5'	Silty SAND	26.8 in/hr
T-2	7.5'	Sandy CLAY	0.1 in/hr
T-3	10'	Sandy CLAY	0.7 in/hr

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The correction factors CF_t , CF_v and CF_s are given below based on soils at 5 to 10 feet from our field tests.

- a) $CF_t = R_f = 1.0$ for our double ring infiltration test holes.
- b) $CF_v = 1.0$ based on uniform soils encountered in three (3) trenches for infiltration tests.
- c) $CF_s = 3.0$ for long-term siltation, plugging and maintenance. The subsurface soils are likely to have some plugging and regular maintenance of storm water discharge devices is required.

Based on the results of our field testing, the subsurface soils encountered in the proposed on-site drainage disposal system at 5 feet below ground surface and into sandy soils shall utilize a design infiltration rate of 8 in/hr. The infiltration rate at a depth below 5 feet to 10 feet indicates the very stiff fine-grained clayey soils which are not suitable for seepage pits at the site. All systems must meet the latest county specifications and the California Regional Water Quality Control Board (CRWQCB) requirements.

It is recommended that foundations shall be setback a minimum distance of 10 feet from the drainage disposal system and the bottom of footing shall be a minimum of 10 feet from the expected zone of saturation. The boundary of the zone of saturation may be assumed to project downward from the top of the permeable portion of the disposal system at an inclination of 1 to 1 or flatter, as determined by the geotechnical engineer.

8.0 Conclusions and Recommendations

Based upon our evaluations, the proposed development is acceptable from a geotechnical engineering standpoint. By following the recommendations and guidelines set forth in our report, the structures will be safe from excessive settlements under the anticipated design loadings and conditions. The proposed development shall meet all requirements of the City Building Ordinance and will not impose any adverse effect on existing adjacent structures.

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The following recommendations are based upon soil conditions encountered in our field investigation; these near-surface soil conditions could vary across the site. Variations in the soil conditions may not become evident until the commencement of grading operations for the proposed development and revised recommendations from the soils engineer may be necessary based upon the conditions encountered.

It is recommended that site inspections be performed by a representative of this firm during all grading and construction of the development to verify the findings and recommendations documented in this report. Any unusual conditions which may be encountered in the course of the project development may require the need for additional study and revised recommendations.

8.1 **Site Grading Recommendations**

Any vegetation and/or demolition debris shall be removed and hauled from proposed grading areas prior to the start of grading operations. Existing vegetation shall not be mixed or disced into the soils. Any removed soils may be reutilized as compacted fill once any deleterious material or oversized materials (in excess of eight inches) is removed. Grading operations shall be performed in accordance with the attached *Specifications for Placement of Compacted Fill*.

8.1.1 **Removal and Recompaction Recommendations**

All disturbed soils and/or fill (about 1 to 1½ feet below ground surface) shall be removed to competent native material, the exposed surface scarified to a depth of 12 inches, brought to within 2% of optimum moisture content and compacted to a minimum of 90% of the laboratory standard (ASTM: D 1557) prior to placement of any additional compacted fill soils, foundations, slabs-on-grade and pavement. Grading shall extend a minimum of five horizontal feet outside the edges of foundations or equidistant to the depth of fill placed, whichever is greater.

It is possible that isolated areas of undiscovered fill not described in this report are present on site; if found, these areas should be treated as discussed earlier. A diligent search shall also be conducted during grading operations in an effort to uncover any underground structures, irrigation or utility lines. If encountered, these structures and lines shall be either removed or properly abandoned prior to the proposed construction.

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Any imported fill material should be preferably soil similar to the upper soils encountered at the subject site. All soils shall be approved by this firm prior to importing at the site and will be subjected to additional laboratory testing to assure concurrence with the recommendations stated in this report.

If placement of slabs-on-grade and pavement is not completed immediately upon completion of grading operations, additional testing and grading of the areas may be necessary prior to continuation of construction operations. Likewise, if adverse weather conditions occur which may damage the subgrade soils, additional assessment by the soils engineer as to the suitability of the supporting soils may be needed.

Care should be taken to provide or maintain adequate lateral support for all adjacent improvements and structures at all times during the grading operations and construction phase. Adequate drainage away from the structures, pavement and slopes should be provided at all times.

8.1.2 **Fill Blanket Recommendations**

Due to the potential for differential settlement of foundations placed on compacted fill and native materials, it is recommended that all foundations including floor slab areas be underlain by a uniform compacted fill blanket at least two feet in thickness. This fill blanket shall extend a minimum of five horizontal feet outside the edges of foundations or equidistant to the depth of fill placed, whichever is greater.

8.2 **Shrinkage and Subsidence**

Results of our in-place density tests reveal that the soil shrinkage will be less than 5% due to excavation and recompaction, based upon the assumption that the fill is compacted to 92% of the maximum dry density per ASTM standards. Subsidence should be 0.2 feet due to earthwork operations. The volume change does not include any allowance for vegetation or organic stripping, removal of subsurface improvements, or topographic approximations.

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Although these values are only approximate, they represent our best estimate of lost yardage, which will likely occur during grading. If more accurate shrinkage and subsidence factors are needed, it is recommended that field testing the actual equipment and grading techniques should be conducted.

8.3 Temporary Excavations

Temporary unshored excavations in the existing site materials may be made at vertical inclinations up to 4 feet in height unless cohesionless soils are encountered. In areas where soils with little or no binder are encountered, where adverse geological conditions are exposed, or where excavations are adjacent to existing structures, shoring or flatter excavations may be required. The temporary cut slope gradients given above do not preclude local raveling and sloughing. All excavations shall be made in accordance with the requirements of the soils engineer, CAL-OSHA and other public agencies having jurisdiction. Care should be taken to provide or maintain adequate lateral support for all adjacent improvements and structures at all times during the grading operations and construction phase.

8.4 Foundation Design

All foundations may be designed utilizing the following allowable bearing capacities for an embedded depth of 24 inches into approved engineered fill with the corresponding widths:

Allowable Bearing Capacity (psf)		
Width (feet)	Continuous Foundation	Isolated Foundation
1.5	2000	2500
2.0	2075	2575
4.0	2375	2875
6.0	2500	3000

The bearing value may be increased by 500 psf for each additional foot of depth in excess of the 18-inch minimum depth, up to a maximum of 4,000 psf. A one-third increase may be used when considering short-term loading and seismic forces. Any foundations located along property line may utilize an allowable bearing capacity of 1,500 psf and embedded into competent native soils. All foundations shall be reinforced a minimum of one, No. 4 bar, top and bottom. A representative of this firm shall inspect all foundation excavations prior to pouring concrete.

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8.5 Settlement Analysis

Resultant pressure curves for the consolidation tests are shown on Plates C and D. Computations utilizing these curves and the recommended allowable soil bearing capacities reveal that the foundations will experience settlements on the order of $\frac{3}{4}$ inch and differential settlements of less than $\frac{1}{4}$ inch.

8.6 Lateral Resistance

The following values may be utilized in resisting lateral loads imposed on the structure. Requirements of the California Building Code should be adhered to when the coefficient of friction and passive pressures are combined.

Coefficient of Friction - 0.35

Equivalent Passive Fluid Pressure = 200 lbs./cu.ft.

Maximum Passive Pressure = 2,000 lbs./cu.ft.

The passive pressure recommendations are valid only for approved compacted fill soils or competent native materials.

8.7 Retaining Wall Design Parameters

Active earth pressures against retaining walls will be equal to the pressures developed by the following fluid densities. These values are for **approved granular backfill material** placed behind the walls at various ground slopes above the walls.

Surface Slope of Retained Materials (Horizontal to Vertical)	Equivalent Fluid Density (lb./cu.ft.)
Level	30
5 to 1	35
4 to 1	38
3 to 1	40
2 to 1	45

Any applicable short-term construction surcharges and seismic forces should be added to the above lateral pressure values. An equivalent fluid pressure of 45 pcf may be utilized for the restrained wall condition with a level grade behind the wall.

The seismic-induced lateral soil pressure for walls greater than 6 feet may be computed using a triangular pressure distribution with the maximum value at the top of the wall. The maximum lateral pressure of (20 pcf) H where H is the height of the retained soils above the wall footing should be used in final design of retaining walls. Sliding resistance values and passive fluid pressure values may be increased by 1/3 during short-term wind and seismic loading conditions.

All walls shall be waterproofed as needed and protected from hydrostatic pressure by a reliable permanent subdrain system. The granular backfill to be utilized immediately adjacent to retaining walls shall consist of an approved select granular soil with a sand equivalency greater than 30. This backfill zone of free draining material shall consist of a wedge beginning a minimum of one horizontal foot from the base of the wall extending upward at an inclination of no less than $\frac{3}{4}$ to 1 (horizontal to vertical).

8.8 Slab Design

All concrete slabs shall be a minimum of six inches in thickness in the proposed warehouse areas and four inches in office and hardscape both reinforced a minimum of No. 3 bars, sixteen inches in each direction and positioned in the center of slab and placed on approved subgrade soils. Additional reinforcement requirements and an increase in thickness of the slabs-on-grade may be necessary based upon soils expansion potential and proposed loading conditions in the structures and should be evaluated further by the project engineers and/or architect. All subgrade soils shall be moisture conditioned to 3% over optimum moisture content to a depth eighteen inches.

A vapor retarder (10-mil minimum thickness) should be utilized in areas which would be sensitive to the infiltration of moisture. This retarder shall meet requirements of ASTM E 96, *Water Vapor Transmission of Materials* and ASTM E 1745, *Standard Specification for Water Vapor Retarders used in Contact with Soil or Granular Fill Under Concrete Slabs*. The vapor retarder shall be installed in accordance with procedures stated in ASTM E 1643, *Standard practice for Installation of Water Vapor Retarders used in Contact with Earth or Granular Fill Under Concrete Slabs*.

The moisture retarder may be placed directly upon compacted subgrade soils conditioned to near optimum moisture levels, although one to two inches of sand beneath the membrane is desirable. The subgrade upon which the retarder is placed shall be smooth and free of rocks, gravel or other protrusions which may damage the retarder. Use of sand above the retarder is under the purview of the structural engineer; if sand is used over the retarder, it should be placed in a dry condition.

8.9 Pavement Section Design

The table on the following page provides a preliminary pavement design based upon an R-Value of 16 for the subgrade soils for the proposed pavement areas. Final pavement design may need to be based on R-Value testing of the subgrade soils near the conclusion of site grading to assure that these soils are consistent with those assumed in this preliminary design.

The recommendations are based upon estimated traffic loads. Client should submit any other anticipated traffic loadings to the geotechnical engineer, if necessary, so that pavement sections may be reviewed to determine adequacy to support the proposed loadings.

Type of Traffic	Traffic Index	Asphalt (in.)	Base Material (in.)
Automobile Parking Stalls	4.0	3.0	6.0
Light Vehicle Circulation Areas	5.5	3.5	9.5
Heavy Truck Access Areas	7.0	4.0	14.0

Any concrete slab-on-grade in pavement areas shall be a minimum of seven inches in thickness and may be placed on approved subgrade soils. All pavement areas shall have positive drainage toward an approved outlet from the site. Drain lines behind curbs and/or adjacent to landscape areas should be considered by client and the appropriate design engineers to prevent water from infiltrating beneath pavement. If such infiltration occurs, damage to pavement, curbs and flow lines, especially on sites with expansive soils, may occur during the life of the project.

Any approved base material shall consist of a Class II aggregate or equivalent and should be compacted to a minimum of 95% relative compaction. All pavement materials shall conform to the requirements set forth by the City of Moreno Valley. The base material; and asphaltic concrete should be tested prior to delivery to the site and during placement to determine conformance with the project specifications. A pavement engineer shall designate the specific asphalt mix design to meet the required project specifications.

8.10 Utility Trench and Excavation Backfill

Trenches from installation of utility lines and other excavations may be backfilled with on-site soils or approved imported soils compacted to a minimum of 90% relative compaction. All utility lines shall be properly bedded with clean sand having a sand equivalency rating of 30 or more. This bedding material shall be thoroughly water jetted around the pipe structure prior to placement of compacted backfill soils.

8.11 Corrosion Design Criteria

Representative samples of the surficial soils, typical of the subgrade soils expected to be encountered within foundation excavations and underground utilities were tested for corrosion potential. The minimum resistivity value obtained for the samples tested is representative of an environment that may be severely corrosive to metals. The soil pH value was considered mildly alkaline and may not have a significant effect on soil corrosivity. Consideration should be given to corrosion protection systems for buried metal such as protective coatings, wrappings or the use of PVC where permitted by local building codes.

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According to Table 4.3.1 of ACI 318 Building Code and Commentary, these contents revealed negligible sulfate concentrations. Therefore, a Type II cement according to latest CBC specifications may be utilized for building foundations at this time. It is recommended that additional sulfate tests be performed at the completion of site grading to assure that the as graded conditions are consistent with the recommendations stated in this design. Corrosion test results may be found on the attached Table IV.

8.12 Expansive Soil

Since expansive soils were encountered, special attention should be given to the project design and maintenance. The attached *Expansive Soil Guidelines* should be reviewed by the engineers, architects, owner, maintenance personnel and other interested parties and considered during the design of the project and future property maintenance.

9.0 Closure

The recommendations and conclusions contained in this report are based upon the soil conditions uncovered in our test excavations. No warranty of the soil condition between our excavations is implied. NorCal Engineering should be notified for possible further recommendations if unexpected to unfavorable conditions are encountered during construction phase. It is the responsibility of the owner to ensure that all information within this report is submitted to the Architect and appropriate Engineers for the project.

A preconstruction conference should be held between the developer, general contractor, grading contractor, city inspector, architect, and geotechnical engineer to clarify any questions relating to the grading operations and subsequent construction. Our representative should be present during the grading operations and construction phase to certify that such recommendations are complied within the field.

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This geotechnical investigation has been conducted in a manner consistent with the level of care and skill exercised by members of our profession currently practicing under similar conditions in the Southern California area. No other warranty, expressed or implied is made.

We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

Keith D. Tucker
Project Engineer
R.G.E. 841



Scott D. Spensiero
Project Manager

NorCal Engineering

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

SPECIFICATIONS FOR PLACEMENT OF COMPACTED FILL

Excavation

Any existing low-density soils and/or saturated soils shall be removed to competent natural soil under the inspection of the Geotechnical Engineering Firm. After the exposed surface has been cleansed of debris and/or vegetation, it shall be scarified until it is uniform in consistency, brought to the proper moisture content and compacted to a minimum of 90% relative compaction (in accordance with ASTM: D 1557).

In any area where a transition between fill and native soil or between bedrock and soil are encountered, additional excavation beneath foundations and slabs will be necessary in order to provide uniform support and avoid differential settlement of the structure.

Material for Fill

The on-site soils or approved import soils may be utilized for the compacted fill provided they are free of any deleterious materials and shall not contain any rocks, brick, asphaltic concrete, concrete or other hard materials greater than eight inches in maximum dimensions. Any import soil must be approved by the Geotechnical Engineering firm a minimum of 72 hours prior to importation of site.

Placement of Compacted Fill Soils

The approved fill soils shall be placed in layers not excess of six inches in thickness. Each lift shall be uniform in thickness and thoroughly blended. The fill soils shall be brought to within 2% of the optimum moisture content, unless otherwise specified by the Soils Engineering firm. Each lift shall be compacted to a minimum of 90% relative compaction (in accordance with ASTM: D 1557) and approved prior to the placement of the next layer of soil. Compaction tests shall be obtained at the discretion of the Geotechnical Engineering firm but to a minimum of one test for every 500 cubic yards placed and/or for every 2 feet of compacted fill placed.

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The minimum relative compaction shall be obtained in accordance with accepted methods in the construction industry. The final grade of the structural areas shall be in a dense and smooth condition prior to placement of slabs-on-grade or pavement areas. No fill soils shall be placed, spread or compacted during unfavorable weather conditions. When the grading is interrupted by heavy rains, compaction operations shall not be resumed until approved by the Geotechnical Engineering firm.

Grading Observations

The controlling governmental agencies should be notified prior to commencement of any grading operations. This firm recommends that the grading operations be conducted under the observation of a Soils Engineering firm as deemed necessary. A 24-hour notice must be provided to this firm prior to the time of our initial inspection.

Observation shall include the clearing and grubbing operations to assure that all unsuitable materials have been properly removed; approve the exposed subgrade in areas to receive fill and in areas where excavation has resulted in the desired finished grade and designate areas of overexcavation; and perform field compaction tests to determine relative compaction achieved during fill placement. In addition, all foundation excavations shall be observed by the Geotechnical Engineering firm to confirm that appropriate bearing materials are present at the design grades and recommend any modifications to construct footings.

EXPANSIVE SOIL GUIDELINES

The following expansive soil guidelines are provided for your project. The intent of these guidelines is to inform you, the client, of the importance of proper design and maintenance of projects supported on expansive soils. ***You, as the owner or other interested party, should be warned that you have a duty to provide the information contained in the soil report including these guidelines to your design engineers, architects, landscapers and other design parties in order to enable them to provide a design that takes into consideration expansive soils.***

In addition, you should provide the soil report with these guidelines to any property manager, lessee, property purchaser or other interested party that will have or assume the responsibility of maintaining the development in the future.

Expansive soils are fine-grained silts and clays which are subject to swelling and contracting. The amount of this swelling and contracting is subject to the amount of fine-grained clay materials present in the soils and the amount of moisture either introduced or extracted from the soils. Expansive soils are divided into five categories ranging from “very low” to “very high”. Expansion indices are assigned to each classification and are included in the laboratory testing section of this report. *If the expansion index of the soils on your site, as stated in this report, is 21 or higher, you have expansive soils.* The classifications of expansive soils are as follows:

Classification of Expansive Soil*

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
Above 130	Very High

*From Table 18A-I-B of California Building Code (1988)

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When expansive soils are compacted during site grading operations, care is taken to place the materials at or slightly above optimum moisture levels and perform proper compaction operations. Any subsequent excessive wetting and/or drying of expansive soils will cause the soil materials to expand and/or contract. These actions are likely to cause distress of foundations, structures, slabs-on-grade, sidewalks and pavement over the life of the structure. ***It is therefore imperative that even after construction of improvements, the moisture contents are maintained at relatively constant levels, allowing neither excessive wetting or drying of soils.***

Evidence of excessive wetting of expansive soils may be seen in concrete slabs, both interior and exterior. Slabs may lift at construction joints producing a trip hazard or may crack from the pressure of soil expansion. Wet clays in foundation areas may result in lifting of the structure causing difficulty in the opening and closing of doors and windows, as well as cracking in exterior and interior wall surfaces. In extreme wetting of soils to depth, settlement of the structure may eventually result. Excessive wetting of soils in landscape areas adjacent to concrete or asphaltic pavement areas may also result in expansion of soils beneath pavement and resultant distress to the pavement surface.

Excessive drying of expansive soils is initially evidenced by cracking in the surface of the soils due to contraction. Settlement of structures and on-grade slabs may also eventually result along with problems in the operation of doors and windows.

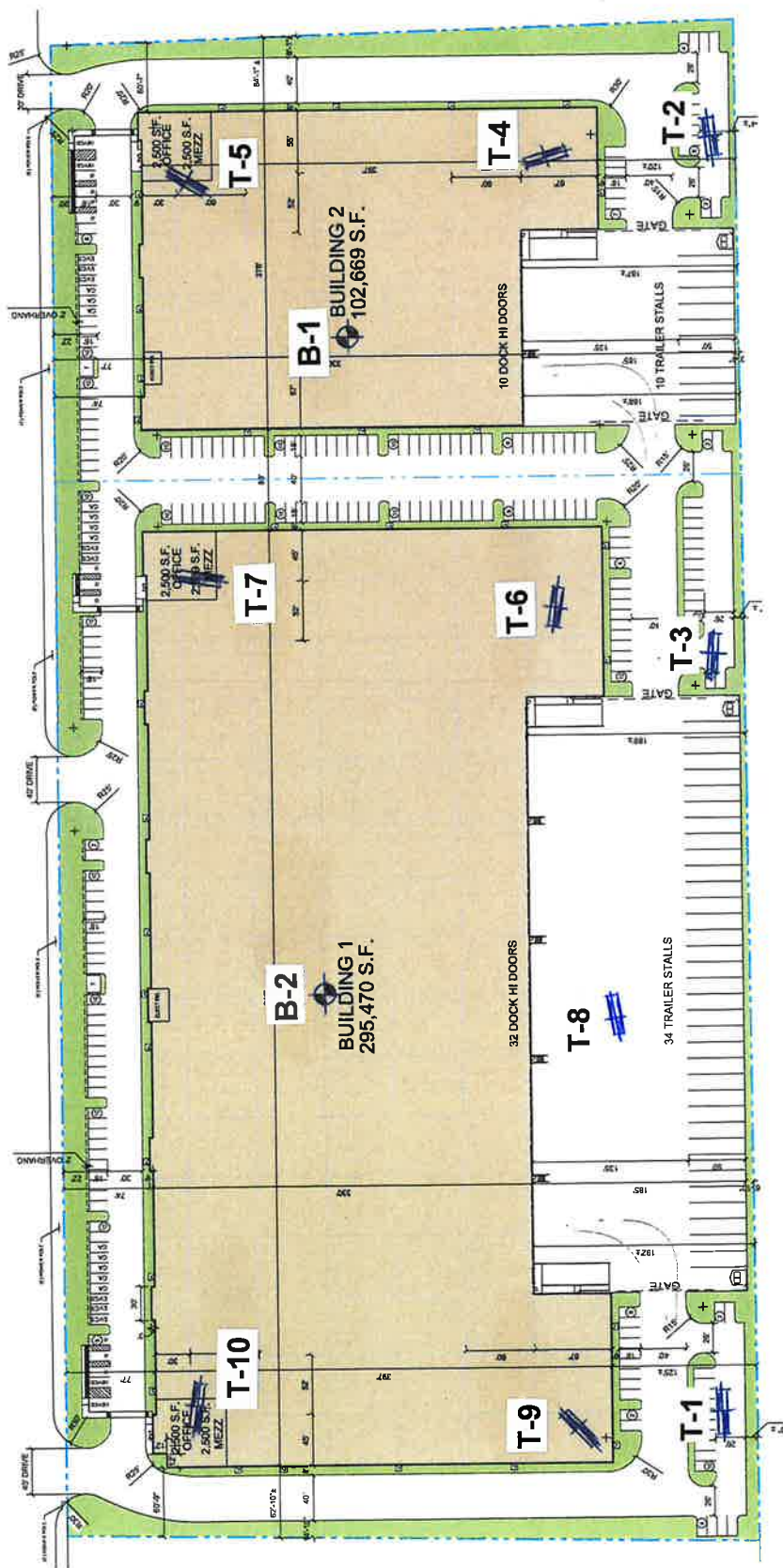
Projects located in areas of expansive clay soils will be subject to more movement and "hairline" cracking of walls and slabs than similar projects situated on non-expansive sandy soils. There are, however, measures that developers and property owners may take to reduce the amount of movement over the life the development. The following guidelines are provided to assist you in both design and maintenance of projects on expansive soils:

- Drainage away from structures and pavement is essential to prevent excessive wetting of expansive soils. Grades should be designed to the latest building code and maintained to allow flow of irrigation and rain water to approved drainage devices or to the street. Any “ponding” of water adjacent to buildings, slabs and pavement after rains is evidence of poor drainage; the installation of drainage devices or regrading of the area may be required to assure proper drainage. Installation of rain gutters is also recommended to control the introduction of moisture next to buildings. Gutters should discharge into a drainage device or onto pavement which drains to roadways.
- Irrigation should be strictly controlled around building foundations, slabs and pavement and may need to be adjusted depending upon season. This control is essential to maintain a relatively uniform moisture content in the expansive soils and to prevent swelling and contracting. Over-watering adjacent to improvements may result in damage to those improvements. NorCal Engineering makes no specific recommendations regarding landscape irrigation schedules.
- Planting schemes for landscaping around structures and pavement should be analyzed carefully. Plants (including sod) requiring high amounts of water may result in excessive wetting of soils. Trees and large shrubs may actually extract moisture from the expansive soils, thus causing contraction of the fine-grained soils.
- Thickened edges on exterior slabs will assist in keeping excessive moisture from entering directly beneath the concrete. A six-inch thick or greater deepened edge on slabs may be considered. Underlying interior and exterior slabs with 6 to 12 inches or more of non-expansive soils and providing presaturation of the underlying clayey soils as recommended in the soil report will improve the overall performance of on-grade slabs.

- Increase the amount of steel reinforcing in concrete slabs, foundations and other structures to resist the forces of expansive soils. The precise amount of reinforcing should be determined by the appropriate design engineers and/or architects.
- Recommendations of the soil report should always be followed in the development of the project. Any recommendations regarding presaturation of the upper subgrade soils in slab areas should be performed in the field and verified by the Soil Engineer.

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 SOILS AND GEOTECHNICAL CONSULTANTS



SITE PLAN

DATE: FEBRUARY 2020

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

List of Appendices **(in order of appearance)**

Appendix A – Log of Excavations

Log of Trenches T-1 to T-10

Log of Borings B-1 and B-2

Appendix B – Laboratory Tests

Table I – Maximum Dry Density

Table II – Expansion

Table III – Atterberg Limits

Table IV - Corrosion

Plates A and B – Direct Shear

Plates C and D - Consolidation

Appendix C –ASCE Seismic Hazards Report and Maps

ASCE Seismic Hazards Report

USGS – Riverside East Quadrangle

Moreno Valley Geology and Seismic Hazards Maps

Liquefaction Calculations

Appendix D – Soil Infiltration Data

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Appendix A

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MAJOR DIVISION			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS	
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL, SAND MIXTURES, LITTLE OR NO FINES	
				GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
				GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES	
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES	
		SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
					SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINE (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND-SILT MIXTURES	
				SC	CLAYEY SANDS, SAND-CLAY MIXTURES	
	FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE		SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
					CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
					OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS	

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

UNIFIED SOIL CLASSIFICATION SYSTEM

KEY:

- Indicates 2.5-inch Inside Diameter. Ring Sample.
- ☒ Indicates 2-inch OD Split Spoon Sample (SPT).
- ☑ Indicates Shelby Tube Sample.
- Indicates No Recovery.
- ▣ Indicates SPT with 140# Hammer 30 in. Drop.
- ☒ Indicates Bulk Sample.
- ▣ Indicates Small Bag Sample.
- ▣ Indicates Non-Standard
- ☒ Indicates Core Run.

COMPONENT DEFINITIONS

COMPONENT	SIZE RANGE
Boulders	Larger than 12 in
Cobbles	3 in to 12 in
Gravel	3 in to No 4 (4.5mm)
Coarse gravel	3 in to 3/4 in
Fine gravel	3/4 in to No 4 (4.5mm)
Sand	No. 4 (4.5mm) to No. 200 (0.074mm)
Coarse sand	No. 4 (4.5 mm) to No. 10 (2.0 mm)
Medium sand	No. 10 (2.0 mm) to No. 40 (0.42 mm)
Fine sand	No. 40 (0.42 mm) to No. 200 (0.074 mm)
Silt and Clay	Smaller than No. 200 (0.074 mm)

COMPONENT PROPORTIONS

DESCRIPTIVE TERMS	RANGE OF PROPORTION
Trace	1 - 5%
Few	5 - 10%
Little	10 - 20%
Some	20 - 35%
And	35 - 50%

MOISTURE CONTENT

DRY	Absence of moisture, dusty, dry to the touch.
DAMP	Some perceptible moisture; below optimum
MOIST	No visible water; near optimum moisture content
WET	Visible free water, usually soil is below water table.

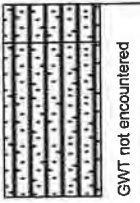
RELATIVE DENSITY OR CONSISTENCY VERSUS SPT N -VALUE

COHESIONLESS SOILS		COHESIVE SOILS		
Density	N (blows/ft)	Consistency	N (blows/ft)	Approximate Undrained Shear Strength (psf)
Very Loose	0 to 4	Very Soft	0 to 2	< 250
Loose	4 to 10	Soft	2 to 4	250 - 500
Medium Dense	10 to 30	Medium Stiff	4 to 8	500 - 1000
Dense	30 to 50	Stiff	8 to 15	1000 - 2000
Very Dense	over 50	Very Stiff	15 to 30	2000 - 4000
		Hard	over 30	> 4000

CDREP
21631-20

Log of Trench T-1

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Silty SAND Brown, loose, moist					
5		NATURAL Silty SAND Brown, dense to very dense, moist Trench completed at depth of 5'					
10							
15							
20							
25							
30							
35							

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SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog\PROJECT\21631-20.log Date: 2/3/2020

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

CDREP
21631-20

Log of Trench T-2

Boring Location: Alessandro & Chagall Ct, Moreno Valley

Date of Drilling: 1/20/2020

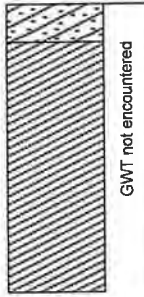
Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight:

Drop:

Surface Elevation: Not Measured

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist					
5		NATURAL Clayey SAND to Sandy CLAY Brown, dense to very dense, moist					
Trench completed at depth of 7.5'							
10							
15							
20							
25							
30							
35							

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2

Superlog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\21631-20.log Date: 2/3/2020

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

CDREP
21631-20

Log of Trench T-3

Boring Location: Alessandro & Chagall Ct, Moreno Valley

Date of Drilling: 1/20/2020

Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight:

Drop:

Surface Elevation: Not Measured

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist					
5		NATURAL Clayey SAND Brown, dense, moist Silty SAND Brown, dense, moist					
10		Sandy CLAY Brown, stiff, moist					
Trench completed at depth of 10'							

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3

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

**CDREP
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Log of Trench T-4

Boring Location: Alessandro & Chagall Ct, Moreno Valley

Date of Drilling: 1/20/2020

Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight:

Drop:

Surface Elevation: Not Measured

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist	☐		11.6	119.0	
5		NATURAL Silty SAND Brown, dense to very dense, moist Silty (fine to coarse grained) SAND Brown, dense, moist	☐		13.2	117.6	
10			☐		9.7	118.8	
10	Trench completed at depth of 10'						

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21631-20

Log of Trench T-5

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

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Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist			12.1	117.2	
5		NATURAL Sandy CLAY Brown, stiff, moist			11.7	120.4	
10		Clayey SAND Brown, very dense, moist			9.4	122.6	
15		Trench completed at depth of 15'			10.3	119.6	

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5

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

**CDREP
21631-20**

Log of Trench T-6

Boring Location: Alessandro & Chagall Ct, Moreno Valley

Date of Drilling: 1/20/2020

Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight:

Drop:

Surface Elevation: Not Measured

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist					
5		NATURAL Sandy CLAY Brown, stiff, moist	■		8.4	115.7	
		Clayey SAND Brown, dense, moist					
		Silty SAND Brown, dense, moist	■		7.0	117.8	
10	Trench completed at depth of 10'						

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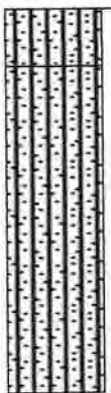
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Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

**CDRE#
21631-20**

Log of Trench T-7

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0	 GWT not encountered	FILL Clayey SAND Brown, loose, moist	■		7.4	115.9	
5		NATURAL Clayey SAND Brown, dense to very dense, moist	■		8.3	117.8	
10		Trench completed at depth of 10'	■		11.0	118.8	
15							
20							
25							
30							
35							

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7

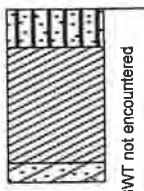
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Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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21631-20

Log of Trench T-8

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/20/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Clayey SAND Brown, loose, moist	■		11.0	117.5	
5		NATURAL Sandy CLAY Brown, stiff, moist Clayey SAND Brown, dense, moist Trench completed at depth of 4.5'					
10							
15							
20							
25							
30							
35							

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8

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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CDREP
21631-20

Log of Trench T-9

Boring Location: Alessandro & Chagall Ct, Moreno Valley

Date of Drilling: 1/20/2020

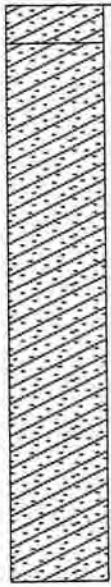




Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight:

Drop:

Surface Elevation: Not Measured

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0	 GWT not encountered	FILL Clayey SAND Brown, loose, moist			10.6	115.5	
5		NATURAL Clayey SAND Brown, dense to very dense, moist			11.1	119.5	
10					9.8	116.1	
15					11.4	116.8	
Trench completed at depth of 15'							

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21631-20

Log of Trench T-10

Boring Location: Alessandro & Chagall Ct, Moreno Valley

Date of Drilling: 1/20/2020

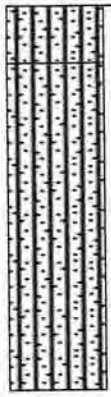
Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight:

Drop:

Surface Elevation: Not Measured

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0	 GWT not encountered	FILL Silty SAND Brown, loose, moist					
5		NATURAL Silty SAND Brown, dense to very dense, moist	■		6.1	114.2	
10		Trench completed at depth of 10'	■		7.4	117.0	

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 File: C:\Superlog\PROJECT\21631-20.log
 Date: 2/3/2020

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10

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

CDREP
21631-20

Log of Boring B-1

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/22/2020	Groundwater Depth: 39'
Drilling Method: Simco 2800HS	
Hammer Weight: 140 lbs	Drop: 30"
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0	[Diagonal Hatching]	FILL Clayey SAND Brown, loose, moist					
5		NATURAL Clayey SAND Brown, dense to very dense, moist	⊗	32/50-4"	12.3		4'
10	[Vertical Hatching]	Sandy SILT Brown, very stiff, moist	⊗	19/50-5"	11.8		6'
15	[Diagonal Hatching]	Clayey (fine to coarse grained) SAND Red-brown, very dense, moist	⊗	24/37/45	14.0		4'
20			⊗	17/26/50	14.5		4'
25			⊗	23/50-5"	14.7		4'
30			⊗	15/18/16	18.3		4'
35	[Vertical Hatching]	Silty SAND Brown, dense, moist					

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Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

**CDREP
21631-20**

Log of Boring B-1

Boring Location: Alessandro & Chagall Ct, Moreno Valley

Date of Drilling: 1/22/2020

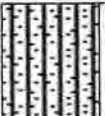

Groundwater Depth: 39'

Drilling Method: Simco 2800HS

Hammer Weight: 140 lbs

Drop: 30"

Surface Elevation: Not Measured

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
35		Silty SAND Brown, dense, moist	☒	10/15/17	19.6		3%
40		Sandy CLAY Red-brown, stiff, wet	☒	18/27/38	21.0		6%
45			☒	13/19/23	20.0		6%
50			☒	10/13/23	19.3		5%
Boring completed at depth of 51.5'							
55							
60							
65							
70							

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Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

**CDREP
21631-20**

Log of Boring B-2

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/22/2020	Groundwater Depth: 33'
Drilling Method: Simco 2800HS	
Hammer Weight: 140 lbs	Drop: 30"
Surface Elevation: Not Measured	

Depth (feet)	Lith-ology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Silty SAND Brown, loose, moist					
5		NATURAL Silty SAND Brown, dense to very dense, moist	⊗	38/50-5"	11.9		2
10		Clayey (fine to coarse grained) SAND Red-brown, very dense, moist	⊗	8/17/19	8.2		4
15		Silty SAND Brown, dense, wet	⊗	10/17/35	12.9		3
20			⊗	10/11/19	6.0		1
25		Clayey SAND Brown, dense, wet	⊗	25/50-4"	11.3		4
30			⊗	18/21/20	15.2		4
35							

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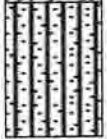
Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog\PROJECT\21631-20.log Date: 2/3/2020

CDREP
21631-20

Log of Boring B-2

Boring Location: Alessandro & Chagall Ct, Moreno Valley	
Date of Drilling: 1/22/2020	Groundwater Depth: 33'
Drilling Method: Simco 2800HS	
Hammer Weight: 140 lbs	Drop: 30"
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
35		Clayey SAND Brown, dense, wet	☒	14/16/26	16.2		4%
40			☒	18/25/31	19.5		4%
45		Silty SAND Brown, dense, wet	☒	13/21/25	16.7		4%
50			☒	10/15/22	13.8		2%
Boring completed at depth of 51.5'							
55							
60							
65							
70							

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog\PROJECT\21631-20.log Date: 2/3/2020

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Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Appendix B

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**TABLE I
MAXIMUM DENSITY TESTS**

Sample	Classification	Optimum Moisture (%)	Maximum Dry Density (lbs/cu.ft)
T-4 @ 2'	Silty SAND	9.0	130.0
T-5 @ 2'	Sandy CLAY	13.5	125.0
T-9 @ 2'	Clayey SAND	12.0	128.0

**TABLE II
EXPANSION TESTS**

Sample	Classification	Expansion Index
T-4 @ 2'	Silty SAND	3
T-5 @ 2'	Sandy CLAY	65
T-9 @ 2'	Clayey SAND	25

**TABLE III
ATTERBERG LIMITS**

Sample	Liquid Limit	Plastic Limit	Plasticity Index
T-5 @ 2-5'	32	19	13
T-5 @ 8-10'	25	19	6

**TABLE IV
CORROSION TESTS**

Sample	pH	Electrical Resistivity	Sulfate (%)	Chloride (ppm)
T-5 @ 2'	7.2	1,820	0.008	257
T-9 @ 2'	7.1	2,540	0.007	285

% by weight
ppm – mg/kg

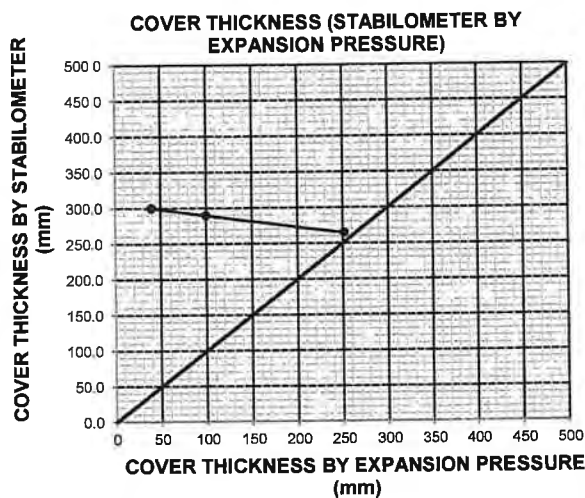
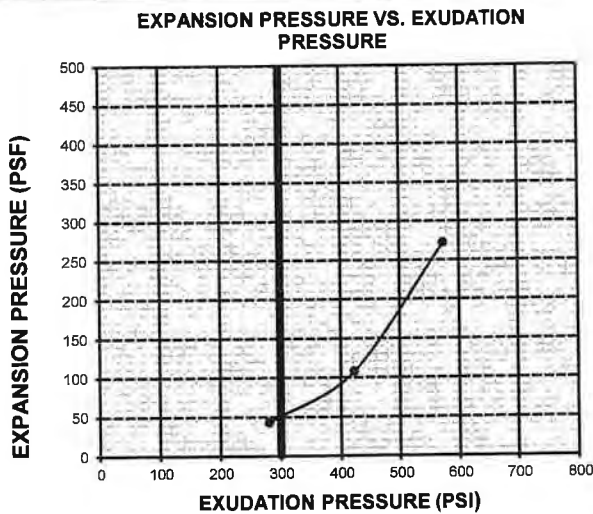
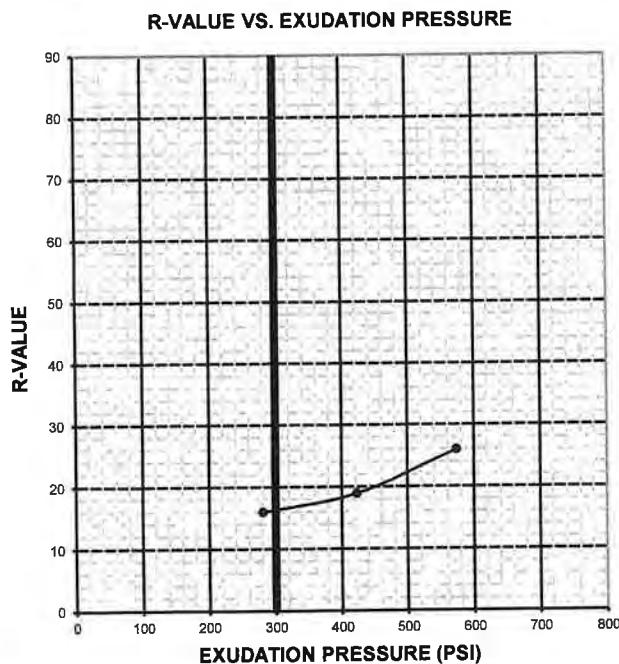


R-VALUE TEST REPORT

CT-301 ASTM-D2844

PROJECT NAME: Norcal (CDREP LLC) PROJECT NUMBER: L-200101
 SAMPLE LOCATION: SEC of SWC of Alessandro Blvd and Chega II CT. Moreno Valley SAMPLE NUMBER: T3
 SAMPLE DESCRIPTION: Sandy Lean Clay (CL-CH) SAMPLE DEPTH: 1.0'
 SAMPLED BY: Norcal TESTED BY: CC/ER
 DATE TESTED: 1/24/2020

TEST SPECIMEN	A	B	C
MOISTURE AT COMPACTION %	14.4	15.5	16.9
WEIGHT OF SAMPLE, grams	1117	1191	1227
HEIGHT OF SAMPLE, Inches	2.30	2.48	2.67
DRY DENSITY, pcf	128.7	126.1	119.3
COMPACTOR AIR PRESSURE, psi	250	200	100
EXUDATION PRESSURE, psi	573	423	281
EXPANSION, Inches x 10 ^{exp-4}	63	25	10
STABILITY Ph 2,000 lbs (160 psi)	100	119	125
TURNS DISPLACEMENT	3.51	3.76	4.19
R-VALUE UNCORRECTED	30	19	14
R-VALUE CORRECTED	26	19	16
EXPANSION PRESSURE (psf)	272.2	108.0	43.2

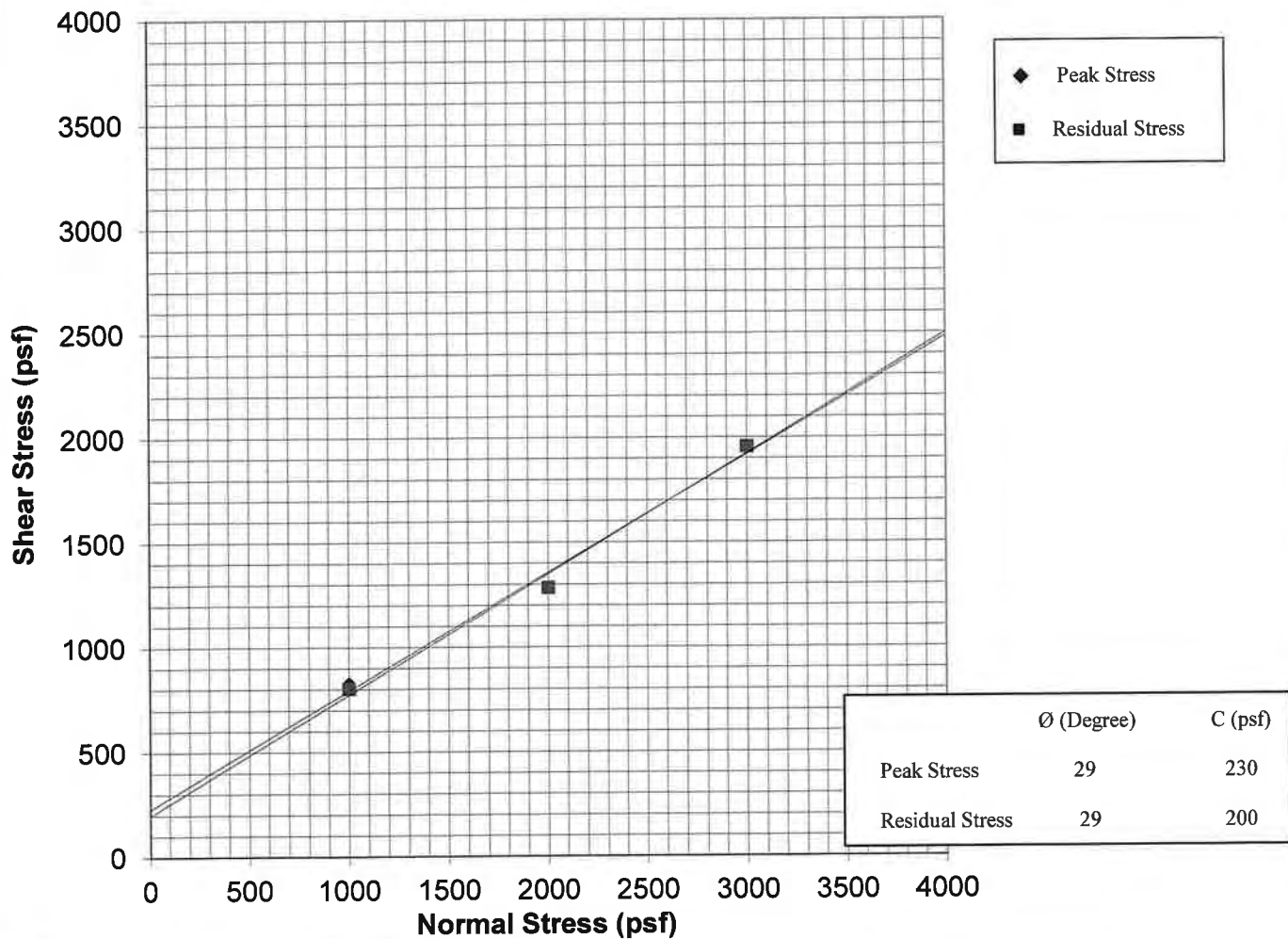
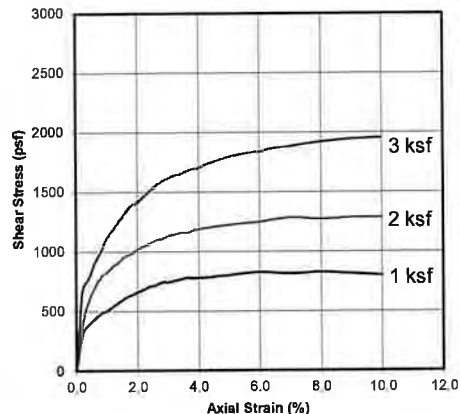


R-VALUE AT EQUILIBRIUM:	16
R-VALUE BY EXUDATION PRESSURE:	16
R-VALUE BY EXPANSION PRESSURE:	N.A.
EXPANSION PRESSURE AT 300 PSI EXUDATION:	52
TRAFFIC INDEX (Assumed):	5.5
GRAVEL FACTOR (Assumed):	1.5
UNIT MASS OF COVER MATERIAL, kg/m³ (Assumed):	2100.0

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Sample No. T5@2'
 Sample Type: Undisturbed/Saturated
 Soil Description: Silty Clay

		1	2	3
Normal Stress	(psf)	1000	2000	3000
Peak Stress	(psf)	828	1284	1956
Displacement	(in)	0.150	0.175	0.250
Residual Stress	(psf)	804	1284	1956
Displacement	(in.)	0.250	0.250	0.250
In Situ Dry Density	(pcf)	117.2	117.2	117.2
In Situ Water Content	(%)	12.1	12.1	12.1
Saturated Water Content	(%)	16.1	16.1	16.1
Strain Rate	(in/min)	0.020	0.020	0.020



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CDREP, LLC

PROJECT NUMBER: 21631-20

DATE: 1/30/2020

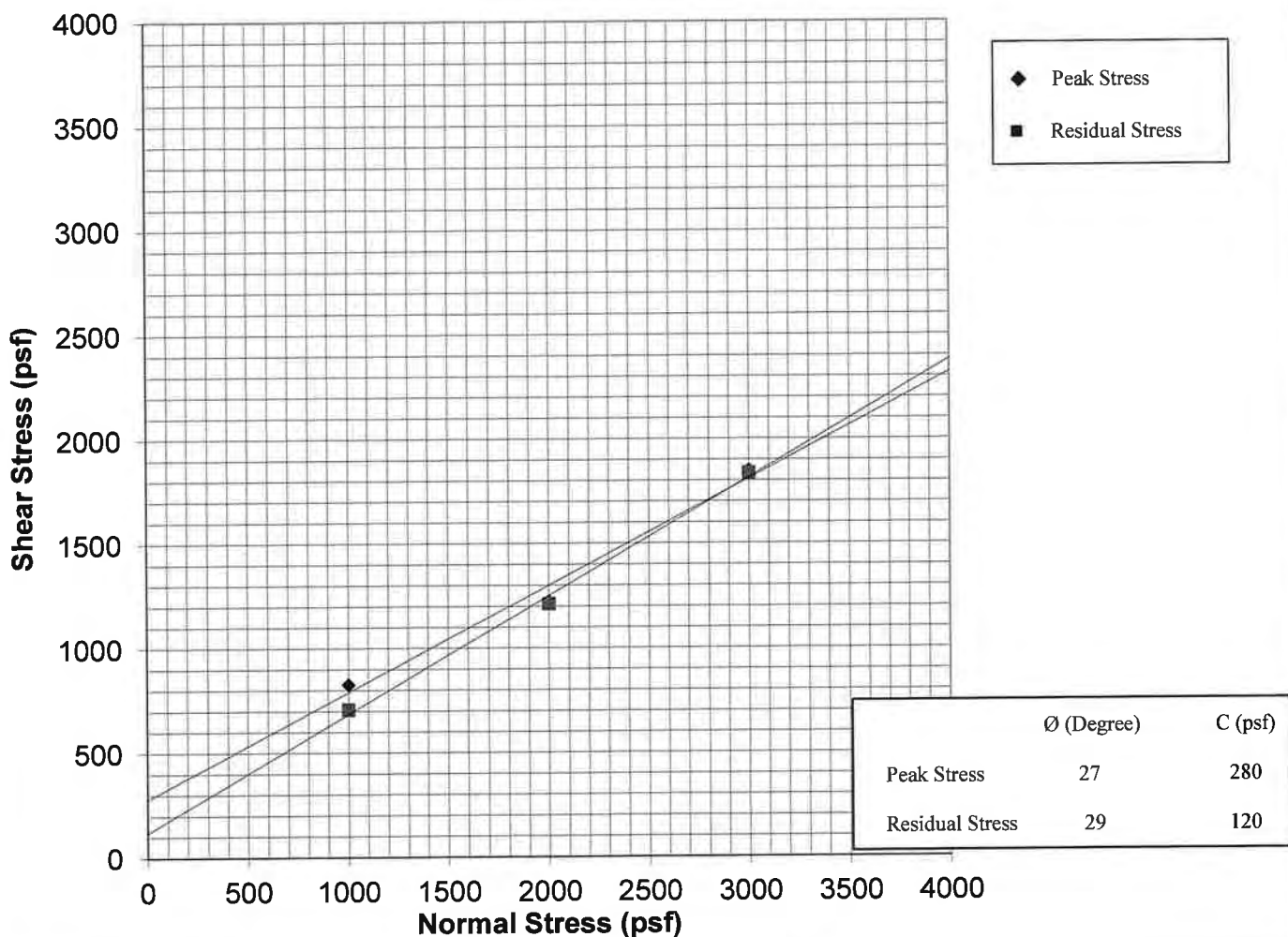
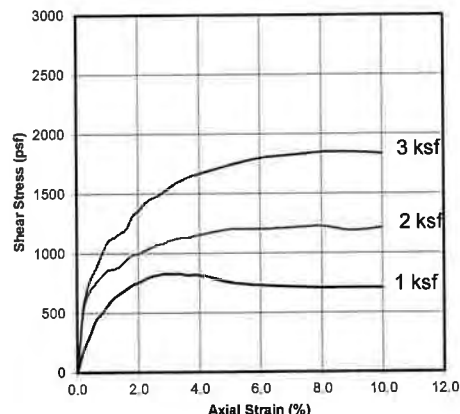
DIRECT SHEAR TEST

ASTM D3080

Plate A

Sample No. T9@2'
 Sample Type: Undisturbed/Saturated
 Soil Description: Silty Clay w/ Some Sand

		1	2	3
Normal Stress	(psf)	1000	2000	3000
Peak Stress	(psf)	828	1224	1848
Displacement	(in.)	0.070	0.200	0.200
Residual Stress	(psf)	708	1212	1836
Displacement	(in.)	0.250	0.250	0.250
In Situ Dry Density	(pcf)	115.5	115.5	115.5
In Situ Water Content	(%)	10.6	10.6	10.6
Saturated Water Content	(%)	16.9	16.9	16.9
Strain Rate	(in/min)	0.020	0.020	0.020



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DIRECT SHEAR TEST
ASTM D3080
Plate B

PROJECT NUMBER: 21631-20

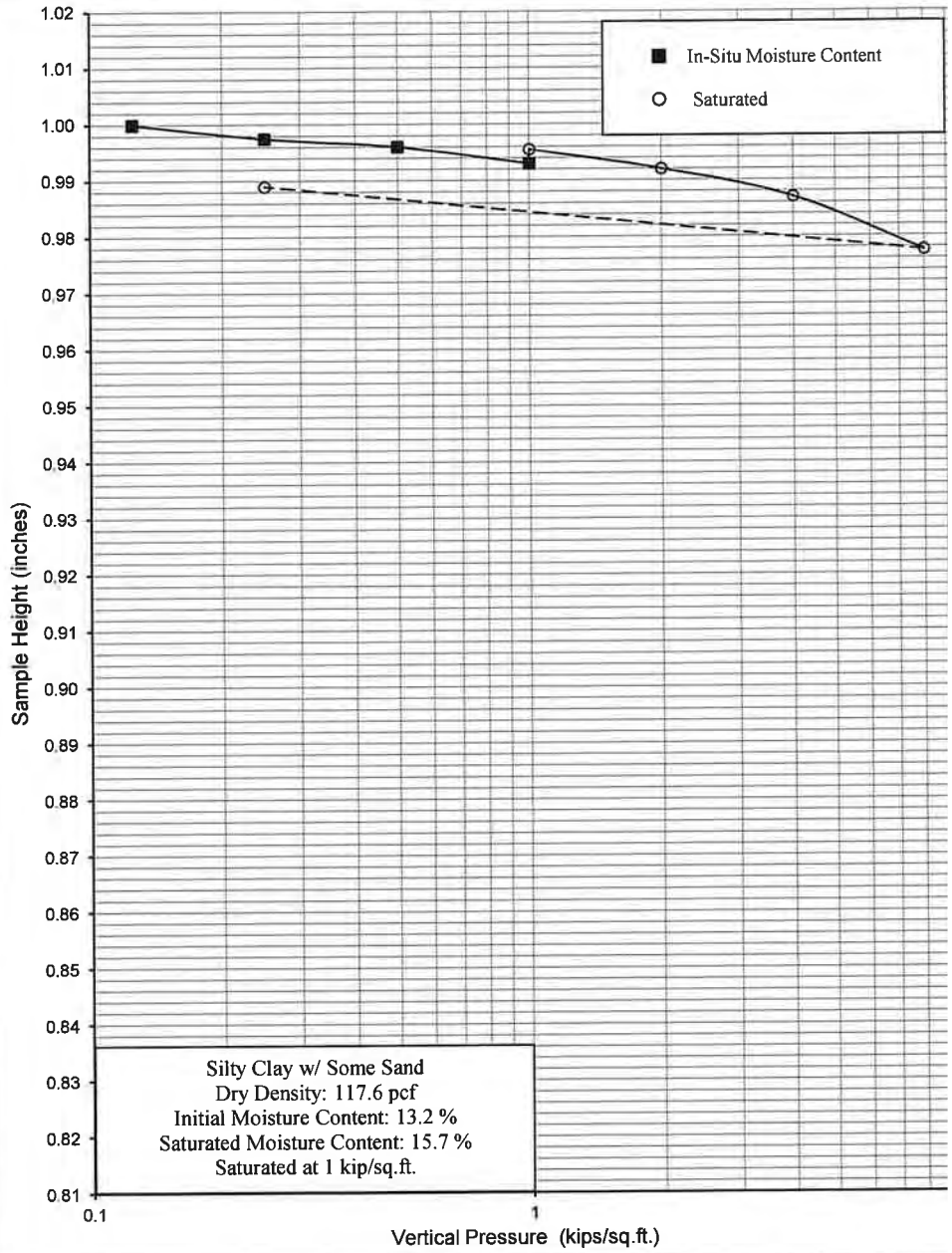
DATE: 1/30/2020

Vertical Pressure (kips/sq.ft.)	Sample Height (inches)	Consolidation (percent)	Sample No.	T4	Depth	4'	Date	1/30/2020
------------------------------------	------------------------	----------------------------	------------	----	-------	----	------	-----------

0.125	1.0000	0.0
0.25	0.9975	0.2
0.5	0.9960	0.4
1	0.9930	0.7
1	0.9955	0.4
2	0.9920	0.8
4	0.9870	1.3
8	0.9775	2.3
0.25	0.9890	1.1

Saturated

Date Tested: 1/29/2020
 Sample: T4
 Depth: 4'



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CDREP, LLC

PROJECT NUMBER: 21631-20

DATE: 1/30/2020

CONSOLIDATION TEST

ASTM D2435

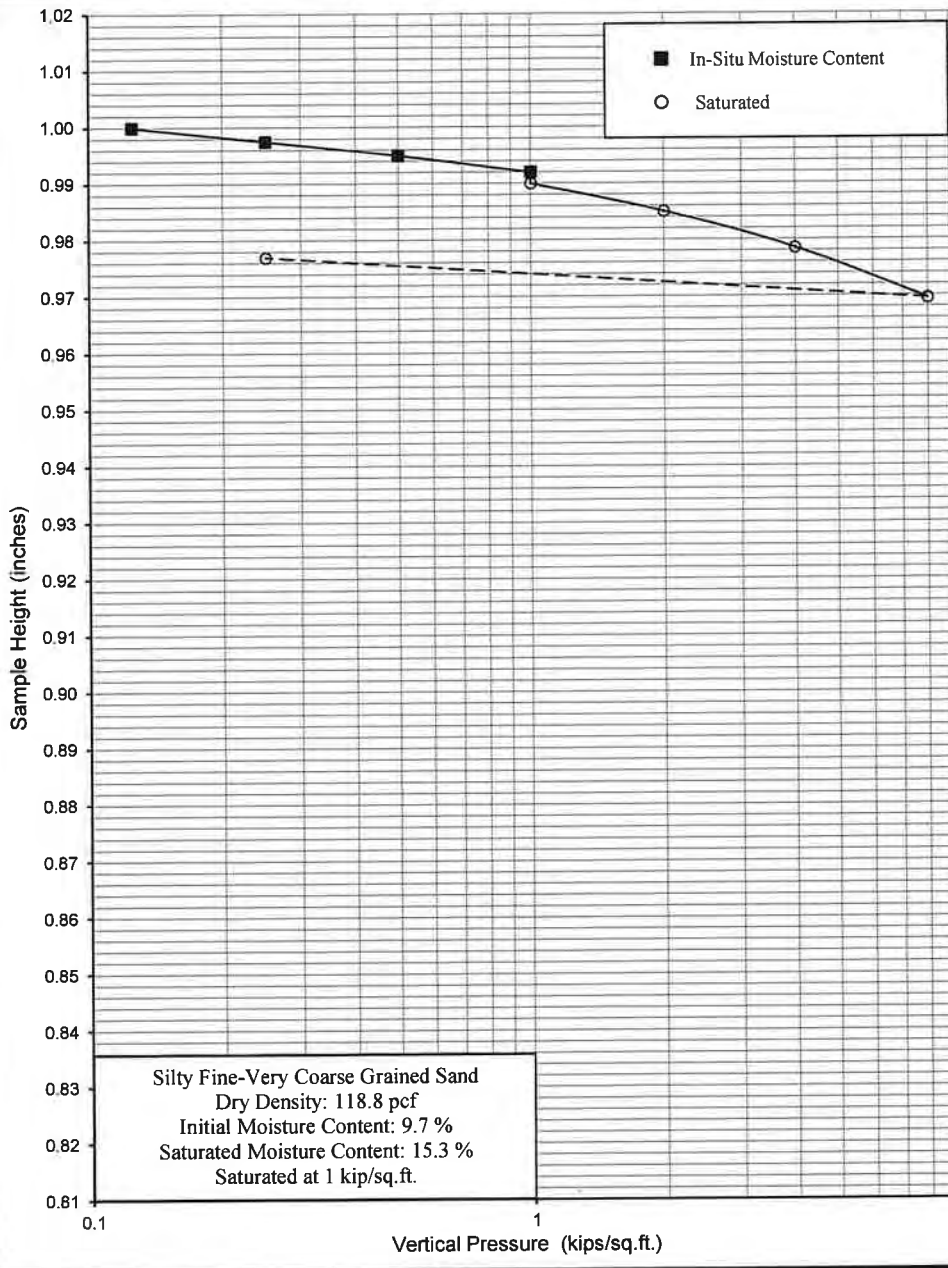
Plate C

Vertical Pressure (kips/sq.ft.)	Sample Height (inches)	Consolidation (percent)	Sample No.	T4	Depth	8'	Date	1/30/2020
---------------------------------	------------------------	-------------------------	------------	----	-------	----	------	-----------

0.125	1.0000	0.0
0.25	0.9975	0.2
0.5	0.9950	0.5
1	0.9920	0.8
1	0.9900	1.0
2	0.9850	1.5
4	0.9785	2.2
8	0.9695	3.1
0.25	0.9770	2.3

Saturated

Date Tested: 1/29/2020
 Sample: T4
 Depth: 8'



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SOILS AND GEOTECHNICAL CONSULTANTS

CDREP, LLC

PROJECT NUMBER: 21631-20

DATE: 1/30/2020

CONSOLIDATION TEST

ASTM D2435

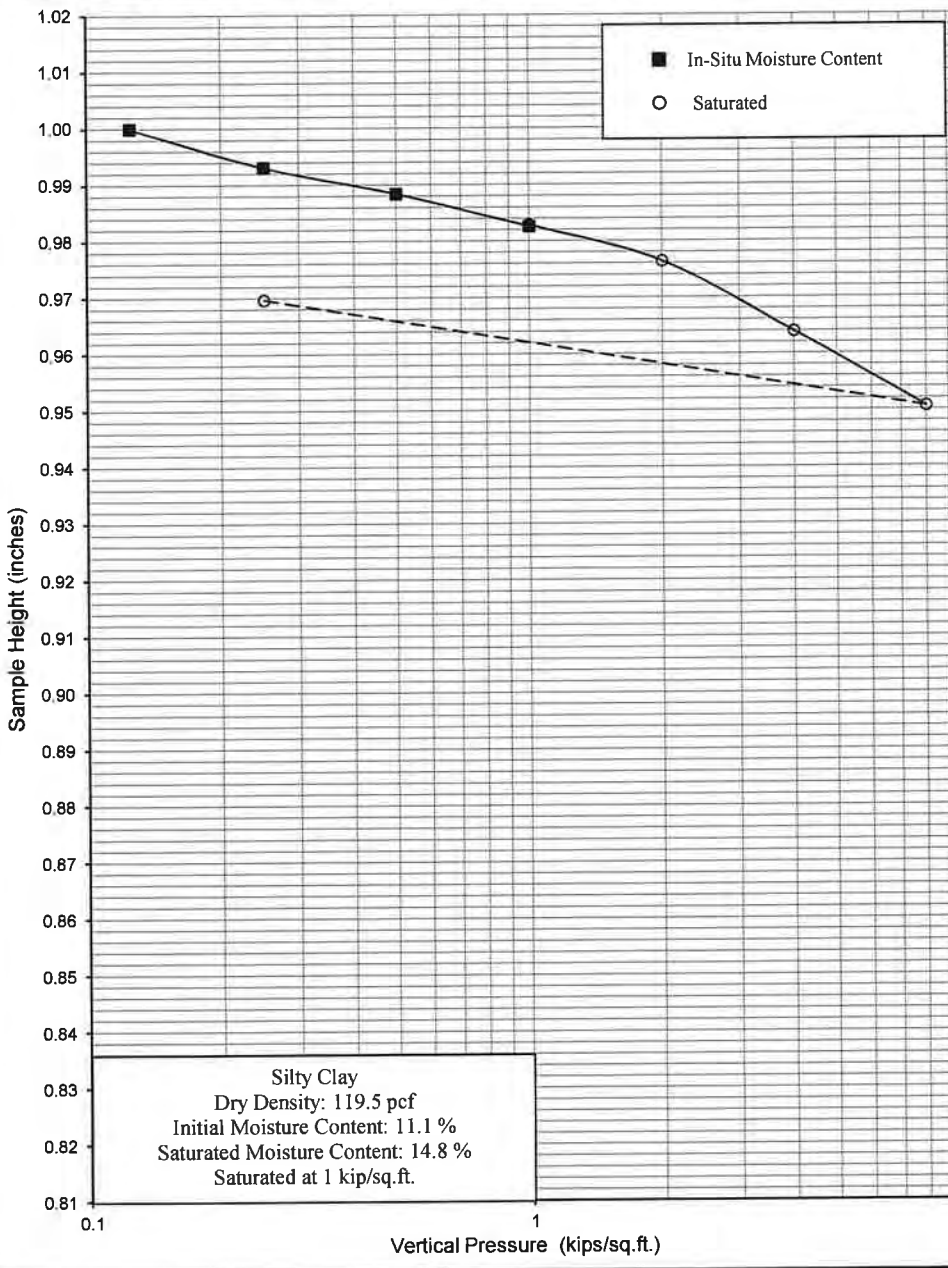
Plate D

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Vertical Pressure (kips/sq.ft.)	Sample Height (inches)	Consolidation (percent)	Sample No.	T9	Depth	5'	Date	1/30/2020
---------------------------------	------------------------	-------------------------	------------	----	-------	----	------	-----------

0.125	1.0000	0.0
0.25	0.9931	0.7
0.5	0.9884	1.2
1	0.9826	1.7
1	0.9829	1.7
2	0.9764	2.4
4	0.9639	3.6
8	0.9506	4.9
0.25	0.9697	3.0

Date Tested: 1/29/2020
 Sample: T9
 Depth: 5'



Silty Clay
 Dry Density: 119.5 pcf
 Initial Moisture Content: 11.1 %
 Saturated Moisture Content: 14.8 %
 Saturated at 1 kip/sq.ft.

NorCal Engineering SOILS AND GEOTECHNICAL CONSULTANTS CDREP, LLC	CONSOLIDATION TEST ASTM D2435 Plate E
	PROJECT NUMBER: 21631-20 DATE: 1/30/2020

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Appendix C

NorCal Engineering

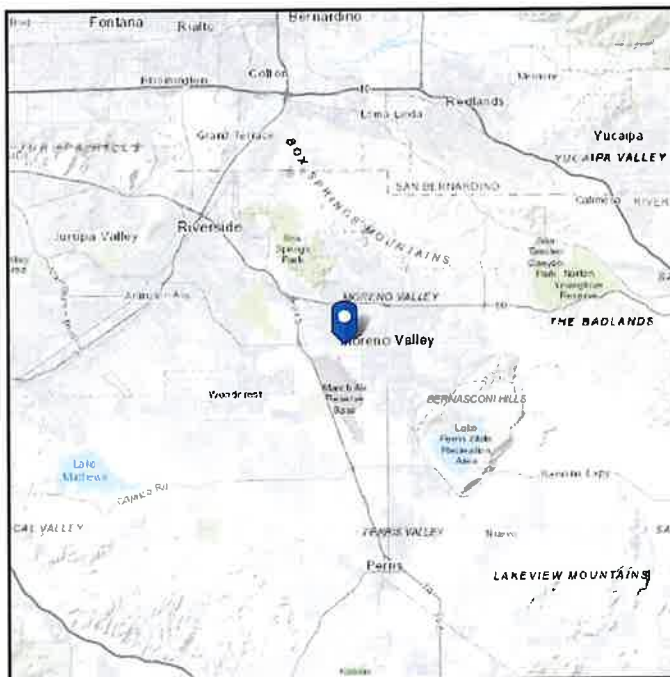
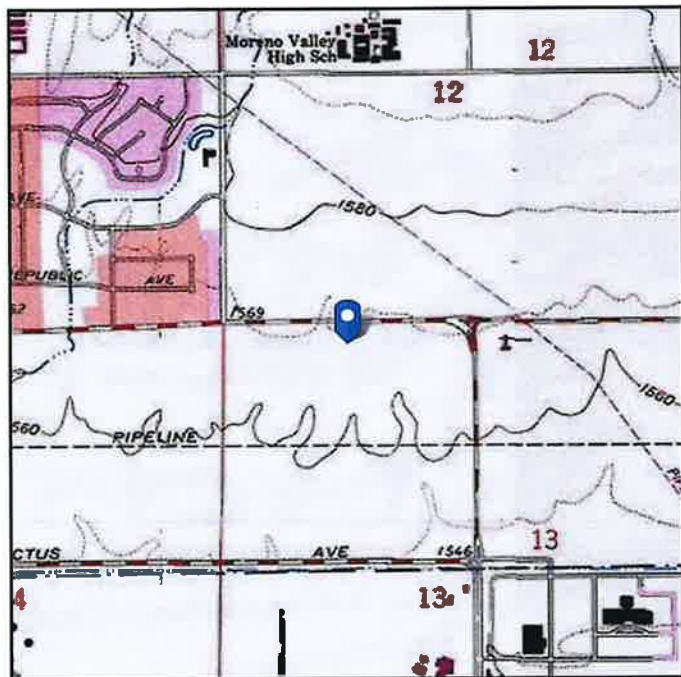


ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-16
Risk Category: III
Soil Class: D - Stiff Soil

Elevation: 1570.6 ft (NAVD 88)
Latitude: 33.916457
Longitude: -117.256778



Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)



Seismic

Site Soil Class: D - Stiff Soil

Results:

S_s :	1.5	S_{D1} :	N/A
S_1 :	0.6	T_L :	8
F_a :	1	PGA :	0.612
F_v :	N/A	PGA _M :	0.674
S_{MS} :	1.5	F_{PGA} :	1.1
S_{M1} :	N/A	I_e :	1.25
S_{DS} :	1	C_v :	1.4

Ground motion hazard analysis may be required. See ASCE/SEI 7-16 Section 11.4.8.

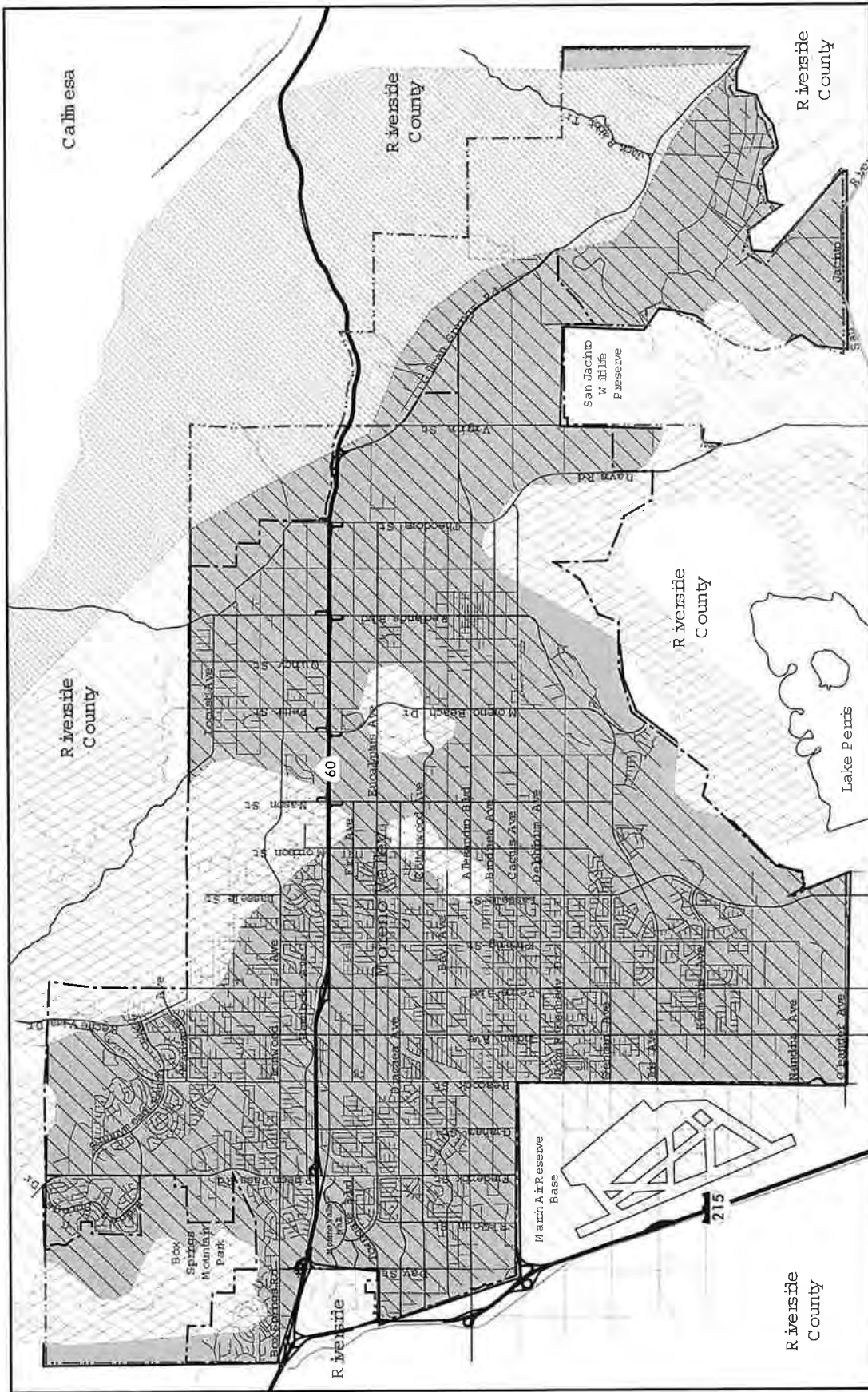
Data Accessed: Tue Jan 28 2020

Date Source: [USGS Seismic Design Maps](#)

The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE 7 standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE 7 Hazard Tool.



Source: Generalized Geologic Map of Part of the Northern Peninsular Ranges, 1965
 University of California, Riverside, California Museum Contributions No. 1, page 64.
 Note: This map is not a substitute for detailed Alquist-Philo Special Studies Maps
 or Riverside County Hazard Management Zone Maps. For Accurate string refer
 to California State and Riverside County Geologists.



Moreno Valley General Plan
 Final Program EIR





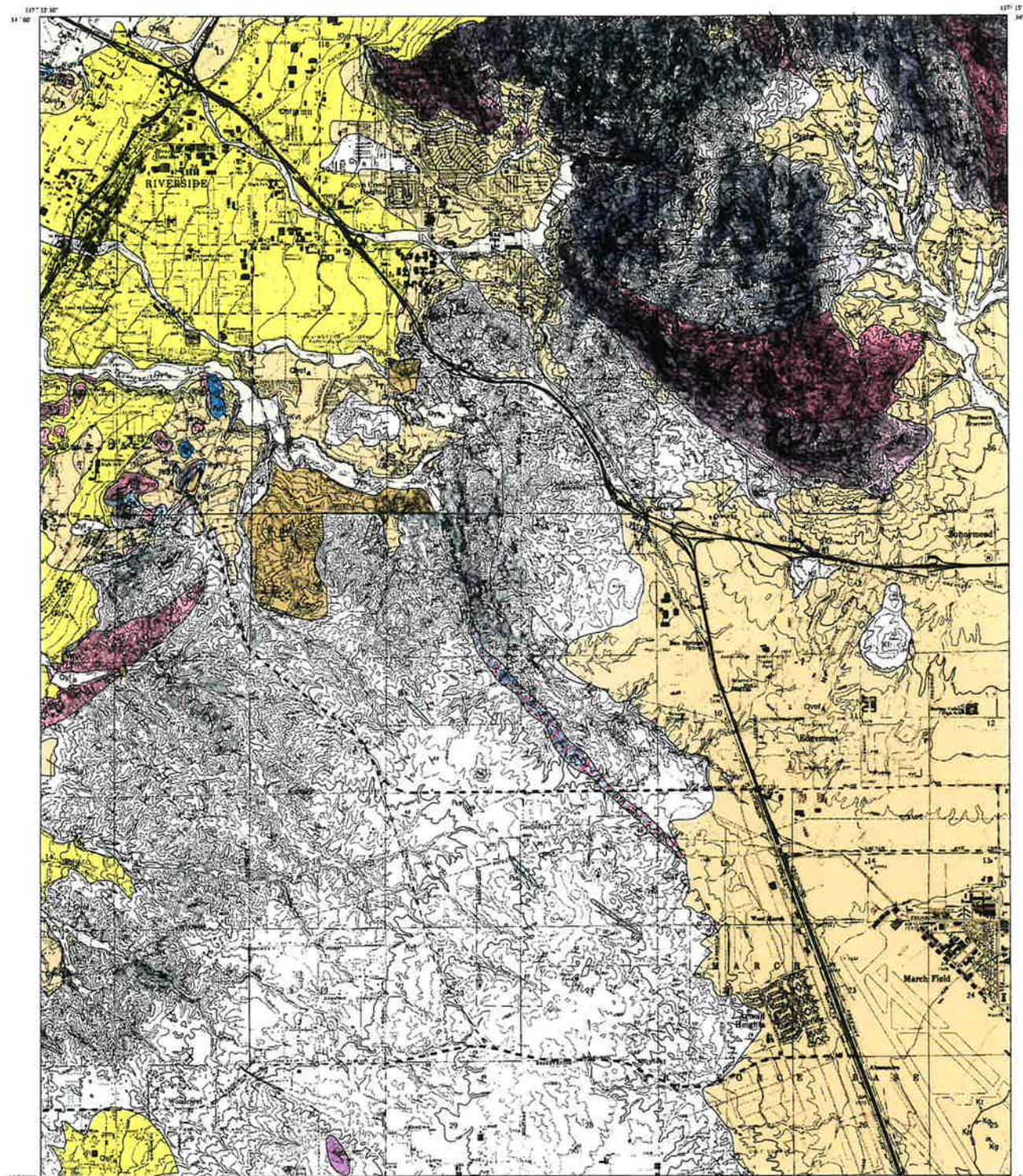
-  Quaternary Alluvium
-  Perris Bedrock
-  Semi Consolidated Sandstone, Siltstone and beds of gravel
-  Granite Rocks of the Southern California Batholith

Figure 5.6-1
Geology

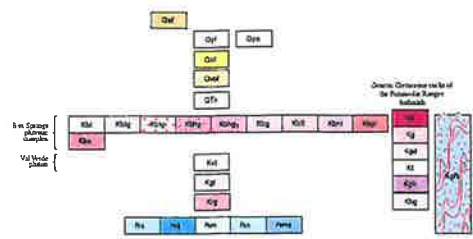
City of Moreno Valley
 July 2006



Prepared in cooperation with the CALIFORNIA DIVISION OF MINERS AND GEOLOGY and the UNITED STATES AIR FORCE



CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

VERY YOUNG SURFICIAL DEPOSITS—Recent recent deposits... YOUNG SURFICIAL DEPOSITS—Quaternary units... OLD SURFICIAL DEPOSITS—Tertiary units... QUATERNARY... TERTIARY... CRETACEOUS... PALEOCENE... Eocene... Oligocene... Miocene... Pliocene... Pleistocene... QUATERNARY... TERTIARY... CRETACEOUS... PALEOCENE... Eocene... Oligocene... Miocene... Pliocene... Pleistocene...

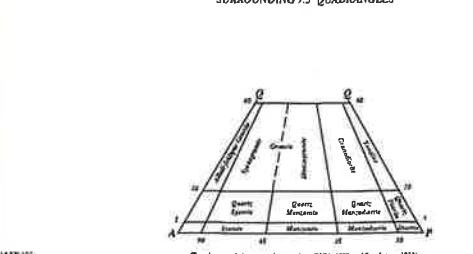
On some ECAD profiles... 1. unconsolidated... 2. highly... 3. clay... 4. sand... 5. gravel...

In the Description of Map Units... 1. strike-slip... 2. normal... 3. thrust... 4. vertical... 5. strike-slip... 6. vertical... 7. strike-slip... 8. vertical... 9. normal... 10. thrust...

Strike-slip and dip of... 1. fault... 2. fault... 3. fault... 4. fault... 5. fault... 6. fault... 7. fault... 8. fault... 9. fault... 10. fault...

Strike-slip and dip of... 1. fault... 2. fault... 3. fault... 4. fault... 5. fault... 6. fault... 7. fault... 8. fault... 9. fault... 10. fault...

Repeating and vertical... 1. fault... 2. fault... 3. fault... 4. fault... 5. fault... 6. fault... 7. fault... 8. fault... 9. fault... 10. fault...



This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards... The map was prepared on an electronic plotter directly from digital files... Digital files available on World Wide Web at http://geoplatform.usgs.gov

GEOLOGIC MAP OF THE RIVERSIDE EAST 7.5' QUADRANGLE, RIVERSIDE COUNTY, CALIFORNIA

Version 1.0

By Douglas M. Morton¹ and Brett Cox²

Perphyritic granodiorite—Coarse-grained, light gray, foliated... Biotite-hornblende gneiss—Light to medium gray, medium- to coarse-grained... Metagraywacke—Light gray, micaceous, medium- to coarse-grained... Metagraywacke and biotite-hornblende gneiss... Metagraywacke and biotite-hornblende gneiss... Metagraywacke and biotite-hornblende gneiss...

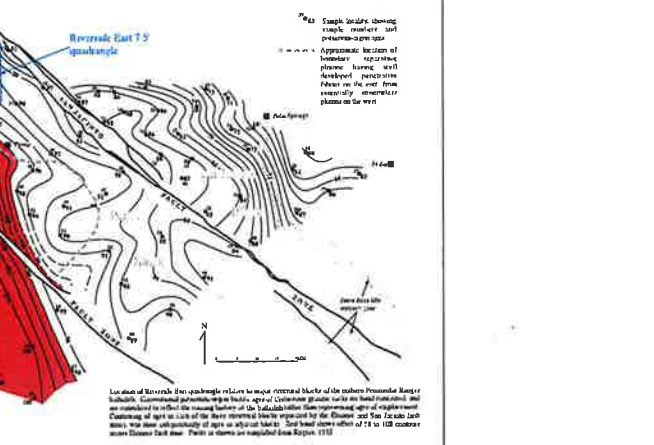
GEOLOGIC SUMMARY

The Riverside East quadrangle is located in the northern part of the Peninsular Range Province... The quadrangle is underlain predominantly by Cretaceous granitic rocks... The quadrangle is underlain predominantly by Cretaceous granitic rocks... The quadrangle is underlain predominantly by Cretaceous granitic rocks...

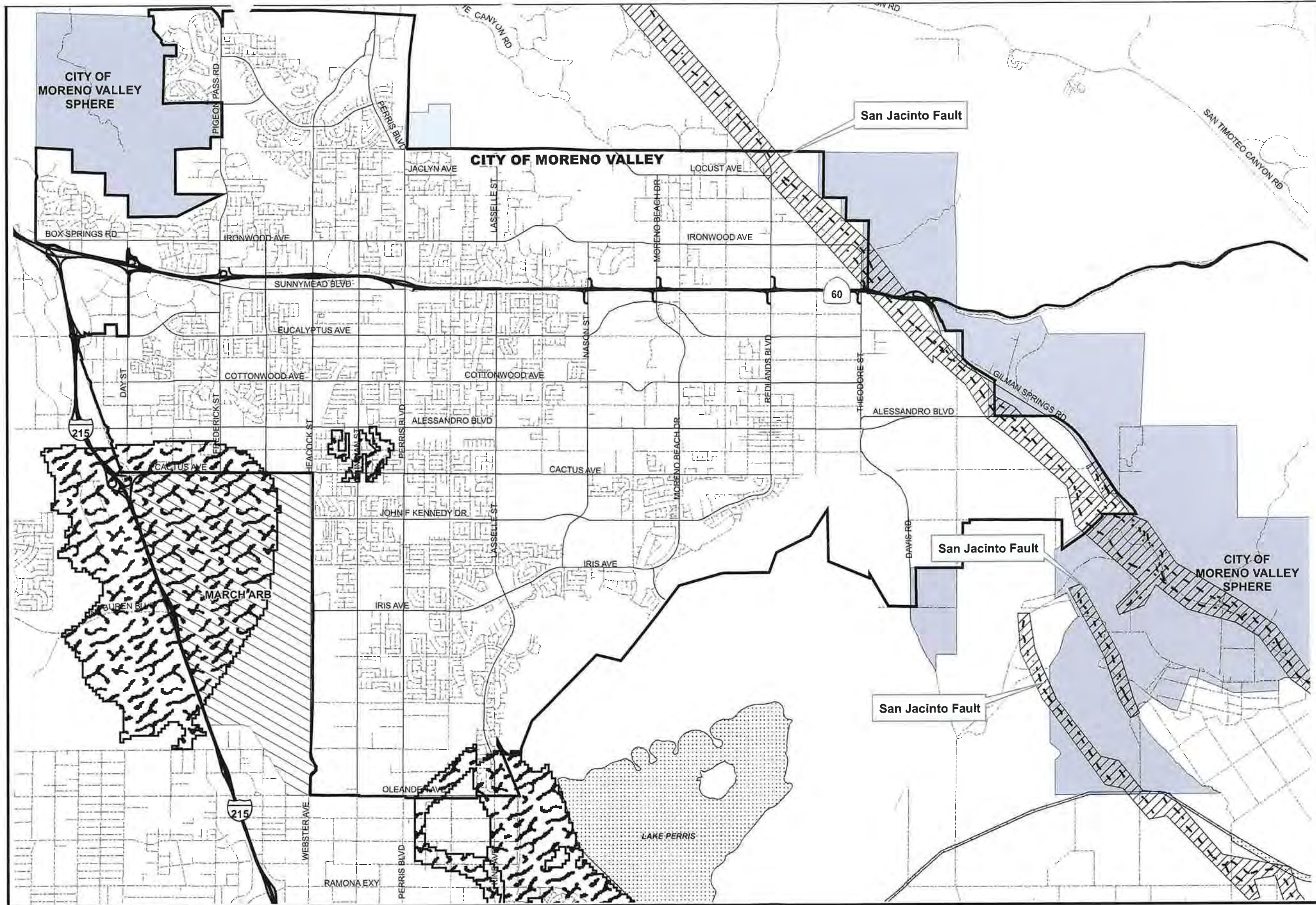
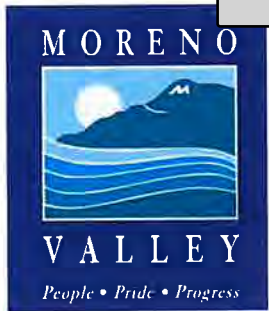
GENERIC CRETACEOUS GRANITIC ROCKS OF THE PENINSULAR RANGE BATHOLITH

Granitic gneiss (Cretaceous)—Medium- to coarse-grained, mostly foliated... Biotite-hornblende gneiss (Cretaceous)—Medium- to coarse-grained... Metagraywacke (Cretaceous)—Medium- to coarse-grained... Metagraywacke and biotite-hornblende gneiss (Cretaceous)—Medium- to coarse-grained... Metagraywacke and biotite-hornblende gneiss (Cretaceous)—Medium- to coarse-grained...

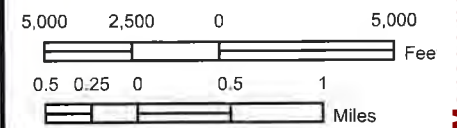
END ROCKS OF PENINSULAR RANGE BATHOLITH



Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)



- Streets
- Major Streets
- Highways
- - - Faults
- [Hatched Box] Fault Zones
- [Wavy Box] Potential Liquefaction
- [White Box] Moreno Valley
- [Light Blue Box] Moreno Valley Sphere
- [Diagonal Line Box] March ARB
- [Dotted Box] Waterbodies



Date: March 24, 2006
 State Plane NAD83 Zone 6
 File: G:\arcmap\planning\gen_plan_update\geologic.mxd

GEOGRAPHIC INFORMATION SYSTEM:

The information shown on this map was compiled from the Riverside County GIS and the City of Moreno Valley GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map.



**Figure 5.6-2
 Seismic Hazard:**

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Appendix D

NorCal Engineering



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 1/20/2020
Test No. 1
Depth: 5'
Tested By: J.S. Jr.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
7:10			105.3			46.4					
7:15	5	5	111.5	6.2		52.8	6.4				
7:15			100.3			41.2					
7:20	5	10	106.4	6.1		47.3	6.1				
7:20			102.6			43.5					
7:25	5	15	108.6	6.0		49.7	6.2				
7:25			103.2			44.2					
7:30	5	20	109.1	5.9		50.3	6.1				
7:30			104.4			45.1					
7:35	5	25	110.4	6.0		51.2	6.1				
7:35			104.1			44.3					
7:40	5	30	109.9	5.8		50.3	6.0				
7:40			103.8			43.9					
7:45	5	35	109.8	6.0		49.9	6.0		72.0	72.0	
7:45			104.3			45.5					
7:50	5	40	110.1	5.8		51.0	5.5		69.6	66.0	
7:50			103.6			44.7					
7:55	5	45	109.3	5.7		50.3	5.6		68.4	67.2	
7:55			103.3			44.1					
8:00	5	50	108.5	5.2		49.4	5.3		62.4	63.6	
8:00			103.1			44.2					
8:05	5	55	108.6	5.5		47.8	5.6		66.0	67.2	
8:05			102.9			43.2					
8:10	5	60	108.2	5.3		48.7	5.5		63.6	66.0	

Average = 67.0 / 67.0 cm/hr



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 1/20/2020
Test No. 2
Depth: 7.5'
Tested By: J.S. Jr.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
8:15			73.0			45.6					
8:30	15	15	74.4	1.4		46.6	1.0				
8:30			74.4			46.6					
8:45	15	30	75.2	0.8		46.6	0.0				
8:45			75.2			46.6					
9:00	15	45	75.7	0.5		46.7	0.1				
9:00			75.7			46.7					
9:15	15	60	76.1	0.4		46.7	0.0				
9:15			76.1			46.7					
9:30	15	75	76.2	0.1		46.7	0.0				
9:30			76.2			46.7					
9:45	15	90	76.3	0.1		46.8	0.1		0.4	0.4	
9:45			76.3			46.8					
10:00	15	105	76.3	0.0		46.8	0.0		0.0	0.0	
10:00			76.3			46.8					
10:15	15	120	76.3	0.0		46.8	0.0		0.0	0.0	
10:15			76.3			46.8					
10:30	15	135	76.3	0.0		46.8	0.0		0.0	0.0	
10:30			76.3			46.8					
10:45	15	150	76.4	0.1		46.8	0.0		0.4	0.0	
10:45			76.4			46.8					
11:00	15	165	76.5	0.1		46.9	0.1		0.4	0.4	
11:00			76.5			46.9					
11:15	15	180	76.5	0.0		46.9	0.0		0.0	0.0	

Average = 0.17 / 0.11 cm/hr



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 1/20/2020
Test No. 3
Depth: 10'
Tested By: D.L.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
9:06			100.0			42.5					
9:16	10	10	101.2	1.2		46.4	3.9				
9:16			99.9			37.9					
9:26	10	20	100.5	0.6		39.2	1.3				
9:26			100.5			39.2					
9:36	10	30	101.0	0.5		40.3	1.1				
9:36			101.0			40.3					
9:46	10	40	101.7	0.7		41.4	1.1				
9:46			101.7			41.4					
9:56	10	50	102.1	0.4		42.1	0.7				
9:56			102.1			42.1					
10:06	10	60	102.6	0.5		42.8	0.7				
10:06			102.6			42.8					
10:16	10	70	102.8	0.2		43.5	0.7		1.2	4.2	
10:16			102.8			43.5					
10:26	10	80	103.0	0.2		44.5	1.0		1.2	6.0	
10:26			103.0			44.5					
10:36	10	90	103.4	0.4		45.2	0.7		2.4	4.2	
10:36			103.4			45.2					
10:46	10	100	103.8	0.4		45.7	0.5		2.4	3.0	
10:46			103.8			45.7					
10:56	10	110	104.2	0.4		46.3	0.6		2.4	3.6	
10:56			104.2			46.3					
11:06	10	120	104.4	0.2		46.7	0.4		1.2	2.4	

Average = 1.8 / 3.9 cm/hr

SITE LOCATION: _____
 GEOTECHNICAL REPORT: _____
 GEOLOGY REPORT: _____

DEPTH TO WATER TABLE = 30'
 EARTHQUAKE MAGNITUDE = 7.0
 PEAK GROUND ACCELERATION = 0.67g

DEPTH BELOW FINAL GRADE (FEET)	MOIST DENSITY (PCF)	σ_0 TOTAL STRESS (PSF)	σ_0 EFFECTIVE STRESS (PSF)	$\alpha_v \sigma_0$ (-)	r_d (-)	τ_{hv} / σ_0 (-)	N VALUE (BLOWS/FT)	RELATIVE DENSITY (%)	C_u (-)	C_E (-)	C_B (-)	C_R (-)	C_S (-)	$(N_1)_{60}$ (BLOWS/FT)	FINES (%)	CRR M=7.5 (-)	MSF (-)	CRR M=7.0 (-)	L.R. F.S.
5	120	600	Same	1.00	0.99	0.44	>50	>90	>1.6	1.00	1.05	0.70	1.20	>70	21	>0.50	1.25	>0.63	>1.4
10	125	1275			0.96	0.42	36		1.2			0.75		41	47				>1.5
15	130	1875			0.92	0.40	52		1.0			0.85		56	33				>1.6
20		2525			0.87	0.38	30	85	0.9			0.90		31	14				>1.6
25		3175			0.80	0.35	>50	>90	0.82			0.95		49	46				>1.6
30		3825			0.74	0.32	41	85	0.77			1.00		40	45				>1.5
35		4475	4163	1.07	0.68	0.32	42	85	0.74					39	40				>1.5
40		5125	4501	1.14	0.64	0.32	56	>90	0.71					50	48				>1.5
45		5775	4839	1.19	0.61	0.32	46	85	0.68					39	47				>1.5
50		6425	5177	1.24	0.58	0.32	37	70	0.65					30	29				>1.5

① INDUCED CYCLIC STRESS RATIO = $\tau_{ave} / \sigma_0 = 0.65 \cdot \frac{\alpha_{max}}{g} \cdot \frac{\sigma_0}{\sigma_0} \cdot r_d$
 • $C_E = Corr. - Energy Ratio = Energy Ratio / 60\%$
 • $C_B = Corr. - Borehole Dia. = 1.15$ for 8" dia. borehole
 • $C_R = Corr. - Rod Length$
 • $C_S = Corr. - Sampling$

Actual Energy Ratio = $0.67 - 1.17$ (Safety Hammer)
 $= 0.50 - 1.00$ (Donut Hammer)
 Sampling Method = 1.0 Standard sampler
 $= 1.2$ Sampler w/o liners

NorCal Engineering
 SOILS AND GEOTECHNICAL CONSULTANTS

EVALUATION OF LIQUEFACTION POTENTIAL

NorCal Engineering
Soils and Geotechnical Consultants
10641 Humbolt Street Los Alamitos, CA 90720
(562) 799-9469 Fax (562) 799-9459

April 27, 2020

Project Number 21631-20

CDREP LLC
523 Main Street
El Segundo, California 90245

Attn: Mr. Mark Bachli

RE: Updated Soils Infiltration Study - Proposed Industrial Warehouse Development - Located at the Southeast and Southwest Corners of Alessandro Boulevard and Chagall Court, in the City of Moreno Valley, California

Dear Mr. Bachli:

Pursuant to your request, this firm has performed an Updated Soils Infiltration Study in accordance with our proposal dated April 10, 2020 for the above referenced project. The purpose of this study is to provide additional testing to evaluate the feasibility of an on-site water disposal system for the proposed industrial development. The scope of work included the following: 1) site reconnaissance; 2) subsurface geotechnical exploration; 3) soil infiltration testing; 4) engineering analysis of field and laboratory data; and 5) preparation of a report.

The 18.05-acre subject property is located at the southeast and southwest corners of Alessandro Boulevard and Chagall Court, in the City of Moreno Valley. The generally rectangular-shaped parcel is elongated in an east to west direction with topography of the relatively level descending slightly from a north to south direction on the order of a few feet. The site is undeveloped parcel covered with a low vegetation growth of natural grasses and weeds.

It is proposed to construct an industrial warehouse development consisting of a 102,669 and 295,470 square feet building as shown on the plan by Herdman Architecture + Design dated December 18, 2019. The proposed concrete tilt-up building will be supported by a conventional slab-on-grade foundation system with perimeter-spread footings and isolated interior footings. Other improvements will include asphalt and concrete pavement areas, hardscape and landscaping.

It is assumed that the proposed grading for the development will include cut and fill procedures on the order of a few feet to achieve finished grade elevations. Final building plans shall be reviewed by this firm prior to submittal for city approval to determine the need for any additional study and revised recommendations pertinent to the proposed development, if necessary.

Field Exploration and Testing

The field exploration consisted of eight (8) additional exploratory trenches by a backhoe to depths ranging between 2 and 7 feet below ground surface (bgs) to determine the subsurface soil conditions. The explorations were visually classified and logged by a field engineer with locations of the subsurface explorations shown on the attached Site Plan. The exploratory trenches revealed the existing earth materials to consist of fill and natural soil. Detailed descriptions of the subsurface conditions are listed on the trench logs in Appendix A. It should be noted that the transition from one soil type to another as shown on the trench logs is approximate and may in fact be a gradual transition. The soils encountered are described as follows:

Fill: A fill soil classifying as a brown, fine to medium grained, silty to clayey SAND was encountered across the site to depths ranging from 1 to 2 feet below ground surface. These soils were noted to be loose and moist.

Natural: A natural undisturbed soil classifying as a brown, fine to medium grained, clayey to silty SAND to sandy CLAY was encountered beneath the upper fill soils. The native soils as encountered were observed to be dense/stiff to very dense/very stiff and moist.

The overall engineering characteristics of the earth material were relatively uniform with each trench and no caving occurred. Groundwater was encountered at a depth of 33 and 39 feet ground surface as encountered from our deep borings in our “Geotechnical Engineering Investigation” report dated January 31, 2020.

Results of Field Infiltration Tests

Infiltration tests within the site were performed to provide preliminary infiltration rates for the purpose of planning and design of an on-site water disposal system. The infiltration tests consisted of the double ring infiltration test per ASTM Method D 3385. The field infiltration rate was computed using a reduction factor – R_f based on the field measurements with our calculations given in Appendix D. Based upon the results of our testing, the soils encountered in the planned on-site drainage disposal system area exhibit the following infiltration rates.

Test No.	Depth	Soil Classification	Field Infiltration Rate	Design Rate
T-1	5'	Silty Sand	5.12 in/hr	1.707
T-2	2'	Sandy Clay	0.05 in/hr	0.017
T-3	5'	Sandy Clay	0.26 in/hr	0.087
T-4	3'	Clayey Sand	0.83 in/hr	0.277
T-5	6'	Clayey Sand	0.87 in/hr	0.290
T-6	7'	Sandy Clay	0.08 in/hr	0.027
T-7	7'	Sandy Clay	0.08 in/hr	0.027
T-8	4'	Sandy Clay	0.35 in/hr	0.117

The correction factors CF_t , CF_v and CF_s are given below based on soils from 2 to 7 feet from our field tests.

- a) $CF_t = R_f = 1.0$ for our double ring infiltration test holes.
- b) $CF_v = 1.0$ based on uniform soils encountered in eight trenches.
- c) $CF_s = 3.0$ for long-term siltation, plugging and maintenance. The subsurface soils are likely to have some plugging and regular maintenance of storm water discharge devices is required.

Based on the results of our field testing, the subsurface soils encountered in the proposed on-site drainage disposal system shall utilize the design infiltration rates based on the County of Riverside safety factor. These infiltration rates were found to be low representing very stiff fine-grained clayey soils which may not be suitable for seepage at the site. Our referenced preliminary geotechnical report stated that deeper soils were clayey soils with increasing density with depth, indicating unfavorable conditions for infiltration. All systems must meet the latest county specifications and the California Regional Water Quality Control Board (CRWQCB) requirements.

It is recommended that foundations shall be setback a minimum distance of 10 feet from the drainage disposal system and the bottom of footing shall be a minimum of 10 feet from the expected zone of saturation. The boundary of the zone of saturation may be assumed to project downward from the top of the permeable portion of the disposal system at an inclination of 1 to 1 or flatter, as determined by the geotechnical engineer.

Closure

The recommendations and conclusions contained in this report are based upon the soil conditions uncovered in our test excavation. No warranty of the soil condition between our excavations is implied. NorCal Engineering should be notified for possible further recommendations if unexpected to unfavorable conditions are encountered during construction phase.

This firm should have the opportunity to review the final plans to verify that all our recommendations are incorporated. This report and all conclusions are subject to the review of the controlling authorities for the project. Our representative should be present during the grading operations and construction phase to certify that such recommendations are complied within the field.

This geotechnical investigation has been conducted in a manner consistent with the level of care and skill exercised by members of our profession currently practicing under similar conditions in the Southern California area. No other warranty, expressed or implied is made.

NorCal Engineering

We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

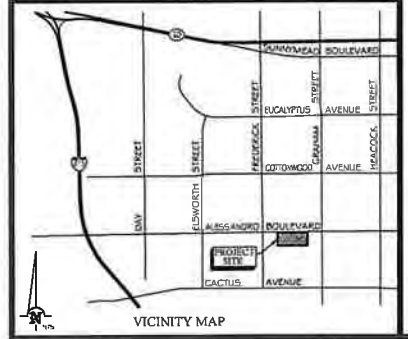
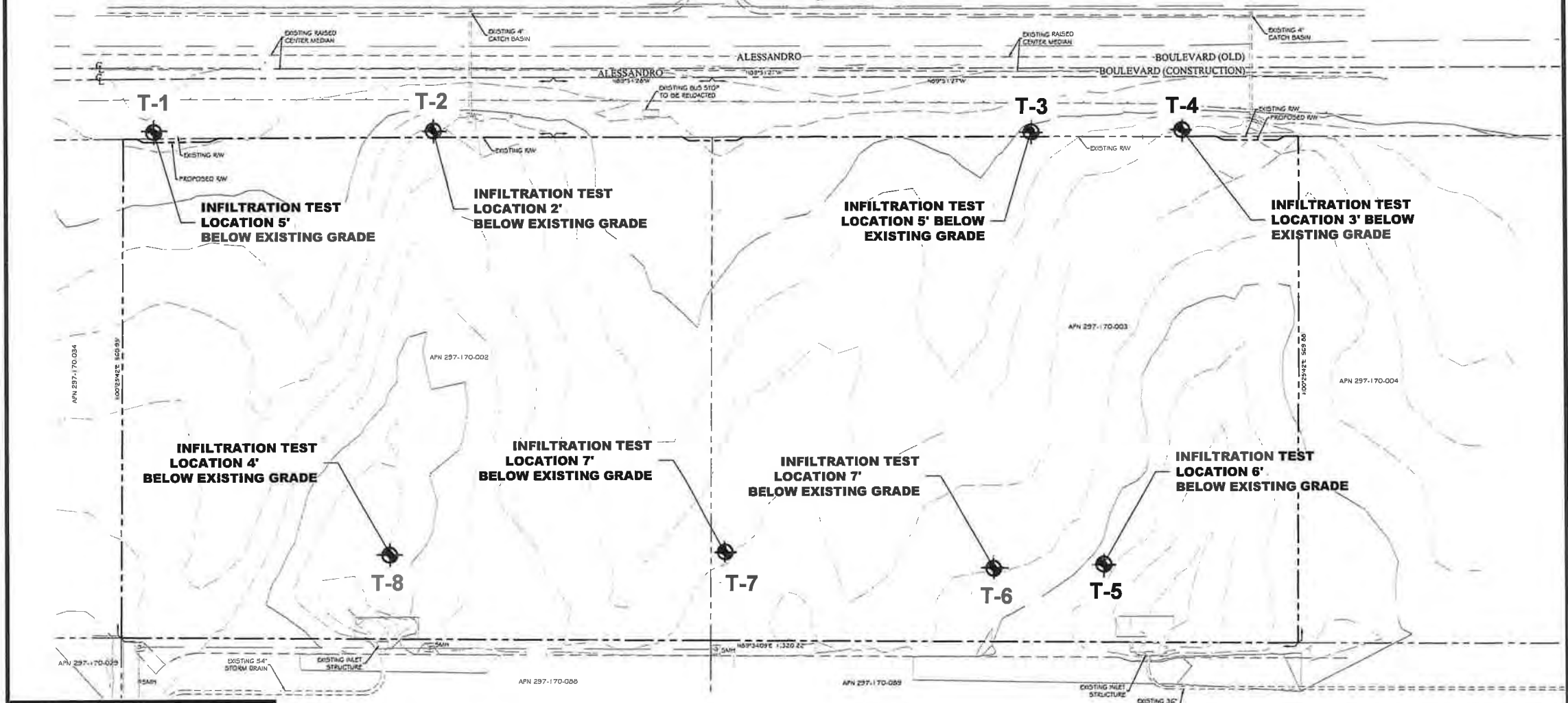
Keith D. Tucker
Project Engineer
R.G.E. 841



Scott D. Spensiero
Project Manager

INFILTRATION TEST LOCATION EXHIBIT

APN 297-170-002 & 003
CITY OF MORENO VALLEY

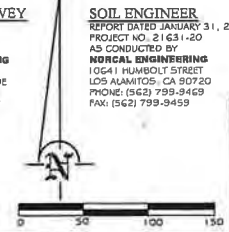


LEGEND

AC	ASPHALT CONCRETE
CF	CURB FACE
ET	ELECTRIC TRANSFORMER
FF	FINISHED FLOOR
FG	FINISHED GRADING
FL	FLOWLINE
FS	FINISHED SURFACE
GB	GRASS/GRASS
INV	INVERT ELEVATION
PB	PULL BOX
PCC	PORTLAND CEMENT CONCRETE
PL	PROPERTY LINE
PP	DI. POWER POLE
RW	RIGHT-OF-WAY
SMH	SEWER MANHOLE
STL	DI. STREET LIGHT
TC	TOP OF CURB
TG	TOP OF GRATE

SOURCE OF SURVEY
TOPOGRAPHIC SURVEY
DATED DECEMBER 2019
AS CONDUCTED BY
**PARTNER ENGINEERING
AND SCIENCE, INC.**
1761 EAST GARDY AVENUE
SANTA ANA, CA 92705
PHONE: (714) 477-0657

SOIL ENGINEER
REPORT DATED JANUARY 31, 2020
PROJECT NO. 21631-20
AS CONDUCTED BY
**NORCAL ENGINEERING
AND SCIENCE, INC.**
10641 HUMBOLDT STREET
LOS ALAMITOS, CA 90720
PHONE: (562) 799-8469
FAX: (562) 799-8458



PROPERTY OWNER
**MORENO VALLEY
CENTERPOINTE**
C/O CDRE HOLDINGS 14 LLC
ATTN: MARK BACHU
523 MAIN STREET
EL SEGUNDO, CA 90245
(310) 420-3302

PREPARED FOR/APPLICANT:
CDRE HOLDINGS 14 LLC
ATTN: MARK BACHU
523 MAIN STREET
EL SEGUNDO, CA 90245
(310) 420-3302

INFILTRATION TEST LOCATION EXHIBIT
APN 297-170-002 & 003
SOUTH SIDE OF ALESSANDRO BOULEVARD
CITY OF MORENO VALLEY

• land planning
• civil engineering
• landscape architecture
phone 909 748 7777
fax 909 748 7779
thatcher engineering & associates, inc.
1481 10th Street, Suite 102, Redlands, CA 92373

Project No:	162012	Date Prepared:	3/25/20	Drawn By:	RL	Reference Number:	1620121AM
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NorCal Engineering
SOILS AND GEOTECHNICAL CONSULTANTS

SITE PLAN

PROJECT	DATE
	APRIL 2020

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

List of Appendices (in order of appearance)

Appendix A

- Log of Trenches T-1 to T-8

Appendix B

- Field Test Data
- Infiltration Test Calculations

Appendix A

MAJOR DIVISION			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS				
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES				
				GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES				
		MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES			
					GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES			
	MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES			
					SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES			
		MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINE (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND-SILT MIXTURES			
					SC	CLAYEY SANDS, SAND-CLAY MIXTURES			
				FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
								CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY							
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS				
				CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS				
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS				
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS				

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

UNIFIED SOIL CLASSIFICATION SYSTEM

KEY:

- Indicates 2.5-inch Inside Diameter. Ring Sample.
- ⊗ Indicates 2-inch OD Split Spoon Sample (SPT).
- Indicates Shelby Tube Sample.
- Indicates No Recovery.
- Indicates SPT with 140# Hammer 30 in. Drop.
- ⊗ Indicates Bulk Sample.
- ⊗ Indicates Small Bag Sample.
- Indicates Non-Standard
- ⊗ Indicates Core Run.

COMPONENT DEFINITIONS

COMPONENT	SIZE RANGE
Boulders	Larger than 12 in
Cobbles	3 in to 12 in
Gravel	3 in to No 4 (4.5mm)
Coarse gravel	3 in to 3/4 in
Fine gravel	3/4 in to No 4 (4.5mm)
Sand	No. 4 (4.5mm) to No. 200 (0.074mm)
Coarse sand	No. 4 (4.5 mm) to No. 10 (2.0 mm)
Medium sand	No. 10 (2.0 mm) to No. 40 (0.42 mm)
Fine sand	No. 40 (0.42 mm) to No. 200 (0.074 mm)
Silt and Clay	Smaller than No. 200 (0.074 mm)

COMPONENT PROPORTIONS

DESCRIPTIVE TERMS	RANGE OF PROPORTION
Trace	1 - 5%
Few	5 - 10%
Little	10 - 20%
Some	20 - 35%
And	35 - 50%

MOISTURE CONTENT

DRY	Absence of moisture, dusty, dry to the touch.
DAMP	Some perceptible moisture; below optimum
MOIST	No visible water; near optimum moisture content
WET	Visible free water, usually soil is below water table.


RELATIVE DENSITY OR CONSISTENCY VERSUS SPT N -VALUE

COHESIONLESS SOILS		COHESIVE SOILS		
Density	N (blows/ft)	Consistency	N (blows/ft)	Approximate Undrained Shear Strength (psf)
Very Loose	0 to 4	Very Soft	0 to 2	< 250
Loose	4 to 10	Soft	2 to 4	250 - 500
Medium Dense	10 to 30	Medium Stiff	4 to 8	500 - 1000
Dense	30 to 50	Stiff	8 to 15	1000 - 2000
Very Dense	over 50	Very Stiff	15 to 30	2000 - 4000
		Hard	over 30	> 4000

CDREP, LLC
21631-20

Log of Trench T-1

Boring Location: Alessandro & Chagall, Moreno Valley	
Date of Drilling: 4/21/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Silty SAND Brown, loose, moist					
5		NATURAL Silty SAND Brown, dense, moist Trench completed at depth of 5'					
10							
15							
20							
25							
30							
35							

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Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Supertog\PROJECT\2163120-1.log Date: 4/24/2020

CDREP, LLC
21631-20

Log of Trench T-2

Boring Location: Alessandro & Chagall, Moreno Valley	
Date of Drilling: 4/21/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	DY Density	Fines
0		FILL Silty SAND Brown, loose, moist					
5		NATURAL Sandy CLAY Brown, stiff, moist Trench completed at depth of 2'					
10							
15							
20							
25							
30							
35							

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Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

CDREP, LLC
21631-20

Log of Trench T-3

Boring Location: Alessandro & Chagall, Moreno Valley	
Date of Drilling: 4/21/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lith-ology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Silty SAND Brown, loose, moist					
		NATURAL Silty SAND Brown, dense to very dense, moist					
		Clayey SAND to Sandy CLAY Brown, dense to stiff, damp					
5		Trench completed at depth of 5'					
10							
15							
20							
25							
30							
35							

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3

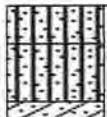
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Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

CDREP, LLC
21631-20

Log of Trench T-4

Boring Location: Alessandro & Chagall, Moreno Valley	
Date of Drilling: 4/21/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0	 GWT not encountered	FILL					
		Silty SAND					
		Brown, loose, moist					
		NATURAL					
		Silty SAND					
5		Brown, dense to very dense, moist					
		Clayey SAND					
	Brown, very dense, damp						
	Trench completed at depth of 3'						
10							
15							
20							
25							
30							
35							

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4

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog\PROJECT\163120-1.log Date: 4/24/2020

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

CDREP, LLC
21631-20

Log of Trench T-5

Boring Location: Alessandro & Chagall, Moreno Valley	Valley
Date of Drilling: 4/21/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Silty SAND Brown, loose, moist					
		NATURAL Silty SAND Brown, dense, moist					
5		Clayey SAND to Sandy CLAY Brown, dense to very stiff, moist					
		Trench completed at depth of 6'					
10							
15							
20							
25							
30							
35							

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5

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog\PROJECT\2163120-1.log Date: 4/24/2020

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

CDREP, LLC
21631-20

Log of Trench T-6

Boring Location: Alessandro & Chagall, Moreno Valley	
Date of Drilling: 4/21/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL Silty SAND Brown, loose, moist NATURAL Silty SAND Brown, dense, moist Clayey SAND to Sandy CLAY Brown, dense to very stiff, moist to damp Trench completed at depth of 7'					
5							
10							
15							
20							
25							
30							
35							

NorCal Engineering

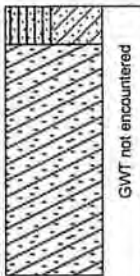
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SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog\PROJECT\163120-1.log Date: 4/24/2020

CDREP, LLC
21631-20

Log of Trench T-7

Boring Location: Alessandro & Chagall, Moreno Valley	
Date of Drilling: 4/21/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL					
		Silty to Clayey SAND Brown, loose, moist					
5		NATURAL Clayey SAND Brown, dense to very dense, moist to damp					
Boring completed at depth of 7'							
10							
15							
20							
25							
30							
35							

NorCal Engineering

7

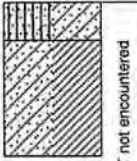
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SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog\PROJECT\163120-1.log Date: 4/24/2020

CDREP, LLC
21631-20

Log of Trench T-8

Boring Location: Alessandro & Chagall, Moreno Valley	Valley
Date of Drilling: 4/21/2020	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lithology	Material Description	Samples		Laboratory		
			Type	Blow Counts	Moisture	Dry Density	Fines
0		FILL					
		Silty to Clayey SAND Brown, loose, moist					
		NATURAL					
		Clayey SAND to Sandy CLAY Brown, dense to very stiff, moist					
5		Trench completed at depth of 4'					
10							
15							
20							
25							
30							
35							

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Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\2163120-1.log Date: 4/24/2020

Appendix B

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 4/21/2020
Test No. 1
Depth: 5'
Tested By: J.S. Jr.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
7:05			100.5			41.6					
7:20	15	15	106.0	5.5		46.6	5.0				
7:20			97.0			37.3					
7:35	15	30	102.2	5.2		42.2	4.9				
7:35			97.0			37.0					
7:50	15	45	102.0	5.0		41.8	4.8				
7:50			102.0			41.8					
8:05	15	60	106.5	4.5		45.7	3.9				
8:05			99.1			38.5					
8:20	15	75	102.8	3.7		42.7	4.2				
8:20			102.8			42.7					
8:35	15	90	106.1	3.3		46.3	3.6				
8:35			106.1			46.3					
8:50	15	105	109.5	3.4		49.5	3.2		13.6	12.8	
8:50			98.1			38.2					
9:05	15	120	101.4	3.3		41.6	3.4		13.2	13.6	
9:05			101.4			41.6					
9:20	15	135	104.5	3.1		45.3	3.7		12.4	14.8	
9:20			104.5			45.3					
9:35	15	150	107.6	3.1		48.6	3.3		12.4	13.2	
9:35			98.6			40.2					
9:50	15	165	102.0	3.4		43.5	3.3		13.6	13.2	
9:50			102.0			43.5					
10:05	15	180	105.2	3.2		46.6	3.1		12.8	12.4	

Average = 13.0 / 13.3 cm/hr



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 4/21/2020
Test No. 2
Depth: 2'
Tested By: J.S. Jr.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
6:38			72.2			38.8					
6:53	15	15	72.4	0.2		39.0	0.2				
6:53			72.4			39.0					
7:08	15	30	72.5	0.1		39.1	0.1				
7:08			72.5			39.1					
7:23	15	45	72.5	0.0		39.1	0.0				
7:23			72.5			39.1					
7:38	15	60	72.6	0.1		39.2	0.1				
7:38			72.6			39.2					
7:53	15	75	72.6	0.0		39.3	0.1				
7:53			72.6			39.3					
8:08	15	90	72.6	0.0		39.3	0.0				
8:08			72.6			39.3					
8:23	15	105	72.7	0.1		39.4	0.1		0.4	0.4	
8:23			72.7			39.4					
8:38	15	120	72.7	0.0		39.4	0.0		0.0	0.0	
8:38			72.7			39.4					
8:53	15	135	72.7	0.0		39.4	0.0		0.0	0.0	
8:53			72.7			39.4					
9:08	15	150	72.7	0.0		39.4	0.0		0.0	0.0	
9:08			72.7			39.4					
9:23	15	165	72.8	0.1		39.5	0.1		0.4	0.4	
9:23			72.8			39.5					
9:38	15	180	72.8	0.0		39.5	0.0		0.0	0.0	

Average = 0.13 / 0.13 cm/hr



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 4/21/2020
Test No. 3
Depth: 5'
Tested By: J.S. Jr.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
9:14			76.2			42.7					
9:29	15	15	76.5	0.3		43.0	0.3				
9:29			76.5			43.0					
9:44	15	30	76.7	0.2		43.2	0.2				
9:44			76.7			43.2					
9:59	15	45	77.0	0.3		43.5	0.3				
9:59			77.0			43.5					
10:14	15	60	77.1	0.1		43.7	0.2				
10:14			77.1			43.7					
10:29	15	75	77.3	0.2		43.9	0.2				
10:29			77.3			43.9					
10:44	15	90	77.5	0.2		44.1	0.2				
10:44			77.5			44.1					
10:59	15	105	77.6	0.1		44.2	0.1		0.4	0.4	
10:59			77.6			44.2					
11:14	15	120	77.8	0.2		44.3	0.1		0.8	0.4	
11:14			77.8			44.3					
11:29	15	135	78.0	0.2		44.5	0.2		0.8	0.8	
11:29			78.0			44.5					
11:44	15	150	78.1	0.1		44.6	0.1		0.4	0.4	
11:44			78.1			44.6					
11:59	15	165	78.3	0.2		44.8	0.2		0.8	0.8	
11:59			78.3			44.8					
12:14	15	180	80.3	0.2		45.0	0.2		0.8	0.8	

Average = 0.67 / 0.60 cm/hr



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 4/21/2020
Test No. 4
Depth: 3'
Tested By: J.S. Jr.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
10:15			98.0			38.7					
10:30	15	15	98.8	0.8		39.3	0.6				
10:30			98.8			39.3					
10:45	15	30	99.4	0.6		40.1	0.8				
10:45			99.4			40.1					
11:00	15	45	100.1	0.7		10.7	0.6				
11:00			100.1			10.7					
11:15	15	60	100.8	0.7		41.2	0.5				
11:15			100.8			41.2					
11:30	15	75	101.5	0.7		41.9	0.7				
11:30			101.5			41.9					
11:45	15	90	102.2	0.7		42.6	0.7				
11:45			102.2			42.6					
12:00	15	105	102.7	0.5		43.2	0.6		2.0	2.4	
12:00			102.7			43.2					
12:15	15	120	103.2	0.5		43.8	0.6		2.0	2.4	
12:15			103.2			43.8					
12:30	15	135	103.8	0.6		44.2	0.4		2.4	1.6	
12:30			103.8			44.2					
12:45	15	150	104.5	0.5		44.7	0.5		2.0	2.0	
12:45			104.5			44.7					
1:00	15	165	105.2	0.7		45.1	0.4		2.8	1.6	
1:00			105.2			45.1					
1:15	15	180	105.6	0.4		45.5	0.4		1.6	1.6	

Average = 2.1 / 1.9 cm/hr



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 4/21/2020
Test No. 5
Depth: 6'
Tested By: J.S. Jr.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
6:11			68.0			37.0					
6:26	15	15	69.1	1.1		37.6	0.6				
6:26			69.1			37.6					
6:41	15	30	69.8	0.7		38.0	0.4				
6:41			69.8			38.0					
6:56	15	45	70.4	0.6		38.3	0.3				
6:56			70.4			38.3					
7:11	15	60	71.0	0.6		38.6	0.3				
7:11			71.0			38.6					
7:26	15	75	71.5	0.5		39.0	0.4				
7:26			71.5			39.0					
7:41	15	90	72.1	0.6		39.4	0.4				
7:41			72.1			39.4					
7:56	15	105	72.6	0.5		39.7	0.3		2.0	1.2	
7:56			72.6			39.7					
8:11	15	120	73.2	0.6		40.0	0.3		2.4	1.2	
8:11			73.2			40.0					
8:26	15	135	73.7	0.5		40.3	0.3		2.0	1.2	
8:26			73.7			40.3					
8:41	15	150	74.3	0.6		40.6	0.3		2.4	1.2	
8:41			74.3			40.6					
8:56	15	165	74.9	0.6		40.9	0.3		2.4	1.2	
8:56			74.9			40.9					
9:11	15	180	75.4	0.5		41.1	0.2		2.0	0.8	

Average = 2.2 / 1.1 cm/hr



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 4/21/2020
Test No. 6
Depth: 7'
Tested By: J.S. Jr.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
6:15			101.2			42.0					
6:30	15	15	101.2	0.0		42.1	0.1				
6:30			101.2			42.1					
6:45	15	30	101.2	0.0		42.1	0.0				
6:45			101.2			42.1					
7:00	15	45	101.3	0.0		42.1	0.1				
7:00			101.3			42.1					
7:15	15	60	101.4	0.1		42.3	0.2				
7:15			101.4			42.3					
7:30	15	75	101.4	0.0		42.3	0.0				
7:30			101.4			42.3					
7:45	15	90	101.6	0.2		42.3	0.0				
7:45			101.6			42.3					
8:00	15	105	101.7	0.1		42.4	0.1		0.4	0.4	
8:00			101.7			42.4					
8:15	15	120	101.7	0.0		42.4	0.0		0.0	0.0	
8:15			101.7			42.4					
8:30	15	135	101.7	0.0		42.4	0.0		0.0	0.0	
8:30			101.7			42.4					
8:45	15	150	101.8	0.1		42.6	0.2		0.4	0.8	
8:45			101.8			42.6					
9:00	15	165	101.8	0.0		42.6	0.0		0.0	0.0	
9:00			108.8			42.6					
9:15	15	180	108.9	0.1		42.7	0.1		0.4	0.4	

Average = 0.2 / 0.3 cm/hr



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 4/21/2020
Test No. 7
Depth: 7'
Tested By: J.S. Jr.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
9:50			79.5			48.8					
10:05	15	15	80.0	0.5		49.0	0.2				
10:05			80.0			49.0					
10:20	15	30	80.2	0.2		49.4	0.4				
10:20			80.2			49.4					
10:35	15	45	80.4	0.2		49.5	0.1				
10:35			80.4			49.5					
10:50	15	60	80.4	0.0		49.6	0.1				
10:50			80.4			49.6					
11:05	15	75	80.4	0.0		49.6	0.0				
11:05			80.4			49.6					
11:20	15	90	80.5	0.1		49.7	0.1		0.4	0.4	
11:20			80.5			49.7					
11:35	15	105	80.7	0.2		49.9	0.2		0.8	0.8	
11:35			80.7			49.9					
11:50	15	120	80.7	0.0		49.9	0.0		0.0	0.0	
11:50			80.7			49.9					
12:05	15	135	80.7	0.0		49.9	0.0		0.0	0.0	
12:05			80.7			49.9					
12:20	15	150	80.7	0.0		49.9	0.0		0.0	0.0	
12:20			80.7			49.9					
12:35	15	165	80.8	0.1		50.0	0.1		0.4	0.4	
12:35			80.8			50.0					
12:50	15	180	80.8	0.0		50.0	0.0		0.0	0.0	

Average = 0.2 / 0.2 cm/hr



SOILS AND GEOTECHNICAL CONSULTANTS

Project: CDREP, LLC
Project No.: 21631-20
Date: 4/21/2020
Test No. 8
Depth: 4'
Tested By: D.L.

TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
9:23			100.8			41.5					
9:38	15	15	101.0	0.2		41.8	0.3				
9:38			101.0			41.8					
9:53	15	30	101.1	0.1		41.8	0.0				
9:53			101.1			41.8					
10:08	15	45	101.3	0.2		41.9	0.1				
10:08			101.3			41.9					
10:23	15	60	101.5	0.2		42.1	0.2				
10:23			101.5			42.1					
10:38	15	75	101.8	0.3		42.4	0.3				
10:38			101.8			42.4					
10:53	15	90	102.0	0.2		42.6	0.2		0.8	0.8	
10:53			102.0			42.6					
11:08	15	105	102.3	0.3		42.9	0.3		1.2	1.2	
11:08			102.3			42.9					
11:23	15	120	102.5	0.2		43.1	0.2		0.8	0.8	
11:23			102.5			43.1					
11:38	15	135	102.8	0.2		43.4	0.3		0.8	1.2	
11:38			102.8			43.4					
11:53	15	150	103.0	0.2		43.7	0.3		0.8	1.2	
11:53			103.0			43.7					
12:08	15	165	103.3	0.3		43.9	0.2		1.2	0.8	
12:08			103.3			43.9					
12:23	15	180	103.5	0.2		44.1	0.2		0.8	0.8	

Average = 0.9 / 1.0 cm/hr

Appendix 4: Historical Site Conditions

Not applicable

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Appendix 5: LID Infeasibility

Not applicable

Appendix 6: BMP Design Details

BMP Sizing, Design Details and other Supporting Documentation

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Santa Ana Watershed - BMP Design Volume, V_{BMP}
(Rev. 10-2011)

Legend: Required Entries
 Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name Thatcher Engineering Date 10/5/2020
 Designed by Kristin Tissot Case No
 Company Project Number/Name Industrial Warehouse Facility, Alessandro Blvd. Moreno Valley

BMP Identification

BMP NAME / ID Area 1
Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, D_{85} = 0.67 inches
 from the Isohyetal Map in Handbook Appendix E

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
1a	502471	Roofs	1	0.89	448204.1			
1b	40593	Ornamental Landscaping	0.1	0.11	4483.8			
1c	15472	Natural (C Soil)	0.3	0.23	3483.8			
558536		Total			456171.7				0.67	25469.6	25470

Notes:

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Santa Ana Watershed - BMP Design Volume, V_{BMP}
 (Rev. 10-2011)

Legend: Required Entries
 Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name Thatcher Engineering Date 10/5/2020
 Designed by Kristin Tissot Case No
 Company Project Number/Name Industrial Warehouse Facility, Alessandro Blvd. Moreno Valley

BMP Identification

BMP NAME / ID Area 2: Biotreatment Device 2
Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, $D_{85} =$ 0.67 inches
 from the Isohyetal Map in Handbook Appendix E

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
2a	221,281	Roofs	1	0.89	197382.7			
2b	24,599	Ornamental Landscaping	0.1	0.11	2717.2			
2c	100149	Natural (C Soil)	0.3	0.23	22550.1			
346029		Total			222650	0.67	12431.3	12432

Notes:

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries
 Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name **Thatcher Engineering** Date **7/14/2020**
 Designed by **Kristin Tissot** Case No
 Company Project Number/Name **Industrial Warehouse Facility, Alessandro Blvd. Moreno Valley**

BMP Identification

BMP NAME / ID **Area 3 Bioretention Swale 3**
Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, $D_{85} =$ **0.67** inches
 from the Isohyetal Map in Handbook Appendix E

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
3a	21,819	Concrete or Asphalt	1	0.89	19462.5			
3b	5861	Ornamental Landscaping	0.1	0.11	647.4			
27680		Total			20109.9	0.67	1122.8	1123

Notes:

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Santa Ana Watershed - BMP Design Volume, V_{BMP}
 (Rev. 10-2011)

Legend: Required Entries
 Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name **Thatcher Engineering** Date **7/14/2020**
 Designed by **Kristin Tissot** Case No
 Company Project Number/Name **Industrial Warehouse Facility, Alessandro, Moreno Valley**

BMP Identification

BMP NAME / ID **Area 4 Bioretention Swale 4**
Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, D_{85} = **0.67** inches
 from the Isohyetal Map in Handbook Appendix E

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_r	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
4a	21407	Concrete or Asphalt	1	0.89	19095			
4b	6587	Ornamental Landscaping	0.1	0.11	727.6			
27994		Total			19822.6	0.67	1106.8	1107

Notes:

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Santa Ana Watershed - BMP Design Volume, V_{BMP}
 (Rev. 10-2011) Legend: Required Entries
 Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name Thatcher Engineering Date 7/14/2020
 Designed by Kristin Tissot Case No
 Company Project Number/Name Industrial Warehouse Facility, Alessandro Blvd. Moreno Valley

BMP Identification

BMP NAME / ID Area 5 Bioretention Swale 5
Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, $D_{85} =$ 0.67 inches
 from the Isohyetal Map in Handbook Appendix E

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
5a	26789	Concrete or Asphalt	1	0.89	23895.8			
5b	8160	Ornamental Landscaping	0.1	0.11	901.3			
34949		<i>Total</i>			24797.1	0.67	1384.5	1385

Notes:

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Bioretention Facility - Design Procedure	BMP ID Bio Swale 3	Legend:	Required Entries
			Calculated Cells
Company Name:	Thatcher Engineering	Date:	10/5/2020
Designed by:	Kristin Tissot	County/City Case No.:	
Design Volume			
Enter the area tributary to this feature		$A_T =$	0.64 acres
Enter V_{BMP} determined from Section 2.1 of this Handbook		$V_{BMP} =$	1,123 ft ³
Type of Bioretention Facility Design			
<input checked="" type="radio"/> Side slopes required (parallel to parking spaces or adjacent to walkways) <input type="radio"/> No side slopes required (perpendicular to parking space or Planter Boxes)			
Bioretention Facility Surface Area			
Depth of Soil Filter Media Layer		$d_S =$	3.0 ft
Top Width of Bioretention Facility, excluding curb		$w_T =$	4.0 ft
ERROR, the minimum width for the Bioretention Facility design selected has not been met			
Total Effective Depth, d_E		$d_E =$	1.63 ft
$d_E = (0.3) \times d_S + (0.4) \times 1 - (0.7/w_T) + 0.5$			
Minimum Surface Area, A_m		$A_M =$	692 ft ²
$A_M (ft^2) = \frac{V_{BMP} (ft^3)}{d_E (ft)}$			
Proposed Surface Area		$A =$	783 ft ²
Bioretention Facility Properties			
Side Slopes in Bioretention Facility		$z =$	4 :1
Diameter of Underdrain			6 inches
Longitudinal Slope of Site (3% maximum)			0.3 %
6" Check Dam Spacing			0 feet
Describe Vegetation:			
Notes:			

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Bioretention Facility - Design Procedure		BMP ID	Legend:	Required Entries
		Bio Swale 4		Calculated Cells
Company Name:	Thatcher Engineering		Date:	10/5/2020
Designed by:	Kristin Tissot		County/City Case No.:	
Design Volume				
Enter the area tributary to this feature			$A_T =$	0.64 acres
Enter V_{BMP} determined from Section 2.1 of this Handbook			$V_{BMP} =$	1,107 ft ³
Type of Bioretention Facility Design				
<input checked="" type="radio"/> Side slopes required (parallel to parking spaces or adjacent to walkways) <input type="radio"/> No side slopes required (perpendicular to parking space or Planter Boxes)				
Bioretention Facility Surface Area				
Depth of Soil Filter Media Layer			$d_S =$	3.0 ft
Top Width of Bioretention Facility, excluding curb			$w_T =$	4.0 ft
ERROR, the minimum width for the Bioretention Facility design selected has not been met				
Total Effective Depth, d_E			$d_E =$	1.63 ft
$d_E = (0.3) \times d_S + (0.4) \times 1 - (0.7/w_T) + 0.5$				
Minimum Surface Area, A_M			$A_M =$	682 ft ²
$A_M \text{ (ft}^2\text{)} = \frac{V_{BMP} \text{ (ft}^3\text{)}}{d_E \text{ (ft)}}$				
Proposed Surface Area			$A =$	942 ft ²
Bioretention Facility Properties				
Side Slopes in Bioretention Facility			$z =$	4 :1
Diameter of Underdrain				6 inches
Longitudinal Slope of Site (3% maximum)				0.3 %
6" Check Dam Spacing				0 feet
Describe Vegetation:				
Notes:				

Bioretention Facility - Design Procedure	BMP ID Bio Swale 5	Legend:	Required Entries Calculated Cells
Company Name:	Thatcher Engineering	Date:	10/5/2020
Designed by:	Kristin Tissot	County/City Case No.:	
Design Volume			
Enter the area tributary to this feature	$A_T =$	0.8	acres
Enter V_{BMP} determined from Section 2.1 of this Handbook	$V_{BMP} =$	1,385	ft ³
Type of Bioretention Facility Design			
<input checked="" type="radio"/> Side slopes required (parallel to parking spaces or adjacent to walkways) <input type="radio"/> No side slopes required (perpendicular to parking space or Planter Boxes)			
Bioretention Facility Surface Area			
Depth of Soil Filter Media Layer	$d_S =$	3.0	ft
Top Width of Bioretention Facility, excluding curb	$w_T =$	4.0	ft
ERROR, the minimum width for the Bioretention Facility design selected has not been met			
Total Effective Depth, d_E $d_E = (0.3) \times d_S + (0.4) \times 1 - (0.7/w_T) + 0.5$	$d_E =$	1.63	ft
Minimum Surface Area, A_m $A_M (ft^2) = \frac{V_{BMP} (ft^3)}{d_E (ft)}$	$A_M =$	853	ft ²
Proposed Surface Area	$A =$	1,200	ft ²
Bioretention Facility Properties			
Side Slopes in Bioretention Facility	$z =$	4	:1
Diameter of Underdrain		6	inches
Longitudinal Slope of Site (3% maximum)		0.4	%
6" Check Dam Spacing		0	feet
Describe Vegetation:			
Notes:			

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

MWS Linear 2.0 Volume Based Sizing Calculations - All States

Model #	Physical Depth of Model from TC, FS, TC to INVERT OUT	Wetland Perimeter (ft)	**Wetland Chamber Max HGL Height (ft)	Wetland Surface Area (sq ft)	Treatment Capacity (cu ft) for Volume Based Design **VOLUME DESIGN**	
					24 Hour Drain Down	48 Hour Drain Down
MWS-L-4-4	4.13'	6.7	3.40	22.78	1139.96	2279.93
MWS-L-4-6	4.13'	9.4	3.40	31.96	1599.35	3198.71
MWS-L-4-8	4.13'	14.8	3.40	50.32	2518.13	5036.26
MWS-L-4-13	4.13'	18.4	3.40	62.56	3130.65	6261.30
MWS-L-4-15	4.13'	22.4	3.40	76.16	3811.22	7622.45
MWS-L-4-17	4.13'	26.4	3.40	89.76	4491.80	8983.60
MWS-L-4-19	4.13'	30.4	3.40	103.36	5172.37	10344.75
MWS-L-4-21	4.13'	34.4	3.40	116.96	5852.95	11705.90
DA 2 MWS-L-8-12	4.13'	44.4	3.40	150.96	7554.39	15108.78
MWS-L-8-16	4.13'	59.2	3.40	201.28	10072.52	20145.04
MWS-L-8-20	4.13'	74.0	3.40	251.60	12590.65	25181.30
DA 1 MWS-L-8-24	4.13'	88.8	3.40	301.92	15108.78	30217.56

Shallow or Deeper Units Available. Change in Height Will Affect Treatment Capacity

** Not the physical height of the unit but the max HGL in the system at peak treatment flow rate

Based on loading rate of 25 in/hr or 0.26 gpm/sq ft



Modular Wetland Systems, Inc.

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www.modularwetlands.com

info@modularwetlands.com

P: 760-433-7640

2972 San Luis Rey Rd, Oceanside CA 92058

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Appendix 7: Hydromodification

Supporting Detail Relating to Hydrologic Conditions of Concern

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

HCOG Narrative
Compass Danbe Centerpointe
Proposed Industrial Warehouse Facility
APN 297-170-002 & 003
South Side of Alessandro Boulevard
City of Moreno Valley
October 6, 2020
PEN20-0120 & PEN20-0121

Alessandro Boulevard is currently a partially improved roadway with a paved roadway, curb, gutter, and sidewalk along the north side. The street is divided by an existing raised center median. The south side of the street, adjacent to the project site, is currently unimproved. Flows from the south side of Alessandro Boulevard currently drain south onto the subject site, and these tributary flows are included in this study. The development proposes to improve Alessandro Boulevard across the project frontage with curb, gutter, and sidewalk. The improvements will nearly mirror the improvements on the north side of the street, which contains two separate catch basins. The improvements will include modified under sidewalk drains, which will allow street flows to enter a proposed bioretention swale sized for water quality treatment purposes. The proposed bioretention swales will discharge treated flows to two proposed catch basins connected to the city's storm drain system, which will be extended as part of this development. The two proposed catch basins will also act as an overflow for the bioretention swale.

The proposed development of the site includes the construction of two industrial warehouse buildings with related parking, paved access, and landscaping. Post-development flows from the property will be directed via sheet flow, ribbon gutter, curb and gutter, and an underground storm drain system to one of two proposed underground detention tanks onsite. A proposed sump and pump will pump flows from the detention tank to a proposed Modular Wetland biotreatment unit for water quality treatment. The Modular Wetland biotreatment units will discharge treated flows into the city's storm drain system that is being installed as part of this development. Each of the two parcels will have its own Modular Wetlands unit and detention tank, and both are located on the south side of the proposed buildings. A separate proposed sump and pump will discharge flows in excess of water quality volumes from the detention tank to the city's storm drain system. There will be no increase in flows or intensity from historic storm events.

RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON
 RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT
 (RCFC&WCD) 1978 HYDROLOGY MANUAL
 (c) Copyright 1982-2016 Advanced Engineering Software (aes)
 (Rational Tabling Version 23.0)
 Release Date: 07/01/2016 License ID 1533

Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

***** DESCRIPTION OF STUDY *****

- * APN 297-170-002 & 003 *
 - * PRE DEVELOPMENT HCOC *
 - * 2-YEAR STORM EVENT *
- *****

FILE NAME: 162012HC.DAT
 TIME/DATE OF STUDY: 11:29 07/13/2020

 USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:

USER SPECIFIED STORM EVENT(YEAR) = 2.00
 SPECIFIED MINIMUM PIPE SIZE(INCH) = 3.00
 SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
 10-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 1.650
 10-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 0.734
 100-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 2.720
 100-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 1.210
 SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.4520815
 SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.4520759

COMPUTED RAINFALL INTENSITY DATA:
 STORM EVENT = 2.00 1-HOUR INTENSITY(INCH/HOUR) = 0.401
 SLOPE OF INTENSITY DURATION CURVE = 0.4521

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD
 NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL
 AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL

NO.	HALF- WIDTH (FT)	CROWN TO CROSSFALL (FT)	STREET-CROSSFALL: IN- / OUT- / PARK- SIDE / SIDE / WAY	CURB HEIGHT (FT)	GUTTER-GEOMETRIES: WIDTH (FT)	LIP (FT)	HIKE (FT)	MANNING FACTOR (n)
1	30.0	20.0	0.018/0.018/0.020	0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
 1. Relative Flow-Depth = 0.00 FEET
 as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
 2. (Depth)*(Velocity) Constraint = 6.0 (FT*FT/S)
 *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN

OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*

FLOW PROCESS FROM NODE 1.00 TO NODE 2.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS: UNDEVELOPED WITH POOR COVER
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 60.00
UPSTREAM ELEVATION(FEET) = 82.50
DOWNSTREAM ELEVATION(FEET) = 78.00
ELEVATION DIFFERENCE(FEET) = 4.50
TC = 0.533*[(60.00**3)/(4.50)]**.2 = 4.599
COMPUTED TIME OF CONCENTRATION INCREASED TO 5 MIN.
2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.234
UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .6059
SOIL CLASSIFICATION IS "C"
SUBAREA RUNOFF(CFS) = 0.48
TOTAL AREA(ACRES) = 0.64 TOTAL RUNOFF(CFS) = 0.48

FLOW PROCESS FROM NODE 3.00 TO NODE 4.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS: UNDEVELOPED WITH POOR COVER
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 62.00
UPSTREAM ELEVATION(FEET) = 82.50
DOWNSTREAM ELEVATION(FEET) = 80.20
ELEVATION DIFFERENCE(FEET) = 2.30
TC = 0.533*[(62.00**3)/(2.30)]**.2 = 5.364
2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.195
UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .5996
SOIL CLASSIFICATION IS "C"
SUBAREA RUNOFF(CFS) = 0.46
TOTAL AREA(ACRES) = 0.64 TOTAL RUNOFF(CFS) = 0.46

FLOW PROCESS FROM NODE 5.00 TO NODE 6.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS: UNDEVELOPED WITH POOR COVER
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 62.00
UPSTREAM ELEVATION(FEET) = 82.50
DOWNSTREAM ELEVATION(FEET) = 78.50
ELEVATION DIFFERENCE(FEET) = 4.00
TC = 0.533*[(62.00**3)/(4.00)]**.2 = 4.802

COMPUTED TIME OF CONCENTRATION INCREASED TO 5 MIN.

2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.234
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .6059
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 0.60
 TOTAL AREA(ACRES) = 0.80 TOTAL RUNOFF(CFS) = 0.60

 FLOW PROCESS FROM NODE 7.00 TO NODE 8.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
 $TC = K * [(LENGTH**3) / (ELEVATION CHANGE)] **.2$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 598.00
 UPSTREAM ELEVATION(FEET) = 78.00
 DOWNSTREAM ELEVATION(FEET) = 72.00
 ELEVATION DIFFERENCE(FEET) = 6.00
 $TC = 0.709 * [(598.00**3) / (6.00)] **.2 = 22.976$
 2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 0.619
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .4575
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 3.63
 TOTAL AREA(ACRES) = 12.82 TOTAL RUNOFF(CFS) = 3.63

 FLOW PROCESS FROM NODE 9.00 TO NODE 10.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
 $TC = K * [(LENGTH**3) / (ELEVATION CHANGE)] **.2$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 607.00
 UPSTREAM ELEVATION(FEET) = 78.50
 DOWNSTREAM ELEVATION(FEET) = 71.80
 ELEVATION DIFFERENCE(FEET) = 6.70
 $TC = 0.709 * [(607.00**3) / (6.70)] **.2 = 22.677$
 2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 0.623
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .4588
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 2.27
 TOTAL AREA(ACRES) = 7.94 TOTAL RUNOFF(CFS) = 2.27

 END OF STUDY SUMMARY:
 TOTAL AREA(ACRES) = 7.9 TC(MIN.) = 22.68
 PEAK FLOW RATE(CFS) = 2.27

 END OF RATIONAL METHOD ANALYSIS

RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON
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PHONE: (909) 748-7777 FAX: (909) 748-7776

***** DESCRIPTION OF STUDY *****
* APN 297-170-002 & 003 *
* POST-DEVELOPMENT DRAINAGE STUDY *
* 2-YEAR STORM EVENT *

FILE NAME: 162012PO.DAT
TIME/DATE OF STUDY: 11:37 07/13/2020

USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:

USER SPECIFIED STORM EVENT(YEAR) = 2.00
SPECIFIED MINIMUM PIPE SIZE(INCH) = 3.00
SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
10-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 1.650
10-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 0.734
100-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 2.720
100-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 1.210
SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.4520815
SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.4520759

COMPUTED RAINFALL INTENSITY DATA:
STORM EVENT = 2.00 1-HOUR INTENSITY(INCH/HOUR) = 0.401
SLOPE OF INTENSITY DURATION CURVE = 0.4521

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD
NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL
AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL

NO.	HALF-WIDTH (FT)	CROWN TO CROSSFALL (FT)	STREET-CROSSFALL IN- / SIDE /	OUT- / PARK- / WAY	CURB HEIGHT (FT)	GUTTER WIDTH (FT)	GEOMETRIES LIP (FT)	MANNING HIKE (FT)	FACTOR (n)
1	30.0	20.0	0.018/0.018/0.020		0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

1. Relative Flow-Depth = 0.00 FEET
as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
2. (Depth)*(Velocity) Constraint = 6.0 (FT*FT/S)

*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN

OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*

FLOW PROCESS FROM NODE 1.00 TO NODE 2.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS COMMERCIAL
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 427.00
UPSTREAM ELEVATION(FEET) = 83.00
DOWNSTREAM ELEVATION(FEET) = 80.80
ELEVATION DIFFERENCE(FEET) = 2.20
TC = 0.303*[(427.00**3)/(2.20)]**.2 = 9.803
2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 0.910
COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8643
SOIL CLASSIFICATION IS "C"
SUBAREA RUNOFF(CFS) = 0.50
TOTAL AREA(ACRES) = 0.64 TOTAL RUNOFF(CFS) = 0.50

FLOW PROCESS FROM NODE 2.00 TO NODE 2.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
TIME OF CONCENTRATION(MIN.) = 9.80
RAINFALL INTENSITY(INCH/HR) = 0.91
TOTAL STREAM AREA(ACRES) = 0.64
PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.50

FLOW PROCESS FROM NODE 3.00 TO NODE 2.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS COMMERCIAL
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 443.00
UPSTREAM ELEVATION(FEET) = 83.00
DOWNSTREAM ELEVATION(FEET) = 80.80
ELEVATION DIFFERENCE(FEET) = 2.20
TC = 0.303*[(443.00**3)/(2.20)]**.2 = 10.022
2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 0.901
COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8641
SOIL CLASSIFICATION IS "C"
SUBAREA RUNOFF(CFS) = 0.50
TOTAL AREA(ACRES) = 0.64 TOTAL RUNOFF(CFS) = 0.50

FLOW PROCESS FROM NODE 2.00 TO NODE 2.00 IS CODE = 1

 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
 =====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION(MIN.) = 10.02
 RAINFALL INTENSITY(INCH/HR) = 0.90
 TOTAL STREAM AREA(ACRES) = 0.64
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.50

** CONFLUENCE DATA **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	0.50	9.80	0.910	0.64
2	0.50	10.02	0.901	0.64

*****WARNING*****
 IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
 ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
 WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	0.99	9.80	0.910
2	1.00	10.02	0.901

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:

PEAK FLOW RATE(CFS) = 0.99 Tc(MIN.) = 9.80
 TOTAL AREA(ACRES) = 1.3
 LONGEST FLOWPATH FROM NODE 3.00 TO NODE 2.00 = 443.00 FEET.

 FLOW PROCESS FROM NODE 4.00 TO NODE 5.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 =====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL
 $TC = K * [(LENGTH**3) / (ELEVATION CHANGE)]**.2$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 551.00
 UPSTREAM ELEVATION(FEET) = 83.00
 DOWNSTREAM ELEVATION(FEET) = 80.00
 ELEVATION DIFFERENCE(FEET) = 3.00
 $TC = 0.303 * [(551.00**3) / (3.00)]**.2 = 10.736$
 2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 0.874
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8634
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 0.60

TOTAL AREA(ACRES) = 0.80 TOTAL RUNOFF(CFS) = 0.60

 FLOW PROCESS FROM NODE 6.00 TO NODE 7.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL
 TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 622.00
 UPSTREAM ELEVATION(FEET) = 82.20
 DOWNSTREAM ELEVATION(FEET) = 72.00
 ELEVATION DIFFERENCE(FEET) = 10.20
 TC = 0.303*[(622.00**3)/(10.20)]**.2 = 9.039
 2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 0.944
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8651
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 5.46
 TOTAL AREA(ACRES) = 6.68 TOTAL RUNOFF(CFS) = 5.46

 FLOW PROCESS FROM NODE 7.00 TO NODE 7.00 IS CODE = 1

 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION(MIN.) = 9.04
 RAINFALL INTENSITY(INCH/HR) = 0.94
 TOTAL STREAM AREA(ACRES) = 6.68
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 5.46

 FLOW PROCESS FROM NODE 8.00 TO NODE 7.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL
 TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 637.00
 UPSTREAM ELEVATION(FEET) = 80.50
 DOWNSTREAM ELEVATION(FEET) = 73.50
 ELEVATION DIFFERENCE(FEET) = 7.00
 TC = 0.303*[(637.00**3)/(7.00)]**.2 = 9.887
 2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 0.907
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8642
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 4.81
 TOTAL AREA(ACRES) = 6.14 TOTAL RUNOFF(CFS) = 4.81

 FLOW PROCESS FROM NODE 7.00 TO NODE 7.00 IS CODE = 1

 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
 =====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION(MIN.) = 9.89
 RAINFALL INTENSITY(INCH/HR) = 0.91
 TOTAL STREAM AREA(ACRES) = 6.14
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 4.81

** CONFLUENCE DATA **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	5.46	9.04	0.944	6.68
2	4.81	9.89	0.907	6.14

*****WARNING*****
 IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
 ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
 WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	9.86	9.04	0.944
2	10.05	9.89	0.907

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:

PEAK FLOW RATE(CFS) = 9.86 Tc(MIN.) = 9.04
 TOTAL AREA(ACRES) = 12.8
 LONGEST FLOWPATH FROM NODE 8.00 TO NODE 7.00 = 637.00 FEET.

 FLOW PROCESS FROM NODE 9.00 TO NODE 10.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 =====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL
 $TC = K * [(LENGTH**3) / (ELEVATION CHANGE)]**0.2$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 704.00
 UPSTREAM ELEVATION(FEET) = 80.20
 DOWNSTREAM ELEVATION(FEET) = 71.80
 ELEVATION DIFFERENCE(FEET) = 8.40
 $TC = 0.303 * [(704.00**3) / (8.40)]**0.2 = 10.122$
 2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 0.897
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8640
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 2.28

TOTAL AREA(ACRES) = 2.94 TOTAL RUNOFF(CFS) = 2.28

FLOW PROCESS FROM NODE 10.00 TO NODE 10.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 3
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
TIME OF CONCENTRATION(MIN.) = 10.12
RAINFALL INTENSITY(INCH/HR) = 0.90
TOTAL STREAM AREA(ACRES) = 2.94
PEAK FLOW RATE(CFS) AT CONFLUENCE = 2.28

FLOW PROCESS FROM NODE 11.00 TO NODE 10.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS COMMERCIAL
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 705.00
UPSTREAM ELEVATION(FEET) = 81.20
DOWNSTREAM ELEVATION(FEET) = 10.10
ELEVATION DIFFERENCE(FEET) = 71.10
TC = 0.303*[(705.00**3)/(71.10)]**.2 = 6.609
2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.088
COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8680
SOIL CLASSIFICATION IS "C"
SUBAREA RUNOFF(CFS) = 2.01
TOTAL AREA(ACRES) = 2.13 TOTAL RUNOFF(CFS) = 2.01

FLOW PROCESS FROM NODE 10.00 TO NODE 10.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 3
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
TIME OF CONCENTRATION(MIN.) = 6.61
RAINFALL INTENSITY(INCH/HR) = 1.09
TOTAL STREAM AREA(ACRES) = 2.13
PEAK FLOW RATE(CFS) AT CONFLUENCE = 2.01

FLOW PROCESS FROM NODE 12.00 TO NODE 10.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 695.00

UPSTREAM ELEVATION(FEET) = 81.50
 DOWNSTREAM ELEVATION(FEET) = 71.20
 ELEVATION DIFFERENCE(FEET) = 10.30
 $TC = 0.709 * [(695.00 ** 3) / (10.30)] ** .2 = 22.569$
 2 YEAR RAINFALL INTENSITY(INCH/HOUR) = 0.624
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .4593
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 0.81
 TOTAL AREA(ACRES) = 2.84 TOTAL RUNOFF(CFS) = 0.81

 FLOW PROCESS FROM NODE 10.00 TO NODE 10.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<<

=====
 TOTAL NUMBER OF STREAMS = 3
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 3 ARE:
 TIME OF CONCENTRATION(MIN.) = 22.57
 RAINFALL INTENSITY(INCH/HR) = 0.62
 TOTAL STREAM AREA(ACRES) = 2.84
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.81

** CONFLUENCE DATA **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	2.28	10.12	0.897	2.94
2	2.01	6.61	1.088	2.13
3	0.81	22.57	0.624	2.84

*****WARNING*****
 IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
 ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
 WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 3 STREAMS.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	3.74	6.61	1.088
2	4.30	10.12	0.897
3	3.55	22.57	0.624

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:

PEAK FLOW RATE(CFS) = 4.30 Tc(MIN.) = 10.12
 TOTAL AREA(ACRES) = 7.9
 LONGEST FLOWPATH FROM NODE 11.00 TO NODE 10.00 = 705.00 FEET.

=====

END OF STUDY SUMMARY:

TOTAL AREA(ACRES) = 7.9 TC(MIN.) = 10.12
 PEAK FLOW RATE(CFS) = 4.30

=====
=====
END OF RATIONAL METHOD ANALYSIS

NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS

=====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
1461 FORD STREET, SUITE 105
REDLANDS, CA 92373
PHONE: (909) 748-7777 FAX: (909) 748-7776

Problem Descriptions:
APN 297-170-002 & 003
PRE-DEVELOPMENT DA1
2-YEAR STORM EVENT

=====

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 1.83 (inches)

SOIL-COVER TYPE	AREA (Acres)	PERCENT OF PERVIOUS AREA	SCS CURVE NUMBER	LOSS RATE Fp(in./hr.)	YIELD
1	12.82	100.00	79.(AMC II)	0.648	0.030

TOTAL AREA (Acres) = 12.82

AREA-AVERAGED LOSS RATE, \bar{F}_m (in./hr.) = 0.648

AREA-AVERAGED LOW LOSS FRACTION, \bar{Y} = 0.970

=====

NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS

=====

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THATCHER ENGINEERING & ASSOCIATES, INC.
1461 FORD STREET, SUITE 105
REDLANDS, CA 92373
PHONE: (909) 748-7777 FAX: (909) 748-7776

Problem Descriptions:
APN 297-170-002 & 003
PRE-DEVELOPMENT DA2
2-YEAR STORM EVENT

=====

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 1.83 (inches)

SOIL-COVER TYPE	AREA (Acres)	PERCENT OF PERVIOUS AREA	SCS CURVE NUMBER	LOSS RATE Fp (in./hr.)	YIELD
1	0.28	0.00	98.(AMC II)	0.000	0.878
2	7.66	100.00	79.(AMC II)	0.648	0.030

TOTAL AREA (Acres) = 7.94

AREA-AVERAGED LOSS RATE, \bar{F}_m (in./hr.) = 0.625

AREA-AVERAGED LOW LOSS FRACTION, \bar{Y} = 0.940

=====

NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS

=====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
1461 FORD STREET, SUITE 105
REDLANDS, CA 92373
PHONE: (909) 748-7777 FAX: (909) 748-7776

Problem Descriptions:
APN 297-170-002 & 003
PRE-DEVELOPMENT DA3
2-YEAR STORM EVENT

=====

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 1.83 (inches)

Table with 7 columns: SOIL-COVER TYPE, AREA (Acres), PERCENT OF PERVIOUS AREA, SCS CURVE NUMBER, LOSS RATE Fp (in./hr.), YIELD. Rows 1 and 2.

TOTAL AREA (Acres) = 0.64

AREA-AVERAGED LOSS RATE, Fm (in./hr.) = 0.173

AREA-AVERAGED LOW LOSS FRACTION, Y = 0.415

=====

NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS

=====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
1461 FORD STREET, SUITE 105
REDLANDS, CA 92373
PHONE: (909) 748-7777 FAX: (909) 748-7776

Problem Descriptions:
APN 297-170-002 & 003
PRE-DEVELOPMENT DA4
2-YEAR STORM EVENT

=====

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 1.83 (inches)

Table with 7 columns: SOIL-COVER TYPE, AREA (Acres), PERCENT OF PERVIOUS AREA, SCS CURVE NUMBER, LOSS RATE Fp(in./hr.), YIELD. Rows 1 and 2.

TOTAL AREA (Acres) = 0.64

AREA-AVERAGED LOSS RATE, Fm (in./hr.) = 0.179

AREA-AVERAGED LOW LOSS FRACTION, Y = 0.425

=====

NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS

=====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
1461 FORD STREET, SUITE 105
REDLANDS, CA 92373
PHONE: (909) 748-7777 FAX: (909) 748-7776

Problem Descriptions:
APN 297-170-002 & 003
PRE-DEVELOPMENT DA5
2-YEAR STORM EVENT

=====

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 1.83 (inches)

Table with 7 columns: SOIL-COVER TYPE, AREA (Acres), PERCENT OF PERVIOUS AREA, SCS CURVE NUMBER, LOSS RATE Fp (in./hr.), YIELD. Rows include soil types 1 and 2 with their respective area, perviousness, SCS curve numbers, loss rates, and yields.

TOTAL AREA (Acres) = 0.80

AREA-AVERAGED LOSS RATE, Fm (in./hr.) = 0.167

AREA-AVERAGED LOW LOSS FRACTION, Y = 0.404

=====

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

 SMALL AREA UNIT HYDROGRAPH MODEL
 =====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

 Problem Descriptions:
 APN 297-170-002 & 003
 PRE-DEVELOPMENT DA1
 2-YEAR STORM EVENT

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
 TOTAL CATCHMENT AREA (ACRES) = 12.82
 SOIL-LOSS RATE, Fm, (INCH/HR) = 0.648
 LOW LOSS FRACTION = 0.970
 TIME OF CONCENTRATION (MIN.) = 22.98
 SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
 USER SPECIFIED RAINFALL VALUES ARE USED
 RETURN FREQUENCY (YEARS) = 2
 5-MINUTE POINT RAINFALL VALUE (INCHES) = 0.12
 30-MINUTE POINT RAINFALL VALUE (INCHES) = 0.32
 1-HOUR POINT RAINFALL VALUE (INCHES) = 0.45
 3-HOUR POINT RAINFALL VALUE (INCHES) = 0.78
 6-HOUR POINT RAINFALL VALUE (INCHES) = 1.07
 24-HOUR POINT RAINFALL VALUE (INCHES) = 1.83

 TOTAL CATCHMENT RUNOFF VOLUME (ACRE-FEET) = 0.07
 TOTAL CATCHMENT SOIL-LOSS VOLUME (ACRE-FEET) = 1.88

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	2.5	5.0	7.5	10.0
0.30	0.0001	0.01	Q	.	.	.	.
0.68	0.0005	0.01	Q	.	.	.	.
1.06	0.0008	0.01	Q	.	.	.	.
1.45	0.0011	0.01	Q	.	.	.	.
1.83	0.0015	0.01	Q	.	.	.	.
2.21	0.0018	0.01	Q	.	.	.	.
2.60	0.0022	0.01	Q	.	.	.	.
2.98	0.0025	0.01	Q	.	.	.	.
3.36	0.0029	0.01	Q	.	.	.	.

3.74	0.0033	0.01	Q	.	.	.	.
4.13	0.0036	0.01	Q	.	.	.	.
4.51	0.0040	0.01	Q	.	.	.	.
4.89	0.0044	0.01	Q	.	.	.	.
5.28	0.0048	0.01	Q	.	.	.	.
5.66	0.0052	0.01	Q	.	.	.	.
6.04	0.0056	0.01	Q	.	.	.	.
6.43	0.0061	0.01	Q	.	.	.	.
6.81	0.0065	0.01	Q	.	.	.	.
7.19	0.0070	0.01	Q	.	.	.	.
7.57	0.0074	0.01	Q	.	.	.	.
7.96	0.0079	0.02	Q	.	.	.	.
8.34	0.0084	0.02	Q	.	.	.	.
8.72	0.0089	0.02	Q	.	.	.	.
9.11	0.0094	0.02	Q	.	.	.	.
9.49	0.0099	0.02	Q	.	.	.	.
9.87	0.0105	0.02	Q	.	.	.	.
10.26	0.0111	0.02	Q	.	.	.	.
10.64	0.0117	0.02	Q	.	.	.	.
11.02	0.0123	0.02	Q	.	.	.	.
11.40	0.0129	0.02	Q	.	.	.	.
11.79	0.0136	0.02	Q	.	.	.	.
12.17	0.0144	0.02	Q	.	.	.	.
12.55	0.0152	0.03	Q	.	.	.	.
12.94	0.0161	0.03	Q	.	.	.	.
13.32	0.0171	0.03	Q	.	.	.	.
13.70	0.0182	0.04	Q	.	.	.	.
14.09	0.0194	0.04	Q	.	.	.	.
14.47	0.0207	0.05	Q	.	.	.	.
14.85	0.0223	0.05	Q	.	.	.	.
15.23	0.0241	0.06	Q	.	.	.	.
15.62	0.0263	0.08	Q	.	.	.	.
16.00	0.0292	0.11	Q	.	.	.	.
16.38	0.0445	0.85	.	Q	.	.	.
16.77	0.0591	0.07	Q	.	.	.	.
17.15	0.0609	0.05	Q	.	.	.	.
17.53	0.0623	0.04	Q	.	.	.	.
17.92	0.0634	0.03	Q	.	.	.	.
18.30	0.0643	0.03	Q	.	.	.	.
18.68	0.0651	0.02	Q	.	.	.	.
19.06	0.0657	0.02	Q	.	.	.	.
19.45	0.0663	0.02	Q	.	.	.	.
19.83	0.0669	0.02	Q	.	.	.	.
20.21	0.0674	0.02	Q	.	.	.	.
20.60	0.0679	0.01	Q	.	.	.	.
20.98	0.0683	0.01	Q	.	.	.	.
21.36	0.0688	0.01	Q	.	.	.	.
21.74	0.0692	0.01	Q	.	.	.	.
22.13	0.0696	0.01	Q	.	.	.	.
22.51	0.0700	0.01	Q	.	.	.	.
22.89	0.0704	0.01	Q	.	.	.	.
23.28	0.0707	0.01	Q	.	.	.	.
23.66	0.0711	0.01	Q	.	.	.	.
24.04	0.0714	0.01	Q	.	.	.	.
24.43	0.0716	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1447.7
10%	46.0
20%	23.0
30%	23.0
40%	23.0
50%	23.0
60%	23.0
70%	23.0
80%	23.0
90%	23.0

SMALL AREA UNIT HYDROGRAPH MODEL

=====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
1461 FORD STREET, SUITE 105
REDLANDS, CA 92373
PHONE: (909) 748-7777 FAX: (909) 748-7776

Problem Descriptions:
APN 297-170-002 & 003
PRE-DEVELOPMENT DA2
2-YEAR STORM EVENT

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
TOTAL CATCHMENT AREA (ACRES) = 7.94
SOIL-LOSS RATE, Fm, (INCH/HR) = 0.625
LOW LOSS FRACTION = 0.940
TIME OF CONCENTRATION (MIN.) = 22.68
SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
USER SPECIFIED RAINFALL VALUES ARE USED
RETURN FREQUENCY (YEARS) = 2
5-MINUTE POINT RAINFALL VALUE (INCHES) = 0.12
30-MINUTE POINT RAINFALL VALUE (INCHES) = 0.32
1-HOUR POINT RAINFALL VALUE (INCHES) = 0.45
3-HOUR POINT RAINFALL VALUE (INCHES) = 0.78
6-HOUR POINT RAINFALL VALUE (INCHES) = 1.07
24-HOUR POINT RAINFALL VALUE (INCHES) = 1.83

TOTAL CATCHMENT RUNOFF VOLUME (ACRE-FEET) = 0.08
TOTAL CATCHMENT SOIL-LOSS VOLUME (ACRE-FEET) = 1.13

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	2.5	5.0	7.5	10.0
0.12	0.0000	0.00	Q	.	.	.	.
0.50	0.0002	0.01	Q	.	.	.	.
0.88	0.0006	0.01	Q	.	.	.	.
1.26	0.0010	0.01	Q	.	.	.	.
1.64	0.0014	0.01	Q	.	.	.	.
2.01	0.0018	0.01	Q	.	.	.	.
2.39	0.0023	0.01	Q	.	.	.	.
2.77	0.0027	0.01	Q	.	.	.	.
3.15	0.0031	0.01	Q	.	.	.	.

3.53	0.0036	0.01	Q	.	.	.	.
3.90	0.0041	0.01	Q	.	.	.	.
4.28	0.0045	0.02	Q	.	.	.	.
4.66	0.0050	0.02	Q	.	.	.	.
5.04	0.0055	0.02	Q	.	.	.	.
5.42	0.0060	0.02	Q	.	.	.	.
5.79	0.0065	0.02	Q	.	.	.	.
6.17	0.0070	0.02	Q	.	.	.	.
6.55	0.0075	0.02	Q	.	.	.	.
6.93	0.0081	0.02	Q	.	.	.	.
7.31	0.0086	0.02	Q	.	.	.	.
7.68	0.0092	0.02	Q	.	.	.	.
8.06	0.0098	0.02	Q	.	.	.	.
8.44	0.0104	0.02	Q	.	.	.	.
8.82	0.0110	0.02	Q	.	.	.	.
9.20	0.0116	0.02	Q	.	.	.	.
9.57	0.0123	0.02	Q	.	.	.	.
9.95	0.0130	0.02	Q	.	.	.	.
10.33	0.0137	0.02	Q	.	.	.	.
10.71	0.0144	0.02	Q	.	.	.	.
11.09	0.0152	0.03	Q	.	.	.	.
11.46	0.0160	0.03	Q	.	.	.	.
11.84	0.0168	0.03	Q	.	.	.	.
12.22	0.0177	0.03	Q	.	.	.	.
12.60	0.0188	0.04	Q	.	.	.	.
12.98	0.0199	0.04	Q	.	.	.	.
13.35	0.0212	0.04	Q	.	.	.	.
13.73	0.0225	0.04	Q	.	.	.	.
14.11	0.0239	0.05	Q	.	.	.	.
14.49	0.0256	0.06	Q	.	.	.	.
14.87	0.0275	0.07	Q	.	.	.	.
15.24	0.0298	0.07	Q	.	.	.	.
15.62	0.0325	0.10	Q	.	.	.	.
16.00	0.0361	0.13	Q	.	.	.	.
16.38	0.0495	0.72	Q	.	.	.	.
16.76	0.0621	0.08	Q	.	.	.	.
17.13	0.0644	0.06	Q	.	.	.	.
17.51	0.0661	0.05	Q	.	.	.	.
17.89	0.0674	0.04	Q	.	.	.	.
18.27	0.0686	0.03	Q	.	.	.	.
18.65	0.0695	0.03	Q	.	.	.	.
19.02	0.0703	0.02	Q	.	.	.	.
19.40	0.0711	0.02	Q	.	.	.	.
19.78	0.0718	0.02	Q	.	.	.	.
20.16	0.0724	0.02	Q	.	.	.	.
20.54	0.0730	0.02	Q	.	.	.	.
20.91	0.0736	0.02	Q	.	.	.	.
21.29	0.0741	0.02	Q	.	.	.	.
21.67	0.0746	0.02	Q	.	.	.	.
22.05	0.0751	0.02	Q	.	.	.	.
22.43	0.0756	0.01	Q	.	.	.	.
22.80	0.0761	0.01	Q	.	.	.	.
23.18	0.0765	0.01	Q	.	.	.	.
23.56	0.0769	0.01	Q	.	.	.	.
23.94	0.0773	0.01	Q	.	.	.	.
24.32	0.0777	0.01	Q	.	.	.	.
24.69	0.0779	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
=====	=====
0%	1451.5
10%	113.4
20%	22.7
30%	22.7
40%	22.7
50%	22.7
60%	22.7
70%	22.7
80%	22.7
90%	22.7

 SMALL AREA UNIT HYDROGRAPH MODEL
 =====

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 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

 Problem Descriptions:

APN 297-170-002 & 003
 PRE-DEVELOPMENT DA3
 2-YEAR STORM EVENT

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
 TOTAL CATCHMENT AREA (ACRES) = 0.64
 SOIL-LOSS RATE, Fm, (INCH/HR) = 0.173
 LOW LOSS FRACTION = 0.415
 TIME OF CONCENTRATION (MIN.) = 5.00
 SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
 USER SPECIFIED RAINFALL VALUES ARE USED
 RETURN FREQUENCY (YEARS) = 2
 5-MINUTE POINT RAINFALL VALUE (INCHES) = 0.12
 30-MINUTE POINT RAINFALL VALUE (INCHES) = 0.32
 1-HOUR POINT RAINFALL VALUE (INCHES) = 0.45
 3-HOUR POINT RAINFALL VALUE (INCHES) = 0.78
 6-HOUR POINT RAINFALL VALUE (INCHES) = 1.07
 24-HOUR POINT RAINFALL VALUE (INCHES) = 1.83

TOTAL CATCHMENT RUNOFF VOLUME (ACRE-FEET) = 0.05
 TOTAL CATCHMENT SOIL-LOSS VOLUME (ACRE-FEET) = 0.04

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	2.5	5.0	7.5	10.0
0.08	0.0000	0.01	Q	.	.	.	.
0.17	0.0001	0.01	Q	.	.	.	.
0.25	0.0002	0.01	Q	.	.	.	.
0.33	0.0002	0.01	Q	.	.	.	.
0.42	0.0003	0.01	Q	.	.	.	.
0.50	0.0004	0.01	Q	.	.	.	.
0.58	0.0004	0.01	Q	.	.	.	.
0.67	0.0005	0.01	Q	.	.	.	.
0.75	0.0006	0.01	Q	.	.	.	.

0.83	0.0007	0.01	Q	.	.	.	.
0.92	0.0007	0.01	Q	.	.	.	.
1.00	0.0008	0.01	Q	.	.	.	.
1.08	0.0009	0.01	Q	.	.	.	.
1.17	0.0009	0.01	Q	.	.	.	.
1.25	0.0010	0.01	Q	.	.	.	.
1.33	0.0011	0.01	Q	.	.	.	.
1.42	0.0012	0.01	Q	.	.	.	.
1.50	0.0012	0.01	Q	.	.	.	.
1.58	0.0013	0.01	Q	.	.	.	.
1.67	0.0014	0.01	Q	.	.	.	.
1.75	0.0015	0.01	Q	.	.	.	.
1.83	0.0015	0.01	Q	.	.	.	.
1.92	0.0016	0.01	Q	.	.	.	.
2.00	0.0017	0.01	Q	.	.	.	.
2.08	0.0017	0.01	Q	.	.	.	.
2.17	0.0018	0.01	Q	.	.	.	.
2.25	0.0019	0.01	Q	.	.	.	.
2.33	0.0020	0.01	Q	.	.	.	.
2.42	0.0020	0.01	Q	.	.	.	.
2.50	0.0021	0.01	Q	.	.	.	.
2.58	0.0022	0.01	Q	.	.	.	.
2.67	0.0023	0.01	Q	.	.	.	.
2.75	0.0024	0.01	Q	.	.	.	.
2.83	0.0024	0.01	Q	.	.	.	.
2.92	0.0025	0.01	Q	.	.	.	.
3.00	0.0026	0.01	Q	.	.	.	.
3.08	0.0027	0.01	Q	.	.	.	.
3.17	0.0027	0.01	Q	.	.	.	.
3.25	0.0028	0.01	Q	.	.	.	.
3.33	0.0029	0.01	Q	.	.	.	.
3.42	0.0030	0.01	Q	.	.	.	.
3.50	0.0031	0.01	Q	.	.	.	.
3.58	0.0031	0.01	Q	.	.	.	.
3.67	0.0032	0.01	Q	.	.	.	.
3.75	0.0033	0.01	Q	.	.	.	.
3.83	0.0034	0.01	Q	.	.	.	.
3.92	0.0035	0.01	Q	.	.	.	.
4.00	0.0035	0.01	Q	.	.	.	.
4.08	0.0036	0.01	Q	.	.	.	.
4.17	0.0037	0.01	Q	.	.	.	.
4.25	0.0038	0.01	Q	.	.	.	.
4.33	0.0039	0.01	Q	.	.	.	.
4.42	0.0039	0.01	Q	.	.	.	.
4.50	0.0040	0.01	Q	.	.	.	.
4.58	0.0041	0.01	Q	.	.	.	.
4.67	0.0042	0.01	Q	.	.	.	.
4.75	0.0043	0.01	Q	.	.	.	.
4.83	0.0044	0.01	Q	.	.	.	.
4.92	0.0045	0.01	Q	.	.	.	.
5.00	0.0045	0.01	Q	.	.	.	.
5.08	0.0046	0.01	Q	.	.	.	.
5.17	0.0047	0.01	Q	.	.	.	.
5.25	0.0048	0.01	Q	.	.	.	.
5.33	0.0049	0.01	Q	.	.	.	.
5.42	0.0050	0.01	Q	.	.	.	.
5.50	0.0051	0.01	Q	.	.	.	.

5.58	0.0051	0.01	Q	.	.	.	.
5.67	0.0052	0.01	Q	.	.	.	.
5.75	0.0053	0.01	Q	.	.	.	.
5.83	0.0054	0.01	Q	.	.	.	.
5.92	0.0055	0.01	Q	.	.	.	.
6.00	0.0056	0.01	Q	.	.	.	.
6.08	0.0057	0.01	Q	.	.	.	.
6.17	0.0058	0.01	Q	.	.	.	.
6.25	0.0059	0.01	Q	.	.	.	.
6.33	0.0060	0.01	Q	.	.	.	.
6.42	0.0061	0.01	Q	.	.	.	.
6.50	0.0062	0.01	Q	.	.	.	.
6.58	0.0062	0.01	Q	.	.	.	.
6.67	0.0063	0.01	Q	.	.	.	.
6.75	0.0064	0.01	Q	.	.	.	.
6.83	0.0065	0.01	Q	.	.	.	.
6.92	0.0066	0.01	Q	.	.	.	.
7.00	0.0067	0.01	Q	.	.	.	.
7.08	0.0068	0.01	Q	.	.	.	.
7.17	0.0069	0.01	Q	.	.	.	.
7.25	0.0070	0.01	Q	.	.	.	.
7.33	0.0071	0.01	Q	.	.	.	.
7.42	0.0072	0.01	Q	.	.	.	.
7.50	0.0073	0.01	Q	.	.	.	.
7.58	0.0074	0.01	Q	.	.	.	.
7.67	0.0075	0.01	Q	.	.	.	.
7.75	0.0076	0.01	Q	.	.	.	.
7.83	0.0077	0.01	Q	.	.	.	.
7.92	0.0078	0.02	Q	.	.	.	.
8.00	0.0079	0.02	Q	.	.	.	.
8.08	0.0080	0.02	Q	.	.	.	.
8.17	0.0081	0.02	Q	.	.	.	.
8.25	0.0082	0.02	Q	.	.	.	.
8.33	0.0084	0.02	Q	.	.	.	.
8.42	0.0085	0.02	Q	.	.	.	.
8.50	0.0086	0.02	Q	.	.	.	.
8.58	0.0087	0.02	Q	.	.	.	.
8.67	0.0088	0.02	Q	.	.	.	.
8.75	0.0089	0.02	Q	.	.	.	.
8.83	0.0090	0.02	Q	.	.	.	.
8.92	0.0091	0.02	Q	.	.	.	.
9.00	0.0092	0.02	Q	.	.	.	.
9.08	0.0093	0.02	Q	.	.	.	.
9.17	0.0095	0.02	Q	.	.	.	.
9.25	0.0096	0.02	Q	.	.	.	.
9.33	0.0097	0.02	Q	.	.	.	.
9.42	0.0098	0.02	Q	.	.	.	.
9.50	0.0099	0.02	Q	.	.	.	.
9.58	0.0100	0.02	Q	.	.	.	.
9.67	0.0102	0.02	Q	.	.	.	.
9.75	0.0103	0.02	Q	.	.	.	.
9.83	0.0104	0.02	Q	.	.	.	.
9.92	0.0105	0.02	Q	.	.	.	.
10.00	0.0107	0.02	Q	.	.	.	.
10.08	0.0108	0.02	Q	.	.	.	.
10.17	0.0109	0.02	Q	.	.	.	.
10.25	0.0110	0.02	Q	.	.	.	.

10.33	0.0112	0.02	Q	.	.	.	.
10.42	0.0113	0.02	Q	.	.	.	.
10.50	0.0114	0.02	Q	.	.	.	.
10.58	0.0115	0.02	Q	.	.	.	.
10.67	0.0117	0.02	Q	.	.	.	.
10.75	0.0118	0.02	Q	.	.	.	.
10.83	0.0120	0.02	Q	.	.	.	.
10.92	0.0121	0.02	Q	.	.	.	.
11.00	0.0122	0.02	Q	.	.	.	.
11.08	0.0124	0.02	Q	.	.	.	.
11.17	0.0125	0.02	Q	.	.	.	.
11.25	0.0126	0.02	Q	.	.	.	.
11.33	0.0128	0.02	Q	.	.	.	.
11.42	0.0129	0.02	Q	.	.	.	.
11.50	0.0131	0.02	Q	.	.	.	.
11.58	0.0132	0.02	Q	.	.	.	.
11.67	0.0134	0.02	Q	.	.	.	.
11.75	0.0135	0.02	Q	.	.	.	.
11.83	0.0137	0.02	Q	.	.	.	.
11.92	0.0138	0.02	Q	.	.	.	.
12.00	0.0140	0.02	Q	.	.	.	.
12.08	0.0142	0.03	Q	.	.	.	.
12.17	0.0144	0.03	Q	.	.	.	.
12.25	0.0146	0.03	Q	.	.	.	.
12.33	0.0148	0.03	Q	.	.	.	.
12.42	0.0150	0.03	Q	.	.	.	.
12.50	0.0152	0.03	Q	.	.	.	.
12.58	0.0154	0.03	Q	.	.	.	.
12.67	0.0156	0.03	Q	.	.	.	.
12.75	0.0158	0.03	Q	.	.	.	.
12.83	0.0160	0.03	Q	.	.	.	.
12.92	0.0162	0.03	Q	.	.	.	.
13.00	0.0164	0.03	Q	.	.	.	.
13.08	0.0167	0.03	Q	.	.	.	.
13.17	0.0169	0.03	Q	.	.	.	.
13.25	0.0171	0.03	Q	.	.	.	.
13.33	0.0173	0.03	Q	.	.	.	.
13.42	0.0176	0.03	Q	.	.	.	.
13.50	0.0178	0.04	Q	.	.	.	.
13.58	0.0181	0.04	Q	.	.	.	.
13.67	0.0183	0.04	Q	.	.	.	.
13.75	0.0186	0.04	Q	.	.	.	.
13.83	0.0188	0.04	Q	.	.	.	.
13.92	0.0191	0.04	Q	.	.	.	.
14.00	0.0194	0.04	Q	.	.	.	.
14.08	0.0197	0.04	Q	.	.	.	.
14.17	0.0200	0.04	Q	.	.	.	.
14.25	0.0203	0.05	Q	.	.	.	.
14.33	0.0206	0.05	Q	.	.	.	.
14.42	0.0209	0.05	Q	.	.	.	.
14.50	0.0212	0.05	Q	.	.	.	.
14.58	0.0216	0.05	Q	.	.	.	.
14.67	0.0219	0.05	Q	.	.	.	.
14.75	0.0223	0.05	Q	.	.	.	.
14.83	0.0227	0.05	Q	.	.	.	.
14.92	0.0231	0.06	Q	.	.	.	.
15.00	0.0235	0.06	Q	.	.	.	.

15.08	0.0239	0.06	Q	.	.	.	.
15.17	0.0243	0.06	Q	.	.	.	.
15.25	0.0248	0.07	Q	.	.	.	.
15.33	0.0253	0.07	Q	.	.	.	.
15.42	0.0258	0.08	Q	.	.	.	.
15.50	0.0263	0.08	Q	.	.	.	.
15.58	0.0269	0.09	Q	.	.	.	.
15.67	0.0275	0.09	Q	.	.	.	.
15.75	0.0283	0.13	Q	.	.	.	.
15.83	0.0292	0.14	Q	.	.	.	.
15.92	0.0304	0.20	Q	.	.	.	.
16.00	0.0320	0.28	.Q	.	.	.	.
16.08	0.0355	0.71	. Q	.	.	.	.
16.17	0.0384	0.16	Q	.	.	.	.
16.25	0.0394	0.10	Q	.	.	.	.
16.33	0.0400	0.08	Q	.	.	.	.
16.42	0.0405	0.07	Q	.	.	.	.
16.50	0.0410	0.07	Q	.	.	.	.
16.58	0.0415	0.06	Q	.	.	.	.
16.67	0.0419	0.06	Q	.	.	.	.
16.75	0.0422	0.05	Q	.	.	.	.
16.83	0.0426	0.05	Q	.	.	.	.
16.92	0.0429	0.05	Q	.	.	.	.
17.00	0.0432	0.05	Q	.	.	.	.
17.08	0.0435	0.04	Q	.	.	.	.
17.17	0.0438	0.04	Q	.	.	.	.
17.25	0.0441	0.04	Q	.	.	.	.
17.33	0.0443	0.04	Q	.	.	.	.
17.42	0.0446	0.03	Q	.	.	.	.
17.50	0.0448	0.03	Q	.	.	.	.
17.58	0.0450	0.03	Q	.	.	.	.
17.67	0.0452	0.03	Q	.	.	.	.
17.75	0.0454	0.03	Q	.	.	.	.
17.83	0.0457	0.03	Q	.	.	.	.
17.92	0.0459	0.03	Q	.	.	.	.
18.00	0.0461	0.03	Q	.	.	.	.
18.08	0.0462	0.02	Q	.	.	.	.
18.17	0.0464	0.02	Q	.	.	.	.
18.25	0.0465	0.02	Q	.	.	.	.
18.33	0.0467	0.02	Q	.	.	.	.
18.42	0.0468	0.02	Q	.	.	.	.
18.50	0.0470	0.02	Q	.	.	.	.
18.58	0.0471	0.02	Q	.	.	.	.
18.67	0.0473	0.02	Q	.	.	.	.
18.75	0.0474	0.02	Q	.	.	.	.
18.83	0.0475	0.02	Q	.	.	.	.
18.92	0.0477	0.02	Q	.	.	.	.
19.00	0.0478	0.02	Q	.	.	.	.
19.08	0.0479	0.02	Q	.	.	.	.
19.17	0.0480	0.02	Q	.	.	.	.
19.25	0.0482	0.02	Q	.	.	.	.
19.33	0.0483	0.02	Q	.	.	.	.
19.42	0.0484	0.02	Q	.	.	.	.
19.50	0.0485	0.02	Q	.	.	.	.
19.58	0.0486	0.02	Q	.	.	.	.
19.67	0.0487	0.02	Q	.	.	.	.
19.75	0.0489	0.02	Q	.	.	.	.

19.83	0.0490	0.02	Q	.	.	.	.
19.92	0.0491	0.02	Q	.	.	.	.
20.00	0.0492	0.02	Q	.	.	.	.
20.08	0.0493	0.02	Q	.	.	.	.
20.17	0.0494	0.01	Q	.	.	.	.
20.25	0.0495	0.01	Q	.	.	.	.
20.33	0.0496	0.01	Q	.	.	.	.
20.42	0.0497	0.01	Q	.	.	.	.
20.50	0.0498	0.01	Q	.	.	.	.
20.58	0.0499	0.01	Q	.	.	.	.
20.67	0.0500	0.01	Q	.	.	.	.
20.75	0.0501	0.01	Q	.	.	.	.
20.83	0.0502	0.01	Q	.	.	.	.
20.92	0.0503	0.01	Q	.	.	.	.
21.00	0.0504	0.01	Q	.	.	.	.
21.08	0.0505	0.01	Q	.	.	.	.
21.17	0.0505	0.01	Q	.	.	.	.
21.25	0.0506	0.01	Q	.	.	.	.
21.33	0.0507	0.01	Q	.	.	.	.
21.42	0.0508	0.01	Q	.	.	.	.
21.50	0.0509	0.01	Q	.	.	.	.
21.58	0.0510	0.01	Q	.	.	.	.
21.67	0.0511	0.01	Q	.	.	.	.
21.75	0.0512	0.01	Q	.	.	.	.
21.83	0.0512	0.01	Q	.	.	.	.
21.92	0.0513	0.01	Q	.	.	.	.
22.00	0.0514	0.01	Q	.	.	.	.
22.08	0.0515	0.01	Q	.	.	.	.
22.17	0.0516	0.01	Q	.	.	.	.
22.25	0.0516	0.01	Q	.	.	.	.
22.33	0.0517	0.01	Q	.	.	.	.
22.42	0.0518	0.01	Q	.	.	.	.
22.50	0.0519	0.01	Q	.	.	.	.
22.58	0.0520	0.01	Q	.	.	.	.
22.67	0.0520	0.01	Q	.	.	.	.
22.75	0.0521	0.01	Q	.	.	.	.
22.83	0.0522	0.01	Q	.	.	.	.
22.92	0.0523	0.01	Q	.	.	.	.
23.00	0.0523	0.01	Q	.	.	.	.
23.08	0.0524	0.01	Q	.	.	.	.
23.17	0.0525	0.01	Q	.	.	.	.
23.25	0.0526	0.01	Q	.	.	.	.
23.33	0.0526	0.01	Q	.	.	.	.
23.42	0.0527	0.01	Q	.	.	.	.
23.50	0.0528	0.01	Q	.	.	.	.
23.58	0.0529	0.01	Q	.	.	.	.
23.67	0.0529	0.01	Q	.	.	.	.
23.75	0.0530	0.01	Q	.	.	.	.
23.83	0.0531	0.01	Q	.	.	.	.
23.92	0.0531	0.01	Q	.	.	.	.
24.00	0.0532	0.01	Q	.	.	.	.
24.08	0.0532	0.00	Q	.	.	.	.

 TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
 (Note: 100% of Peak Flow Rate estimate assumed to have
 an instantaneous time duration)

Percentile of Estimated
Peak Flow Rate

Duration
(minutes)

=====

=====

0%	1440.0
10%	70.0
20%	20.0
30%	10.0
40%	10.0
50%	5.0
60%	5.0
70%	5.0
80%	5.0
90%	5.0

 SMALL AREA UNIT HYDROGRAPH MODEL
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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

 Problem Descriptions:

APN 297-170-002 & 003
 PRE-DEVELOPMENT DA4
 2-YEAR STORM EVENT

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
 TOTAL CATCHMENT AREA (ACRES) = 0.64
 SOIL-LOSS RATE, Fm, (INCH/HR) = 0.179
 LOW LOSS FRACTION = 0.425
 TIME OF CONCENTRATION (MIN.) = 5.36
 SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
 USER SPECIFIED RAINFALL VALUES ARE USED
 RETURN FREQUENCY (YEARS) = 2
 5-MINUTE POINT RAINFALL VALUE (INCHES) = 0.12
 30-MINUTE POINT RAINFALL VALUE (INCHES) = 0.32
 1-HOUR POINT RAINFALL VALUE (INCHES) = 0.45
 3-HOUR POINT RAINFALL VALUE (INCHES) = 0.78
 6-HOUR POINT RAINFALL VALUE (INCHES) = 1.07
 24-HOUR POINT RAINFALL VALUE (INCHES) = 1.83

TOTAL CATCHMENT RUNOFF VOLUME (ACRE-FEET) = 0.05
 TOTAL CATCHMENT SOIL-LOSS VOLUME (ACRE-FEET) = 0.05

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	2.5	5.0	7.5	10.0
0.01	0.0000	0.00	Q	.	.	.	.
0.10	0.0000	0.01	Q	.	.	.	.
0.19	0.0001	0.01	Q	.	.	.	.
0.28	0.0002	0.01	Q	.	.	.	.
0.37	0.0003	0.01	Q	.	.	.	.
0.46	0.0003	0.01	Q	.	.	.	.
0.55	0.0004	0.01	Q	.	.	.	.
0.63	0.0005	0.01	Q	.	.	.	.
0.72	0.0005	0.01	Q	.	.	.	.

0.81	0.0006	0.01	Q	.	.	.	.
0.90	0.0007	0.01	Q	.	.	.	.
0.99	0.0008	0.01	Q	.	.	.	.
1.08	0.0008	0.01	Q	.	.	.	.
1.17	0.0009	0.01	Q	.	.	.	.
1.26	0.0010	0.01	Q	.	.	.	.
1.35	0.0011	0.01	Q	.	.	.	.
1.44	0.0011	0.01	Q	.	.	.	.
1.53	0.0012	0.01	Q	.	.	.	.
1.62	0.0013	0.01	Q	.	.	.	.
1.71	0.0014	0.01	Q	.	.	.	.
1.80	0.0015	0.01	Q	.	.	.	.
1.89	0.0015	0.01	Q	.	.	.	.
1.97	0.0016	0.01	Q	.	.	.	.
2.06	0.0017	0.01	Q	.	.	.	.
2.15	0.0018	0.01	Q	.	.	.	.
2.24	0.0018	0.01	Q	.	.	.	.
2.33	0.0019	0.01	Q	.	.	.	.
2.42	0.0020	0.01	Q	.	.	.	.
2.51	0.0021	0.01	Q	.	.	.	.
2.60	0.0022	0.01	Q	.	.	.	.
2.69	0.0022	0.01	Q	.	.	.	.
2.78	0.0023	0.01	Q	.	.	.	.
2.87	0.0024	0.01	Q	.	.	.	.
2.96	0.0025	0.01	Q	.	.	.	.
3.05	0.0026	0.01	Q	.	.	.	.
3.14	0.0027	0.01	Q	.	.	.	.
3.23	0.0027	0.01	Q	.	.	.	.
3.31	0.0028	0.01	Q	.	.	.	.
3.40	0.0029	0.01	Q	.	.	.	.
3.49	0.0030	0.01	Q	.	.	.	.
3.58	0.0031	0.01	Q	.	.	.	.
3.67	0.0032	0.01	Q	.	.	.	.
3.76	0.0032	0.01	Q	.	.	.	.
3.85	0.0033	0.01	Q	.	.	.	.
3.94	0.0034	0.01	Q	.	.	.	.
4.03	0.0035	0.01	Q	.	.	.	.
4.12	0.0036	0.01	Q	.	.	.	.
4.21	0.0037	0.01	Q	.	.	.	.
4.30	0.0038	0.01	Q	.	.	.	.
4.39	0.0038	0.01	Q	.	.	.	.
4.48	0.0039	0.01	Q	.	.	.	.
4.57	0.0040	0.01	Q	.	.	.	.
4.65	0.0041	0.01	Q	.	.	.	.
4.74	0.0042	0.01	Q	.	.	.	.
4.83	0.0043	0.01	Q	.	.	.	.
4.92	0.0044	0.01	Q	.	.	.	.
5.01	0.0045	0.01	Q	.	.	.	.
5.10	0.0046	0.01	Q	.	.	.	.
5.19	0.0046	0.01	Q	.	.	.	.
5.28	0.0047	0.01	Q	.	.	.	.
5.37	0.0048	0.01	Q	.	.	.	.
5.46	0.0049	0.01	Q	.	.	.	.
5.55	0.0050	0.01	Q	.	.	.	.
5.64	0.0051	0.01	Q	.	.	.	.
5.73	0.0052	0.01	Q	.	.	.	.
5.82	0.0053	0.01	Q	.	.	.	.

11.00	0.0120	0.02	Q	.	.	.	.
11.09	0.0121	0.02	Q	.	.	.	.
11.18	0.0123	0.02	Q	.	.	.	.
11.27	0.0124	0.02	Q	.	.	.	.
11.35	0.0126	0.02	Q	.	.	.	.
11.44	0.0127	0.02	Q	.	.	.	.
11.53	0.0129	0.02	Q	.	.	.	.
11.62	0.0131	0.02	Q	.	.	.	.
11.71	0.0132	0.02	Q	.	.	.	.
11.80	0.0134	0.02	Q	.	.	.	.
11.89	0.0135	0.02	Q	.	.	.	.
11.98	0.0137	0.02	Q	.	.	.	.
12.07	0.0139	0.02	Q	.	.	.	.
12.16	0.0141	0.03	Q	.	.	.	.
12.25	0.0143	0.03	Q	.	.	.	.
12.34	0.0145	0.03	Q	.	.	.	.
12.43	0.0147	0.03	Q	.	.	.	.
12.52	0.0149	0.03	Q	.	.	.	.
12.61	0.0151	0.03	Q	.	.	.	.
12.69	0.0153	0.03	Q	.	.	.	.
12.78	0.0155	0.03	Q	.	.	.	.
12.87	0.0158	0.03	Q	.	.	.	.
12.96	0.0160	0.03	Q	.	.	.	.
13.05	0.0162	0.03	Q	.	.	.	.
13.14	0.0165	0.03	Q	.	.	.	.
13.23	0.0167	0.03	Q	.	.	.	.
13.32	0.0169	0.03	Q	.	.	.	.
13.41	0.0172	0.03	Q	.	.	.	.
13.50	0.0174	0.03	Q	.	.	.	.
13.59	0.0177	0.04	Q	.	.	.	.
13.68	0.0179	0.04	Q	.	.	.	.
13.77	0.0182	0.04	Q	.	.	.	.
13.86	0.0185	0.04	Q	.	.	.	.
13.95	0.0188	0.04	Q	.	.	.	.
14.03	0.0190	0.04	Q	.	.	.	.
14.12	0.0193	0.04	Q	.	.	.	.
14.21	0.0197	0.04	Q	.	.	.	.
14.30	0.0200	0.05	Q	.	.	.	.
14.39	0.0203	0.05	Q	.	.	.	.
14.48	0.0207	0.05	Q	.	.	.	.
14.57	0.0211	0.05	Q	.	.	.	.
14.66	0.0214	0.05	Q	.	.	.	.
14.75	0.0218	0.05	Q	.	.	.	.
14.84	0.0222	0.06	Q	.	.	.	.
14.93	0.0226	0.06	Q	.	.	.	.
15.02	0.0231	0.06	Q	.	.	.	.
15.11	0.0235	0.06	Q	.	.	.	.
15.20	0.0240	0.07	Q	.	.	.	.
15.29	0.0245	0.07	Q	.	.	.	.
15.37	0.0250	0.07	Q	.	.	.	.
15.46	0.0255	0.08	Q	.	.	.	.
15.55	0.0261	0.08	Q	.	.	.	.
15.64	0.0268	0.09	Q	.	.	.	.
15.73	0.0275	0.11	Q	.	.	.	.
15.82	0.0284	0.13	Q	.	.	.	.
15.91	0.0296	0.19	Q	.	.	.	.
16.00	0.0313	0.27	.Q	.	.	.	.

16.09	0.0348	0.70	. Q	.	.	.	.
16.18	0.0380	0.15	Q	.	.	.	.
16.27	0.0389	0.10	Q	.	.	.	.
16.36	0.0395	0.08	Q	.	.	.	.
16.45	0.0401	0.07	Q	.	.	.	.
16.54	0.0406	0.06	Q	.	.	.	.
16.63	0.0410	0.06	Q	.	.	.	.
16.71	0.0414	0.05	Q	.	.	.	.
16.80	0.0418	0.05	Q	.	.	.	.
16.89	0.0422	0.05	Q	.	.	.	.
16.98	0.0425	0.05	Q	.	.	.	.
17.07	0.0428	0.04	Q	.	.	.	.
17.16	0.0431	0.04	Q	.	.	.	.
17.25	0.0434	0.04	Q	.	.	.	.
17.34	0.0437	0.03	Q	.	.	.	.
17.43	0.0439	0.03	Q	.	.	.	.
17.52	0.0442	0.03	Q	.	.	.	.
17.61	0.0444	0.03	Q	.	.	.	.
17.70	0.0446	0.03	Q	.	.	.	.
17.79	0.0448	0.03	Q	.	.	.	.
17.88	0.0451	0.03	Q	.	.	.	.
17.97	0.0453	0.03	Q	.	.	.	.
18.05	0.0455	0.03	Q	.	.	.	.
18.14	0.0456	0.02	Q	.	.	.	.
18.23	0.0458	0.02	Q	.	.	.	.
18.32	0.0460	0.02	Q	.	.	.	.
18.41	0.0461	0.02	Q	.	.	.	.
18.50	0.0463	0.02	Q	.	.	.	.
18.59	0.0464	0.02	Q	.	.	.	.
18.68	0.0466	0.02	Q	.	.	.	.
18.77	0.0467	0.02	Q	.	.	.	.
18.86	0.0468	0.02	Q	.	.	.	.
18.95	0.0470	0.02	Q	.	.	.	.
19.04	0.0471	0.02	Q	.	.	.	.
19.13	0.0473	0.02	Q	.	.	.	.
19.22	0.0474	0.02	Q	.	.	.	.
19.31	0.0475	0.02	Q	.	.	.	.
19.39	0.0476	0.02	Q	.	.	.	.
19.48	0.0478	0.02	Q	.	.	.	.
19.57	0.0479	0.02	Q	.	.	.	.
19.66	0.0480	0.02	Q	.	.	.	.
19.75	0.0481	0.02	Q	.	.	.	.
19.84	0.0482	0.02	Q	.	.	.	.
19.93	0.0483	0.02	Q	.	.	.	.
20.02	0.0485	0.02	Q	.	.	.	.
20.11	0.0486	0.01	Q	.	.	.	.
20.20	0.0487	0.01	Q	.	.	.	.
20.29	0.0488	0.01	Q	.	.	.	.
20.38	0.0489	0.01	Q	.	.	.	.
20.47	0.0490	0.01	Q	.	.	.	.
20.56	0.0491	0.01	Q	.	.	.	.
20.65	0.0492	0.01	Q	.	.	.	.
20.73	0.0493	0.01	Q	.	.	.	.
20.82	0.0494	0.01	Q	.	.	.	.
20.91	0.0495	0.01	Q	.	.	.	.
21.00	0.0496	0.01	Q	.	.	.	.
21.09	0.0497	0.01	Q	.	.	.	.

21.18	0.0498	0.01	Q	.	.	.	.
21.27	0.0499	0.01	Q	.	.	.	.
21.36	0.0500	0.01	Q	.	.	.	.
21.45	0.0501	0.01	Q	.	.	.	.
21.54	0.0502	0.01	Q	.	.	.	.
21.63	0.0502	0.01	Q	.	.	.	.
21.72	0.0503	0.01	Q	.	.	.	.
21.81	0.0504	0.01	Q	.	.	.	.
21.90	0.0505	0.01	Q	.	.	.	.
21.99	0.0506	0.01	Q	.	.	.	.
22.07	0.0507	0.01	Q	.	.	.	.
22.16	0.0508	0.01	Q	.	.	.	.
22.25	0.0509	0.01	Q	.	.	.	.
22.34	0.0509	0.01	Q	.	.	.	.
22.43	0.0510	0.01	Q	.	.	.	.
22.52	0.0511	0.01	Q	.	.	.	.
22.61	0.0512	0.01	Q	.	.	.	.
22.70	0.0513	0.01	Q	.	.	.	.
22.79	0.0514	0.01	Q	.	.	.	.
22.88	0.0514	0.01	Q	.	.	.	.
22.97	0.0515	0.01	Q	.	.	.	.
23.06	0.0516	0.01	Q	.	.	.	.
23.15	0.0517	0.01	Q	.	.	.	.
23.24	0.0517	0.01	Q	.	.	.	.
23.33	0.0518	0.01	Q	.	.	.	.
23.41	0.0519	0.01	Q	.	.	.	.
23.50	0.0520	0.01	Q	.	.	.	.
23.59	0.0521	0.01	Q	.	.	.	.
23.68	0.0521	0.01	Q	.	.	.	.
23.77	0.0522	0.01	Q	.	.	.	.
23.86	0.0523	0.01	Q	.	.	.	.
23.95	0.0523	0.01	Q	.	.	.	.
24.04	0.0524	0.01	Q	.	.	.	.
24.13	0.0525	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
 (Note: 100% of Peak Flow Rate estimate assumed to have
 an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
=====	=====
0%	1441.8
10%	69.7
20%	21.4
30%	10.7
40%	5.4
50%	5.4
60%	5.4
70%	5.4
80%	5.4
90%	5.4

SMALL AREA UNIT HYDROGRAPH MODEL

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

 Problem Descriptions:
 APN 297-170-002 & 003
 PRE-DEVELOPMENT DA5
 2-YEAR STORM EVENT

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
 TOTAL CATCHMENT AREA (ACRES) = 0.80
 SOIL-LOSS RATE, Fm, (INCH/HR) = 0.167
 LOW LOSS FRACTION = 0.404
 TIME OF CONCENTRATION (MIN.) = 5.00
 SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
 USER SPECIFIED RAINFALL VALUES ARE USED
 RETURN FREQUENCY (YEARS) = 2
 5-MINUTE POINT RAINFALL VALUE (INCHES) = 0.12
 30-MINUTE POINT RAINFALL VALUE (INCHES) = 0.32
 1-HOUR POINT RAINFALL VALUE (INCHES) = 0.45
 3-HOUR POINT RAINFALL VALUE (INCHES) = 0.78
 6-HOUR POINT RAINFALL VALUE (INCHES) = 1.07
 24-HOUR POINT RAINFALL VALUE (INCHES) = 1.83

 TOTAL CATCHMENT RUNOFF VOLUME (ACRE-FEET) = 0.07
 TOTAL CATCHMENT SOIL-LOSS VOLUME (ACRE-FEET) = 0.05

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	2.5	5.0	7.5	10.0
0.08	0.0000	0.01	Q	.	.	.	.
0.17	0.0001	0.01	Q	.	.	.	.
0.25	0.0002	0.01	Q	.	.	.	.
0.33	0.0003	0.01	Q	.	.	.	.
0.42	0.0004	0.01	Q	.	.	.	.
0.50	0.0005	0.01	Q	.	.	.	.
0.58	0.0006	0.01	Q	.	.	.	.
0.67	0.0007	0.01	Q	.	.	.	.
0.75	0.0008	0.01	Q	.	.	.	.

0.83	0.0008	0.01	Q	.	.	.	.
0.92	0.0009	0.01	Q	.	.	.	.
1.00	0.0010	0.01	Q	.	.	.	.
1.08	0.0011	0.01	Q	.	.	.	.
1.17	0.0012	0.01	Q	.	.	.	.
1.25	0.0013	0.01	Q	.	.	.	.
1.33	0.0014	0.01	Q	.	.	.	.
1.42	0.0015	0.01	Q	.	.	.	.
1.50	0.0016	0.01	Q	.	.	.	.
1.58	0.0017	0.01	Q	.	.	.	.
1.67	0.0018	0.01	Q	.	.	.	.
1.75	0.0018	0.01	Q	.	.	.	.
1.83	0.0019	0.01	Q	.	.	.	.
1.92	0.0020	0.01	Q	.	.	.	.
2.00	0.0021	0.01	Q	.	.	.	.
2.08	0.0022	0.01	Q	.	.	.	.
2.17	0.0023	0.01	Q	.	.	.	.
2.25	0.0024	0.01	Q	.	.	.	.
2.33	0.0025	0.01	Q	.	.	.	.
2.42	0.0026	0.01	Q	.	.	.	.
2.50	0.0027	0.01	Q	.	.	.	.
2.58	0.0028	0.01	Q	.	.	.	.
2.67	0.0029	0.01	Q	.	.	.	.
2.75	0.0030	0.01	Q	.	.	.	.
2.83	0.0031	0.01	Q	.	.	.	.
2.92	0.0032	0.01	Q	.	.	.	.
3.00	0.0033	0.01	Q	.	.	.	.
3.08	0.0034	0.01	Q	.	.	.	.
3.17	0.0035	0.01	Q	.	.	.	.
3.25	0.0036	0.01	Q	.	.	.	.
3.33	0.0037	0.01	Q	.	.	.	.
3.42	0.0038	0.01	Q	.	.	.	.
3.50	0.0039	0.01	Q	.	.	.	.
3.58	0.0040	0.01	Q	.	.	.	.
3.67	0.0041	0.01	Q	.	.	.	.
3.75	0.0042	0.01	Q	.	.	.	.
3.83	0.0043	0.01	Q	.	.	.	.
3.92	0.0044	0.02	Q	.	.	.	.
4.00	0.0045	0.02	Q	.	.	.	.
4.08	0.0046	0.02	Q	.	.	.	.
4.17	0.0047	0.02	Q	.	.	.	.
4.25	0.0048	0.02	Q	.	.	.	.
4.33	0.0049	0.02	Q	.	.	.	.
4.42	0.0050	0.02	Q	.	.	.	.
4.50	0.0051	0.02	Q	.	.	.	.
4.58	0.0052	0.02	Q	.	.	.	.
4.67	0.0053	0.02	Q	.	.	.	.
4.75	0.0055	0.02	Q	.	.	.	.
4.83	0.0056	0.02	Q	.	.	.	.
4.92	0.0057	0.02	Q	.	.	.	.
5.00	0.0058	0.02	Q	.	.	.	.
5.08	0.0059	0.02	Q	.	.	.	.
5.17	0.0060	0.02	Q	.	.	.	.
5.25	0.0061	0.02	Q	.	.	.	.
5.33	0.0062	0.02	Q	.	.	.	.
5.42	0.0063	0.02	Q	.	.	.	.
5.50	0.0064	0.02	Q	.	.	.	.

5.58	0.0066	0.02	Q	.	.	.	.
5.67	0.0067	0.02	Q	.	.	.	.
5.75	0.0068	0.02	Q	.	.	.	.
5.83	0.0069	0.02	Q	.	.	.	.
5.92	0.0070	0.02	Q	.	.	.	.
6.00	0.0071	0.02	Q	.	.	.	.
6.08	0.0072	0.02	Q	.	.	.	.
6.17	0.0074	0.02	Q	.	.	.	.
6.25	0.0075	0.02	Q	.	.	.	.
6.33	0.0076	0.02	Q	.	.	.	.
6.42	0.0077	0.02	Q	.	.	.	.
6.50	0.0078	0.02	Q	.	.	.	.
6.58	0.0080	0.02	Q	.	.	.	.
6.67	0.0081	0.02	Q	.	.	.	.
6.75	0.0082	0.02	Q	.	.	.	.
6.83	0.0083	0.02	Q	.	.	.	.
6.92	0.0084	0.02	Q	.	.	.	.
7.00	0.0086	0.02	Q	.	.	.	.
7.08	0.0087	0.02	Q	.	.	.	.
7.17	0.0088	0.02	Q	.	.	.	.
7.25	0.0089	0.02	Q	.	.	.	.
7.33	0.0091	0.02	Q	.	.	.	.
7.42	0.0092	0.02	Q	.	.	.	.
7.50	0.0093	0.02	Q	.	.	.	.
7.58	0.0094	0.02	Q	.	.	.	.
7.67	0.0096	0.02	Q	.	.	.	.
7.75	0.0097	0.02	Q	.	.	.	.
7.83	0.0098	0.02	Q	.	.	.	.
7.92	0.0100	0.02	Q	.	.	.	.
8.00	0.0101	0.02	Q	.	.	.	.
8.08	0.0102	0.02	Q	.	.	.	.
8.17	0.0104	0.02	Q	.	.	.	.
8.25	0.0105	0.02	Q	.	.	.	.
8.33	0.0106	0.02	Q	.	.	.	.
8.42	0.0108	0.02	Q	.	.	.	.
8.50	0.0109	0.02	Q	.	.	.	.
8.58	0.0111	0.02	Q	.	.	.	.
8.67	0.0112	0.02	Q	.	.	.	.
8.75	0.0113	0.02	Q	.	.	.	.
8.83	0.0115	0.02	Q	.	.	.	.
8.92	0.0116	0.02	Q	.	.	.	.
9.00	0.0118	0.02	Q	.	.	.	.
9.08	0.0119	0.02	Q	.	.	.	.
9.17	0.0120	0.02	Q	.	.	.	.
9.25	0.0122	0.02	Q	.	.	.	.
9.33	0.0123	0.02	Q	.	.	.	.
9.42	0.0125	0.02	Q	.	.	.	.
9.50	0.0126	0.02	Q	.	.	.	.
9.58	0.0128	0.02	Q	.	.	.	.
9.67	0.0129	0.02	Q	.	.	.	.
9.75	0.0131	0.02	Q	.	.	.	.
9.83	0.0133	0.02	Q	.	.	.	.
9.92	0.0134	0.02	Q	.	.	.	.
10.00	0.0136	0.02	Q	.	.	.	.
10.08	0.0137	0.02	Q	.	.	.	.
10.17	0.0139	0.02	Q	.	.	.	.
10.25	0.0140	0.02	Q	.	.	.	.

10.33	0.0142	0.02	Q	.	.	.	.
10.42	0.0144	0.02	Q	.	.	.	.
10.50	0.0145	0.02	Q	.	.	.	.
10.58	0.0147	0.02	Q	.	.	.	.
10.67	0.0149	0.02	Q	.	.	.	.
10.75	0.0150	0.02	Q	.	.	.	.
10.83	0.0152	0.03	Q	.	.	.	.
10.92	0.0154	0.03	Q	.	.	.	.
11.00	0.0156	0.03	Q	.	.	.	.
11.08	0.0157	0.03	Q	.	.	.	.
11.17	0.0159	0.03	Q	.	.	.	.
11.25	0.0161	0.03	Q	.	.	.	.
11.33	0.0163	0.03	Q	.	.	.	.
11.42	0.0165	0.03	Q	.	.	.	.
11.50	0.0167	0.03	Q	.	.	.	.
11.58	0.0168	0.03	Q	.	.	.	.
11.67	0.0170	0.03	Q	.	.	.	.
11.75	0.0172	0.03	Q	.	.	.	.
11.83	0.0174	0.03	Q	.	.	.	.
11.92	0.0176	0.03	Q	.	.	.	.
12.00	0.0178	0.03	Q	.	.	.	.
12.08	0.0181	0.04	Q	.	.	.	.
12.17	0.0183	0.04	Q	.	.	.	.
12.25	0.0185	0.04	Q	.	.	.	.
12.33	0.0188	0.04	Q	.	.	.	.
12.42	0.0190	0.04	Q	.	.	.	.
12.50	0.0193	0.04	Q	.	.	.	.
12.58	0.0195	0.04	Q	.	.	.	.
12.67	0.0198	0.04	Q	.	.	.	.
12.75	0.0201	0.04	Q	.	.	.	.
12.83	0.0203	0.04	Q	.	.	.	.
12.92	0.0206	0.04	Q	.	.	.	.
13.00	0.0209	0.04	Q	.	.	.	.
13.08	0.0212	0.04	Q	.	.	.	.
13.17	0.0215	0.04	Q	.	.	.	.
13.25	0.0217	0.04	Q	.	.	.	.
13.33	0.0220	0.04	Q	.	.	.	.
13.42	0.0223	0.04	Q	.	.	.	.
13.50	0.0226	0.04	Q	.	.	.	.
13.58	0.0229	0.05	Q	.	.	.	.
13.67	0.0233	0.05	Q	.	.	.	.
13.75	0.0236	0.05	Q	.	.	.	.
13.83	0.0239	0.05	Q	.	.	.	.
13.92	0.0242	0.05	Q	.	.	.	.
14.00	0.0246	0.05	Q	.	.	.	.
14.08	0.0249	0.06	Q	.	.	.	.
14.17	0.0253	0.06	Q	.	.	.	.
14.25	0.0257	0.06	Q	.	.	.	.
14.33	0.0261	0.06	Q	.	.	.	.
14.42	0.0266	0.06	Q	.	.	.	.
14.50	0.0270	0.06	Q	.	.	.	.
14.58	0.0274	0.07	Q	.	.	.	.
14.67	0.0279	0.07	Q	.	.	.	.
14.75	0.0283	0.07	Q	.	.	.	.
14.83	0.0288	0.07	Q	.	.	.	.
14.92	0.0293	0.07	Q	.	.	.	.
15.00	0.0298	0.08	Q	.	.	.	.

15.08	0.0304	0.08	Q	.	.	.	.
15.17	0.0309	0.08	Q	.	.	.	.
15.25	0.0315	0.09	Q	.	.	.	.
15.33	0.0321	0.09	Q	.	.	.	.
15.42	0.0328	0.10	Q	.	.	.	.
15.50	0.0335	0.10	Q	.	.	.	.
15.58	0.0342	0.11	Q	.	.	.	.
15.67	0.0350	0.12	Q	.	.	.	.
15.75	0.0360	0.16	Q	.	.	.	.
15.83	0.0371	0.17	Q	.	.	.	.
15.92	0.0386	0.26	.Q	.	.	.	.
16.00	0.0407	0.36	.Q	.	.	.	.
16.08	0.0451	0.92	. Q	.	.	.	.
16.17	0.0489	0.20	Q	.	.	.	.
16.25	0.0501	0.13	Q	.	.	.	.
16.33	0.0509	0.11	Q	.	.	.	.
16.42	0.0516	0.09	Q	.	.	.	.
16.50	0.0522	0.09	Q	.	.	.	.
16.58	0.0528	0.08	Q	.	.	.	.
16.67	0.0533	0.07	Q	.	.	.	.
16.75	0.0538	0.07	Q	.	.	.	.
16.83	0.0542	0.06	Q	.	.	.	.
16.92	0.0547	0.06	Q	.	.	.	.
17.00	0.0551	0.06	Q	.	.	.	.
17.08	0.0554	0.05	Q	.	.	.	.
17.17	0.0558	0.05	Q	.	.	.	.
17.25	0.0561	0.05	Q	.	.	.	.
17.33	0.0564	0.04	Q	.	.	.	.
17.42	0.0567	0.04	Q	.	.	.	.
17.50	0.0570	0.04	Q	.	.	.	.
17.58	0.0573	0.04	Q	.	.	.	.
17.67	0.0576	0.04	Q	.	.	.	.
17.75	0.0578	0.04	Q	.	.	.	.
17.83	0.0581	0.04	Q	.	.	.	.
17.92	0.0584	0.04	Q	.	.	.	.
18.00	0.0586	0.04	Q	.	.	.	.
18.08	0.0588	0.03	Q	.	.	.	.
18.17	0.0590	0.03	Q	.	.	.	.
18.25	0.0592	0.03	Q	.	.	.	.
18.33	0.0594	0.03	Q	.	.	.	.
18.42	0.0596	0.03	Q	.	.	.	.
18.50	0.0598	0.03	Q	.	.	.	.
18.58	0.0600	0.03	Q	.	.	.	.
18.67	0.0601	0.03	Q	.	.	.	.
18.75	0.0603	0.02	Q	.	.	.	.
18.83	0.0605	0.02	Q	.	.	.	.
18.92	0.0606	0.02	Q	.	.	.	.
19.00	0.0608	0.02	Q	.	.	.	.
19.08	0.0610	0.02	Q	.	.	.	.
19.17	0.0611	0.02	Q	.	.	.	.
19.25	0.0613	0.02	Q	.	.	.	.
19.33	0.0614	0.02	Q	.	.	.	.
19.42	0.0616	0.02	Q	.	.	.	.
19.50	0.0617	0.02	Q	.	.	.	.
19.58	0.0619	0.02	Q	.	.	.	.
19.67	0.0620	0.02	Q	.	.	.	.
19.75	0.0622	0.02	Q	.	.	.	.

19.83	0.0623	0.02	Q	.	.	.	.
19.92	0.0624	0.02	Q	.	.	.	.
20.00	0.0626	0.02	Q	.	.	.	.
20.08	0.0627	0.02	Q	.	.	.	.
20.17	0.0628	0.02	Q	.	.	.	.
20.25	0.0630	0.02	Q	.	.	.	.
20.33	0.0631	0.02	Q	.	.	.	.
20.42	0.0632	0.02	Q	.	.	.	.
20.50	0.0634	0.02	Q	.	.	.	.
20.58	0.0635	0.02	Q	.	.	.	.
20.67	0.0636	0.02	Q	.	.	.	.
20.75	0.0637	0.02	Q	.	.	.	.
20.83	0.0638	0.02	Q	.	.	.	.
20.92	0.0640	0.02	Q	.	.	.	.
21.00	0.0641	0.02	Q	.	.	.	.
21.08	0.0642	0.02	Q	.	.	.	.
21.17	0.0643	0.02	Q	.	.	.	.
21.25	0.0644	0.02	Q	.	.	.	.
21.33	0.0645	0.02	Q	.	.	.	.
21.42	0.0647	0.02	Q	.	.	.	.
21.50	0.0648	0.02	Q	.	.	.	.
21.58	0.0649	0.02	Q	.	.	.	.
21.67	0.0650	0.02	Q	.	.	.	.
21.75	0.0651	0.02	Q	.	.	.	.
21.83	0.0652	0.02	Q	.	.	.	.
21.92	0.0653	0.02	Q	.	.	.	.
22.00	0.0654	0.02	Q	.	.	.	.
22.08	0.0655	0.02	Q	.	.	.	.
22.17	0.0656	0.01	Q	.	.	.	.
22.25	0.0657	0.01	Q	.	.	.	.
22.33	0.0658	0.01	Q	.	.	.	.
22.42	0.0659	0.01	Q	.	.	.	.
22.50	0.0660	0.01	Q	.	.	.	.
22.58	0.0661	0.01	Q	.	.	.	.
22.67	0.0662	0.01	Q	.	.	.	.
22.75	0.0663	0.01	Q	.	.	.	.
22.83	0.0664	0.01	Q	.	.	.	.
22.92	0.0665	0.01	Q	.	.	.	.
23.00	0.0666	0.01	Q	.	.	.	.
23.08	0.0667	0.01	Q	.	.	.	.
23.17	0.0668	0.01	Q	.	.	.	.
23.25	0.0669	0.01	Q	.	.	.	.
23.33	0.0670	0.01	Q	.	.	.	.
23.42	0.0671	0.01	Q	.	.	.	.
23.50	0.0672	0.01	Q	.	.	.	.
23.58	0.0673	0.01	Q	.	.	.	.
23.67	0.0673	0.01	Q	.	.	.	.
23.75	0.0674	0.01	Q	.	.	.	.
23.83	0.0675	0.01	Q	.	.	.	.
23.92	0.0676	0.01	Q	.	.	.	.
24.00	0.0677	0.01	Q	.	.	.	.
24.08	0.0677	0.00	Q	.	.	.	.

 TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
 (Note: 100% of Peak Flow Rate estimate assumed to have
 an instantaneous time duration)

Percentile of Estimated
Peak Flow Rate

Duration
(minutes)

=====

=====

0%	1440.0
10%	65.0
20%	20.0
30%	10.0
40%	5.0
50%	5.0
60%	5.0
70%	5.0
80%	5.0
90%	5.0

NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS

=====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
1461 FORD STREET, SUITE 105
REDLANDS, CA 92373
PHONE: (909) 748-7777 FAX: (909) 748-7776

Problem Descriptions:
APN 297-170-002 & 003
POST DEVELOPMENT DA1
2-YEAR STORM EVENT

=====

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 1.83 (inches)

Table with 7 columns: SOIL-COVER TYPE, AREA (Acres), PERCENT OF PERVIOUS AREA, SCS CURVE NUMBER, LOSS RATE Fp(in./hr.), YIELD. Rows include soil types 1 and 2 with their respective area, perviousness, SCS curve numbers, loss rates, and yields.

TOTAL AREA (Acres) = 12.82

AREA-AVERAGED LOSS RATE, Fm (in./hr.) = 0.081

AREA-AVERAGED LOW LOSS FRACTION, Y = 0.210

=====

 NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
 AND LOW LOSS FRACTION ESTIMATIONS
 =====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

 Problem Descriptions:
 APN 297-170-002 & 003
 POST-DEVELOPMENT DA2
 2-YEAR STORM EVENT
 =====

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
 AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 1.83 (inches)

SOIL-COVER TYPE	AREA (Acres)	PERCENT OF PERVIOUS AREA	SCS CURVE NUMBER	LOSS RATE Fp (in./hr.)	YIELD
1	2.67	100.00	79.(AMC II)	0.648	0.030
2	0.27	100.00	69.(AMC II)	0.812	0.000
3	5.00	0.00	98.(AMC II)	0.000	0.878

TOTAL AREA (Acres) = 7.94

AREA-AVERAGED LOSS RATE, \bar{F}_m (in./hr.) = 0.246

AREA-AVERAGED LOW LOSS FRACTION, \bar{Y} = 0.437
 =====

NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS

=====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
1461 FORD STREET, SUITE 105
REDLANDS, CA 92373
PHONE: (909) 748-7777 FAX: (909) 748-7776

Problem Descriptions:
APN 297-170-002 & 003
POST-DEVELOPMENT DA3
2-YEAR STORM EVENT

=====

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 1.83 (inches)

Table with 7 columns: SOIL-COVER TYPE, AREA (Acres), PERCENT OF PERVIOUS AREA, SCS CURVE NUMBER, LOSS RATE Fp (in./hr.), and YIELD. It contains two rows of data for soil types 1 and 2.

TOTAL AREA (Acres) = 0.64

AREA-AVERAGED LOSS RATE, Fm (in./hr.) = 0.165

AREA-AVERAGED LOW LOSS FRACTION, Y = 0.301

=====

NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm) AND LOW LOSS FRACTION ESTIMATIONS

=====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC. 1461 FORD STREET, SUITE 105 REDLANDS, CA 92373 PHONE: (909) 748-7777 FAX: (909) 748-7776

Problem Descriptions: APN 297-170-002 & 003 POST-DEVELOPMENT DA4 2-YEAR STORM EVENT

=====

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm) AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 1.83 (inches)

Table with 7 columns: SOIL-COVER TYPE, AREA (Acres), PERCENT OF PERVIOUS AREA, SCS CURVE NUMBER, LOSS RATE Fp (in./hr.), YIELD. Rows 1 and 2.

TOTAL AREA (Acres) = 0.64

AREA-AVERAGED LOSS RATE, Fm (in./hr.) = 0.190

AREA-AVERAGED LOW LOSS FRACTION, Y-bar = 0.328

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NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS

=====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
1461 FORD STREET, SUITE 105
REDLANDS, CA 92373
PHONE: (909) 748-7777 FAX: (909) 748-7776

Problem Descriptions:
APN 297-170-002 & 003
POST-DEVELOPMENT DA5
2-YEAR STORM EVENT

=====

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 1.83 (inches)

Table with 7 columns: SOIL-COVER TYPE, AREA (Acres), PERCENT OF PERVIOUS AREA, SCS CURVE NUMBER, LOSS RATE Fp(in./hr.), YIELD. Rows 1 and 2.

TOTAL AREA (Acres) = 0.80

AREA-AVERAGED LOSS RATE, Fm (in./hr.) = 0.193

AREA-AVERAGED LOW LOSS FRACTION, Y = 0.331

=====

 SMALL AREA UNIT HYDROGRAPH MODEL
 =====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

 Problem Descriptions:
 APN 297-170-002 & 003
 POST-DEVELOPMENT DA1
 2-YEAR STORM EVENT

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
 TOTAL CATCHMENT AREA (ACRES) = 12.82
 SOIL-LOSS RATE, Fm, (INCH/HR) = 0.081
 LOW LOSS FRACTION = 0.210
 TIME OF CONCENTRATION (MIN.) = 9.04
 SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
 USER SPECIFIED RAINFALL VALUES ARE USED
 RETURN FREQUENCY (YEARS) = 2
 5-MINUTE POINT RAINFALL VALUE (INCHES) = 0.12
 30-MINUTE POINT RAINFALL VALUE (INCHES) = 0.32
 1-HOUR POINT RAINFALL VALUE (INCHES) = 0.45
 3-HOUR POINT RAINFALL VALUE (INCHES) = 0.78
 6-HOUR POINT RAINFALL VALUE (INCHES) = 1.07
 24-HOUR POINT RAINFALL VALUE (INCHES) = 1.83

 TOTAL CATCHMENT RUNOFF VOLUME (ACRE-FEET) = 1.41
 TOTAL CATCHMENT SOIL-LOSS VOLUME (ACRE-FEET) = 0.55

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	5.0	10.0	15.0	20.0
0.03	0.0000	0.00	Q	.	.	.	.
0.18	0.0017	0.27	Q	.	.	.	.
0.33	0.0050	0.27	Q	.	.	.	.
0.48	0.0084	0.27	Q	.	.	.	.
0.63	0.0118	0.27	Q	.	.	.	.
0.78	0.0153	0.28	Q	.	.	.	.
0.93	0.0187	0.28	Q	.	.	.	.
1.08	0.0222	0.28	Q	.	.	.	.
1.23	0.0257	0.28	Q	.	.	.	.

1.39	0.0292	0.28	Q	.	.	.	.
1.54	0.0327	0.28	Q	.	.	.	.
1.69	0.0363	0.29	Q	.	.	.	.
1.84	0.0399	0.29	Q	.	.	.	.
1.99	0.0435	0.29	Q	.	.	.	.
2.14	0.0471	0.29	Q	.	.	.	.
2.29	0.0507	0.29	Q	.	.	.	.
2.44	0.0544	0.30	Q	.	.	.	.
2.59	0.0581	0.30	Q	.	.	.	.
2.74	0.0618	0.30	Q	.	.	.	.
2.89	0.0656	0.30	Q	.	.	.	.
3.04	0.0694	0.30	Q	.	.	.	.
3.19	0.0732	0.31	Q	.	.	.	.
3.34	0.0770	0.31	Q	.	.	.	.
3.49	0.0809	0.31	Q	.	.	.	.
3.65	0.0847	0.31	Q	.	.	.	.
3.80	0.0887	0.32	Q	.	.	.	.
3.95	0.0926	0.32	Q	.	.	.	.
4.10	0.0966	0.32	Q	.	.	.	.
4.25	0.1006	0.32	Q	.	.	.	.
4.40	0.1046	0.33	Q	.	.	.	.
4.55	0.1087	0.33	Q	.	.	.	.
4.70	0.1128	0.33	Q	.	.	.	.
4.85	0.1169	0.33	Q	.	.	.	.
5.00	0.1211	0.34	Q	.	.	.	.
5.15	0.1253	0.34	Q	.	.	.	.
5.30	0.1295	0.34	Q	.	.	.	.
5.45	0.1338	0.34	Q	.	.	.	.
5.60	0.1381	0.35	Q	.	.	.	.
5.75	0.1425	0.35	Q	.	.	.	.
5.91	0.1469	0.35	Q	.	.	.	.
6.06	0.1513	0.36	Q	.	.	.	.
6.21	0.1558	0.36	Q	.	.	.	.
6.36	0.1603	0.36	Q	.	.	.	.
6.51	0.1648	0.37	Q	.	.	.	.
6.66	0.1694	0.37	Q	.	.	.	.
6.81	0.1741	0.38	Q	.	.	.	.
6.96	0.1788	0.38	Q	.	.	.	.
7.11	0.1835	0.38	Q	.	.	.	.
7.26	0.1883	0.39	Q	.	.	.	.
7.41	0.1931	0.39	Q	.	.	.	.
7.56	0.1980	0.39	Q	.	.	.	.
7.71	0.2030	0.40	Q	.	.	.	.
7.86	0.2080	0.40	Q	.	.	.	.
8.01	0.2130	0.41	Q	.	.	.	.
8.17	0.2181	0.41	Q	.	.	.	.
8.32	0.2233	0.42	Q	.	.	.	.
8.47	0.2285	0.42	Q	.	.	.	.
8.62	0.2338	0.43	Q	.	.	.	.
8.77	0.2392	0.43	Q	.	.	.	.
8.92	0.2446	0.44	Q	.	.	.	.
9.07	0.2501	0.44	Q	.	.	.	.
9.22	0.2557	0.45	Q	.	.	.	.
9.37	0.2613	0.46	Q	.	.	.	.
9.52	0.2670	0.46	Q	.	.	.	.
9.67	0.2728	0.47	Q	.	.	.	.
9.82	0.2787	0.48	Q	.	.	.	.

9.97	0.2847	0.48	Q	.	.	.	.
10.12	0.2908	0.49	Q	.	.	.	.
10.27	0.2969	0.50	Q	.	.	.	.
10.43	0.3032	0.51	.Q	.	.	.	.
10.58	0.3095	0.51	.Q	.	.	.	.
10.73	0.3160	0.53	.Q	.	.	.	.
10.88	0.3226	0.53	.Q	.	.	.	.
11.03	0.3293	0.54	.Q	.	.	.	.
11.18	0.3361	0.55	.Q	.	.	.	.
11.33	0.3430	0.56	.Q	.	.	.	.
11.48	0.3501	0.57	.Q	.	.	.	.
11.63	0.3573	0.59	.Q	.	.	.	.
11.78	0.3647	0.60	.Q	.	.	.	.
11.93	0.3722	0.61	.Q	.	.	.	.
12.08	0.3799	0.62	.Q	.	.	.	.
12.23	0.3885	0.76	.Q	.	.	.	.
12.38	0.3980	0.77	.Q	.	.	.	.
12.53	0.4077	0.79	.Q	.	.	.	.
12.69	0.4176	0.80	.Q	.	.	.	.
12.84	0.4277	0.83	.Q	.	.	.	.
12.99	0.4381	0.84	.Q	.	.	.	.
13.14	0.4488	0.87	.Q	.	.	.	.
13.29	0.4598	0.89	.Q	.	.	.	.
13.44	0.4711	0.93	.Q	.	.	.	.
13.59	0.4827	0.94	.Q	.	.	.	.
13.74	0.4947	0.99	.Q	.	.	.	.
13.89	0.5072	1.01	. Q	.	.	.	.
14.04	0.5201	1.06	. Q	.	.	.	.
14.19	0.5341	1.19	. Q	.	.	.	.
14.34	0.5494	1.27	. Q	.	.	.	.
14.49	0.5654	1.30	. Q	.	.	.	.
14.64	0.5822	1.39	. Q	.	.	.	.
14.79	0.5998	1.44	. Q	.	.	.	.
14.95	0.6185	1.56	. Q	.	.	.	.
15.10	0.6384	1.63	. Q	.	.	.	.
15.25	0.6599	1.82	. Q	.	.	.	.
15.40	0.6832	1.93	. Q	.	.	.	.
15.55	0.7091	2.22	. Q	.	.	.	.
15.70	0.7382	2.46	. Q	.	.	.	.
15.85	0.7765	3.68	.	Q	.	.	.
16.00	0.8301	4.93	.	Q.	.	.	.
16.15	0.9341	11.77	.	.	Q	.	.
16.30	1.0255	2.90	.	Q	.	.	.
16.45	1.0563	2.05	.	Q	.	.	.
16.60	1.0798	1.72	.	Q	.	.	.
16.75	1.0998	1.50	. Q	.	.	.	.
16.90	1.1175	1.34	. Q	.	.	.	.
17.05	1.1336	1.23	. Q	.	.	.	.
17.21	1.1477	1.04	. Q	.	.	.	.
17.36	1.1601	0.97	.Q	.	.	.	.
17.51	1.1718	0.91	.Q	.	.	.	.
17.66	1.1828	0.86	.Q	.	.	.	.
17.81	1.1932	0.81	.Q	.	.	.	.
17.96	1.2031	0.78	.Q	.	.	.	.
18.11	1.2125	0.72	.Q	.	.	.	.
18.26	1.2207	0.60	.Q	.	.	.	.
18.41	1.2281	0.58	.Q	.	.	.	.

18.56	1.2352	0.56	.Q	.	.	.	.
18.71	1.2420	0.54	.Q	.	.	.	.
18.86	1.2486	0.52	.Q	.	.	.	.
19.01	1.2549	0.50	.Q	.	.	.	.
19.16	1.2611	0.49	Q	.	.	.	.
19.31	1.2671	0.47	Q	.	.	.	.
19.47	1.2729	0.46	Q	.	.	.	.
19.62	1.2785	0.45	Q	.	.	.	.
19.77	1.2840	0.44	Q	.	.	.	.
19.92	1.2894	0.43	Q	.	.	.	.
20.07	1.2946	0.42	Q	.	.	.	.
20.22	1.2997	0.41	Q	.	.	.	.
20.37	1.3047	0.40	Q	.	.	.	.
20.52	1.3096	0.39	Q	.	.	.	.
20.67	1.3144	0.38	Q	.	.	.	.
20.82	1.3191	0.37	Q	.	.	.	.
20.97	1.3237	0.37	Q	.	.	.	.
21.12	1.3282	0.36	Q	.	.	.	.
21.27	1.3326	0.35	Q	.	.	.	.
21.42	1.3370	0.35	Q	.	.	.	.
21.57	1.3413	0.34	Q	.	.	.	.
21.73	1.3455	0.33	Q	.	.	.	.
21.88	1.3496	0.33	Q	.	.	.	.
22.03	1.3537	0.32	Q	.	.	.	.
22.18	1.3577	0.32	Q	.	.	.	.
22.33	1.3616	0.31	Q	.	.	.	.
22.48	1.3655	0.31	Q	.	.	.	.
22.63	1.3693	0.31	Q	.	.	.	.
22.78	1.3731	0.30	Q	.	.	.	.
22.93	1.3768	0.30	Q	.	.	.	.
23.08	1.3805	0.29	Q	.	.	.	.
23.23	1.3841	0.29	Q	.	.	.	.
23.38	1.3877	0.29	Q	.	.	.	.
23.53	1.3913	0.28	Q	.	.	.	.
23.68	1.3947	0.28	Q	.	.	.	.
23.83	1.3982	0.28	Q	.	.	.	.
23.99	1.4016	0.27	Q	.	.	.	.
24.14	1.4050	0.27	Q	.	.	.	.
24.29	1.4066	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:

(Note: 100% of Peak Flow Rate estimate assumed to have an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
=====	=====
0%	1446.4
10%	180.8
20%	45.2
30%	27.1
40%	18.1
50%	9.0
60%	9.0
70%	9.0
80%	9.0
90%	9.0

SMALL AREA UNIT HYDROGRAPH MODEL

=====

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Ver. 23.0 Release Date: 07/01/2016 License ID 1533

Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
1461 FORD STREET, SUITE 105
REDLANDS, CA 92373
PHONE: (909) 748-7777 FAX: (909) 748-7776

Problem Descriptions:
APN 297-107-002 & 003
POST-DEVELOPMENT DA2
2-YEAR STORM EVENT

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
TOTAL CATCHMENT AREA (ACRES) = 7.94
SOIL-LOSS RATE, Fm, (INCH/HR) = 0.246
LOW LOSS FRACTION = 0.437
TIME OF CONCENTRATION (MIN.) = 10.12
SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
USER SPECIFIED RAINFALL VALUES ARE USED
RETURN FREQUENCY (YEARS) = 2
5-MINUTE POINT RAINFALL VALUE (INCHES) = 0.12
30-MINUTE POINT RAINFALL VALUE (INCHES) = 0.32
1-HOUR POINT RAINFALL VALUE (INCHES) = 0.45
3-HOUR POINT RAINFALL VALUE (INCHES) = 0.78
6-HOUR POINT RAINFALL VALUE (INCHES) = 1.07
24-HOUR POINT RAINFALL VALUE (INCHES) = 1.83

TOTAL CATCHMENT RUNOFF VOLUME (ACRE-FEET) = 0.63
TOTAL CATCHMENT SOIL-LOSS VOLUME (ACRE-FEET) = 0.58

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	2.5	5.0	7.5	10.0
0.15	0.0008	0.12	Q	.	.	.	.
0.31	0.0025	0.12	Q	.	.	.	.
0.48	0.0042	0.12	Q	.	.	.	.
0.65	0.0058	0.12	Q	.	.	.	.
0.82	0.0075	0.12	Q	.	.	.	.
0.99	0.0092	0.12	Q	.	.	.	.
1.16	0.0110	0.12	Q	.	.	.	.
1.33	0.0127	0.12	Q	.	.	.	.
1.49	0.0144	0.13	Q	.	.	.	.

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

1.66	0.0162	0.13	Q	.	.	.	.
1.83	0.0180	0.13	Q	.	.	.	.
2.00	0.0197	0.13	Q	.	.	.	.
2.17	0.0215	0.13	Q	.	.	.	.
2.34	0.0233	0.13	Q	.	.	.	.
2.51	0.0251	0.13	Q	.	.	.	.
2.68	0.0270	0.13	Q	.	.	.	.
2.84	0.0288	0.13	Q	.	.	.	.
3.01	0.0307	0.13	Q	.	.	.	.
3.18	0.0326	0.13	Q	.	.	.	.
3.35	0.0345	0.14	Q	.	.	.	.
3.52	0.0364	0.14	Q	.	.	.	.
3.69	0.0383	0.14	Q	.	.	.	.
3.86	0.0402	0.14	Q	.	.	.	.
4.02	0.0422	0.14	Q	.	.	.	.
4.19	0.0442	0.14	Q	.	.	.	.
4.36	0.0461	0.14	Q	.	.	.	.
4.53	0.0481	0.14	Q	.	.	.	.
4.70	0.0502	0.15	Q	.	.	.	.
4.87	0.0522	0.15	Q	.	.	.	.
5.04	0.0543	0.15	Q	.	.	.	.
5.21	0.0564	0.15	Q	.	.	.	.
5.37	0.0585	0.15	Q	.	.	.	.
5.54	0.0606	0.15	Q	.	.	.	.
5.71	0.0627	0.15	Q	.	.	.	.
5.88	0.0649	0.16	Q	.	.	.	.
6.05	0.0671	0.16	Q	.	.	.	.
6.22	0.0693	0.16	Q	.	.	.	.
6.39	0.0715	0.16	Q	.	.	.	.
6.55	0.0738	0.16	Q	.	.	.	.
6.72	0.0760	0.16	Q	.	.	.	.
6.89	0.0783	0.17	Q	.	.	.	.
7.06	0.0807	0.17	Q	.	.	.	.
7.23	0.0830	0.17	Q	.	.	.	.
7.40	0.0854	0.17	Q	.	.	.	.
7.57	0.0878	0.17	Q	.	.	.	.
7.74	0.0903	0.18	Q	.	.	.	.
7.90	0.0927	0.18	Q	.	.	.	.
8.07	0.0952	0.18	Q	.	.	.	.
8.24	0.0978	0.18	Q	.	.	.	.
8.41	0.1003	0.19	Q	.	.	.	.
8.58	0.1029	0.19	Q	.	.	.	.
8.75	0.1056	0.19	Q	.	.	.	.
8.92	0.1083	0.19	Q	.	.	.	.
9.08	0.1110	0.20	Q	.	.	.	.
9.25	0.1137	0.20	Q	.	.	.	.
9.42	0.1165	0.20	Q	.	.	.	.
9.59	0.1194	0.20	Q	.	.	.	.
9.76	0.1222	0.21	Q	.	.	.	.
9.93	0.1252	0.21	Q	.	.	.	.
10.10	0.1282	0.22	Q	.	.	.	.
10.27	0.1312	0.22	Q	.	.	.	.
10.43	0.1343	0.22	Q	.	.	.	.
10.60	0.1374	0.23	Q	.	.	.	.
10.77	0.1406	0.23	Q	.	.	.	.
10.94	0.1439	0.24	Q	.	.	.	.
11.11	0.1472	0.24	Q	.	.	.	.

11.28	0.1506	0.25	Q	.	.	.	.
11.45	0.1541	0.25	.Q	.	.	.	.
11.61	0.1576	0.26	.Q	.	.	.	.
11.78	0.1613	0.26	.Q	.	.	.	.
11.95	0.1650	0.27	.Q	.	.	.	.
12.12	0.1690	0.31	.Q	.	.	.	.
12.29	0.1735	0.33	.Q	.	.	.	.
12.46	0.1782	0.34	.Q	.	.	.	.
12.63	0.1830	0.35	.Q	.	.	.	.
12.80	0.1880	0.36	.Q	.	.	.	.
12.96	0.1931	0.37	.Q	.	.	.	.
13.13	0.1983	0.38	.Q	.	.	.	.
13.30	0.2037	0.39	.Q	.	.	.	.
13.47	0.2093	0.41	.Q	.	.	.	.
13.64	0.2151	0.42	.Q	.	.	.	.
13.81	0.2211	0.44	.Q	.	.	.	.
13.98	0.2273	0.45	.Q	.	.	.	.
14.14	0.2341	0.52	. Q	.	.	.	.
14.31	0.2415	0.54	. Q	.	.	.	.
14.48	0.2493	0.58	. Q	.	.	.	.
14.65	0.2576	0.60	. Q	.	.	.	.
14.82	0.2663	0.65	. Q	.	.	.	.
14.99	0.2756	0.68	. Q	.	.	.	.
15.16	0.2856	0.76	. Q	.	.	.	.
15.33	0.2965	0.81	. Q	.	.	.	.
15.49	0.3086	0.93	. Q	.	.	.	.
15.66	0.3222	1.03	. Q	.	.	.	.
15.83	0.3400	1.52	. Q	.	.	.	.
16.00	0.3642	1.94	. Q	.	.	.	.
16.17	0.4176	5.72	.	.	Q	.	.
16.34	0.4656	1.17	. Q	.	.	.	.
16.51	0.4798	0.87	. Q	.	.	.	.
16.67	0.4908	0.72	. Q	.	.	.	.
16.84	0.5001	0.62	. Q	.	.	.	.
17.01	0.5084	0.56	. Q	.	.	.	.
17.18	0.5156	0.47	.Q	.	.	.	.
17.35	0.5218	0.43	.Q	.	.	.	.
17.52	0.5276	0.40	.Q	.	.	.	.
17.69	0.5330	0.38	.Q	.	.	.	.
17.86	0.5381	0.36	.Q	.	.	.	.
18.02	0.5430	0.34	.Q	.	.	.	.
18.19	0.5472	0.27	.Q	.	.	.	.
18.36	0.5510	0.26	.Q	.	.	.	.
18.53	0.5545	0.25	Q	.	.	.	.
18.70	0.5579	0.24	Q	.	.	.	.
18.87	0.5612	0.23	Q	.	.	.	.
19.04	0.5643	0.22	Q	.	.	.	.
19.20	0.5674	0.21	Q	.	.	.	.
19.37	0.5703	0.21	Q	.	.	.	.
19.54	0.5731	0.20	Q	.	.	.	.
19.71	0.5759	0.19	Q	.	.	.	.
19.88	0.5786	0.19	Q	.	.	.	.
20.05	0.5812	0.18	Q	.	.	.	.
20.22	0.5837	0.18	Q	.	.	.	.
20.39	0.5862	0.18	Q	.	.	.	.
20.55	0.5886	0.17	Q	.	.	.	.
20.72	0.5909	0.17	Q	.	.	.	.

20.89	0.5932	0.16	Q	.	.	.	.
21.06	0.5955	0.16	Q	.	.	.	.
21.23	0.5977	0.16	Q	.	.	.	.
21.40	0.5999	0.15	Q	.	.	.	.
21.57	0.6020	0.15	Q	.	.	.	.
21.73	0.6041	0.15	Q	.	.	.	.
21.90	0.6061	0.15	Q	.	.	.	.
22.07	0.6081	0.14	Q	.	.	.	.
22.24	0.6101	0.14	Q	.	.	.	.
22.41	0.6120	0.14	Q	.	.	.	.
22.58	0.6139	0.14	Q	.	.	.	.
22.75	0.6158	0.13	Q	.	.	.	.
22.92	0.6177	0.13	Q	.	.	.	.
23.08	0.6195	0.13	Q	.	.	.	.
23.25	0.6213	0.13	Q	.	.	.	.
23.42	0.6230	0.13	Q	.	.	.	.
23.59	0.6248	0.12	Q	.	.	.	.
23.76	0.6265	0.12	Q	.	.	.	.
23.93	0.6282	0.12	Q	.	.	.	.
24.10	0.6299	0.12	Q	.	.	.	.
24.26	0.6307	0.00	Q	.	.	.	.

 TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
 (Note: 100% of Peak Flow Rate estimate assumed to have
 an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
=====	=====
0%	1447.2
10%	151.8
20%	40.5
30%	20.2
40%	10.1
50%	10.1
60%	10.1
70%	10.1
80%	10.1
90%	10.1

 SMALL AREA UNIT HYDROGRAPH MODEL
 =====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

 Problem Descriptions:

APN 297-170-002 & 003
 POST-DEVELOPMENT DA3
 2-YEAR STORM EVENT

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
 TOTAL CATCHMENT AREA (ACRES) = 0.64
 SOIL-LOSS RATE, Fm, (INCH/HR) = 0.165
 LOW LOSS FRACTION = 0.301
 TIME OF CONCENTRATION (MIN.) = 9.81
 SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
 USER SPECIFIED RAINFALL VALUES ARE USED
 RETURN FREQUENCY (YEARS) = 2
 5-MINUTE POINT RAINFALL VALUE (INCHES) = 0.12
 30-MINUTE POINT RAINFALL VALUE (INCHES) = 0.32
 1-HOUR POINT RAINFALL VALUE (INCHES) = 0.45
 3-HOUR POINT RAINFALL VALUE (INCHES) = 0.78
 6-HOUR POINT RAINFALL VALUE (INCHES) = 1.07
 24-HOUR POINT RAINFALL VALUE (INCHES) = 1.83

TOTAL CATCHMENT RUNOFF VOLUME (ACRE-FEET) = 0.06
 TOTAL CATCHMENT SOIL-LOSS VOLUME (ACRE-FEET) = 0.04

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	2.5	5.0	7.5	10.0
0.14	0.0001	0.01	Q	.	.	.	.
0.30	0.0002	0.01	Q	.	.	.	.
0.47	0.0004	0.01	Q	.	.	.	.
0.63	0.0006	0.01	Q	.	.	.	.
0.79	0.0007	0.01	Q	.	.	.	.
0.96	0.0009	0.01	Q	.	.	.	.
1.12	0.0011	0.01	Q	.	.	.	.
1.28	0.0012	0.01	Q	.	.	.	.
1.45	0.0014	0.01	Q	.	.	.	.

1.61	0.0016	0.01	Q	.	.	.	.
1.78	0.0017	0.01	Q	.	.	.	.
1.94	0.0019	0.01	Q	.	.	.	.
2.10	0.0021	0.01	Q	.	.	.	.
2.27	0.0022	0.01	Q	.	.	.	.
2.43	0.0024	0.01	Q	.	.	.	.
2.59	0.0026	0.01	Q	.	.	.	.
2.76	0.0028	0.01	Q	.	.	.	.
2.92	0.0030	0.01	Q	.	.	.	.
3.08	0.0031	0.01	Q	.	.	.	.
3.25	0.0033	0.01	Q	.	.	.	.
3.41	0.0035	0.01	Q	.	.	.	.
3.57	0.0037	0.01	Q	.	.	.	.
3.74	0.0039	0.01	Q	.	.	.	.
3.90	0.0041	0.01	Q	.	.	.	.
4.06	0.0043	0.01	Q	.	.	.	.
4.23	0.0045	0.01	Q	.	.	.	.
4.39	0.0046	0.01	Q	.	.	.	.
4.55	0.0048	0.01	Q	.	.	.	.
4.72	0.0050	0.01	Q	.	.	.	.
4.88	0.0052	0.01	Q	.	.	.	.
5.05	0.0054	0.01	Q	.	.	.	.
5.21	0.0056	0.01	Q	.	.	.	.
5.37	0.0058	0.02	Q	.	.	.	.
5.54	0.0060	0.02	Q	.	.	.	.
5.70	0.0063	0.02	Q	.	.	.	.
5.86	0.0065	0.02	Q	.	.	.	.
6.03	0.0067	0.02	Q	.	.	.	.
6.19	0.0069	0.02	Q	.	.	.	.
6.35	0.0071	0.02	Q	.	.	.	.
6.52	0.0073	0.02	Q	.	.	.	.
6.68	0.0075	0.02	Q	.	.	.	.
6.84	0.0078	0.02	Q	.	.	.	.
7.01	0.0080	0.02	Q	.	.	.	.
7.17	0.0082	0.02	Q	.	.	.	.
7.33	0.0084	0.02	Q	.	.	.	.
7.50	0.0087	0.02	Q	.	.	.	.
7.66	0.0089	0.02	Q	.	.	.	.
7.82	0.0092	0.02	Q	.	.	.	.
7.99	0.0094	0.02	Q	.	.	.	.
8.15	0.0096	0.02	Q	.	.	.	.
8.32	0.0099	0.02	Q	.	.	.	.
8.48	0.0101	0.02	Q	.	.	.	.
8.64	0.0104	0.02	Q	.	.	.	.
8.81	0.0107	0.02	Q	.	.	.	.
8.97	0.0109	0.02	Q	.	.	.	.
9.13	0.0112	0.02	Q	.	.	.	.
9.30	0.0114	0.02	Q	.	.	.	.
9.46	0.0117	0.02	Q	.	.	.	.
9.62	0.0120	0.02	Q	.	.	.	.
9.79	0.0123	0.02	Q	.	.	.	.
9.95	0.0126	0.02	Q	.	.	.	.
10.11	0.0129	0.02	Q	.	.	.	.
10.28	0.0131	0.02	Q	.	.	.	.
10.44	0.0134	0.02	Q	.	.	.	.
10.60	0.0138	0.02	Q	.	.	.	.
10.77	0.0141	0.02	Q	.	.	.	.

10.93	0.0144	0.02	Q	.	.	.	.
11.10	0.0147	0.02	Q	.	.	.	.
11.26	0.0150	0.02	Q	.	.	.	.
11.42	0.0154	0.03	Q	.	.	.	.
11.59	0.0157	0.03	Q	.	.	.	.
11.75	0.0161	0.03	Q	.	.	.	.
11.91	0.0164	0.03	Q	.	.	.	.
12.08	0.0168	0.03	Q	.	.	.	.
12.24	0.0172	0.03	Q	.	.	.	.
12.40	0.0177	0.03	Q	.	.	.	.
12.57	0.0181	0.04	Q	.	.	.	.
12.73	0.0186	0.04	Q	.	.	.	.
12.89	0.0191	0.04	Q	.	.	.	.
13.06	0.0196	0.04	Q	.	.	.	.
13.22	0.0202	0.04	Q	.	.	.	.
13.38	0.0207	0.04	Q	.	.	.	.
13.55	0.0213	0.04	Q	.	.	.	.
13.71	0.0218	0.04	Q	.	.	.	.
13.87	0.0224	0.05	Q	.	.	.	.
14.04	0.0231	0.05	Q	.	.	.	.
14.20	0.0237	0.05	Q	.	.	.	.
14.37	0.0245	0.05	Q	.	.	.	.
14.53	0.0252	0.06	Q	.	.	.	.
14.69	0.0260	0.06	Q	.	.	.	.
14.86	0.0269	0.07	Q	.	.	.	.
15.02	0.0278	0.07	Q	.	.	.	.
15.18	0.0288	0.08	Q	.	.	.	.
15.35	0.0298	0.08	Q	.	.	.	.
15.51	0.0310	0.09	Q	.	.	.	.
15.67	0.0324	0.10	Q	.	.	.	.
15.84	0.0341	0.16	Q	.	.	.	.
16.00	0.0365	0.20	Q	.	.	.	.
16.16	0.0413	0.51	Q	.	.	.	.
16.33	0.0455	0.12	Q	.	.	.	.
16.49	0.0469	0.09	Q	.	.	.	.
16.65	0.0480	0.07	Q	.	.	.	.
16.82	0.0489	0.06	Q	.	.	.	.
16.98	0.0497	0.06	Q	.	.	.	.
17.14	0.0504	0.05	Q	.	.	.	.
17.31	0.0511	0.04	Q	.	.	.	.
17.47	0.0516	0.04	Q	.	.	.	.
17.64	0.0522	0.04	Q	.	.	.	.
17.80	0.0527	0.04	Q	.	.	.	.
17.96	0.0532	0.03	Q	.	.	.	.
18.13	0.0536	0.03	Q	.	.	.	.
18.29	0.0540	0.03	Q	.	.	.	.
18.45	0.0544	0.03	Q	.	.	.	.
18.62	0.0547	0.02	Q	.	.	.	.
18.78	0.0550	0.02	Q	.	.	.	.
18.94	0.0554	0.02	Q	.	.	.	.
19.11	0.0557	0.02	Q	.	.	.	.
19.27	0.0559	0.02	Q	.	.	.	.
19.43	0.0562	0.02	Q	.	.	.	.
19.60	0.0565	0.02	Q	.	.	.	.
19.76	0.0568	0.02	Q	.	.	.	.
19.92	0.0570	0.02	Q	.	.	.	.
20.09	0.0573	0.02	Q	.	.	.	.

20.25	0.0575	0.02	Q	.	.	.	.
20.41	0.0578	0.02	Q	.	.	.	.
20.58	0.0580	0.02	Q	.	.	.	.
20.74	0.0582	0.02	Q	.	.	.	.
20.91	0.0584	0.02	Q	.	.	.	.
21.07	0.0587	0.02	Q	.	.	.	.
21.23	0.0589	0.02	Q	.	.	.	.
21.40	0.0591	0.02	Q	.	.	.	.
21.56	0.0593	0.02	Q	.	.	.	.
21.72	0.0595	0.01	Q	.	.	.	.
21.89	0.0597	0.01	Q	.	.	.	.
22.05	0.0599	0.01	Q	.	.	.	.
22.21	0.0601	0.01	Q	.	.	.	.
22.38	0.0603	0.01	Q	.	.	.	.
22.54	0.0604	0.01	Q	.	.	.	.
22.70	0.0606	0.01	Q	.	.	.	.
22.87	0.0608	0.01	Q	.	.	.	.
23.03	0.0610	0.01	Q	.	.	.	.
23.19	0.0612	0.01	Q	.	.	.	.
23.36	0.0613	0.01	Q	.	.	.	.
23.52	0.0615	0.01	Q	.	.	.	.
23.68	0.0617	0.01	Q	.	.	.	.
23.85	0.0618	0.01	Q	.	.	.	.
24.01	0.0620	0.01	Q	.	.	.	.
24.18	0.0621	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
 (Note: 100% of Peak Flow Rate estimate assumed to have
 an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
=====	=====
0%	1442.1
10%	176.6
20%	49.1
30%	29.4
40%	9.8
50%	9.8
60%	9.8
70%	9.8
80%	9.8
90%	9.8

 SMALL AREA UNIT HYDROGRAPH MODEL
 =====

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

 Problem Descriptions:
 APN 297-170-002 & 003
 POST-DEVELOPMENT DA4
 2-YEAR STORM EVENT

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
 TOTAL CATCHMENT AREA (ACRES) = 0.64
 SOIL-LOSS RATE, Fm, (INCH/HR) = 0.190
 LOW LOSS FRACTION = 0.328
 TIME OF CONCENTRATION (MIN.) = 10.02
 SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
 USER SPECIFIED RAINFALL VALUES ARE USED
 RETURN FREQUENCY (YEARS) = 2
 5-MINUTE POINT RAINFALL VALUE (INCHES) = 0.12
 30-MINUTE POINT RAINFALL VALUE (INCHES) = 0.32
 1-HOUR POINT RAINFALL VALUE (INCHES) = 0.45
 3-HOUR POINT RAINFALL VALUE (INCHES) = 0.78
 6-HOUR POINT RAINFALL VALUE (INCHES) = 1.07
 24-HOUR POINT RAINFALL VALUE (INCHES) = 1.83

 TOTAL CATCHMENT RUNOFF VOLUME (ACRE-FEET) = 0.06
 TOTAL CATCHMENT SOIL-LOSS VOLUME (ACRE-FEET) = 0.04

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	2.5	5.0	7.5	10.0
0.13	0.0001	0.01	Q	.	.	.	.
0.30	0.0002	0.01	Q	.	.	.	.
0.47	0.0004	0.01	Q	.	.	.	.
0.64	0.0005	0.01	Q	.	.	.	.
0.80	0.0007	0.01	Q	.	.	.	.
0.97	0.0009	0.01	Q	.	.	.	.
1.14	0.0010	0.01	Q	.	.	.	.
1.30	0.0012	0.01	Q	.	.	.	.
1.47	0.0014	0.01	Q	.	.	.	.

1.64	0.0015	0.01	Q	.	.	.	.
1.80	0.0017	0.01	Q	.	.	.	.
1.97	0.0019	0.01	Q	.	.	.	.
2.14	0.0020	0.01	Q	.	.	.	.
2.31	0.0022	0.01	Q	.	.	.	.
2.47	0.0024	0.01	Q	.	.	.	.
2.64	0.0026	0.01	Q	.	.	.	.
2.81	0.0027	0.01	Q	.	.	.	.
2.97	0.0029	0.01	Q	.	.	.	.
3.14	0.0031	0.01	Q	.	.	.	.
3.31	0.0033	0.01	Q	.	.	.	.
3.47	0.0034	0.01	Q	.	.	.	.
3.64	0.0036	0.01	Q	.	.	.	.
3.81	0.0038	0.01	Q	.	.	.	.
3.98	0.0040	0.01	Q	.	.	.	.
4.14	0.0042	0.01	Q	.	.	.	.
4.31	0.0044	0.01	Q	.	.	.	.
4.48	0.0046	0.01	Q	.	.	.	.
4.64	0.0048	0.01	Q	.	.	.	.
4.81	0.0050	0.01	Q	.	.	.	.
4.98	0.0051	0.01	Q	.	.	.	.
5.14	0.0053	0.01	Q	.	.	.	.
5.31	0.0055	0.01	Q	.	.	.	.
5.48	0.0057	0.01	Q	.	.	.	.
5.65	0.0059	0.01	Q	.	.	.	.
5.81	0.0062	0.01	Q	.	.	.	.
5.98	0.0064	0.02	Q	.	.	.	.
6.15	0.0066	0.02	Q	.	.	.	.
6.31	0.0068	0.02	Q	.	.	.	.
6.48	0.0070	0.02	Q	.	.	.	.
6.65	0.0072	0.02	Q	.	.	.	.
6.81	0.0074	0.02	Q	.	.	.	.
6.98	0.0077	0.02	Q	.	.	.	.
7.15	0.0079	0.02	Q	.	.	.	.
7.32	0.0081	0.02	Q	.	.	.	.
7.48	0.0083	0.02	Q	.	.	.	.
7.65	0.0086	0.02	Q	.	.	.	.
7.82	0.0088	0.02	Q	.	.	.	.
7.98	0.0090	0.02	Q	.	.	.	.
8.15	0.0093	0.02	Q	.	.	.	.
8.32	0.0095	0.02	Q	.	.	.	.
8.48	0.0098	0.02	Q	.	.	.	.
8.65	0.0100	0.02	Q	.	.	.	.
8.82	0.0103	0.02	Q	.	.	.	.
8.99	0.0105	0.02	Q	.	.	.	.
9.15	0.0108	0.02	Q	.	.	.	.
9.32	0.0110	0.02	Q	.	.	.	.
9.49	0.0113	0.02	Q	.	.	.	.
9.65	0.0116	0.02	Q	.	.	.	.
9.82	0.0119	0.02	Q	.	.	.	.
9.99	0.0121	0.02	Q	.	.	.	.
10.15	0.0124	0.02	Q	.	.	.	.
10.32	0.0127	0.02	Q	.	.	.	.
10.49	0.0130	0.02	Q	.	.	.	.
10.66	0.0133	0.02	Q	.	.	.	.
10.82	0.0136	0.02	Q	.	.	.	.
10.99	0.0139	0.02	Q	.	.	.	.

11.16	0.0143	0.02	Q	.	.	.	.
11.32	0.0146	0.02	Q	.	.	.	.
11.49	0.0149	0.02	Q	.	.	.	.
11.66	0.0153	0.02	Q	.	.	.	.
11.82	0.0156	0.03	Q	.	.	.	.
11.99	0.0160	0.03	Q	.	.	.	.
12.16	0.0164	0.03	Q	.	.	.	.
12.33	0.0168	0.03	Q	.	.	.	.
12.49	0.0172	0.03	Q	.	.	.	.
12.66	0.0177	0.03	Q	.	.	.	.
12.83	0.0182	0.04	Q	.	.	.	.
12.99	0.0187	0.04	Q	.	.	.	.
13.16	0.0192	0.04	Q	.	.	.	.
13.33	0.0197	0.04	Q	.	.	.	.
13.49	0.0202	0.04	Q	.	.	.	.
13.66	0.0208	0.04	Q	.	.	.	.
13.83	0.0214	0.04	Q	.	.	.	.
14.00	0.0220	0.04	Q	.	.	.	.
14.16	0.0226	0.05	Q	.	.	.	.
14.33	0.0233	0.05	Q	.	.	.	.
14.50	0.0241	0.06	Q	.	.	.	.
14.66	0.0249	0.06	Q	.	.	.	.
14.83	0.0257	0.06	Q	.	.	.	.
15.00	0.0266	0.07	Q	.	.	.	.
15.16	0.0275	0.07	Q	.	.	.	.
15.33	0.0286	0.08	Q	.	.	.	.
15.50	0.0297	0.09	Q	.	.	.	.
15.67	0.0310	0.10	Q	.	.	.	.
15.83	0.0327	0.15	Q	.	.	.	.
16.00	0.0351	0.19	Q	.	.	.	.
16.17	0.0398	0.50	.Q	.	.	.	.
16.33	0.0440	0.11	Q	.	.	.	.
16.50	0.0453	0.08	Q	.	.	.	.
16.67	0.0464	0.07	Q	.	.	.	.
16.83	0.0473	0.06	Q	.	.	.	.
17.00	0.0481	0.05	Q	.	.	.	.
17.17	0.0488	0.05	Q	.	.	.	.
17.34	0.0494	0.04	Q	.	.	.	.
17.50	0.0499	0.04	Q	.	.	.	.
17.67	0.0504	0.04	Q	.	.	.	.
17.84	0.0509	0.03	Q	.	.	.	.
18.00	0.0514	0.03	Q	.	.	.	.
18.17	0.0518	0.03	Q	.	.	.	.
18.34	0.0522	0.03	Q	.	.	.	.
18.51	0.0525	0.02	Q	.	.	.	.
18.67	0.0528	0.02	Q	.	.	.	.
18.84	0.0531	0.02	Q	.	.	.	.
19.01	0.0534	0.02	Q	.	.	.	.
19.17	0.0537	0.02	Q	.	.	.	.
19.34	0.0540	0.02	Q	.	.	.	.
19.51	0.0543	0.02	Q	.	.	.	.
19.67	0.0545	0.02	Q	.	.	.	.
19.84	0.0548	0.02	Q	.	.	.	.
20.01	0.0551	0.02	Q	.	.	.	.
20.17	0.0553	0.02	Q	.	.	.	.
20.34	0.0555	0.02	Q	.	.	.	.
20.51	0.0558	0.02	Q	.	.	.	.

20.68	0.0560	0.02	Q	.	.	.	.
20.84	0.0562	0.02	Q	.	.	.	.
21.01	0.0564	0.02	Q	.	.	.	.
21.18	0.0566	0.02	Q	.	.	.	.
21.34	0.0568	0.01	Q	.	.	.	.
21.51	0.0571	0.01	Q	.	.	.	.
21.68	0.0573	0.01	Q	.	.	.	.
21.85	0.0574	0.01	Q	.	.	.	.
22.01	0.0576	0.01	Q	.	.	.	.
22.18	0.0578	0.01	Q	.	.	.	.
22.35	0.0580	0.01	Q	.	.	.	.
22.51	0.0582	0.01	Q	.	.	.	.
22.68	0.0584	0.01	Q	.	.	.	.
22.85	0.0586	0.01	Q	.	.	.	.
23.01	0.0587	0.01	Q	.	.	.	.
23.18	0.0589	0.01	Q	.	.	.	.
23.35	0.0591	0.01	Q	.	.	.	.
23.52	0.0592	0.01	Q	.	.	.	.
23.68	0.0594	0.01	Q	.	.	.	.
23.85	0.0596	0.01	Q	.	.	.	.
24.02	0.0597	0.01	Q	.	.	.	.
24.18	0.0598	0.00	Q	.	.	.	.

 TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
 (Note: 100% of Peak Flow Rate estimate assumed to have
 an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
=====	=====
0%	1442.9
10%	180.4
20%	40.1
30%	20.0
40%	10.0
50%	10.0
60%	10.0
70%	10.0
80%	10.0
90%	10.0

 SMALL AREA UNIT HYDROGRAPH MODEL
 =====

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 Ver. 23.0 Release Date: 07/01/2016 License ID 1533

Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

 Problem Descriptions:
 APN 297-170-002 & 003
 POST-DEVELOPMENT DA5
 2-YEAR STORM EVENT

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
 TOTAL CATCHMENT AREA(ACRES) = 0.80
 SOIL-LOSS RATE, Fm, (INCH/HR) = 0.193
 LOW LOSS FRACTION = 0.331
 TIME OF CONCENTRATION(MIN.) = 10.74
 SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
 USER SPECIFIED RAINFALL VALUES ARE USED
 RETURN FREQUENCY(YEARS) = 2
 5-MINUTE POINT RAINFALL VALUE(INCHES) = 0.12
 30-MINUTE POINT RAINFALL VALUE(INCHES) = 0.32
 1-HOUR POINT RAINFALL VALUE(INCHES) = 0.45
 3-HOUR POINT RAINFALL VALUE(INCHES) = 0.78
 6-HOUR POINT RAINFALL VALUE(INCHES) = 1.07
 24-HOUR POINT RAINFALL VALUE(INCHES) = 1.83

 TOTAL CATCHMENT RUNOFF VOLUME(ACRE-FEET) = 0.07
 TOTAL CATCHMENT SOIL-LOSS VOLUME(ACRE-FEET) = 0.05

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	2.5	5.0	7.5	10.0
0.07	0.0000	0.01	Q	.	.	.	.
0.25	0.0003	0.01	Q	.	.	.	.
0.43	0.0005	0.01	Q	.	.	.	.
0.61	0.0007	0.01	Q	.	.	.	.
0.79	0.0009	0.01	Q	.	.	.	.
0.96	0.0011	0.01	Q	.	.	.	.
1.14	0.0013	0.01	Q	.	.	.	.
1.32	0.0015	0.01	Q	.	.	.	.
1.50	0.0018	0.02	Q	.	.	.	.

1.68	0.0020	0.02	Q	.	.	.	.
1.86	0.0022	0.02	Q	.	.	.	.
2.04	0.0024	0.02	Q	.	.	.	.
2.22	0.0027	0.02	Q	.	.	.	.
2.40	0.0029	0.02	Q	.	.	.	.
2.58	0.0031	0.02	Q	.	.	.	.
2.75	0.0034	0.02	Q	.	.	.	.
2.93	0.0036	0.02	Q	.	.	.	.
3.11	0.0038	0.02	Q	.	.	.	.
3.29	0.0041	0.02	Q	.	.	.	.
3.47	0.0043	0.02	Q	.	.	.	.
3.65	0.0046	0.02	Q	.	.	.	.
3.83	0.0048	0.02	Q	.	.	.	.
4.01	0.0051	0.02	Q	.	.	.	.
4.19	0.0053	0.02	Q	.	.	.	.
4.37	0.0056	0.02	Q	.	.	.	.
4.54	0.0058	0.02	Q	.	.	.	.
4.72	0.0061	0.02	Q	.	.	.	.
4.90	0.0063	0.02	Q	.	.	.	.
5.08	0.0066	0.02	Q	.	.	.	.
5.26	0.0069	0.02	Q	.	.	.	.
5.44	0.0071	0.02	Q	.	.	.	.
5.62	0.0074	0.02	Q	.	.	.	.
5.80	0.0077	0.02	Q	.	.	.	.
5.98	0.0079	0.02	Q	.	.	.	.
6.16	0.0082	0.02	Q	.	.	.	.
6.33	0.0085	0.02	Q	.	.	.	.
6.51	0.0088	0.02	Q	.	.	.	.
6.69	0.0091	0.02	Q	.	.	.	.
6.87	0.0094	0.02	Q	.	.	.	.
7.05	0.0097	0.02	Q	.	.	.	.
7.23	0.0100	0.02	Q	.	.	.	.
7.41	0.0103	0.02	Q	.	.	.	.
7.59	0.0106	0.02	Q	.	.	.	.
7.77	0.0109	0.02	Q	.	.	.	.
7.95	0.0112	0.02	Q	.	.	.	.
8.12	0.0115	0.02	Q	.	.	.	.
8.30	0.0118	0.02	Q	.	.	.	.
8.48	0.0122	0.02	Q	.	.	.	.
8.66	0.0125	0.02	Q	.	.	.	.
8.84	0.0128	0.02	Q	.	.	.	.
9.02	0.0132	0.02	Q	.	.	.	.
9.20	0.0135	0.02	Q	.	.	.	.
9.38	0.0139	0.02	Q	.	.	.	.
9.56	0.0142	0.02	Q	.	.	.	.
9.74	0.0146	0.02	Q	.	.	.	.
9.91	0.0150	0.03	Q	.	.	.	.
10.09	0.0154	0.03	Q	.	.	.	.
10.27	0.0157	0.03	Q	.	.	.	.
10.45	0.0161	0.03	Q	.	.	.	.
10.63	0.0165	0.03	Q	.	.	.	.
10.81	0.0169	0.03	Q	.	.	.	.
10.99	0.0174	0.03	Q	.	.	.	.
11.17	0.0178	0.03	Q	.	.	.	.
11.35	0.0182	0.03	Q	.	.	.	.
11.52	0.0187	0.03	Q	.	.	.	.
11.70	0.0191	0.03	Q	.	.	.	.

11.88	0.0196	0.03	Q	.	.	.	.
12.06	0.0201	0.03	Q	.	.	.	.
12.24	0.0206	0.04	Q	.	.	.	.
12.42	0.0212	0.04	Q	.	.	.	.
12.60	0.0218	0.04	Q	.	.	.	.
12.78	0.0224	0.04	Q	.	.	.	.
12.96	0.0231	0.04	Q	.	.	.	.
13.14	0.0237	0.05	Q	.	.	.	.
13.32	0.0244	0.05	Q	.	.	.	.
13.49	0.0251	0.05	Q	.	.	.	.
13.67	0.0259	0.05	Q	.	.	.	.
13.85	0.0267	0.05	Q	.	.	.	.
14.03	0.0275	0.06	Q	.	.	.	.
14.21	0.0283	0.06	Q	.	.	.	.
14.39	0.0293	0.07	Q	.	.	.	.
14.57	0.0303	0.07	Q	.	.	.	.
14.75	0.0314	0.08	Q	.	.	.	.
14.93	0.0325	0.08	Q	.	.	.	.
15.10	0.0338	0.09	Q	.	.	.	.
15.28	0.0351	0.09	Q	.	.	.	.
15.46	0.0366	0.11	Q	.	.	.	.
15.64	0.0383	0.12	Q	.	.	.	.
15.82	0.0405	0.17	Q	.	.	.	.
16.00	0.0434	0.23	Q	.	.	.	.
16.18	0.0495	0.59	. Q	.	.	.	.
16.36	0.0549	0.14	Q	.	.	.	.
16.54	0.0566	0.10	Q	.	.	.	.
16.72	0.0580	0.08	Q	.	.	.	.
16.90	0.0592	0.07	Q	.	.	.	.
17.07	0.0602	0.07	Q	.	.	.	.
17.25	0.0611	0.05	Q	.	.	.	.
17.43	0.0618	0.05	Q	.	.	.	.
17.61	0.0625	0.05	Q	.	.	.	.
17.79	0.0632	0.04	Q	.	.	.	.
17.97	0.0638	0.04	Q	.	.	.	.
18.15	0.0644	0.04	Q	.	.	.	.
18.33	0.0649	0.03	Q	.	.	.	.
18.51	0.0654	0.03	Q	.	.	.	.
18.68	0.0658	0.03	Q	.	.	.	.
18.86	0.0662	0.03	Q	.	.	.	.
19.04	0.0666	0.03	Q	.	.	.	.
19.22	0.0670	0.03	Q	.	.	.	.
19.40	0.0674	0.02	Q	.	.	.	.
19.58	0.0677	0.02	Q	.	.	.	.
19.76	0.0681	0.02	Q	.	.	.	.
19.94	0.0684	0.02	Q	.	.	.	.
20.12	0.0687	0.02	Q	.	.	.	.
20.30	0.0691	0.02	Q	.	.	.	.
20.48	0.0694	0.02	Q	.	.	.	.
20.65	0.0697	0.02	Q	.	.	.	.
20.83	0.0700	0.02	Q	.	.	.	.
21.01	0.0703	0.02	Q	.	.	.	.
21.19	0.0705	0.02	Q	.	.	.	.
21.37	0.0708	0.02	Q	.	.	.	.
21.55	0.0711	0.02	Q	.	.	.	.
21.73	0.0714	0.02	Q	.	.	.	.
21.91	0.0716	0.02	Q	.	.	.	.

22.09	0.0719	0.02	Q	.	.	.	.
22.27	0.0721	0.02	Q	.	.	.	.
22.44	0.0724	0.02	Q	.	.	.	.
22.62	0.0726	0.02	Q	.	.	.	.
22.80	0.0728	0.02	Q	.	.	.	.
22.98	0.0731	0.02	Q	.	.	.	.
23.16	0.0733	0.02	Q	.	.	.	.
23.34	0.0735	0.02	Q	.	.	.	.
23.52	0.0738	0.01	Q	.	.	.	.
23.70	0.0740	0.01	Q	.	.	.	.
23.88	0.0742	0.01	Q	.	.	.	.
24.06	0.0744	0.01	Q	.	.	.	.
24.23	0.0745	0.00	Q	.	.	.	.

TIME DURATION (minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
 (Note: 100% of Peak Flow Rate estimate assumed to have an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
=====	=====
0%	1449.9
10%	182.6
20%	53.7
30%	21.5
40%	10.7
50%	10.7
60%	10.7
70%	10.7
80%	10.7
90%	10.7



NOAA Atlas 14, Volume 6, Version 2
Location name: Moreno Valley, California, USA*
Latitude: 33.9165°, Longitude: -117.2566°
Elevation: 1570.47 ft**
* source: ESRI Maps
** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerals](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.088 (0.073-0.106)	0.117 (0.098-0.142)	0.157 (0.131-0.191)	0.191 (0.157-0.234)	0.238 (0.189-0.302)	0.276 (0.215-0.357)	0.315 (0.239-0.419)	0.357 (0.263-0.488)	0.415 (0.294-0.594)	0.463 (0.316-0.686)
10-min	0.126 (0.105-0.153)	0.168 (0.140-0.204)	0.226 (0.188-0.274)	0.274 (0.226-0.335)	0.341 (0.272-0.433)	0.395 (0.308-0.512)	0.451 (0.343-0.600)	0.511 (0.377-0.700)	0.596 (0.421-0.851)	0.663 (0.452-0.983)
15-min	0.152 (0.127-0.184)	0.204 (0.170-0.247)	0.273 (0.227-0.331)	0.331 (0.273-0.405)	0.413 (0.328-0.523)	0.478 (0.372-0.619)	0.546 (0.414-0.726)	0.618 (0.456-0.847)	0.720 (0.509-1.03)	0.802 (0.547-1.19)
30-min	0.239 (0.199-0.289)	0.319 (0.266-0.386)	0.427 (0.355-0.519)	0.518 (0.427-0.635)	0.646 (0.514-0.820)	0.748 (0.583-0.970)	0.855 (0.649-1.14)	0.968 (0.714-1.33)	1.13 (0.797-1.61)	1.26 (0.857-1.86)
60-min	0.336 (0.281-0.407)	0.449 (0.374-0.544)	0.601 (0.500-0.731)	0.730 (0.601-0.894)	0.910 (0.724-1.15)	1.05 (0.820-1.37)	1.20 (0.914-1.60)	1.36 (1.01-1.87)	1.59 (1.12-2.27)	1.77 (1.21-2.62)
2-hr	0.490 (0.409-0.593)	0.639 (0.532-0.774)	0.836 (0.695-1.02)	0.999 (0.824-1.23)	1.23 (0.976-1.56)	1.40 (1.09-1.82)	1.58 (1.20-2.11)	1.77 (1.31-2.43)	2.04 (1.44-2.91)	2.24 (1.53-3.32)
3-hr	0.601 (0.501-0.727)	0.776 (0.647-0.940)	1.01 (0.838-1.22)	1.20 (0.988-1.47)	1.46 (1.16-1.85)	1.66 (1.30-2.16)	1.87 (1.42-2.49)	2.09 (1.54-2.86)	2.38 (1.68-3.41)	2.62 (1.78-3.88)
6-hr	0.829 (0.692-1.00)	1.07 (0.888-1.29)	1.38 (1.14-1.67)	1.63 (1.34-2.00)	1.97 (1.57-2.50)	2.24 (1.74-2.90)	2.51 (1.91-3.34)	2.79 (2.06-3.82)	3.17 (2.24-4.52)	3.46 (2.36-5.12)
12-hr	1.07 (0.896-1.30)	1.39 (1.16-1.69)	1.81 (1.50-2.20)	2.15 (1.77-2.63)	2.61 (2.08-3.31)	2.96 (2.31-3.84)	3.32 (2.52-4.41)	3.68 (2.72-5.05)	4.18 (2.95-5.97)	4.56 (3.11-6.76)
24-hr	1.39 (1.23-1.60)	1.83 (1.62-2.12)	2.41 (2.13-2.79)	2.88 (2.52-3.37)	3.52 (2.98-4.25)	4.01 (3.33-4.94)	4.51 (3.65-5.68)	5.02 (3.96-6.50)	5.71 (4.32-7.69)	6.24 (4.57-8.70)
2-day	1.64 (1.45-1.89)	2.20 (1.94-2.54)	2.93 (2.58-3.39)	3.53 (3.09-4.12)	4.35 (3.68-5.24)	4.97 (4.13-6.12)	5.61 (4.55-7.07)	6.27 (4.94-8.11)	7.16 (5.42-9.65)	7.84 (5.74-10.9)
3-day	1.74 (1.54-2.01)	2.37 (2.09-2.73)	3.20 (2.82-3.70)	3.87 (3.39-4.52)	4.80 (4.06-5.78)	5.51 (4.57-6.78)	6.24 (5.05-7.86)	6.99 (5.51-9.05)	8.02 (6.07-10.8)	8.81 (6.45-12.3)
4-day	1.88 (1.67-2.17)	2.58 (2.28-2.98)	3.51 (3.09-4.06)	4.27 (3.74-4.98)	5.31 (4.50-6.40)	6.12 (5.08-7.53)	6.95 (5.63-8.75)	7.81 (6.15-10.1)	8.98 (6.80-12.1)	9.89 (7.24-13.8)
7-day	2.10 (1.86-2.42)	2.92 (2.58-3.38)	4.02 (3.55-4.66)	4.93 (4.31-5.75)	6.18 (5.23-7.45)	7.15 (5.93-8.79)	8.15 (6.60-10.3)	9.18 (7.24-11.9)	10.6 (8.03-14.3)	11.7 (8.57-16.3)
10-day	2.21 (1.95-2.54)	3.10 (2.74-3.58)	4.30 (3.79-4.97)	5.29 (4.63-6.18)	6.67 (5.65-8.04)	7.75 (6.43-9.53)	8.85 (7.17-11.1)	10.0 (7.89-13.0)	11.6 (8.78-15.6)	12.8 (9.40-17.9)
20-day	2.58 (2.28-2.98)	3.68 (3.25-4.24)	5.17 (4.56-5.98)	6.42 (5.62-7.49)	8.19 (6.93-9.86)	9.58 (7.95-11.8)	11.0 (8.94-13.9)	12.6 (9.91-16.3)	14.7 (11.1-19.8)	16.4 (12.0-22.8)
30-day	3.01 (2.66-3.47)	4.28 (3.79-4.95)	6.04 (5.33-6.99)	7.54 (6.59-8.79)	9.66 (8.18-11.6)	11.4 (9.42-14.0)	13.1 (10.6-16.5)	15.0 (11.8-19.4)	17.7 (13.4-23.8)	19.8 (14.5-27.6)
45-day	3.54 (3.13-4.08)	4.99 (4.41-5.76)	7.03 (6.19-8.13)	8.78 (7.67-10.2)	11.3 (9.56-13.6)	13.3 (11.1-16.4)	15.5 (12.6-19.5)	17.8 (14.0-23.0)	21.1 (16.0-28.4)	23.7 (17.3-33.0)
60-day	4.07 (3.60-4.69)	5.67 (5.01-6.55)	7.94 (7.00-9.19)	9.90 (8.66-11.6)	12.8 (10.8-15.4)	15.1 (12.5-18.6)	17.6 (14.2-22.1)	20.2 (16.0-26.2)	24.1 (18.2-32.4)	27.2 (19.9-37.9)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

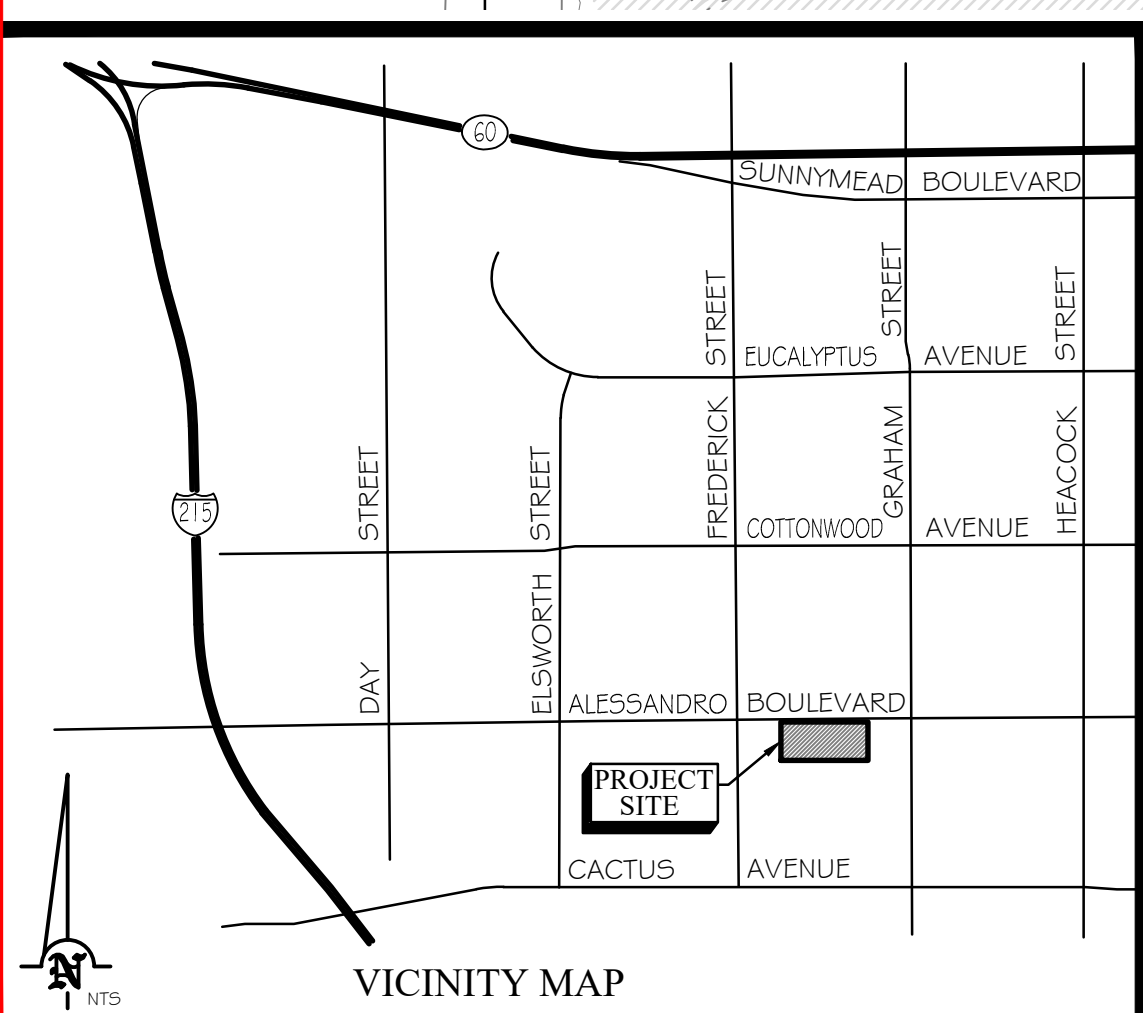
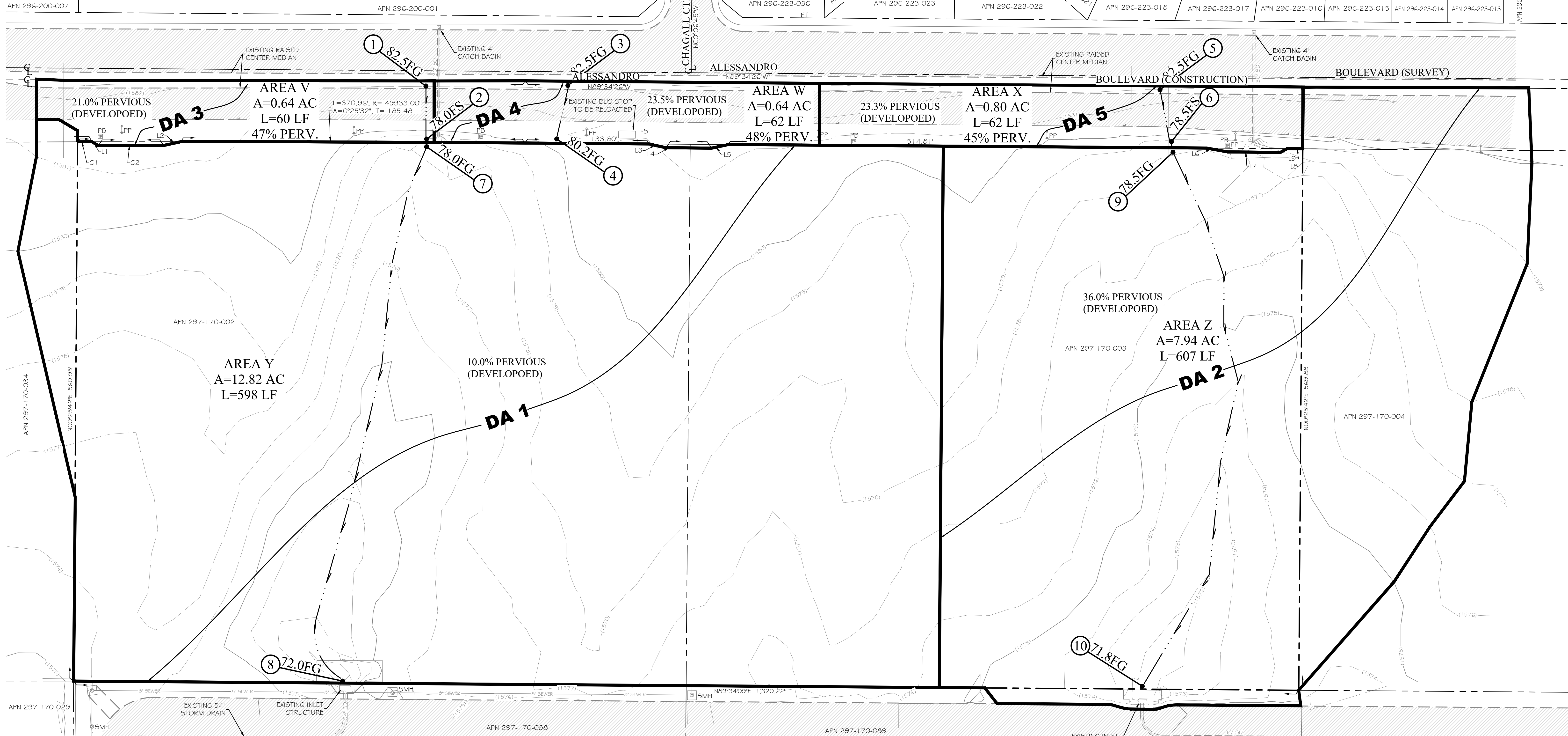
[Back to Top](#)

PF graphical

HCOC TRIBUTARY AREA MAP

PRE-DEVELOPMENT - COMPASS DANBE CENTERPOINTE - PROPOSED INDUSTRIAL WAREHOUSE FACILITY, PEN20-0120/TPM 37944

SOUTH SIDE OF ALESSANDRO BOULEVARD - APN 297-170-002 & 003 - CITY OF MORENO VALLEY



PAVING LEGEND

- EXISTING PCC PAVING
- EXISTING AC PAVING

LEGEND

- AC ASPHALT CONCRETE
- CF CURB FACE
- ET ELECTRIC TRANSFORMER
- FF FINISHED FLOOR
- FG FINISHED GROUND
- FL FLOWLINE
- FS FINISHED SURFACE
- GB GRADEBREAK
- INV INVERT ELEVATION
- PB FULL BOX
- PCC PORTLAND CEMENT CONCRETE
- PL PROPERTY LINE
- PP EX. POWER POLE
- RW RIGHT-OF-WAY
- SMH SEWER MANHOLE
- STL EX. STREET LIGHT
- TC TOP OF CURB
- TG TOP OF GRATE

LINE DATA

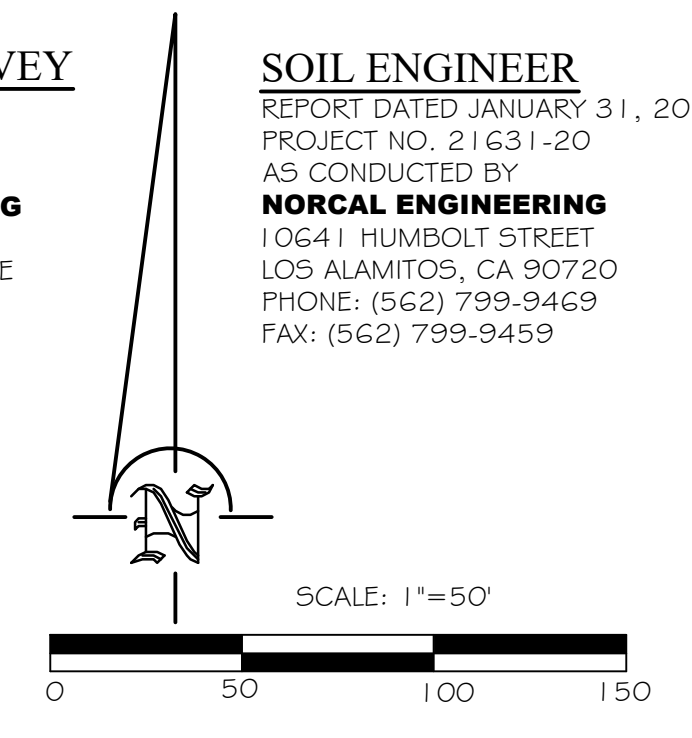
	BEARING	DISTANCE
L1	N59°30'55"W	7.89'
L2	N77°40'08"E	18.75'
L3	N77°12'47"W	18.69'
L4	N89°34'26"W	49.33'
L5	N78°03'57"E	18.69'
L6	N79°46'02"E	23.49'
L7	N89°34'26"W	56.75'
L8	N60°53'25"E	8.11'
L9	N89°34'26"W	16.97'

CURVE DATA

	Δ	R	T	L
C1	00°01'04"	49933.00'	7.71'	15.41'
C2	00°04'51"	49929.00'	35.23'	70.46'

SOURCE OF SURVEY
 TOPOGRAPHIC SURVEY
 REPORT DATED JANUARY 31, 2020
 DATED DECEMBER 2019
 AS CONDUCTED BY
**PARTNER ENGINEERING
 AND SCIENCE, INC.**
 1761 EAST GARRY AVENUE
 SANTA ANA, CA 92705
 PHONE: (714) 477-8657

SOIL ENGINEER
 REPORT DATED JANUARY 31, 2020
 PROJECT NO. 21631-20
 AS CONDUCTED BY
NORCAL ENGINEERING
 10641 HUMBOLT STREET
 LOS ALAMITOS, CA 90720
 PHONE: (562) 799-9469
 FAX: (562) 799-9459



① ELEV.
 L=165'
 A=1.44 AC

LEGEND

- NODE # & ELEV.
- FLOWLINE LENGTH
- SUB AREA
- FLOWLINE
- TRIBUTARY BOUNDARY

PROPERTY OWNER:
MORENO VALLEY CENTERPOINTE
 C/O CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

PREPARED FOR/APPLICANT:
CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

HCOC TRIBUTARY AREA MAP
 PEN20-0120/TPM37944
 PRE-DEVELOPMENT - APN 297-170-002 & 003
 COMPASS DANBE CENTERPOINTE
 PROPOSED INDUSTRIAL WAREHOUSE FACILITY
 SOUTH SIDE OF ALESSANDRO BOULEVARD
 CITY OF MORENO VALLEY

thatcher engineering & associates, inc.
 1461 10th Street, Suite 105, Redlands, CA 92373
 • land planning
 • civil engineering
 • landscape architecture
 phone 909.748.7777
 fax 909.748.7776

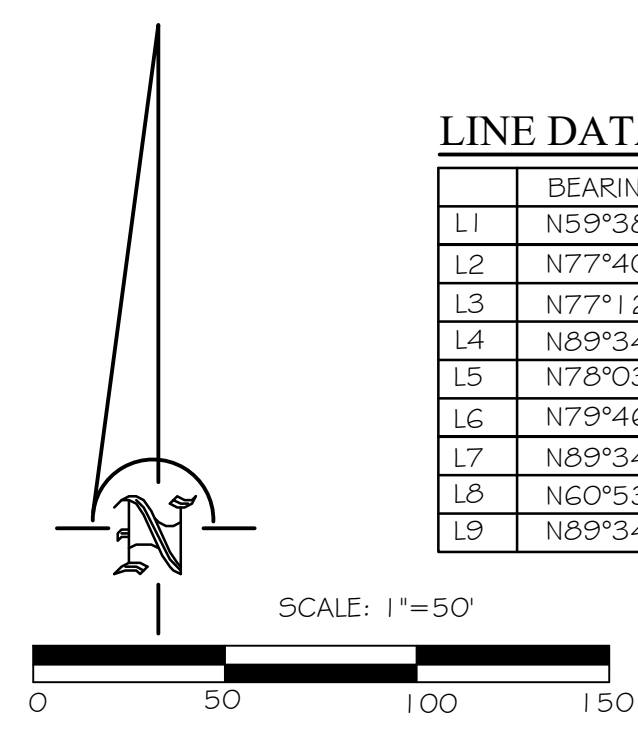
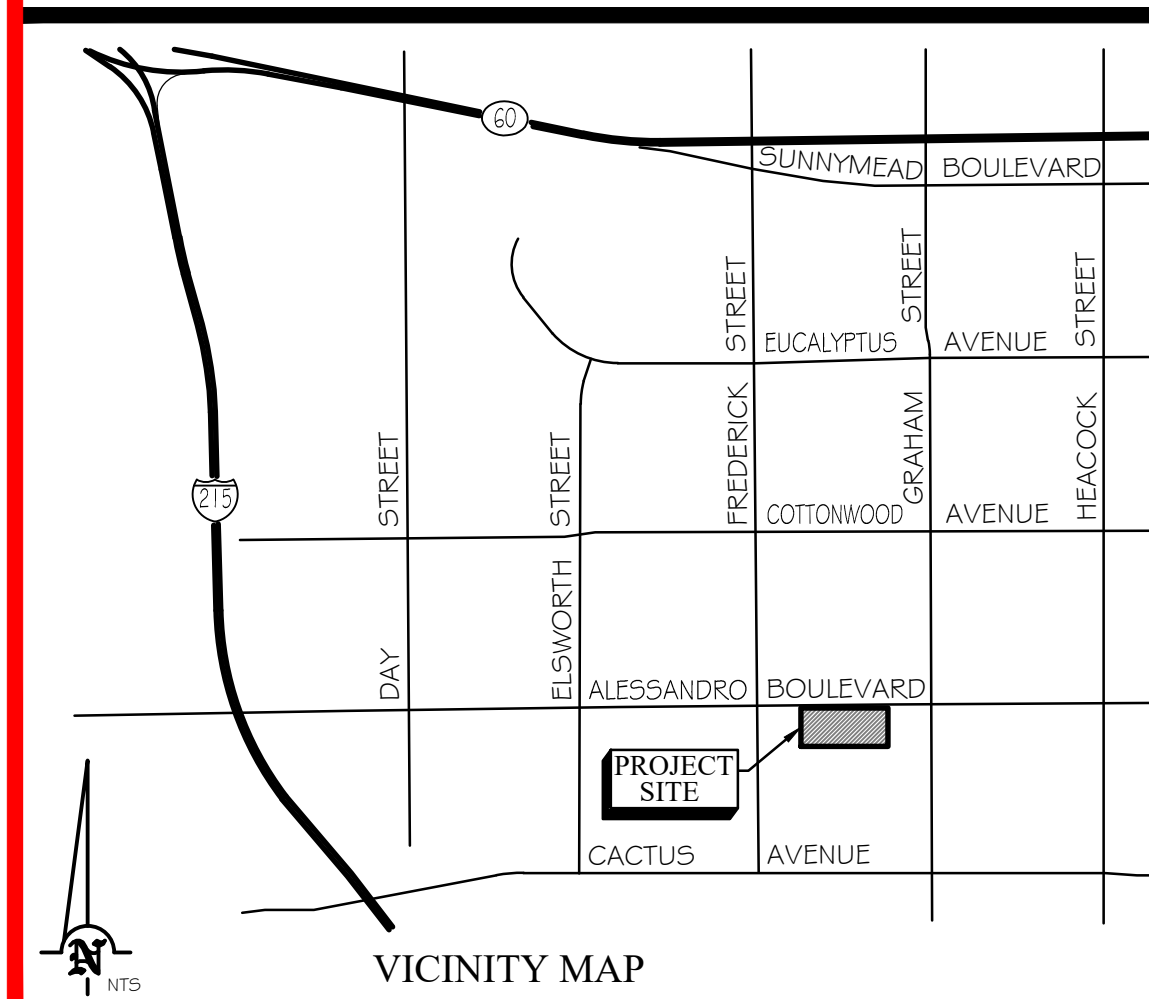
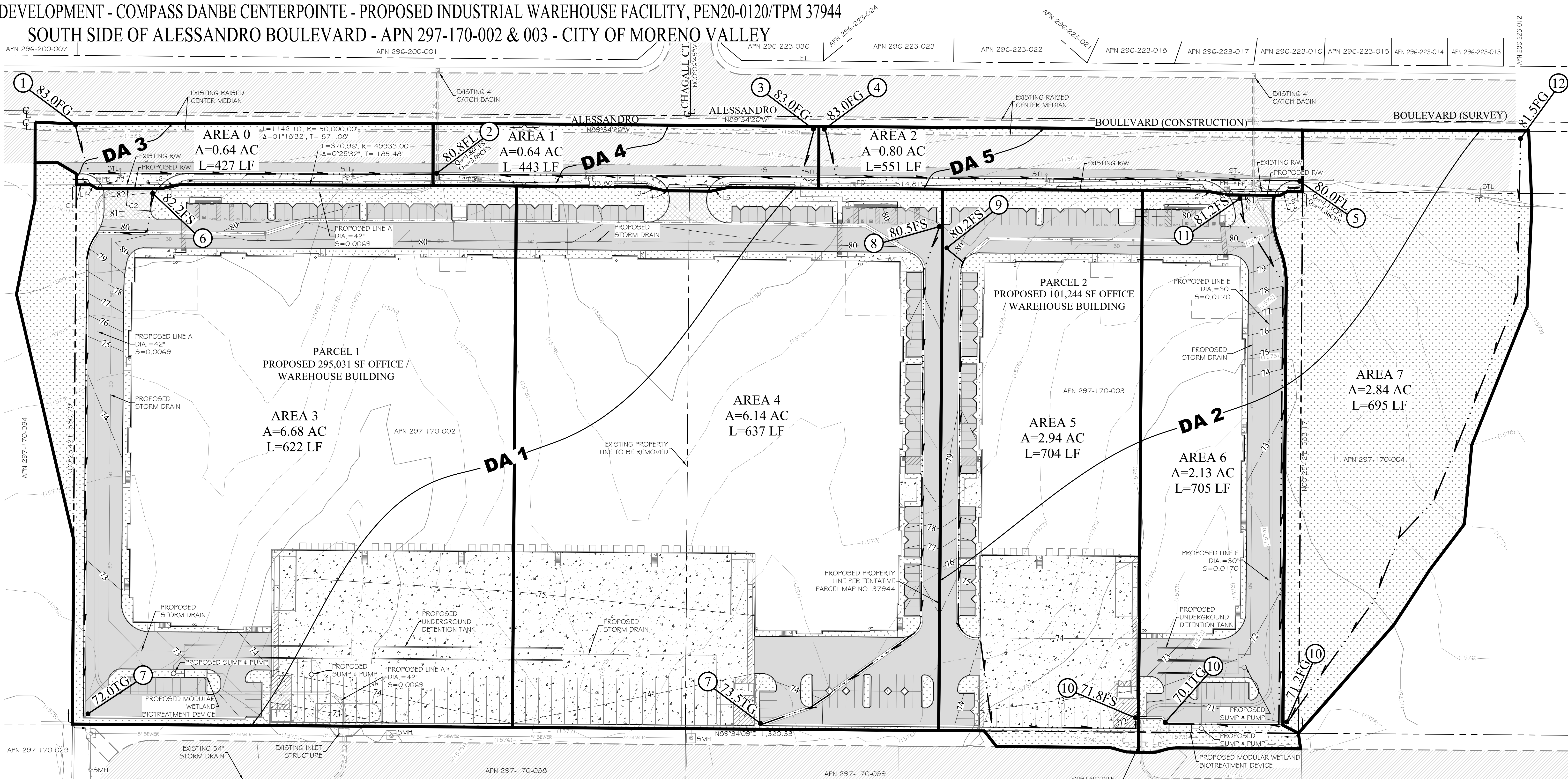
PATRICK C. FLANAGAN, JR.
 No. 86046
 Exp. 9/30/22
 CIVIL
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA

Patrick C. Flanagan, Jr. R.C.E. 86046 Exp. Sep 30, 2022
 Job Number: 162012 Date Prepared: 10/6/20 Drawn By: RL Reference Number: 162012HCOC

HCOC TRIBUTARY AREA MAP

POST-DEVELOPMENT - COMPASS DANBE CENTERPOINTE - PROPOSED INDUSTRIAL WAREHOUSE FACILITY, PEN20-0120/TPM 37944

SOUTH SIDE OF ALESSANDRO BOULEVARD - APN 297-170-002 & 003 - CITY OF MORENO VALLEY



LINE DATA

LINE	BEARING	DISTANCE
L1	N59°38'55"W	7.89'
L2	N77°40'08"E	18.75'
L3	N77°12'47"W	18.69'
L4	N89°34'26"W	49.33'
L5	N78°03'57"E	18.69'
L6	N79°46'02"E	23.49'
L7	N89°34'26"W	56.75'
L8	N60°53'25"E	8.11'
L9	N89°34'26"W	16.97'

PAVING LEGEND

- PROPOSED/EXISTING LANDSCAPE
- PROPOSED AC PAVING
- PROPOSED PCC PAVING
- PROPOSED DECORATIVE PAVING
- EXISTING AC PAVING

CURVE DATA

Curve	Δ	R	T	L
C1	00°01'04"	49933.00	7.71'	15.41'
C2	00°04'51"	49929.00	35.23'	70.46'

LEGEND

- AC ASPHALT CONCRETE
- CF CURB FACE
- DIA DIAMETER
- ET ELECTRIC TRANSFORMER
- FF FINISHED FLOOR
- FG FINISHED GROUND
- FL FLOWLINE
- FS FINISHED SURFACE
- PB PULL BOX
- PCC PORTLAND CEMENT CONCRETE
- PL PROPERTY LINE
- PP EX. POWER POLE
- RW RIGHT-OF-WAY
- SMH SEWER MANHOLE
- STL EX. STREET LIGHT
- TC TOP OF CURB
- TG TOP OF GRATE

LEGEND

- ELEV.
L=165'
- A=1.44 AC
- SUB AREA
- FLOWLINE
- TRIBUTARY BOUNDARY

SOURCE OF SURVEY
TOPOGRAPHIC SURVEY DATED DECEMBER 2019 AS CONDUCTED BY **PARTNER ENGINEERING AND SCIENCE, INC.** 1761 EAST GARRY AVENUE SANTA ANA, CA 92705 PHONE: (714) 477-8657

SOIL ENGINEER
REPORT DATED JANUARY 31, 2020 PROJECT NO. 21631-20 AS CONDUCTED BY **NORCAL ENGINEERING** 10641 HUMBOLT STREET LOS ALAMITOS, CA 90720 PHONE: (562) 799-9469 FAX: (562) 799-9459

PROPERTY OWNER:
MORENO VALLEY CENTERPOINTE
C/O CDRE HOLDINGS 17 LLC
ATTN: MARK BACHLI
523 MAIN STREET
EL SEGUNDO, CA 90245
(310) 428-3302

PREPARED FOR/APPLICANT:
CDRE HOLDINGS 17 LLC
ATTN: MARK BACHLI
523 MAIN STREET
EL SEGUNDO, CA 90245
(310) 428-3302

HCOC TRIBUTARY AREA MAP
PEN20-0120/TPM37944
POST-DEVELOPMENT - APN 297-170-002 & 003
COMPASS DANBE CENTERPOINTE
PROPOSED INDUSTRIAL WAREHOUSE FACILITY
SOUTH SIDE OF ALESSANDRO BOULEVARD
CITY OF MORENO VALLEY

thatcher engineering & associates, inc.
1461 10th Street, Suite 105, Redlands, CA 92373

- land planning
- civil engineering
- landscape architecture

Patrick C. Flanagan, Jr., R.C.E. 86046 Exp. Sep 30, 2022

Job Number:	Date Prepared:	Drawn By:	Reference Number:
162012	10/6/20	RL	162012HCOC

Appendix 8: Source Control

Pollutant Sources/Source Control Checklist

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

How to use this worksheet (also see instructions in Section G of the WQMP Template):

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies.
2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your WQMP Exhibit.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in your WQMP. Use the format shown in Table G.1 on page 23 of this WQMP Template. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternative BMPs for those shown here.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input checked="" type="checkbox"/> A. On-site storm drain inlets	<input checked="" type="checkbox"/> Locations of inlets.	<input checked="" type="checkbox"/> Mark all inlets with the words “Only Rain Down the Storm Drain” or similar. Catch Basin Markers may be available from the Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.	<input checked="" type="checkbox"/> Maintain and periodically repaint or replace inlet markings. <input checked="" type="checkbox"/> Provide stormwater pollution prevention information to new site owners, lessees, or operators. <input checked="" type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-44, “Drainage System Maintenance,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com <input checked="" type="checkbox"/> Include the following in lease agreements: “Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains.”
<input type="checkbox"/> B. Interior floor drains and elevator shaft sump pumps		<input type="checkbox"/> State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	<input type="checkbox"/> Inspect and maintain drains to prevent blockages and overflow.
<input type="checkbox"/> C. Interior parking garages		<input type="checkbox"/> State that parking garage floor drains will be plumbed to the sanitary sewer.	<input type="checkbox"/> Inspect and maintain drains to prevent blockages and overflow.

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> D1. Need for future indoor & structural pest control		<input type="checkbox"/> Note building design features that discourage entry of pests.	<input type="checkbox"/> Provide Integrated Pest Management information to owners, lessees, and operators.
<input checked="" type="checkbox"/> D2. Landscape/ Outdoor Pesticide Use	<input type="checkbox"/> Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. <input type="checkbox"/> Show self-retaining landscape areas, if any. <input checked="" type="checkbox"/> Show stormwater treatment and hydrograph modification management BMPs. (See instructions in Chapter 3, Step 5 and guidance in Chapter 5.)	State that final landscape plans will accomplish all of the following. <input type="checkbox"/> Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. <input checked="" type="checkbox"/> Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. <input checked="" type="checkbox"/> Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. <input checked="" type="checkbox"/> Consider using pest-resistant plants, especially adjacent to hardscape. <input checked="" type="checkbox"/> To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	<input checked="" type="checkbox"/> Maintain landscaping using minimum or no pesticides. <input checked="" type="checkbox"/> See applicable operational BMPs in “What you should know for.....Landscape and Gardening” at http://rcflood.org/stormwater/Error! Hyperlink reference not valid . Provide IPM information to new owners, lessees and operators. <input checked="" type="checkbox"/>

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> E. Pools, spas, ponds, decorative fountains, and other water features.	<input type="checkbox"/> Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet. (Exception: Public pools must be plumbed according to County Department of Environmental Health Guidelines.)	If the Co-Permittee requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.	<input checked="" type="checkbox"/> See applicable operational BMPs in "Guidelines for Maintaining Your Swimming Pool, Jacuzzi and Garden Fountain" at http://rcflood.org/stormwater/
<input type="checkbox"/> F. Food service	<input type="checkbox"/> For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. <input type="checkbox"/> On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	<input type="checkbox"/> Describe the location and features of the designated cleaning area. <input type="checkbox"/> Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	<input type="checkbox"/> See the brochure, "The Food Service Industry Best Management Practices for: Restaurants, Grocery Stores, Delicatessens and Bakeries" at http://rcflood.org/stormwater/ Provide this brochure to new site owners, lessees, and operators.
<input checked="" type="checkbox"/> G. Refuse areas	<input checked="" type="checkbox"/> Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. <input checked="" type="checkbox"/> If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. <input type="checkbox"/> Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	<input checked="" type="checkbox"/> State how site refuse will be handled and provide supporting detail to what is shown on plans. <input checked="" type="checkbox"/> State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	<input checked="" type="checkbox"/> State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input checked="" type="checkbox"/> H. Industrial processes.	<input type="checkbox"/> Show process area.	<input checked="" type="checkbox"/> If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."	<input type="checkbox"/> See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com See the brochure "Industrial & Commercial Facilities Best Management Practices for: Industrial, Commercial Facilities" at http://rcflood.org/stormwater/

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> I. Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)	<input type="checkbox"/> Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area. <input type="checkbox"/> Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults. <input type="checkbox"/> Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.	<p>Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains.</p> <p>Where appropriate, reference documentation of compliance with the requirements of Hazardous Materials Programs for:</p> <ul style="list-style-type: none"> ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank <p>www.cchealth.org/groups/hazmat/</p>	<input type="checkbox"/> See the Fact Sheets SC-31, “Outdoor Liquid Container Storage” and SC-33, “Outdoor Storage of Raw Materials ” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> J. Vehicle and Equipment Cleaning	<input type="checkbox"/> Show on drawings as appropriate: (1) Commercial/industrial facilities having vehicle/equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses. (2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use). (3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer. (4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.	<input type="checkbox"/> If a car wash area is not provided, describe any measures taken to discourage on-site car washing and explain how these will be enforced.	Describe operational measures to implement the following (if applicable): <input type="checkbox"/> Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system. Refer to “Outdoor Cleaning Activities and Professional Mobile Service Providers” for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/ <input type="checkbox"/> Car dealerships and similar may rinse cars with water only.

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<p><input type="checkbox"/> K. Vehicle/Equipment Repair and Maintenance</p>	<p><input type="checkbox"/> Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater.</p> <p><input type="checkbox"/> Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas.</p> <p><input type="checkbox"/> Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.</p>	<p><input type="checkbox"/> State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area.</p> <p><input type="checkbox"/> State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.</p> <p><input type="checkbox"/> State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.</p>	<p>In the Stormwater Control Plan, note that all of the following restrictions apply to use the site:</p> <p><input type="checkbox"/> No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains.</p> <p><input type="checkbox"/> No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately.</p> <p><input type="checkbox"/> No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.</p> <p>Refer to "Automotive Maintenance & Car Care Best Management Practices for Auto Body Shops, Auto Repair Shops, Car Dealerships, Gas Stations and Fleet Service Operations". Brochure can be found at http://rcflood.org/stormwater/</p> <p>Refer to Outdoor Cleaning Activities and Professional Mobile Service Providers for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/</p>

Attachment: Appendix I1- Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> L. Fuel Dispensing Areas	<input type="checkbox"/> Fueling areas ⁶ shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable. <input type="checkbox"/> Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area ¹ .] The canopy [or cover] shall not drain onto the fueling area.		<input type="checkbox"/> The property owner shall dry sweep the fueling area routinely. <input type="checkbox"/> See the Fact Sheet SD-30 , “Fueling Areas” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

⁶ The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input checked="" type="checkbox"/> M. Loading Docks	<input type="checkbox"/> Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas shall be drained to the sanitary sewer, or diverted and collected for ultimate discharge to the sanitary sewer. <input type="checkbox"/> Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. <input type="checkbox"/> Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.		<input checked="" type="checkbox"/> Move loaded and unloaded items indoors as soon as possible. <input checked="" type="checkbox"/> See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input checked="" type="checkbox"/> N. Fire Sprinkler Test Water		<input type="checkbox"/> Provide a means to drain fire sprinkler test water to the sanitary sewer.	<input checked="" type="checkbox"/> See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
<p>O. Miscellaneous Drain or Wash Water or Other Sources</p> <input type="checkbox"/> Boiler drain lines <input checked="" type="checkbox"/> Condensate drain lines <input type="checkbox"/> Rooftop equipment <input type="checkbox"/> Drainage sumps <input checked="" type="checkbox"/> Roofing, gutters, and trim. <input type="checkbox"/> Other sources		<input type="checkbox"/> Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. <input checked="" type="checkbox"/> Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. <input checked="" type="checkbox"/> Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment. <input type="checkbox"/> Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. <input checked="" type="checkbox"/> Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff. <input type="checkbox"/> Include controls for other sources as specified by local reviewer.	

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input checked="" type="checkbox"/> P. Plazas, sidewalks, and parking lots.			<input checked="" type="checkbox"/> Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-

Appendix 9: O&M

Not applicable for Preliminary WQMP

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Appendix 10: Educational Materials

BMP Fact Sheets, Maintenance Guidelines and Other End-User BMP Information

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Site Design & Landscape Planning SD-10



Design Objectives

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Each project site possesses unique topographic, hydrologic, and vegetative features, some of which are more suitable for development than others. Integrating and incorporating appropriate landscape planning methodologies into the project design is the most effective action that can be done to minimize surface and groundwater contamination from stormwater.

Approach

Landscape planning should couple consideration of land suitability for urban uses with consideration of community goals and projected growth. Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment.

Design Considerations

Design requirements for site design and landscapes planning should conform to applicable standards and specifications of agencies with jurisdiction and be consistent with applicable General Plan and Local Area Plan policies.



SD-10 Site Design & Landscape Planning

Designing New Installations

Begin the development of a plan for the landscape unit with attention to the following general principles:

- Formulate the plan on the basis of clearly articulated community goals. Carefully identify conflicts and choices between retaining and protecting desired resources and community growth.
- Map and assess land suitability for urban uses. Include the following landscape features in the assessment: wooded land, open unwooded land, steep slopes, erosion-prone soils, foundation suitability, soil suitability for waste disposal, aquifers, aquifer recharge areas, wetlands, floodplains, surface waters, agricultural lands, and various categories of urban land use. When appropriate, the assessment can highlight outstanding local or regional resources that the community determines should be protected (e.g., a scenic area, recreational area, threatened species habitat, farmland, fish run). Mapping and assessment should recognize not only these resources but also additional areas needed for their sustenance.

Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

Conserve Natural Areas during Landscape Planning

If applicable, the following items are required and must be implemented in the site layout during the subdivision design and approval process, consistent with applicable General Plan and Local Area Plan policies:

- Cluster development on least-sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.
- Limit clearing and grading of native vegetation at a site to the minimum amount needed to build lots, allow access, and provide fire protection.
- Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.
- Promote natural vegetation by using parking lot islands and other landscaped areas.
- Preserve riparian areas and wetlands.

Maximize Natural Water Storage and Infiltration Opportunities Within the Landscape Unit

- Promote the conservation of forest cover. Building on land that is already deforested affects basin hydrology to a lesser extent than converting forested land. Loss of forest cover reduces interception storage, detention in the organic forest floor layer, and water losses by evapotranspiration, resulting in large peak runoff increases and either their negative effects or the expense of countering them with structural solutions.
- Maintain natural storage reservoirs and drainage corridors, including depressions, areas of permeable soils, swales, and intermittent streams. Develop and implement policies and

Site Design & Landscape Planning SD-10

regulations to discourage the clearing, filling, and channelization of these features. Utilize them in drainage networks in preference to pipes, culverts, and engineered ditches.

- Evaluating infiltration opportunities by referring to the stormwater management manual for the jurisdiction and pay particular attention to the selection criteria for avoiding groundwater contamination, poor soils, and hydrogeological conditions that cause these facilities to fail. If necessary, locate developments with large amounts of impervious surfaces or a potential to produce relatively contaminated runoff away from groundwater recharge areas.

Protection of Slopes and Channels during Landscape Design

- Convey runoff safely from the tops of slopes.
- Avoid disturbing steep or unstable slopes.
- Avoid disturbing natural channels.
- Stabilize disturbed slopes as quickly as possible.
- Vegetate slopes with native or drought tolerant vegetation.
- Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.
- Stabilize temporary and permanent channel crossings as quickly as possible, and ensure that increases in run-off velocity and frequency caused by the project do not erode the channel.
- Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.
- Line on-site conveyance channels where appropriate, to reduce erosion caused by increased flow velocity due to increases in tributary impervious area. The first choice for linings should be grass or some other vegetative surface; since these materials not only reduce runoff velocities, but also provide water quality benefits from filtration and infiltration. If velocities in the channel are high enough to erode grass or other vegetative linings, riprap, concrete, soil cement, or geo-grid stabilization are other alternatives.
- Consider other design principles that are comparable and equally effective.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define “redevelopment” in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of “redevelopment” must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under “designing new installations” above should be followed.

SD-10 Site Design & Landscape Planning

Redevelopment may present significant opportunity to add features which had not previously been implemented. Examples include incorporation of depressions, areas of permeable soils, and swales in newly redeveloped areas. While some site constraints may exist due to the status of already existing infrastructure, opportunities should not be missed to maximize infiltration, slow runoff, reduce impervious areas, disconnect directly connected impervious areas.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Stormwater Management Manual for Western Washington, Washington State Department of Ecology, August 2001.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Efficient Irrigation

SD-12



Design Objectives

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Irrigation water provided to landscaped areas may result in excess irrigation water being conveyed into stormwater drainage systems.

Approach

Project plan designs for development and redevelopment should include application methods of irrigation water that minimize runoff of excess irrigation water into the stormwater conveyance system.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment. (Detached residential single-family homes are typically excluded from this requirement.)

Design Considerations

Designing New Installations

The following methods to reduce excessive irrigation runoff should be considered, and incorporated and implemented where determined applicable and feasible by the Permittee:

- Employ rain-triggered shutoff devices to prevent irrigation after precipitation.
- Design irrigation systems to each landscape area's specific water requirements.
- Include design featuring flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.
- Implement landscape plans consistent with County or City water conservation resolutions, which may include provision of water sensors, programmable irrigation times (for short cycles), etc.



SD-12

Efficient Irrigation

- Design timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water drainage system.
- Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. Choose plants with low irrigation requirements (for example, native or drought tolerant species). Consider design features such as:
 - Using mulches (such as wood chips or bark) in planter areas without ground cover to minimize sediment in runoff
 - Installing appropriate plant materials for the location, in accordance with amount of sunlight and climate, and use native plant materials where possible and/or as recommended by the landscape architect
 - Leaving a vegetative barrier along the property boundary and interior watercourses, to act as a pollutant filter, where appropriate and feasible
 - Choosing plants that minimize or eliminate the use of fertilizer or pesticides to sustain growth
- Employ other comparable, equally effective methods to reduce irrigation water runoff.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define “redevelopment” in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of “redevelopment” must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under “designing new installations” above should be followed.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Alternative Building Materials

SD-21



Design Objectives

- Maximize Infiltration
- Provide Retention
- Source Control
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutant
- Collect and Convey

Description

Alternative building materials are selected instead of conventional materials for new construction and renovation. These materials reduce potential sources of pollutants in stormwater runoff by eliminating compounds that can leach into runoff, reducing the need for pesticide application, reducing the need for painting and other maintenance, or by reducing the volume of runoff.

Approach

Alternative building materials are available for use as lumber for decking, roofing materials, home siding, and paving for driveways, decks, and sidewalks.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment.

Design Considerations

Designing New Installations

Decking

One of the most common materials for construction of decks and other outdoor construction has traditionally been pressure treated wood, which is now being phased out. The standard treatment is called CCA, for chromated copper arsenate. The key ingredients are arsenic (which kills termites, carpenter ants and other insects), copper (which kills the fungi that cause wood to rot) and chromium (which reacts with the other ingredients to bind them to the wood). The amount of arsenic is far from trivial. A deck just 8 feet x 10 feet contains more than 1 1/3 pounds of this highly potent poison. Replacement materials include a new type of pressure treated wood, plastic and composite lumber.



SD-21 **Alternative Building Materials**

There are currently over 20 products in the market consisting of plastic or plastic-wood composites. Plastic lumber is made from 100% recycled plastic, # 2 HDPE and polyethylene plastic milk jugs and soap bottles. Plastic-wood composites are a combination of plastic and wood fibers or sawdust. These materials are a long lasting exterior weather, insect, and chemical resistant wood lumber replacement for non structural applications. Use it for decks, docks, raised garden beds and planter boxes, pallets, hand railings, outdoor furniture, animal pens, boat decks, etc.

New pressure treated wood uses a much safer recipe, ACQ, which stands for ammoniacal copper quaternary. It contains no arsenic and no chromium. Yet the American Wood Preservers Association has found it to be just as effective as the standard formula. ACQ is common in Japan and Europe.

Roofing

Several studies have indicated that metal used as roofing material, flashing, or gutters can leach metals into the environment. The leaching occurs because rainfall is slightly acidic and slowly dissolved the exposed metals. Common traditional applications include copper sheathing and galvanized (zinc) gutters.

Coated metal products are available for both roofing and gutter applications. These products eliminate contact of bare metal with rainfall, eliminating one source of metals in runoff. There are also roofing materials made of recycled rubber and plastic that resemble traditional materials.

A less traditional approach is the use of green roofs. These roofs are not just green, they're alive. Planted with grasses and succulents, low- profile green roofs reduce the urban heat island effect, stormwater runoff, and cooling costs, while providing wildlife habitat and a connection to nature for building occupants. These roofs are widely used on industrial facilities in Europe and have been established as experimental installations in several locations in the US, including Portland, Oregon. Their feasibility is questionable in areas of California with prolonged, dry, hot weather.

Paved Areas

Traditionally, concrete is used for construction of patios, sidewalks, and driveways. Although it is non-toxic, these paved areas reduce stormwater infiltration and increase the volume and rate of runoff. This increase in the amount of runoff is the leading cause of stream channel degradation in urban areas.

There are a number of alternative materials that can be used in these applications, including porous concrete and asphalt, modular blocks, and crushed granite. These materials, especially modular paving blocks, are widely available and a well established method to reduce stormwater runoff.

Building Siding

Wood siding is commonly used on the exterior of residential construction. This material weathers fairly rapidly and requires repeated painting to prevent rotting. Alternative "new" products for this application include cement-fiber and vinyl. Cement-fiber siding is a masonry product made from Portland cement, sand, and cellulose and will not burn, cup, swell, or shrink.

Alternative Building Materials

SD-21

Pesticide Reduction

A common use of powerful pesticides is for the control of termites. Chlordane was used for many years for this purpose and is now found in urban streams and lakes nationwide. There are a number of physical barriers that can be installed during construction to help reduce the use of pesticides.

Sand barriers for subterranean termites are a physical deterrent because the termites cannot tunnel through it. Sand barriers can be applied in crawl spaces under pier and beam foundations, under slab foundations, and between the foundation and concrete porches, terraces, patios and steps. Other possible locations include under fence posts, underground electrical cables, water and gas lines, telephone and electrical poles, inside hollow tile cells and against retaining walls.

Metal termite shields are physical barriers to termites which prevent them from building invisible tunnels. In reality, metal shields function as a helpful termite detection device, forcing them to build tunnels on the outside of the shields which are easily seen. Metal termite shields also help prevent dampness from wicking to adjoining wood members which can result in rot, thus making the material more attractive to termites and other pests. Metal flashing and metal plates can also be used as a barrier between piers and beams of structures such as decks, which are particularly vulnerable to termite attack.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define “redevelopment” in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of “redevelopment” must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under “designing new installations” above should be followed.

Other Resources

There are no good, independent, comprehensive sources of information on alternative building materials for use in minimizing the impacts of stormwater runoff. Most websites or other references to “green” or “alternative” building materials focus on indoor applications, such as formaldehyde free plywood and low VOC paints, carpets, and pads. Some supplemental information on alternative materials is available from the manufacturers.

Fires are a source of concern in many areas of California. Information on the flammability of alternative decking materials is available from the University of California Forest Product Laboratory (UCFPL) website at: <http://www.ucfpl.ucop.edu/WDeckIntro.htm>

Bioretention

TC-32



Description

The bioretention best management practice (BMP) functions as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes. These facilities normally consist of a grass buffer strip, sand bed, ponding area, organic layer or mulch layer, planting soil, and plants. The runoff's velocity is reduced by passing over or through buffer strip and subsequently distributed evenly along a ponding area. Exfiltration of the stored water in the bioretention area planting soil into the underlying soils occurs over a period of days.

California Experience

None documented. Bioretention has been used as a stormwater BMP since 1992. In addition to Prince George's County, MD and Alexandria, VA, bioretention has been used successfully at urban and suburban areas in Montgomery County, MD; Baltimore County, MD; Chesterfield County, VA; Prince William County, VA; Smith Mountain Lake State Park, VA; and Cary, NC.

Advantages

- Bioretention provides stormwater treatment that enhances the quality of downstream water bodies by temporarily storing runoff in the BMP and releasing it over a period of four days to the receiving water (EPA, 1999).
- The vegetation provides shade and wind breaks, absorbs noise, and improves an area's landscape.

Limitations

- The bioretention BMP is not recommended for areas with slopes greater than 20% or where mature tree removal would

Design Considerations

- Soil for Infiltration
- Tributary Area
- Slope
- Aesthetics
- Environmental Side-effects

Targeted Constituents

<input checked="" type="checkbox"/>	Sediment	■
<input checked="" type="checkbox"/>	Nutrients	▲
<input checked="" type="checkbox"/>	Trash	■
<input checked="" type="checkbox"/>	Metals	■
<input checked="" type="checkbox"/>	Bacteria	■
<input checked="" type="checkbox"/>	Oil and Grease	■
<input checked="" type="checkbox"/>	Organics	■

Legend (Removal Effectiveness)

- Low
- High
- ▲ Medium



be required since clogging may result, particularly if the BMP receives runoff with high sediment loads (EPA, 1999).

- Bioretention is not a suitable BMP at locations where the water table is within 6 feet of the ground surface and where the surrounding soil stratum is unstable.
- By design, bioretention BMPs have the potential to create very attractive habitats for mosquitoes and other vectors because of highly organic, often heavily vegetated areas mixed with shallow water.
- In cold climates the soil may freeze, preventing runoff from infiltrating into the planting soil.

Design and Sizing Guidelines

- The bioretention area should be sized to capture the design storm runoff.
- In areas where the native soil permeability is less than 0.5 in/hr an underdrain should be provided.
- Recommended minimum dimensions are 15 feet by 40 feet, although the preferred width is 25 feet. Excavated depth should be 4 feet.
- Area should drain completely within 72 hours.
- Approximately 1 tree or shrub per 50 ft² of bioretention area should be included.
- Cover area with about 3 inches of mulch.

Construction/Inspection Considerations

Bioretention area should not be established until contributing watershed is stabilized.

Performance

Bioretention removes stormwater pollutants through physical and biological processes, including adsorption, filtration, plant uptake, microbial activity, decomposition, sedimentation and volatilization (EPA, 1999). Adsorption is the process whereby particulate pollutants attach to soil (e.g., clay) or vegetation surfaces. Adequate contact time between the surface and pollutant must be provided for in the design of the system for this removal process to occur. Thus, the infiltration rate of the soils must not exceed those specified in the design criteria or pollutant removal may decrease. Pollutants removed by adsorption include metals, phosphorus, and hydrocarbons. Filtration occurs as runoff passes through the bioretention area media, such as the sand bed, ground cover, and planting soil.

Common particulates removed from stormwater include particulate organic matter, phosphorus, and suspended solids. Biological processes that occur in wetlands result in pollutant uptake by plants and microorganisms in the soil. Plant growth is sustained by the uptake of nutrients from the soils, with woody plants locking up these nutrients through the seasons. Microbial activity within the soil also contributes to the removal of nitrogen and organic matter. Nitrogen is removed by nitrifying and denitrifying bacteria, while aerobic bacteria are responsible for the decomposition of the organic matter. Microbial processes require oxygen and can result in depleted oxygen levels if the bioretention area is not adequately

Bioretention

TC-32

aerated. Sedimentation occurs in the swale or ponding area as the velocity slows and solids fall out of suspension.

The removal effectiveness of bioretention has been studied during field and laboratory studies conducted by the University of Maryland (Davis et al, 1998). During these experiments, synthetic stormwater runoff was pumped through several laboratory and field bioretention areas to simulate typical storm events in Prince George's County, MD. Removal rates for heavy metals and nutrients are shown in Table 1.

Pollutant	Removal Rate
Total Phosphorus	70-83%
Metals (Cu, Zn, Pb)	93-98%
TKN	68-80%
Total Suspended Solids	90%
Organics	90%
Bacteria	90%

Results for both the laboratory and field experiments were similar for each of the pollutants analyzed. Doubling or halving the influent pollutant levels had little effect on the effluent pollutants concentrations (Davis et al, 1998).

The microbial activity and plant uptake occurring in the bioretention area will likely result in higher removal rates than those determined for infiltration BMPs.

Siting Criteria

Bioretention BMPs are generally used to treat stormwater from impervious surfaces at commercial, residential, and industrial areas (EPA, 1999). Implementation of bioretention for stormwater management is ideal for median strips, parking lot islands, and swales. Moreover, the runoff in these areas can be designed to either divert directly into the bioretention area or convey into the bioretention area by a curb and gutter collection system.

The best location for bioretention areas is upland from inlets that receive sheet flow from graded areas and at areas that will be excavated (EPA, 1999). In order to maximize treatment effectiveness, the site must be graded in such a way that minimizes erosive conditions as sheet flow is conveyed to the treatment area. Locations where a bioretention area can be readily incorporated into the site plan without further environmental damage are preferred. Furthermore, to effectively minimize sediment loading in the treatment area, bioretention only should be used in stabilized drainage areas.

Additional Design Guidelines

The layout of the bioretention area is determined after site constraints such as location of utilities, underlying soils, existing vegetation, and drainage are considered (EPA, 1999). Sites with loamy sand soils are especially appropriate for bioretention because the excavated soil can be backfilled and used as the planting soil, thus eliminating the cost of importing planting soil.

The use of bioretention may not be feasible given an unstable surrounding soil stratum, soils with clay content greater than 25 percent, a site with slopes greater than 20 percent, and/or a site with mature trees that would be removed during construction of the BMP.

Bioretention can be designed to be off-line or on-line of the existing drainage system (EPA, 1999). The drainage area for a bioretention area should be between 0.1 and 0.4 hectares (0.25 and 1.0 acres). Larger drainage areas may require multiple bioretention areas. Furthermore, the maximum drainage area for a bioretention area is determined by the expected rainfall intensity and runoff rate. Stabilized areas may erode when velocities are greater than 5 feet per second (1.5 meter per second). The designer should determine the potential for erosive conditions at the site.

The size of the bioretention area, which is a function of the drainage area and the runoff generated from the area is sized to capture the water quality volume.

The recommended minimum dimensions of the bioretention area are 15 feet (4.6 meters) wide by 40 feet (12.2 meters) long, where the minimum width allows enough space for a dense, randomly-distributed area of trees and shrubs to become established. Thus replicating a natural forest and creating a microclimate, thereby enabling the bioretention area to tolerate the effects of heat stress, acid rain, runoff pollutants, and insect and disease infestations which landscaped areas in urban settings typically are unable to tolerate. The preferred width is 25 feet (7.6 meters), with a length of twice the width. Essentially, any facilities wider than 20 feet (6.1 meters) should be twice as long as they are wide, which promotes the distribution of flow and decreases the chances of concentrated flow.

In order to provide adequate storage and prevent water from standing for excessive periods of time the ponding depth of the bioretention area should not exceed 6 inches (15 centimeters). Water should not be left to stand for more than 72 hours. A restriction on the type of plants that can be used may be necessary due to some plants' water intolerance. Furthermore, if water is left standing for longer than 72 hours mosquitoes and other insects may start to breed.

The appropriate planting soil should be backfilled into the excavated bioretention area. Planting soils should be sandy loam, loamy sand, or loam texture with a clay content ranging from 10 to 25 percent.

Generally the soil should have infiltration rates greater than 0.5 inches (1.25 centimeters) per hour, which is typical of sandy loams, loamy sands, or loams. The pH of the soil should range between 5.5 and 6.5, where pollutants such as organic nitrogen and phosphorus can be adsorbed by the soil and microbial activity can flourish. Additional requirements for the planting soil include a 1.5 to 3 percent organic content and a maximum 500 ppm concentration of soluble salts.

Bioretention

TC-32

Soil tests should be performed for every 500 cubic yards (382 cubic meters) of planting soil, with the exception of pH and organic content tests, which are required only once per bioretention area (EPA, 1999). Planting soil should be 4 inches (10.1 centimeters) deeper than the bottom of the largest root ball and 4 feet (1.2 meters) altogether. This depth will provide adequate soil for the plants' root systems to become established, prevent plant damage due to severe wind, and provide adequate moisture capacity. Most sites will require excavation in order to obtain the recommended depth.

Planting soil depths of greater than 4 feet (1.2 meters) may require additional construction practices such as shoring measures (EPA, 1999). Planting soil should be placed in 18 inches or greater lifts and lightly compacted until the desired depth is reached. Since high canopy trees may be destroyed during maintenance the bioretention area should be vegetated to resemble a terrestrial forest community ecosystem that is dominated by understory trees. Three species each of both trees and shrubs are recommended to be planted at a rate of 2500 trees and shrubs per hectare (1000 per acre). For instance, a 15 foot (4.6 meter) by 40 foot (12.2 meter) bioretention area (600 square feet or 55.75 square meters) would require 14 trees and shrubs. The shrub-to-tree ratio should be 2:1 to 3:1.

Trees and shrubs should be planted when conditions are favorable. Vegetation should be watered at the end of each day for fourteen days following its planting. Plant species tolerant of pollutant loads and varying wet and dry conditions should be used in the bioretention area.

The designer should assess aesthetics, site layout, and maintenance requirements when selecting plant species. Adjacent non-native invasive species should be identified and the designer should take measures, such as providing a soil breach to eliminate the threat of these species invading the bioretention area. Regional landscaping manuals should be consulted to ensure that the planting of the bioretention area meets the landscaping requirements established by the local authorities. The designers should evaluate the best placement of vegetation within the bioretention area. Plants should be placed at irregular intervals to replicate a natural forest. Trees should be placed on the perimeter of the area to provide shade and shelter from the wind. Trees and shrubs can be sheltered from damaging flows if they are placed away from the path of the incoming runoff. In cold climates, species that are more tolerant to cold winds, such as evergreens, should be placed in windier areas of the site.

Following placement of the trees and shrubs, the ground cover and/or mulch should be established. Ground cover such as grasses or legumes can be planted at the beginning of the growing season. Mulch should be placed immediately after trees and shrubs are planted. Two to 3 inches (5 to 7.6 cm) of commercially-available fine shredded hardwood mulch or shredded hardwood chips should be applied to the bioretention area to protect from erosion.

Maintenance

The primary maintenance requirement for bioretention areas is that of inspection and repair or replacement of the treatment area's components. Generally, this involves nothing more than the routine periodic maintenance that is required of any landscaped area. Plants that are appropriate for the site, climatic, and watering conditions should be selected for use in the bioretention cell. Appropriately selected plants will aide in reducing fertilizer, pesticide, water, and overall maintenance requirements. Bioretention system components should blend over time through plant and root growth, organic decomposition, and the development of a natural

soil horizon. These biologic and physical processes over time will lengthen the facility's life span and reduce the need for extensive maintenance.

Routine maintenance should include a biannual health evaluation of the trees and shrubs and subsequent removal of any dead or diseased vegetation (EPA, 1999). Diseased vegetation should be treated as needed using preventative and low-toxic measures to the extent possible. BMPs have the potential to create very attractive habitats for mosquitoes and other vectors because of highly organic, often heavily vegetated areas mixed with shallow water. Routine inspections for areas of standing water within the BMP and corrective measures to restore proper infiltration rates are necessary to prevent creating mosquito and other vector habitat. In addition, bioretention BMPs are susceptible to invasion by aggressive plant species such as cattails, which increase the chances of water standing and subsequent vector production if not routinely maintained.

In order to maintain the treatment area's appearance it may be necessary to prune and weed. Furthermore, mulch replacement is suggested when erosion is evident or when the site begins to look unattractive. Specifically, the entire area may require mulch replacement every two to three years, although spot mulching may be sufficient when there are random void areas. Mulch replacement should be done prior to the start of the wet season.

New Jersey's Department of Environmental Protection states in their bioretention systems standards that accumulated sediment and debris removal (especially at the inflow point) will normally be the primary maintenance function. Other potential tasks include replacement of dead vegetation, soil pH regulation, erosion repair at inflow points, mulch replenishment, unclogging the underdrain, and repairing overflow structures. There is also the possibility that the cation exchange capacity of the soils in the cell will be significantly reduced over time. Depending on pollutant loads, soils may need to be replaced within 5-10 years of construction (LID, 2000).

Cost

Construction Cost

Construction cost estimates for a bioretention area are slightly greater than those for the required landscaping for a new development (EPA, 1999). A general rule of thumb (Coffman, 1999) is that residential bioretention areas average about \$3 to \$4 per square foot, depending on soil conditions and the density and types of plants used. Commercial, industrial and institutional site costs can range between \$10 to \$40 per square foot, based on the need for control structures, curbing, storm drains and underdrains.

Retrofitting a site typically costs more, averaging \$6,500 per bioretention area. The higher costs are attributed to the demolition of existing concrete, asphalt, and existing structures and the replacement of fill material with planting soil. The costs of retrofitting a commercial site in Maryland, Kettering Development, with 15 bioretention areas were estimated at \$111,600.

In any bioretention area design, the cost of plants varies substantially and can account for a significant portion of the expenditures. While these cost estimates are slightly greater than those of typical landscaping treatment (due to the increased number of plantings, additional soil excavation, backfill material, use of underdrains etc.), those landscaping expenses that would be required regardless of the bioretention installation should be subtracted when determining the net cost.

Perhaps of most importance, however, the cost savings compared to the use of traditional structural stormwater conveyance systems makes bioretention areas quite attractive financially. For example, the use of bioretention can decrease the cost required for constructing stormwater conveyance systems at a site. A medical office building in Maryland was able to reduce the amount of storm drain pipe that was needed from 800 to 230 feet - a cost savings of \$24,000 (PGDER, 1993). And a new residential development spent a total of approximately \$100,000 using bioretention cells on each lot instead of nearly \$400,000 for the traditional stormwater ponds that were originally planned (Rappahanock,). Also, in residential areas, stormwater management controls become a part of each property owner's landscape, reducing the public burden to maintain large centralized facilities.

Maintenance Cost

The operation and maintenance costs for a bioretention facility will be comparable to those of typical landscaping required for a site. Costs beyond the normal landscaping fees will include the cost for testing the soils and may include costs for a sand bed and planting soil.

References and Sources of Additional Information

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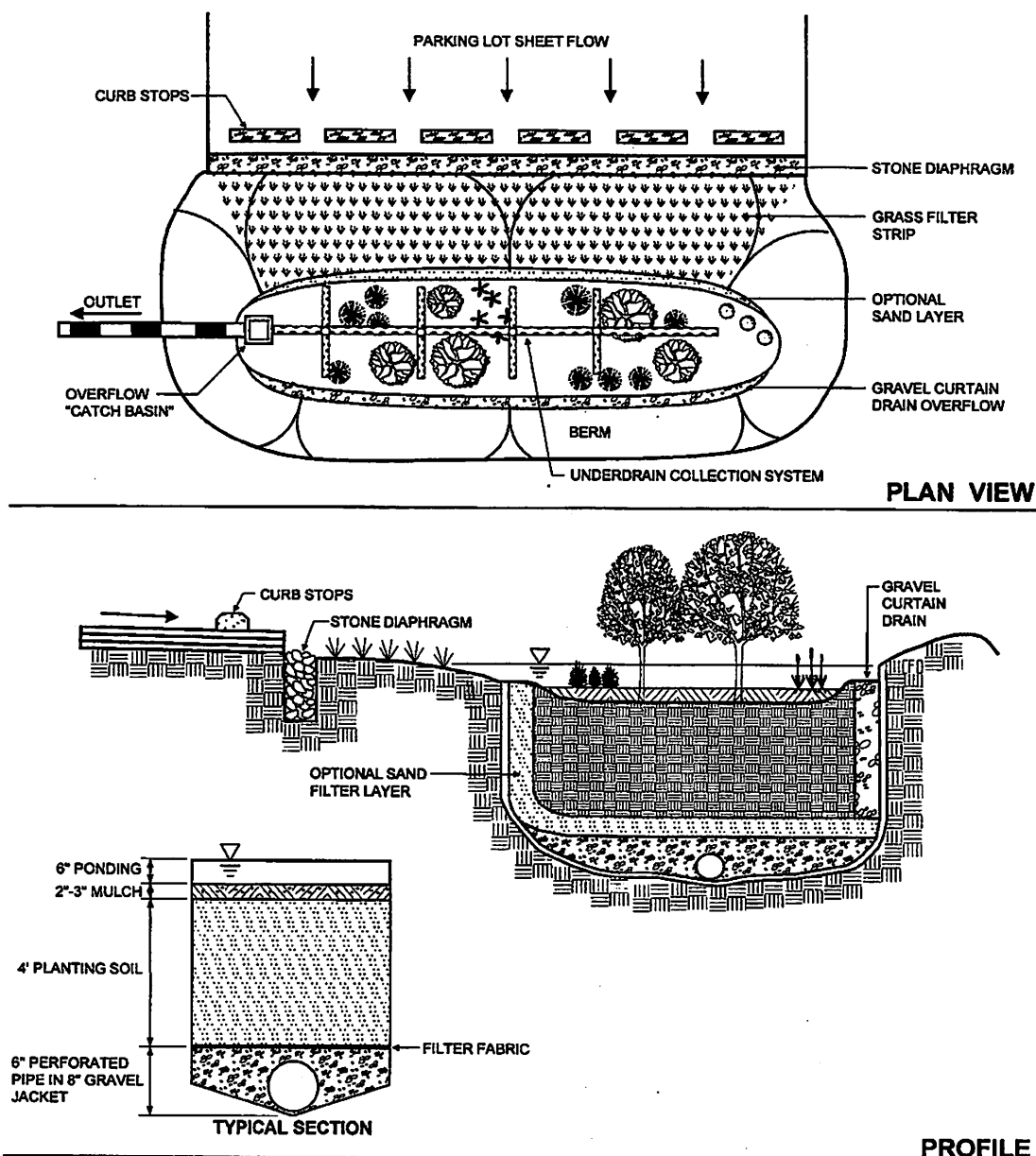
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TC-32

Bioretention



Schematic of a Bioretention Facility (MDE, 2000)

Attachment: Appendix I1-Preliminary Water Quality Management Plan (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Outdoor Loading/Unloading

SC-30



Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Description

The loading/unloading of materials usually takes place outside on docks or terminals; therefore, materials spilled, leaked, or lost during loading/unloading may collect in the soil or on other surfaces and have the potential to be carried away by stormwater runoff or when the area is cleaned. Additionally, rainfall may wash pollutants from machinery used to unload or move materials. Implementation of the following protocols will prevent or reduce the discharge of pollutants to stormwater from outdoor loading/unloading of materials.

Approach

Reduce potential for pollutant discharge through source control pollution prevention and BMP implementation. Successful implementation depends on effective training of employees on applicable BMPs and general pollution prevention strategies and objectives.

Pollution Prevention

- Keep accurate maintenance logs to evaluate materials removed and improvements made.
- Park tank trucks or delivery vehicles in designated areas so that spills or leaks can be contained.
- Limit exposure of material to rainfall whenever possible.
- Prevent stormwater run-on.
- Check equipment regularly for leaks.

Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓



SC-30**Outdoor Loading/Unloading*****Suggested Protocols******Loading and Unloading – General Guidelines***

- Develop an operations plan that describes procedures for loading and/or unloading.
- Conduct loading and unloading in dry weather if possible.
- Cover designated loading/unloading areas to reduce exposure of materials to rain.
- Consider placing a seal or door skirt between delivery vehicles and building to prevent exposure to rain.
- Design loading/unloading area to prevent stormwater run-on, which would include grading or berming the area, and position roof downspouts so they direct stormwater away from the loading/unloading areas.
- Have employees load and unload all materials and equipment in covered areas such as building overhangs at loading docks if feasible.
- Load/unload only at designated loading areas.
- Use drip pans underneath hose and pipe connections and other leak-prone spots during liquid transfer operations, and when making and breaking connections. Several drip pans should be stored in a covered location near the liquid transfer area so that they are always available, yet protected from precipitation when not in use. Drip pans can be made specifically for railroad tracks. Drip pans must be cleaned periodically, and drip collected materials must be disposed of properly.
- Pave loading areas with concrete instead of asphalt.
- Avoid placing storm drains in the area.
- Grade and/or berm the loading/unloading area to a drain that is connected to a deadend.

Inspection

- Check loading and unloading equipment regularly for leaks, including valves, pumps, flanges and connections.
- Look for dust or fumes during loading or unloading operations.

Training

- Train employees (e.g., fork lift operators) and contractors on proper spill containment and cleanup.
- Have employees trained in spill containment and cleanup present during loading/unloading.
- Train employees in proper handling techniques during liquid transfers to avoid spills.
- Make sure forklift operators are properly trained on loading and unloading procedures.

Outdoor Loading/Unloading

SC-30

Spill Response and Prevention

- Keep your Spill Prevention Control and Countermeasure (SPCC) Plan up-to-date.
- Contain leaks during transfer.
- Store and maintain appropriate spill cleanup materials in a location that is readily accessible and known to all and ensure that employees are familiar with the site's spill control plan and proper spill cleanup procedures.
- Have an emergency spill cleanup plan readily available.
- Use drip pans or comparable devices when transferring oils, solvents, and paints.

Other Considerations (Limitations and Regulations)

- Space and time limitations may preclude all transfers from being performed indoors or under cover.
- It may not be possible to conduct transfers only during dry weather.

Requirements

Costs

Costs should be low except when covering a large loading/unloading area.

Maintenance

- Conduct regular inspections and make repairs as necessary. The frequency of repairs will depend on the age of the facility.
- Check loading and unloading equipment regularly for leaks.
- Conduct regular broom dry-sweeping of area.

Supplemental Information

Further Detail of the BMP

Special Circumstances for Indoor Loading/Unloading of Materials

Loading or unloading of liquids should occur in the manufacturing building so that any spills that are not completely retained can be discharged to the sanitary sewer, treatment plant, or treated in a manner consistent with local sewer authorities and permit requirements.

- For loading and unloading tank trucks to above and below ground storage tanks, the following procedures should be used:
 - The area where the transfer takes place should be paved. If the liquid is reactive with the asphalt, Portland cement should be used to pave the area.
 - The transfer area should be designed to prevent run-on of stormwater from adjacent areas. Sloping the pad and using a curb, like a speed bump, around the uphill side of the transfer area should reduce run-on.

SC-30 Outdoor Loading/Unloading

- The transfer area should be designed to prevent runoff of spilled liquids from the area. Sloping the area to a drain should prevent runoff. The drain should be connected to a dead-end sump or to the sanitary sewer. A positive control valve should be installed on the drain.
- For transfer from rail cars to storage tanks that must occur outside, use the following procedures:
 - Drip pans should be placed at locations where spillage may occur, such as hose connections, hose reels, and filler nozzles. Use drip pans when making and breaking connections.
 - Drip pan systems should be installed between the rails to collect spillage from tank cars.

References and Resources

California's Nonpoint Source Program Plan <http://www.swrcb.ca.gov/nps/index.html>

Clark County Storm Water Pollution Control Manual
<http://www.co.clark.wa.us/pubworks/bmpman.pdf>

King County Storm Water Pollution Control Manual <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Santa Clara Valley Urban Runoff Pollution Prevention Program <http://www.scvurppp.org>

The Storm Water Managers Resource Center <http://www.stormwatercenter.net/>

Parking/Storage Area Maintenance SC-43



Description

Parking lots and storage areas can contribute a number of substances, such as trash, suspended solids, hydrocarbons, oil and grease, and heavy metals that can enter receiving waters through stormwater runoff or non-stormwater discharges. The protocols in this fact sheet are intended to prevent or reduce the discharge of pollutants from parking/storage areas and include using good housekeeping practices, following appropriate cleaning BMPs, and training employees.

Approach

The goal of this program is to ensure stormwater pollution prevention practices are considered when conducting activities on or around parking areas and storage areas to reduce potential for pollutant discharge to receiving waters. Successful implementation depends on effective training of employees on applicable BMPs and general pollution prevention strategies and objectives.

Pollution Prevention

- Encourage alternative designs and maintenance strategies for impervious parking lots. (See New Development and Redevelopment BMP Handbook)
- Keep accurate maintenance logs to evaluate BMP implementation.

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment	✓
Nutrients	
Trash	✓
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓



SC-43 Parking/Storage Area Maintenance

Suggested Protocols

General

- Keep the parking and storage areas clean and orderly. Remove debris in a timely fashion.
- Allow sheet runoff to flow into biofilters (vegetated strip and swale) and/or infiltration devices.
- Utilize sand filters or oleophilic collectors for oily waste in low quantities.
- Arrange rooftop drains to prevent drainage directly onto paved surfaces.
- Design lot to include semi-permeable hardscape.
- Discharge soapy water remaining in mop or wash buckets to the sanitary sewer through a sink, toilet, clean-out, or wash area with drain.

Controlling Litter

- Post "No Littering" signs and enforce anti-litter laws.
- Provide an adequate number of litter receptacles.
- Clean out and cover litter receptacles frequently to prevent spillage.
- Provide trash receptacles in parking lots to discourage litter.
- Routinely sweep, shovel, and dispose of litter in the trash.

Surface Cleaning

- Use dry cleaning methods (e.g., sweeping, vacuuming) to prevent the discharge of pollutants into the stormwater conveyance system if possible.
- Establish frequency of public parking lot sweeping based on usage and field observations of waste accumulation.
- Sweep all parking lots at least once before the onset of the wet season.
- Follow the procedures below if water is used to clean surfaces:
 - Block the storm drain or contain runoff.
 - Collect and pump wash water to the sanitary sewer or discharge to a pervious surface. Do not allow wash water to enter storm drains.
 - Dispose of parking lot sweeping debris and dirt at a landfill.
- Follow the procedures below when cleaning heavy oily deposits:
 - Clean oily spots with absorbent materials.
 - Use a screen or filter fabric over inlet, then wash surfaces.

Parking/Storage Area Maintenance SC-43

- Do not allow discharges to the storm drain.
- Vacuum/pump discharges to a tank or discharge to sanitary sewer.
- Appropriately dispose of spilled materials and absorbents.

Surface Repair

- Preheat, transfer or load hot bituminous material away from storm drain inlets.
- Apply concrete, asphalt, and seal coat during dry weather to prevent contamination from contacting stormwater runoff.
- Cover and seal nearby storm drain inlets where applicable (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and all water from emulsified oil sealants has drained or evaporated. Clean any debris from these covered manholes and drains for proper disposal.
- Use only as much water as necessary for dust control, to avoid runoff.
- Catch drips from paving equipment that is not in use with pans or absorbent material placed under the machines. Dispose of collected material and absorbents properly.

Inspection

- Have designated personnel conduct inspections of parking facilities and stormwater conveyance systems associated with parking facilities on a regular basis.
- Inspect cleaning equipment/sweepers for leaks on a regular basis.

Training

- Provide regular training to field employees and/or contractors regarding cleaning of paved areas and proper operation of equipment.
- Train employees and contractors in proper techniques for spill containment and cleanup.

Spill Response and Prevention

- Keep your Spill Prevention Control and Countermeasure (SPCC) Plan up-to-date.
- Place a stockpile of spill cleanup materials where it will be readily accessible or at a central location.
- Clean up fluid spills immediately with absorbent rags or material.
- Dispose of spilled material and absorbents properly.

Other Considerations

Limitations related to sweeping activities at large parking facilities may include high equipment costs, the need for sweeper operator training, and the inability of current sweeper technology to remove oil and grease.

SC-43 Parking/Storage Area Maintenance

Requirements

Costs

Cleaning/sweeping costs can be quite large. Construction and maintenance of stormwater structural controls can be quite expensive as well.

Maintenance

- Sweep parking lot regularly to minimize cleaning with water.
- Clean out oil/water/sand separators regularly, especially after heavy storms.
- Clean parking facilities regularly to prevent accumulated wastes and pollutants from being discharged into conveyance systems during rainy conditions.

Supplemental Information

Further Detail of the BMP

Surface Repair

Apply concrete, asphalt, and seal coat during dry weather to prevent contamination from contacting stormwater runoff. Where applicable, cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and all water from emulsified oil sealants has drained or evaporated. Clean any debris from these covered manholes and drains for proper disposal. Only use only as much water as is necessary for dust control to avoid runoff.

References and Resources

California's Nonpoint Source Program Plan <http://www.swrcb.ca.gov/nps/index.html>

Clark County Storm Water Pollution Control Manual
<http://www.co.clark.wa.us/pubworks/bmpman.pdf>

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Santa Clara Valley Urban Runoff Pollution Prevention Program <http://www.scvurppp.org>

The Storm Water Managers Resource Center <http://www.stormwatercenter.net/>

Drainage System Maintenance

SC-44



Description

As a consequence of its function, the stormwater conveyance system collects and transports urban runoff and stormwater that may contain certain pollutants. The protocols in this fact sheet are intended to reduce pollutants reaching receiving waters through proper conveyance system operation and maintenance.

Approach

Pollution Prevention

Maintain catch basins, stormwater inlets, and other stormwater conveyance structures on a regular basis to remove pollutants, reduce high pollutant concentrations during the first flush of storms, prevent clogging of the downstream conveyance system, restore catch basins' sediment trapping capacity, and ensure the system functions properly hydraulically to avoid flooding.

Suggested Protocols

Catch Basins/Inlet Structures

- Staff should regularly inspect facilities to ensure compliance with the following:
 - Immediate repair of any deterioration threatening structural integrity.
 - Cleaning before the sump is 40% full. Catch basins should be cleaned as frequently as needed to meet this standard.
 - Stenciling of catch basins and inlets (see SC34 Waste Handling and Disposal).

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize

Targeted Constituents

Sediment	✓
Nutrients	
Trash	✓
Metals	
Bacteria	✓
Oil and Grease	
Organics	



SC-44 **Drainage System Maintenance**

- Clean catch basins, storm drain inlets, and other conveyance structures before the wet season to remove sediments and debris accumulated during the summer.
- Conduct inspections more frequently during the wet season for problem areas where sediment or trash accumulates more often. Clean and repair as needed.
- Keep accurate logs of the number of catch basins cleaned.
- Store wastes collected from cleaning activities of the drainage system in appropriate containers or temporary storage sites in a manner that prevents discharge to the storm drain.
- Dewater the wastes if necessary with outflow into the sanitary sewer if permitted. Water should be treated with an appropriate filtering device prior to discharge to the sanitary sewer. If discharge to the sanitary sewer is not allowed, water should be pumped or vacuumed to a tank and properly disposed. Do not dewater near a storm drain or stream.

Storm Drain Conveyance System

- Locate reaches of storm drain with deposit problems and develop a flushing schedule that keeps the pipe clear of excessive buildup.
- Collect and pump flushed effluent to the sanitary sewer for treatment whenever possible.

Pump Stations

- Clean all storm drain pump stations prior to the wet season to remove silt and trash.
- Do not allow discharge to reach the storm drain system when cleaning a storm drain pump station or other facility.
- Conduct routine maintenance at each pump station.
- Inspect, clean, and repair as necessary all outlet structures prior to the wet season.

Open Channel

- Modify storm channel characteristics to improve channel hydraulics, increase pollutant removals, and enhance channel/creek aesthetic and habitat value.
- Conduct channel modification/improvement in accordance with existing laws. Any person, government agency, or public utility proposing an activity that will change the natural (emphasis added) state of any river, stream, or lake in California, must enter into a Stream or Lake Alteration Agreement with the Department of Fish and Game. The developer-applicant should also contact local governments (city, county, special districts), other state agencies (SWRCB, RWQCB, Department of Forestry, Department of Water Resources), and Federal Corps of Engineers and USFWS.

Illicit Connections and Discharges

- Look for evidence of illegal discharges or illicit connections during routine maintenance of conveyance system and drainage structures:
 - Is there evidence of spills such as paints, discoloring, etc?

Drainage System Maintenance

SC-44

- Are there any odors associated with the drainage system?
- Record locations of apparent illegal discharges/illicit connections?
- Track flows back to potential dischargers and conduct aboveground inspections. This can be done through visual inspection of upgradient manholes or alternate techniques including zinc chloride smoke testing, fluorometric dye testing, physical inspection testing, or television camera inspection.
- Eliminate the discharge once the origin of flow is established.
- Stencil or demarcate storm drains, where applicable, to prevent illegal disposal of pollutants. Storm drain inlets should have messages such as “Dump No Waste Drains to Stream” stenciled next to them to warn against ignorant or intentional dumping of pollutants into the storm drainage system.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

Illegal Dumping

- Inspect and clean up hot spots and other storm drainage areas regularly where illegal dumping and disposal occurs.
- Establish a system for tracking incidents. The system should be designed to identify the following:
 - Illegal dumping hot spots
 - Types and quantities (in some cases) of wastes
 - Patterns in time of occurrence (time of day/night, month, or year)
 - Mode of dumping (abandoned containers, “midnight dumping” from moving vehicles, direct dumping of materials, accidents/spills)
 - Responsible parties
- Post “No Dumping” signs in problem areas with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

Training

- Train crews in proper maintenance activities, including record keeping and disposal.
- Allow only properly trained individuals to handle hazardous materials/wastes.
- Have staff involved in detection and removal of illicit connections trained in the following:
 - OSHA-required Health and Safety Training (29 CFR 1910.120) plus annual refresher training (as needed).

SC-44 Drainage System Maintenance

- OSHA Confined Space Entry training (Cal-OSHA Confined Space, Title 8 and Federal OSHA 29 CFR 1910.146).
- Procedural training (field screening, sampling, smoke/dye testing, TV inspection).

Spill Response and Prevention

- Investigate all reports of spills, leaks, and/or illegal dumping promptly.
- Clean up all spills and leaks using “dry” methods (with absorbent materials and/or rags) or dig up, remove, and properly dispose of contaminated soil.
- Refer to fact sheet SC-11 Spill Prevention, Control, and Cleanup.

Other Considerations (Limitations and Regulations)

- Clean-up activities may create a slight disturbance for local aquatic species. Access to items and material on private property may be limited. Trade-offs may exist between channel hydraulics and water quality/riparian habitat. If storm channels or basins are recognized as wetlands, many activities, including maintenance, may be subject to regulation and permitting.
- Storm drain flushing is most effective in small diameter pipes (36-inch diameter pipe or less, depending on water supply and sediment collection capacity). Other considerations associated with storm drain flushing may include the availability of a water source, finding a downstream area to collect sediments, liquid/sediment disposal, and prohibition against disposal of flushed effluent to sanitary sewer in some areas.
- Regulations may include adoption of substantial penalties for illegal dumping and disposal.
- Local municipal codes may include sections prohibiting discharge of soil, debris, refuse, hazardous wastes, and other pollutants into the storm drain system.

Requirements

Costs

- An aggressive catch basin cleaning program could require a significant capital and O&M budget.
- The elimination of illegal dumping is dependent on the availability, convenience, and cost of alternative means of disposal. The primary cost is for staff time. Cost depends on how aggressively a program is implemented. Other cost considerations for an illegal dumping program include:
 - Purchase and installation of signs.
 - Rental of vehicle(s) to haul illegally-disposed items and material to landfills.
 - Rental of heavy equipment to remove larger items (e.g., car bodies) from channels.
 - Purchase of landfill space to dispose of illegally-dumped items and material.

Drainage System Maintenance

SC-44

- Methods used for illicit connection detection (smoke testing, dye testing, visual inspection, and flow monitoring) can be costly and time-consuming. Site-specific factors, such as the level of impervious area, the density and ages of buildings, and type of land use will determine the level of investigation necessary.

Maintenance

- Two-person teams may be required to clean catch basins with vector trucks.
- Teams of at least two people plus administrative personnel are required to identify illicit discharges, depending on the complexity of the storm sewer system.
- Arrangements must be made for proper disposal of collected wastes.
- Technical staff are required to detect and investigate illegal dumping violations.

Supplemental Information

Further Detail of the BMP

Storm Drain Flushing

Flushing is a common maintenance activity used to improve pipe hydraulics and to remove pollutants in storm drainage systems. Flushing may be designed to hydraulically convey accumulated material to strategic locations, such as an open channel, another point where flushing will be initiated, or the sanitary sewer and the treatment facilities, thus preventing resuspension and overflow of a portion of the solids during storm events. Flushing prevents “plug flow” discharges of concentrated pollutant loadings and sediments. Deposits can hinder the designed conveyance capacity of the storm drain system and potentially cause backwater conditions in severe cases of clogging.

Storm drain flushing usually takes place along segments of pipe with grades that are too flat to maintain adequate velocity to keep particles in suspension. An upstream manhole is selected to place an inflatable device that temporarily plugs the pipe. Further upstream, water is pumped into the line to create a flushing wave. When the upstream reach of pipe is sufficiently full to cause a flushing wave, the inflated device is rapidly deflated with the assistance of a vacuum pump, thereby releasing the backed up water and resulting in the cleaning of the storm drain segment.

To further reduce impacts of stormwater pollution, a second inflatable device placed well downstream may be used to recollect the water after the force of the flushing wave has dissipated. A pump may then be used to transfer the water and accumulated material to the sanitary sewer for treatment. In some cases, an interceptor structure may be more practical or required to recollect the flushed waters.

It has been found that cleansing efficiency of periodic flush waves is dependent upon flush volume, flush discharge rate, sewer slope, sewer length, sewer flow rate, sewer diameter, and population density. As a rule of thumb, the length of line to be flushed should not exceed 700 feet. At this maximum recommended length, the percent removal efficiency ranges between 65-75% for organics and 55-65% for dry weather grit/inorganic material. The percent removal efficiency drops rapidly beyond that. Water is commonly supplied by a water truck, but fire hydrants can also supply water. To make the best use of water, it is recommended that reclaimed water be used or that fire hydrant line flushing coincide with storm sewer flushing.

SC-44 Drainage System Maintenance

References and Resources

California's Nonpoint Source Program Plan <http://www.swrcb.ca.gov/nps/index.html>

Clark County Storm Water Pollution Control Manual
<http://www.co.clark.wa.us/pubworks/bmpman.pdf>

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King County Storm Water Pollution Control Manual <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program <http://www.scvurppp.org>

The Storm Water Managers Resource Center <http://www.stormwatercenter.net>

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Parcel Map 37944
LST20-0018

**Preliminary Drainage Study
Compass Danbe Centerpointe
Proposed Industrial Warehouse Facility
APN 297-170-002 & 003
South Side of Alessandro Boulevard
City of Moreno Valley
February 3, 2021**

PEN20-0120 & PEN20-0121

Prepared for/Applicant:

CDRE HOLDINGS 17 LLC
Attn: Mark Bachli
523 Main Street
El Segundo, CA 90245

Table of Contents

Introduction..... 2

Description 2

Offsite Drainage Impacts 3

Purpose 4

Analysis..... 4

Conclusion 9

Appendix 10

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

CDRE HOLDINGS 17 LLC
PEN20-0120 & PEN20-0121
APN 297-170-002 & 003
City of Moreno Valley

February 3, 2021

Introduction:

The project proposes to develop the currently vacant subject site. The development of the site includes relocating the existing property line through a Tentative Parcel Map to accommodate the proposed site layout. Each of the two proposed parcels will be developed with an industrial warehouse building. Parcel 1 will include a 295,031 square foot building, and Parcel 2 will include a 101,244 square foot building. The development also includes the construction of a parking lot, asphalt paving, perimeter landscaping, and other related improvements. Three driveways are proposed along Alessandro Boulevard to provide access to the parking and facilities for the two buildings. The purpose of this study is to analyze the pre-development and post-development flows and proposed drainage mitigation improvements.

Description:

The project site is currently approximately 17.67 net acres in size. The project site, APN 297-170-002 & 003, is located on the south side of Alessandro Boulevard in the middle of the block between Frederick Street, to the west, and Graham Street, to the east, in the City of Moreno Valley. The project proposes to dedicate areas for the use of public sidewalk proposed behind the three proposed driveways, which will drain to the street. The dedication will decrease the parcel size to 17.65 net acres. The existing property line between the two parcels will be relocated, per Tentative Parcel Map No. 37944. The site's westerly boundary is adjacent to APN 297-170-034, which is vacant. The site's northerly boundary is adjacent to the Alessandro Boulevard right of way. The site's easterly boundary is adjacent to APN 297-170-004, which is vacant. The site's southerly boundary is adjacent to APN 297-170-088 & 089, which is fully developed with industrial warehouse facilities.

The area south of the site (APN 297-170-088 & 089) consists of the aforementioned industrial warehouse facilities. The properties drain south; however, there is a portion of landscape that drains to the project site. This small area is included in the study.

The area west of the site (APN 297-170-034) is vacant. The property drains southeasterly and contributes minor tributary flows to the subject site. These flows are included in this study.

The area east of the site (APN 297-170-004) is vacant. The property drains southwesterly and contributes tributary flows to the subject site. These flows are included in this study.

CDRE HOLDINGS 17 LLC
PEN20-0120 & PEN20-0121
APN 297-170-002 & 003
City of Moreno Valley

February 3, 2021

Alessandro Boulevard is currently a partially improved roadway with a paved roadway, curb, gutter, and sidewalk along the north side. The street is divided by an existing raised center median. The south side of the street, adjacent to the project site, is currently unimproved. Flows from the south side of Alessandro Boulevard currently drain south onto the subject site, and these tributary flows are included in this study. The development proposes to improve Alessandro Boulevard across the project frontage with curb, gutter, and sidewalk. The improvements will nearly mirror the improvements on the north side of the street, which contains two separate catch basins. The improvements will include modified under sidewalk drains, which will allow street flows to enter a proposed bioretention swale sized for water quality treatment purposes. The proposed bioretention swales will discharge treated flows to two proposed catch basins connected to the City's storm drain system, which will be extended as part of this development. The two proposed catch basins will also act as an overflow for the bioretention swale.

The proposed development of the site includes the construction of two industrial warehouse buildings with related parking, paved access, and landscaping. Post-development flows from the property will be directed via sheet flow, ribbon gutter, curb and gutter, and an underground storm drain system to one of two proposed underground detention tanks onsite. A proposed sump and pump will pump flows from the detention tank to a proposed Modular Wetland biotreatment unit for water quality treatment. The Modular Wetland biotreatment units will discharge treated flows into a private storm drain system that is being installed as part of this development. Each of the two parcels will have its own Modular Wetlands unit and detention tank, and both are located on the south side of the proposed buildings. A separate proposed sump and pump will discharge flows in excess of water quality volumes from the detention tank to the aforementioned private storm drain system. There will be no increase in flows or intensity from historic storm events.

Offsite Drainage Impacts

As mentioned above, as part of this development, there will be improvements to the City's public storm drain facilities. There are currently two storm drain pipes that discharge flows from the north side of Alessandro Boulevard onto the subject site. The westerly line is known as "Line A," and the easterly line is known as "Line E." As part of the project, those two storm drain pipes will be improved, and two proposed catch basins will be installed on the south side of Alessandro Boulevard. The proposed catch basins will receive the flows conveyed by Line A and Line E and also intercept street flows adjacent to the project site via the bioretention swale mentioned above. From the two proposed catch basins, flows will be routed through the project site (separately) in a proposed storm drain and connect to Riverside County's future storm drain facilities

CDRE HOLDINGS 17 LLC
PEN20-0120 & PEN20-0121
APN 297-170-002 & 003
City of Moreno Valley

February 3, 2021

located in an existing storm drain easement on the two properties to the south (APN 297-170-088 & 089). Based on City Drawing No. 4-888, sheet 8A, the "Future Construction" drawing of Line A, preliminary calculations have been prepared to demonstrate how the line could be installed to accommodate the proposed development. According to the Hydrology Map prepared by Huitt-Zollars, Inc. in their report for Moreno Valley Centerpointe (Project No. 11-0244-01), the 100-year flow discharging from Line A is 78.84 CFS. Flows generated from the proposed street improvements would add an additional 3.09 CFS. Given the start and end inverts shown on sheet 8A, Drawing No. 4-888, a slope of 0.0069 ft/ft can be achieved by Line A (see Figure 5.2 for proposed Line A alignment). Therefore, a 42" pipe will be required to convey the 81.93 CFS through the site in Line A. According to the Hydrology Map prepared by Huitt-Zollars Inc., 100-year flows discharging from Line E are 32.01 CFS. Additional street flows adjacent to the project add another 1.86 CFS. Based on the invert elevation of Line E shown on Drawing No. 4-992, sheet 3, and survey information of Line E discharging onto the north side of the project site, a pipe slope of 0.0170 ft/ft can be achieved by Line E (see Figure 5.2 for proposed Line E alignment). Therefore, a 30" pipe will be required to convey the 33.87 CFS through the site in Line E. Preliminary pipe sizing calculations for Line A and Line E are included in the appendix of this report (Figure 4.1 and 4.2).

The existing storm drain system, located south of the project site, is currently maintained by the City on an interim basis. As part of this project, the developer will be required to enter into a Cooperative Agreement with the City of Moreno Valley and Riverside County Flood Control & Water Conservation District for the future maintenance by Riverside County Flood Control & Water Conservation District of proposed storm drain Line "A" as well as the existing storm drain located on APN 297-170-088.

Purpose

The purpose of this study is to analyze the flows to and through the site, both pre-development and post-development. Further, the mitigation measures proposed will be discussed to demonstrate that the additional flows from the development will not have a negative impact on the downstream properties.

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 PEN20-0120 & PEN20-0121
 APN 297-170-002 & 003
 City of Moreno Valley

February 3, 2021

Analysis

To achieve the desired goal, the following steps will be taken:

1. Determine the 10 and 100 year pre-development flows. Note the pre-development flows currently drain southerly to three locations. A portion of the site flows south then west to APN 297-170-034. This area is denoted as Area A. Area B flows to an existing inlet structure located on the subject site (APN 291-170-002). The inlet structure will be removed as part of the expansion of the interim City's storm drain system. Area C and Area D flow to an existing inlet structure on APN 297-170-089.
2. Determine the 10 and 100 year post-development flows. Note the post-development analysis is broken up by drainage area. Area 0, Area 1, and Area 2 are located in Alessandro Boulevard, and flows from these areas will be directed to bioretention swales located within the right of way as previously discussed. Area 3 and Area 4 are directed to the proposed underground detention tank located in APN 297-170-002. Area 5, Area 6, and Area 7 are directed to the proposed underground detention tank in APN 297-170-003.
3. Identify the proposed mitigation and discuss the potential impacts the development of the site would have on the downstream properties.

Results

The 10 and 100 year pre-development flows were determined utilizing the Rational Method per Riverside County Hydrology Manual. AES 2016 Software was utilized for the calculations and they can be found in the appendix of this report. The variables used were:

Rainfall Values (per Duration Curves, Sunnymead - Moreno, Figure 4.1):

- 10-year storm 10-minute intensity = 1.65
- 10-year storm 60-minute intensity = 0.73
- 100-year storm 10-minute intensity = 2.72
- 100-year storm 60-minute intensity = 1.21

Soil Group: C (Figure 4.2)

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 APN 297-170-002 & 003
 City of Moreno Valley

February 3, 2021

1A. PRE-DEVELOPMENT FLOWS AREA A

10-year peak flows: $Q_{10} = 1.68$ CFS

10-year time of concentration: $T_{c10} = 21.45$ min

$$\text{10-year volume produced} = (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right)$$

$$= (1.68\text{cfs})(21.45\text{min})(60\text{min})(3/2) = \mathbf{3,244 \text{ cubic feet}}$$

100-year peak flows: $Q_{100} = 3.15$ CFS

100-year time of concentration: $T_{c100} = 21.45$ min

$$\text{100-year volume produced} = (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right)$$

$$= (3.15\text{cfs})(21.45\text{min})(60\text{min})(3/2) = \mathbf{6,082 \text{ cubic feet}}$$

AREA B

10-year peak flows: $Q_{10} = 4.75$ CFS

10-year time of concentration: $T_{c10} = 22.37$ min

$$\text{10-year volume produced} = (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right)$$

$$= (4.75\text{cfs})(22.37\text{min})(60\text{min})(3/2) = \mathbf{9,564 \text{ cubic feet}}$$

100-year peak flows: $Q_{100} = 8.94$ CFS

100-year time of concentration: $T_{c100} = 22.37$ min

$$\text{100-year volume produced} = (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right)$$

$$= (8.94\text{cfs})(22.37\text{min})(60\text{min})(3/2) = \mathbf{17,999 \text{ cubic feet}}$$

AREA C & AREA D, CONFLUENCE @ NODE 6

10-year peak flows: $Q_{10} = 7.71$ CFS

10-year time of concentration: $T_{c10} = 28.56$ min

$$\text{10-year volume produced} = (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right)$$

$$= (7.71\text{cfs})(28.56\text{min})(60\text{min})(3/2) = \mathbf{19,818 \text{ cubic feet}}$$

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 PEN20-0120 & PEN20-0121
 APN 297-170-002 & 003
 City of Moreno Valley

February 3, 2021

100-year peak flows: $Q_{100} = 14.67$ CFS

100-year time of concentration: $T_{c100} = 28.56$ min

$$\begin{aligned} \text{100-year volume produced} &= (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right) \\ &= (14.67 \text{ cfs})(28.56 \text{ min})(60 \text{ min})(3/2) = \mathbf{37,708 \text{ cubic feet}} \end{aligned}$$

2A. POST-DEVELOPMENT FLOWS

AREA 0

10-year peak flows: $Q_{10} = 0.94$ CFS

10-year time of concentration: $T_{c10} = 9.81$ min

$$\begin{aligned} \text{10-year volume produced} &= (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right) \\ &= (0.94 \text{ cfs})(9.81 \text{ min})(60 \text{ min})(3/2) = \mathbf{830 \text{ cubic feet}} \end{aligned}$$

100-year peak flows: $Q_{100} = 1.55$ CFS

100-year time of concentration: $T_{c100} = 9.81$ min

$$\begin{aligned} \text{100-year volume produced} &= (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right) \\ &= (1.55 \text{ cfs})(9.81 \text{ min})(60 \text{ min})(3/2) = \mathbf{1,369 \text{ cubic feet}} \end{aligned}$$

AREA 1

10-year peak flows: $Q_{10} = 0.93$ CFS

10-year time of concentration: $T_{c10} = 10.02$ min

$$\begin{aligned} \text{10-year volume produced} &= (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right) \\ &= (0.93 \text{ cfs})(10.02 \text{ min})(60 \text{ min})(3/2) = \mathbf{839 \text{ cubic feet}} \end{aligned}$$

100-year peak flows: $Q_{100} = 1.54$ CFS

100-year time of concentration: $T_{c100} = 10.02$ min

$$\begin{aligned} \text{100-year volume produced} &= (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right) \\ &= (1.54 \text{ cfs})(10.02 \text{ min})(60 \text{ min})(3/2) = \mathbf{1,389 \text{ cubic feet}} \end{aligned}$$

AREA 2

10-year peak flows: $Q_{10} = 1.13$ CFS

10-year time of concentration: $T_{c10} = 10.74$ min

$$\begin{aligned} \text{10-year volume produced} &= (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right) \\ &= (1.13 \text{ cfs})(10.74 \text{ min})(60 \text{ min})(3/2) = \mathbf{1,093 \text{ cubic feet}} \end{aligned}$$

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 PEN20-0120 & PEN20-0121
 APN 297-170-002 & 003
 City of Moreno Valley

February 3, 2021

100-year peak flows: $Q_{100} = 1.86$ CFS

100-year time of concentration: $T_{c100} = 10.74$ min

$$\begin{aligned} \text{100-year volume produced} &= (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right) \\ &= (1.86\text{cfs})(10.74\text{min})(60\text{min})(3/2) = \mathbf{1,798 \text{ cubic feet}} \end{aligned}$$

AREA 3 & AREA 4, CONFLUENCE @ NODE 7

10-year peak flows: $Q_{10} = 18.46$ CFS

10-year time of concentration: $T_{c10} = 9.04$ min

$$\begin{aligned} \text{10-year volume produced} &= (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right) \\ &= (18.46\text{cfs})(9.04\text{min})(60\text{min})(3/2) = \mathbf{15,020 \text{ cubic feet}} \end{aligned}$$

100-year peak flows: $Q_{100} = 30.38$ CFS

100-year time of concentration: $T_{c100} = 9.04$ min

$$\begin{aligned} \text{100-year volume produced} &= (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right) \\ &= (30.34\text{cfs})(9.04\text{min})(60\text{min})(3/2) = \mathbf{24,685 \text{ cubic feet}} \end{aligned}$$

AREA 5, AREA 6, & AREA 7, CONFLUENCE @ NODE 10

10-year peak flows: $Q_{10} = 8.24$ CFS

10-year time of concentration: $T_{c10} = 10.12$ min

$$\begin{aligned} \text{10-year volume produced} &= (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right) \\ &= (8.24\text{cfs})(10.12\text{min})(60\text{min})(3/2) = \mathbf{7,505 \text{ cubic feet}} \end{aligned}$$

100-year peak flows: $Q_{100} = 13.77$ CFS

100-year time of concentration: $T_{c100} = 10.12$ min

$$\begin{aligned} \text{100-year volume produced} &= (Q)(T_c)(60 \text{ min}) \left(\frac{3}{2}\right) \\ &= (13.77\text{cfs})(10.12\text{min})(60\text{min})(3/2) = \mathbf{12,542 \text{ cubic feet}} \end{aligned}$$

3. DRAINAGE IMPACTS

- Pre-development: A portion of the site currently drains to APN 297-170-034. The majority of the site drains south to the two existing inlet structures located near the southerly property line.
- Post-development: Flows from Alessandro Boulevard will be directed to a proposed bioretention swale for treatment, then to proposed catch basins that will connect to the city's storm drain. In the event of back to back 100-year storms, the proposed catch basins will capture flows not captured by the proposed bioretention swale. Pre-development flows going to APN 297-170-034 will be mitigated completely due to the development of the site.

Onsite flows from the site will be directed to one of two proposed underground detention tanks. The required treatment volume will be pumped from the detention tank to a proposed Modular Wetlands unit for water quality treatment purposes. The modular wetlands will discharge treated flows to the private storm drain system. Flows in excess of the water quality treatment volumes will be pumped from the detention tank to the private storm drain system. The total capacity of the detention tank on Parcel 1 is 58,464 cubic feet. The total volume of water expected from a 100-year storm from Parcel 1 is 24,685 cubic feet, which is less than half of the capacity of the tank. The proposed tank will handle back to back 100-year storms, but in the event the basin reaches capacity, it will overflow via the proposed sump and pump to the private storm drain system.

The total capacity of the detention tank on Parcel 2 is 24,394 cubic feet. The total volume of water expected from a 100-year storm from Parcel 2 is 12,542 cubic feet, which is slightly over half of the capacity of the system. The proposed tank will handle back to back 100-year storms, but in the event the basin reaches capacity, it will overflow via the proposed sump and pump to the city's storm drain. The table below summarizes pre development flows, which set the requirements for flows leaving the site post development.

	Pre-development
10-year flows	14.14 cfs
10-year volume	32,626 cubic feet
100-year flows	26.76 cfs
100-year volume	61,789 cubic feet

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 PEN20-0120 & PEN20-0121
 APN 297-170-002 & 003
 City of Moreno Valley

February 3, 2021

Conclusion

The increased post-development flow volumes from the development area will be contained within the proposed underground detention tanks. Treated flows and flows in excess of water quality treatment volumes will be discharged from the detention tanks to the private storm drain system at a rate equal to or less than the pre-development condition. Emergency overflow is provided for large back to back storms, which will leave the underground basin via sump and pump to the city's storm drain system, which is being expanded as part of this project. The post-development flow volumes allowed to enter APN 297-170-034 will be completely mitigated as a result of this development. Flows generated onsite from back to back 100-year storms will be contained within the proposed underground detention tanks. Therefore, there will be no increase in flows as a result of the proposed development.

The proposed storm drain Line "A" will connect to the future RCFC&WCD maintained Line "A", at the southwest corner of the project site, which is currently maintained on an interim basis by City and how the proposed private storm drain Line "E" will connect to the existing City maintained Line "E" located at the southeast corner of the project site.

Prepared By:

Rob Lane, E.I.T. 157676

Patrick C. Flanagan, Jr., P.E.
 RCE 86046 Exp 9/30/22

APPENDIX

- Figure 1.1 PRE-DEVELOPMENT FLOW CALCULATIONS – 10-YEAR STORM
- Figure 1.2 PRE-DEVELOPMENT FLOW CALCULATIONS – 100-YEAR STORM
- Figure 2.1 POST-DEVELOPMENT FLOW CALCULATIONS – 10-YEAR STORM
- Figure 2.2 POST-DEVELOPMENT FLOW CALCULATIONS – 100-YEAR STORM
- Figure 3.1 NOAA ATLAS 14, VOLUME 6, VERSION 2 POINT PRECIPITATION
- Figure 3.2 HYDROLOGIC SOILS GROUP MAP FOR RIVERSIDE – EAST (PLATE C-1.16)
- Figure 4.1 PIPE SIZING CALCULATION (LINE A)
- Figure 4.2 PIPE SIZING CALCULATION (EAST)
- Figure 4.3 DETENTION TANK DETAIL
- Figure 5.1 PRE-DEVELOPMENT TRIBUTARY MAP
- Figure 5.2 POST-DEVELOPMENT TRIBUTARY MAP

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 Release Date: 07/01/2016 License ID 1533

Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

***** DESCRIPTION OF STUDY *****

- * APN 297-170-002 & 003 *
 - * PRE-DEVELOPMENT DRAINAGE STUDY *
 - * 10-YEAR STORM EVENT *
- *****

FILE NAME: 162012PR.DAT
 TIME/DATE OF STUDY: 14:09 04/01/2020

 USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:

USER SPECIFIED STORM EVENT(YEAR) = 10.00
 SPECIFIED MINIMUM PIPE SIZE(INCH) = 3.00
 SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
 10-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 1.650
 10-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 0.734
 100-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 2.720
 100-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 1.210
 SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.4520815
 SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.4520759

COMPUTED RAINFALL INTENSITY DATA:

STORM EVENT = 10.00 1-HOUR INTENSITY(INCH/HOUR) = 0.741
 SLOPE OF INTENSITY DURATION CURVE = 0.4521

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD

NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL
 AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL

NO.	HALF-	CROWN TO	STREET-CROSSFALL:			CURB GUTTER-GEOMETRIES:			MANNING	
	WIDTH	CROSSFALL	IN-	/	OUT-/PARK-	HEIGHT	WIDTH	LIP	HIKE	FACTOR
	(FT)	(FT)	SIDE	/	SIDE/	(FT)	(FT)	(FT)	(FT)	(n)
1	30.0	20.0	0.018/0.018/0.020			0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

1. Relative Flow-Depth = 0.00 FEET
 as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
2. (Depth)*(Velocity) Constraint = 6.0 (FT*FT/S)

*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN

Figure 1.1
 Page 1 of 4

OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*

 FLOW PROCESS FROM NODE 1.00 TO NODE 2.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
 $TC = K * [(LENGTH^{**3}) / (ELEVATION CHANGE)]^{**2}$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 545.00
 UPSTREAM ELEVATION(FEET) = 82.50
 DOWNSTREAM ELEVATION(FEET) = 76.10
 ELEVATION DIFFERENCE(FEET) = 6.40
 $TC = 0.709 * [(545.00^{**3}) / (6.40)]^{**2} = 21.453$
 10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.180
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .5970
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 1.68
 TOTAL AREA(ACRES) = 2.38 TOTAL RUNOFF(CFS) = 1.68

 FLOW PROCESS FROM NODE 3.00 TO NODE 4.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
 $TC = K * [(LENGTH^{**3}) / (ELEVATION CHANGE)]^{**2}$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 689.00
 UPSTREAM ELEVATION(FEET) = 82.50
 DOWNSTREAM ELEVATION(FEET) = 72.00
 ELEVATION DIFFERENCE(FEET) = 10.50
 $TC = 0.709 * [(689.00^{**3}) / (10.50)]^{**2} = 22.366$
 10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.158
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .5932
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 4.75
 TOTAL AREA(ACRES) = 6.92 TOTAL RUNOFF(CFS) = 4.75

 FLOW PROCESS FROM NODE 5.00 TO NODE 6.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
 $TC = K * [(LENGTH^{**3}) / (ELEVATION CHANGE)]^{**2}$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 666.00
 UPSTREAM ELEVATION(FEET) = 81.50
 DOWNSTREAM ELEVATION(FEET) = 74.50
 ELEVATION DIFFERENCE(FEET) = 7.00
 $TC = 0.709 * [(666.00^{**3}) / (7.00)]^{**2} = 23.766$
 10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.127

Figure 1.1
 Page 2 of 4

UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .5876
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 1.74
 TOTAL AREA(ACRES) = 2.63 TOTAL RUNOFF(CFS) = 1.74

FLOW PROCESS FROM NODE 6.00 TO NODE 6.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION(MIN.) = 23.77
 RAINFALL INTENSITY(INCH/HR) = 1.13
 TOTAL STREAM AREA(ACRES) = 2.63
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 1.74

FLOW PROCESS FROM NODE 7.00 TO NODE 6.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
 $TC = K * [(LENGTH**3) / (ELEVATION CHANGE)]**.2$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 1058.00
 UPSTREAM ELEVATION(FEET) = 83.00
 DOWNSTREAM ELEVATION(FEET) = 71.80
 ELEVATION DIFFERENCE(FEET) = 11.20
 $TC = 0.709 * [(1058.00**3) / (11.20)]**.2 = 28.559$
 10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.037
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .5705
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 6.11
 TOTAL AREA(ACRES) = 10.33 TOTAL RUNOFF(CFS) = 6.11

FLOW PROCESS FROM NODE 6.00 TO NODE 6.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<

=====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION(MIN.) = 28.56
 RAINFALL INTENSITY(INCH/HR) = 1.04
 TOTAL STREAM AREA(ACRES) = 10.33
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 6.11

** CONFLUENCE DATA **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	1.74	23.77	1.127	2.63
2	6.11	28.56	1.037	10.33

Figure 1.1
 Page 3 of 4

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

*****WARNING*****
 IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
 ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
 WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	6.83	23.77	1.127
2	7.71	28.56	1.037

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:

PEAK FLOW RATE(CFS) = 7.71 Tc(MIN.) = 28.56
 TOTAL AREA(ACRES) = 13.0
 LONGEST FLOWPATH FROM NODE 7.00 TO NODE 6.00 = 1058.00 FEET.

=====
 END OF STUDY SUMMARY:

TOTAL AREA(ACRES) = 13.0 TC(MIN.) = 28.56
 PEAK FLOW RATE(CFS) = 7.71
 =====

=====
 END OF RATIONAL METHOD ANALYSIS

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Figure 1.1
 Page 4 of 4

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 Release Date: 07/01/2016 License ID 1533

Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

***** DESCRIPTION OF STUDY *****

- * APN 297-170-002 & 003 *
 - * PRE-DEVELOPMENT DRAINAGE STUDY *
 - * 100-YEAR STORM EVENT *
- *****

FILE NAME: 162012PR.DAT
 TIME/DATE OF STUDY: 14:10 04/01/2020

 USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:

USER SPECIFIED STORM EVENT(YEAR) = 100.00
 SPECIFIED MINIMUM PIPE SIZE(INCH) = 3.00
 SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
 10-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 1.650
 10-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 0.734
 100-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 2.720
 100-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 1.210
 SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.4520815
 SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.4520759

COMPUTED RAINFALL INTENSITY DATA:

STORM EVENT = 100.00 1-HOUR INTENSITY(INCH/HOUR) = 1.210
 SLOPE OF INTENSITY DURATION CURVE = 0.4521

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD

NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL
 AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL

NO.	HALF-	CROWN TO	STREET-CROSSFALL:		CURB	GUTTER-GEOMETRIES:			MANNING
	WIDTH	CROSSFALL	IN-	OUT-/PARK-		HEIGHT	WIDTH	LIP		HIKE	FACTOR
====	(FT)	(FT)	SIDE	/ SIDE/	(FT)	(FT)	(FT)	(FT)	(n)
1	30.0	20.0	0.018/0.018/0.020		0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

1. Relative Flow-Depth = 0.00 FEET
 as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
2. (Depth)*(Velocity) Constraint = 6.0 (FT*FT/S)

*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Figure 1.2
 Page 1 of 4

OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*

 FLOW PROCESS FROM NODE 1.00 TO NODE 2.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
 $TC = K * [(LENGTH^{**3}) / (ELEVATION CHANGE)]^{**2}$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 545.00
 UPSTREAM ELEVATION(FEET) = 82.50
 DOWNSTREAM ELEVATION(FEET) = 76.10
 ELEVATION DIFFERENCE(FEET) = 6.40
 $TC = 0.709 * [(545.00^{**3}) / (6.40)]^{**2} = 21.453$
 100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.926
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .6865
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 3.15
 TOTAL AREA(ACRES) = 2.38 TOTAL RUNOFF(CFS) = 3.15

 FLOW PROCESS FROM NODE 3.00 TO NODE 4.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
 $TC = K * [(LENGTH^{**3}) / (ELEVATION CHANGE)]^{**2}$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 689.00
 UPSTREAM ELEVATION(FEET) = 82.50
 DOWNSTREAM ELEVATION(FEET) = 72.00
 ELEVATION DIFFERENCE(FEET) = 10.50
 $TC = 0.709 * [(689.00^{**3}) / (10.50)]^{**2} = 22.366$
 100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.890
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .6834
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 8.94
 TOTAL AREA(ACRES) = 6.92 TOTAL RUNOFF(CFS) = 8.94

 FLOW PROCESS FROM NODE 5.00 TO NODE 6.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
 $TC = K * [(LENGTH^{**3}) / (ELEVATION CHANGE)]^{**2}$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 666.00
 UPSTREAM ELEVATION(FEET) = 81.50
 DOWNSTREAM ELEVATION(FEET) = 74.50
 ELEVATION DIFFERENCE(FEET) = 7.00
 $TC = 0.709 * [(666.00^{**3}) / (7.00)]^{**2} = 23.766$
 100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.839

Figure 1.2
 Page 2 of 4

UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .6789
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 3.28
 TOTAL AREA(ACRES) = 2.63 TOTAL RUNOFF(CFS) = 3.28

FLOW PROCESS FROM NODE 6.00 TO NODE 6.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION(MIN.) = 23.77
 RAINFALL INTENSITY(INCH/HR) = 1.84
 TOTAL STREAM AREA(ACRES) = 2.63
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 3.28

FLOW PROCESS FROM NODE 7.00 TO NODE 6.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
 $TC = K * [(LENGTH**3) / (ELEVATION CHANGE)]**.2$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 1058.00
 UPSTREAM ELEVATION(FEET) = 83.00
 DOWNSTREAM ELEVATION(FEET) = 71.80
 ELEVATION DIFFERENCE(FEET) = 11.20
 $TC = 0.709 * [(1058.00**3) / (11.20)]**.2 = 28.559$
 100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.693
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .6647
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 11.62
 TOTAL AREA(ACRES) = 10.33 TOTAL RUNOFF(CFS) = 11.62

FLOW PROCESS FROM NODE 6.00 TO NODE 6.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<

=====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION(MIN.) = 28.56
 RAINFALL INTENSITY(INCH/HR) = 1.69
 TOTAL STREAM AREA(ACRES) = 10.33
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 11.62

** CONFLUENCE DATA **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	3.28	23.77	1.839	2.63
2	11.62	28.56	1.693	10.33

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Figure 1.2
 Page 3 of 4

*****WARNING*****
 IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
 ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
 WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	12.96	23.77	1.839
2	14.64	28.56	1.693

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:

PEAK FLOW RATE (CFS) = 14.64 Tc (MIN.) = 28.56
 TOTAL AREA (ACRES) = 13.0
 LONGEST FLOWPATH FROM NODE 7.00 TO NODE 6.00 = 1058.00 FEET.

=====
 END OF STUDY SUMMARY:

TOTAL AREA (ACRES) = 13.0 TC (MIN.) = 28.56
 PEAK FLOW RATE (CFS) = 14.64
 =====

=====
 END OF RATIONAL METHOD ANALYSIS

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON
 RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT
 (RCFC&WCD) 1978 HYDROLOGY MANUAL
 (c) Copyright 1982-2016 Advanced Engineering Software (aes)
 (Rational Tabling Version 23.0)
 Release Date: 07/01/2016 License ID 1533

Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
 1461 FORD STREET, SUITE 105
 REDLANDS, CA 92373
 PHONE: (909) 748-7777 FAX: (909) 748-7776

***** DESCRIPTION OF STUDY *****

- * APN 297-170-002 & 003 *
 - * POST-DEVELOPMENT DRAINAGE STUDY *
 - * 10-YEAR STORM EVENT *
- *****

FILE NAME: 162012PO.DAT
 TIME/DATE OF STUDY: 11:31 07/13/2020

 USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:

USER SPECIFIED STORM EVENT(YEAR) = 10.00
 SPECIFIED MINIMUM PIPE SIZE(INCH) = 3.00
 SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
 10-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 1.650
 10-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 0.734
 100-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 2.720
 100-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 1.210
 SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.4520815
 SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.4520759

COMPUTED RAINFALL INTENSITY DATA:

STORM EVENT = 10.00 1-HOUR INTENSITY(INCH/HOUR) = 0.741
 SLOPE OF INTENSITY DURATION CURVE = 0.4521

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD

NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL
 AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL

NO.	HALF- CROWN TO		STREET-CROSSFALL:		CURB HEIGHT (FT)	GUTTER-GEOMETRIES:			MANNING FACTOR (n)
	WIDTH (FT)	CROSSFALL (FT)	IN- / SIDE	OUT- / SIDE/ WAY		WIDTH (FT)	LIP (FT)	HIKE (FT)	
1	30.0	20.0	0.018/0.018	0.020	0.67	2.00	0.0313	0.167	0.0150

GLOBAL STREET FLOW-DEPTH CONSTRAINTS:

1. Relative Flow-Depth = 0.00 FEET
 as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
2. (Depth)*(Velocity) Constraint = 6.0 (FT*FT/S)

*SIZE PIPE WITH A FLOW CAPACITY GREATER THAN

Figure 2.1
 Page 1 of 8

OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*

 FLOW PROCESS FROM NODE 1.00 TO NODE 2.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL

TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 427.00
 UPSTREAM ELEVATION(FEET) = 83.00
 DOWNSTREAM ELEVATION(FEET) = 80.80
 ELEVATION DIFFERENCE(FEET) = 2.20
 TC = 0.303*[(427.00**3)/(2.20)]**.2 = 9.803
 10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.682
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8764
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 0.94
 TOTAL AREA(ACRES) = 0.64 TOTAL RUNOFF(CFS) = 0.94

 FLOW PROCESS FROM NODE 2.00 TO NODE 2.00 IS CODE = 1

 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION(MIN.) = 9.80
 RAINFALL INTENSITY(INCH/HR) = 1.68
 TOTAL STREAM AREA(ACRES) = 0.64
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.94

 FLOW PROCESS FROM NODE 3.00 TO NODE 2.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL

TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 443.00
 UPSTREAM ELEVATION(FEET) = 83.00
 DOWNSTREAM ELEVATION(FEET) = 80.80
 ELEVATION DIFFERENCE(FEET) = 2.20
 TC = 0.303*[(443.00**3)/(2.20)]**.2 = 10.022
 10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.665
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8762
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 0.93
 TOTAL AREA(ACRES) = 0.64 TOTAL RUNOFF(CFS) = 0.93

 FLOW PROCESS FROM NODE 2.00 TO NODE 2.00 IS CODE = 1

Figure 2.1
 Page 2 of 8

Attachment: Appendix I2-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
 =====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION(MIN.) = 10.02
 RAINFALL INTENSITY(INCH/HR) = 1.66
 TOTAL STREAM AREA(ACRES) = 0.64
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 0.93

** CONFLUENCE DATA **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	0.94	9.80	1.682	0.64
2	0.93	10.02	1.665	0.64

*****WARNING*****
 IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
 ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
 WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	1.86	9.80	1.682
2	1.87	10.02	1.665

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:

PEAK FLOW RATE(CFS) = 1.86 Tc(MIN.) = 9.80
 TOTAL AREA(ACRES) = 1.3
 LONGEST FLOWPATH FROM NODE 3.00 TO NODE 2.00 = 443.00 FEET.

 FLOW PROCESS FROM NODE 4.00 TO NODE 5.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 =====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL
 $TC = K * [(LENGTH**3) / (ELEVATION CHANGE)]**.2$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 551.00
 UPSTREAM ELEVATION(FEET) = 83.00
 DOWNSTREAM ELEVATION(FEET) = 80.00
 ELEVATION DIFFERENCE(FEET) = 3.00
 $TC = 0.303 * [(551.00**3) / (3.00)]**.2 = 10.736$
 10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.614
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8756
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 1.13

Figure 2.1
 Page 3 of 8

TOTAL AREA(ACRES) = 0.80 TOTAL RUNOFF(CFS) = 1.13

FLOW PROCESS FROM NODE 6.00 TO NODE 7.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS COMMERCIAL
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 622.00
UPSTREAM ELEVATION(FEET) = 82.20
DOWNSTREAM ELEVATION(FEET) = 72.00
ELEVATION DIFFERENCE(FEET) = 10.20
TC = 0.303*[(622.00**3)/(10.20)]**.2 = 9.039
10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.744
COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8770
SOIL CLASSIFICATION IS "C"
SUBAREA RUNOFF(CFS) = 10.22
TOTAL AREA(ACRES) = 6.68 TOTAL RUNOFF(CFS) = 10.22

FLOW PROCESS FROM NODE 7.00 TO NODE 7.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
TIME OF CONCENTRATION(MIN.) = 9.04
RAINFALL INTENSITY(INCH/HR) = 1.74
TOTAL STREAM AREA(ACRES) = 6.68
PEAK FLOW RATE(CFS) AT CONFLUENCE = 10.22

FLOW PROCESS FROM NODE 8.00 TO NODE 7.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS COMMERCIAL
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 637.00
UPSTREAM ELEVATION(FEET) = 80.50
DOWNSTREAM ELEVATION(FEET) = 73.50
ELEVATION DIFFERENCE(FEET) = 7.00
TC = 0.303*[(637.00**3)/(7.00)]**.2 = 9.887
10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 1.675
COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8763
SOIL CLASSIFICATION IS "C"
SUBAREA RUNOFF(CFS) = 9.01
TOTAL AREA(ACRES) = 6.14 TOTAL RUNOFF(CFS) = 9.01

FLOW PROCESS FROM NODE 7.00 TO NODE 7.00 IS CODE = 1

Figure 2.1
Page 4 of 8

Attachment: Appendix I2-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<<
 =====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION (MIN.) = 9.89
 RAINFALL INTENSITY (INCH/HR) = 1.68
 TOTAL STREAM AREA (ACRES) = 6.14
 PEAK FLOW RATE (CFS) AT CONFLUENCE = 9.01

** CONFLUENCE DATA **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	10.22	9.04	1.744	6.68
2	9.01	9.89	1.675	6.14

*****WARNING*****
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 ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
 WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	18.46	9.04	1.744
2	18.83	9.89	1.675

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:

PEAK FLOW RATE (CFS) = 18.46 Tc (MIN.) = 9.04
 TOTAL AREA (ACRES) = 12.8
 LONGEST FLOWPATH FROM NODE 8.00 TO NODE 7.00 = 637.00 FEET.

 FLOW PROCESS FROM NODE 9.00 TO NODE 10.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<<
 =====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL
 $TC = K * [(LENGTH^{**3}) / (ELEVATION CHANGE)]^{**0.2}$
 INITIAL SUBAREA FLOW-LENGTH (FEET) = 704.00
 UPSTREAM ELEVATION (FEET) = 80.20
 DOWNSTREAM ELEVATION (FEET) = 71.80
 ELEVATION DIFFERENCE (FEET) = 8.40
 $TC = 0.303 * [(704.00^{**3}) / (8.40)]^{**0.2} = 10.122$
 10 YEAR RAINFALL INTENSITY (INCH/HOUR) = 1.657
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8761
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF (CFS) = 4.27

Figure 2.1
 Page 5 of 8

TOTAL AREA(ACRES) = 2.94 TOTAL RUNOFF(CFS) = 4.27

FLOW PROCESS FROM NODE 10.00 TO NODE 10.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

TOTAL NUMBER OF STREAMS = 3
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
TIME OF CONCENTRATION(MIN.) = 10.12
RAINFALL INTENSITY(INCH/HR) = 1.66
TOTAL STREAM AREA(ACRES) = 2.94
PEAK FLOW RATE(CFS) AT CONFLUENCE = 4.27

FLOW PROCESS FROM NODE 11.00 TO NODE 10.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS COMMERCIAL
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 705.00
UPSTREAM ELEVATION(FEET) = 81.20
DOWNSTREAM ELEVATION(FEET) = 10.10
ELEVATION DIFFERENCE(FEET) = 71.10
TC = 0.303*[(705.00**3)/(71.10)]**.2 = 6.609
10 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.010
COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8793
SOIL CLASSIFICATION IS "C"
SUBAREA RUNOFF(CFS) = 3.76
TOTAL AREA(ACRES) = 2.13 TOTAL RUNOFF(CFS) = 3.76

FLOW PROCESS FROM NODE 10.00 TO NODE 10.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

TOTAL NUMBER OF STREAMS = 3
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
TIME OF CONCENTRATION(MIN.) = 6.61
RAINFALL INTENSITY(INCH/HR) = 2.01
TOTAL STREAM AREA(ACRES) = 2.13
PEAK FLOW RATE(CFS) AT CONFLUENCE = 3.76

FLOW PROCESS FROM NODE 12.00 TO NODE 10.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 695.00

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Figure 2.1
Page 6 of 8

UPSTREAM ELEVATION (FEET) = 81.50
 DOWNSTREAM ELEVATION (FEET) = 71.20
 ELEVATION DIFFERENCE (FEET) = 10.30
 $TC = 0.709 * [(695.00 ** 3) / (10.30)] ** .2 = 22.569$
 10 YEAR RAINFALL INTENSITY (INCH/HOUR) = 1.153
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .5924
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF (CFS) = 1.94
 TOTAL AREA (ACRES) = 2.84 TOTAL RUNOFF (CFS) = 1.94

 FLOW PROCESS FROM NODE 10.00 TO NODE 10.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<

=====

TOTAL NUMBER OF STREAMS = 3
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 3 ARE:
 TIME OF CONCENTRATION (MIN.) = 22.57
 RAINFALL INTENSITY (INCH/HR) = 1.15
 TOTAL STREAM AREA (ACRES) = 2.84
 PEAK FLOW RATE (CFS) AT CONFLUENCE = 1.94

** CONFLUENCE DATA **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	4.27	10.12	1.657	2.94
2	3.76	6.61	2.010	2.13
3	1.94	22.57	1.153	2.84

*****WARNING*****
 IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 3 STREAMS.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	7.12	6.61	2.010
2	8.24	10.12	1.657
3	7.07	22.57	1.153

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:

PEAK FLOW RATE (CFS) = 8.24 Tc (MIN.) = 10.12
 TOTAL AREA (ACRES) = 7.9
 LONGEST FLOWPATH FROM NODE 11.00 TO NODE 10.00 = 705.00 FEET.

=====

END OF STUDY SUMMARY:

TOTAL AREA (ACRES) = 7.9 TC (MIN.) = 10.12
 PEAK FLOW RATE (CFS) = 8.24

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Figure 2.1
 Page 7 of 8

=====
=====
END OF RATIONAL METHOD ANALYSIS

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Figure 2.1
Page 8 of 8

RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM BASED ON
RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT
(RCFC&WCD) 1978 HYDROLOGY MANUAL
(c) Copyright 1982-2016 Advanced Engineering Software (aes)
(Rational Tabling Version 23.0)
Release Date: 07/01/2016 License ID 1533

Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.
1461 FORD STREET, SUITE 105
REDLANDS, CA 92373
PHONE: (909) 748-7777 FAX: (909) 748-7776

***** DESCRIPTION OF STUDY *****

- * APN 297-170-002 & 003 *
- * POST-DEVELOPMENT DRAINAGE STUDY *
- * 100-YEAR STORM EVENT *

FILE NAME: 162012PO.DAT
TIME/DATE OF STUDY: 11:32 07/13/2020

USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:

USER SPECIFIED STORM EVENT(YEAR) = 100.00
SPECIFIED MINIMUM PIPE SIZE(INCH) = 3.00
SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
10-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 1.650
10-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 0.734
100-YEAR STORM 10-MINUTE INTENSITY(INCH/HOUR) = 2.720
100-YEAR STORM 60-MINUTE INTENSITY(INCH/HOUR) = 1.210
SLOPE OF 10-YEAR INTENSITY-DURATION CURVE = 0.4520815
SLOPE OF 100-YEAR INTENSITY-DURATION CURVE = 0.4520759

COMPUTED RAINFALL INTENSITY DATA:
STORM EVENT = 100.00 1-HOUR INTENSITY(INCH/HOUR) = 1.210
SLOPE OF INTENSITY DURATION CURVE = 0.4521

RCFC&WCD HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD
NOTE: COMPUTE CONFLUENCE VALUES ACCORDING TO RCFC&WCD HYDROLOGY MANUAL
AND IGNORE OTHER CONFLUENCE COMBINATIONS FOR DOWNSTREAM ANALYSES

USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL

NO.	HALF-	CROWN TO	STREET-CROSSFALL:		CURB	GUTTER-GEOMETRIES:			MANNING
	WIDTH	CROSSFALL	IN-	OUT-/PARK-		HEIGHT	WIDTH	LIP		HIKE	FACTOR
====	(FT)	(FT)	SIDE /	SIDE/ WAY	(FT)	(FT)	(FT)	(FT)	(n)
1	30.0	20.0	0.018/0.018/0.020		0.67	2.00	0.0313	0.167	0.0150

- GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
1. Relative Flow-Depth = 0.00 FEET
as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
 2. (Depth)*(Velocity) Constraint = 6.0 (FT*FT/S)
- *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN

Figure 2.2
Page 1 of 8

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*

FLOW PROCESS FROM NODE 1.00 TO NODE 2.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS COMMERCIAL
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 427.00
UPSTREAM ELEVATION(FEET) = 83.00
DOWNSTREAM ELEVATION(FEET) = 80.80
ELEVATION DIFFERENCE(FEET) = 2.20
TC = 0.303*[(427.00**3)/(2.20)]**.2 = 9.803
100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.745
COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8839
SOIL CLASSIFICATION IS "C"
SUBAREA RUNOFF(CFS) = 1.55
TOTAL AREA(ACRES) = 0.64 TOTAL RUNOFF(CFS) = 1.55

FLOW PROCESS FROM NODE 2.00 TO NODE 2.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 2
CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
TIME OF CONCENTRATION(MIN.) = 9.80
RAINFALL INTENSITY(INCH/HR) = 2.74
TOTAL STREAM AREA(ACRES) = 0.64
PEAK FLOW RATE(CFS) AT CONFLUENCE = 1.55

FLOW PROCESS FROM NODE 3.00 TO NODE 2.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
DEVELOPMENT IS COMMERCIAL
TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
INITIAL SUBAREA FLOW-LENGTH(FEET) = 443.00
UPSTREAM ELEVATION(FEET) = 83.00
DOWNSTREAM ELEVATION(FEET) = 80.80
ELEVATION DIFFERENCE(FEET) = 2.20
TC = 0.303*[(443.00**3)/(2.20)]**.2 = 10.022
100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.717
COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8837
SOIL CLASSIFICATION IS "C"
SUBAREA RUNOFF(CFS) = 1.54
TOTAL AREA(ACRES) = 0.64 TOTAL RUNOFF(CFS) = 1.54

FLOW PROCESS FROM NODE 2.00 TO NODE 2.00 IS CODE = 1

Figure 2.2
Page 2 of 8

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<

=====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION(MIN.) = 10.02
 RAINFALL INTENSITY(INCH/HR) = 2.72
 TOTAL STREAM AREA(ACRES) = 0.64
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 1.54

** CONFLUENCE DATA **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	1.55	9.80	2.745	0.64
2	1.54	10.02	2.717	0.64

*****WARNING*****
 IN THIS COMPUTER PROGRAM, THE CONFLUENCE VALUE USED IS BASED
 ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
 WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	3.06	9.80	2.745
2	3.07	10.02	2.717

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:

PEAK FLOW RATE(CFS) = 3.06 Tc(MIN.) = 9.80
 TOTAL AREA(ACRES) = 1.3
 LONGEST FLOWPATH FROM NODE 3.00 TO NODE 2.00 = 443.00 FEET.

 FLOW PROCESS FROM NODE 4.00 TO NODE 5.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL
 $TC = K * [(LENGTH^{**3}) / (ELEVATION CHANGE)]^{**2}$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 551.00
 UPSTREAM ELEVATION(FEET) = 83.00
 DOWNSTREAM ELEVATION(FEET) = 80.00
 ELEVATION DIFFERENCE(FEET) = 3.00
 $TC = 0.303 * [(551.00^{**3}) / (3.00)]^{**2} = 10.736$
 100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.634
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8833
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 1.86

Figure 2.2
 Page 3 of 8

TOTAL AREA(ACRES) = 0.80 TOTAL RUNOFF(CFS) = 1.86

 FLOW PROCESS FROM NODE 6.00 TO NODE 7.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 =====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL
 TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 622.00
 UPSTREAM ELEVATION(FEET) = 82.20
 DOWNSTREAM ELEVATION(FEET) = 72.00
 ELEVATION DIFFERENCE(FEET) = 10.20
 TC = 0.303*[(622.00**3)/(10.20)]**.2 = 9.039
 100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.847
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8844
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 16.82
 TOTAL AREA(ACRES) = 6.68 TOTAL RUNOFF(CFS) = 16.82

 FLOW PROCESS FROM NODE 7.00 TO NODE 7.00 IS CODE = 1

 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 =====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION(MIN.) = 9.04
 RAINFALL INTENSITY(INCH/HR) = 2.85
 TOTAL STREAM AREA(ACRES) = 6.68
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 16.82

 FLOW PROCESS FROM NODE 8.00 TO NODE 7.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 =====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL
 TC = K*[(LENGTH**3)/(ELEVATION CHANGE)]**.2
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 637.00
 UPSTREAM ELEVATION(FEET) = 80.50
 DOWNSTREAM ELEVATION(FEET) = 73.50
 ELEVATION DIFFERENCE(FEET) = 7.00
 TC = 0.303*[(637.00**3)/(7.00)]**.2 = 9.887
 100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.734
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8838
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 14.84
 TOTAL AREA(ACRES) = 6.14 TOTAL RUNOFF(CFS) = 14.84

 FLOW PROCESS FROM NODE 7.00 TO NODE 7.00 IS CODE = 1

Figure 2.2
 Page 4 of 8

Attachment: Appendix I2-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
 =====

TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION(MIN.) = 9.89
 RAINFALL INTENSITY(INCH/HR) = 2.73
 TOTAL STREAM AREA(ACRES) = 6.14
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 14.84

** CONFLUENCE DATA **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	16.82	9.04	2.847	6.68
2	14.84	9.89	2.734	6.14

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 ON THE RCFC&WCD FORMULA OF PLATE D-1 AS DEFAULT VALUE. THIS FORMULA
 WILL NOT NECESSARILY RESULT IN THE MAXIMUM VALUE OF PEAK FLOW.

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 2 STREAMS.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	30.38	9.04	2.847
2	30.99	9.89	2.734

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:

PEAK FLOW RATE(CFS) = 30.38 Tc(MIN.) = 9.04
 TOTAL AREA(ACRES) = 12.8
 LONGEST FLOWPATH FROM NODE 8.00 TO NODE 7.00 = 637.00 FEET.

 FLOW PROCESS FROM NODE 9.00 TO NODE 10.00 IS CODE = 21

>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 =====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL
 $TC = K * [(LENGTH^{**3}) / (ELEVATION CHANGE)]^{**.2}$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 704.00
 UPSTREAM ELEVATION(FEET) = 80.20
 DOWNSTREAM ELEVATION(FEET) = 71.80
 ELEVATION DIFFERENCE(FEET) = 8.40
 $TC = 0.303 * [(704.00^{**3}) / (8.40)]^{**.2} = 10.122$
 100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 2.705
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8837
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 7.03

Figure 2.2
 Page 5 of 8

TOTAL AREA(ACRES) = 2.94 TOTAL RUNOFF(CFS) = 7.03

 FLOW PROCESS FROM NODE 10.00 TO NODE 10.00 IS CODE = 1

 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 3
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION(MIN.) = 10.12
 RAINFALL INTENSITY(INCH/HR) = 2.71
 TOTAL STREAM AREA(ACRES) = 2.94
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 7.03

 FLOW PROCESS FROM NODE 11.00 TO NODE 10.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS COMMERCIAL
 $TC = K * [(LENGTH**3) / (ELEVATION CHANGE)]**.2$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 705.00
 UPSTREAM ELEVATION(FEET) = 81.20
 DOWNSTREAM ELEVATION(FEET) = 10.10
 ELEVATION DIFFERENCE(FEET) = 71.10
 $TC = 0.303 * [(705.00**3) / (71.10)]**.2 = 6.609$
 100 YEAR RAINFALL INTENSITY(INCH/HOUR) = 3.280
 COMMERCIAL DEVELOPMENT RUNOFF COEFFICIENT = .8861
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF(CFS) = 6.19
 TOTAL AREA(ACRES) = 2.13 TOTAL RUNOFF(CFS) = 6.19

 FLOW PROCESS FROM NODE 10.00 TO NODE 10.00 IS CODE = 1

 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<

=====

TOTAL NUMBER OF STREAMS = 3
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION(MIN.) = 6.61
 RAINFALL INTENSITY(INCH/HR) = 3.28
 TOTAL STREAM AREA(ACRES) = 2.13
 PEAK FLOW RATE(CFS) AT CONFLUENCE = 6.19

 FLOW PROCESS FROM NODE 12.00 TO NODE 10.00 IS CODE = 21

 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<

=====

ASSUMED INITIAL SUBAREA UNIFORM
 DEVELOPMENT IS: UNDEVELOPED WITH FAIR COVER
 $TC = K * [(LENGTH**3) / (ELEVATION CHANGE)]**.2$
 INITIAL SUBAREA FLOW-LENGTH(FEET) = 695.00

Figure 2.2
 Page 6 of 8

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

UPSTREAM ELEVATION (FEET) = 81.50
 DOWNSTREAM ELEVATION (FEET) = 71.20
 ELEVATION DIFFERENCE (FEET) = 10.30
 $TC = 0.709 * [(695.00^{**3}) / (10.30)]^{**.2} = 22.569$
 100 YEAR RAINFALL INTENSITY (INCH/HOUR) = 1.883
 UNDEVELOPED WATERSHED RUNOFF COEFFICIENT = .6828
 SOIL CLASSIFICATION IS "C"
 SUBAREA RUNOFF (CFS) = 3.65
 TOTAL AREA (ACRES) = 2.84 TOTAL RUNOFF (CFS) = 3.65

 FLOW PROCESS FROM NODE 10.00 TO NODE 10.00 IS CODE = 1

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<

=====

TOTAL NUMBER OF STREAMS = 3
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 3 ARE:
 TIME OF CONCENTRATION (MIN.) = 22.57
 RAINFALL INTENSITY (INCH/HR) = 1.88
 TOTAL STREAM AREA (ACRES) = 2.84
 PEAK FLOW RATE (CFS) AT CONFLUENCE = 3.65

** CONFLUENCE DATA **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)	AREA (ACRE)
1	7.03	10.12	2.705	2.94
2	6.19	6.61	3.280	2.13
3	3.65	22.57	1.883	2.84

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RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 3 STREAMS.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	RUNOFF (CFS)	Tc (MIN.)	INTENSITY (INCH/HOUR)
1	11.85	6.61	3.280
2	13.77	10.12	2.705
3	12.09	22.57	1.883

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:

PEAK FLOW RATE (CFS) = 13.77 Tc (MIN.) = 10.12
 TOTAL AREA (ACRES) = 7.9
 LONGEST FLOWPATH FROM NODE 11.00 TO NODE 10.00 = 705.00 FEET.

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END OF STUDY SUMMARY:

TOTAL AREA (ACRES) = 7.9 TC (MIN.) = 10.12
 PEAK FLOW RATE (CFS) = 13.77

Figure 2.2
 Page 7 of 8

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END OF RATIONAL METHOD ANALYSIS

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Figure 2.2
Page 8 of 8



NOAA Atlas 14, Volume 6, Version 2
 Location name: Moreno Valley, California, USA*
 Latitude: 33.9159°, Longitude: -117.2492°
 Elevation: 1566.65 ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perca, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aeriels](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.06 (0.876-1.27)	1.42 (1.18-1.72)	1.90 (1.57-2.30)	2.30 (1.90-2.82)	2.87 (2.28-3.64)	3.32 (2.59-4.31)	3.79 (2.88-5.04)	4.30 (3.17-5.88)	4.99 (3.53-7.14)	5.56 (3.78-8.23)
10-min	0.756 (0.630-0.918)	1.01 (0.846-1.23)	1.36 (1.13-1.65)	1.65 (1.36-2.02)	2.06 (1.64-2.61)	2.38 (1.85-3.08)	2.72 (2.06-3.61)	3.07 (2.27-4.21)	3.58 (2.53-5.11)	3.98 (2.71-5.90)
15-min	0.608 (0.508-0.740)	0.816 (0.680-0.988)	1.10 (0.912-1.33)	1.33 (1.10-1.63)	1.66 (1.32-2.10)	1.92 (1.50-2.49)	2.19 (1.66-2.91)	2.48 (1.83-3.40)	2.88 (2.04-4.12)	3.21 (2.19-4.76)
30-min	0.480 (0.400-0.580)	0.642 (0.536-0.778)	0.862 (0.716-1.05)	1.05 (0.862-1.28)	1.30 (1.04-1.65)	1.51 (1.18-1.96)	1.72 (1.31-2.29)	1.95 (1.44-2.67)	2.27 (1.60-3.24)	2.52 (1.72-3.74)
60-min	0.337 (0.281-0.408)	0.451 (0.376-0.546)	0.605 (0.503-0.735)	0.734 (0.605-0.900)	0.915 (0.729-1.16)	1.06 (0.825-1.37)	1.21 (0.918-1.61)	1.37 (1.01-1.87)	1.59 (1.13-2.28)	1.77 (1.21-2.63)
2-hr	0.246 (0.206-0.298)	0.321 (0.268-0.389)	0.420 (0.350-0.511)	0.503 (0.414-0.616)	0.616 (0.491-0.782)	0.706 (0.550-0.914)	0.796 (0.605-1.06)	0.892 (0.658-1.22)	1.02 (0.722-1.46)	1.13 (0.768-1.67)
3-hr	0.201 (0.168-0.243)	0.260 (0.217-0.315)	0.338 (0.281-0.411)	0.402 (0.331-0.493)	0.490 (0.390-0.621)	0.558 (0.435-0.723)	0.627 (0.477-0.834)	0.700 (0.516-0.958)	0.799 (0.564-1.14)	0.876 (0.597-1.30)
6-hr	0.139 (0.116-0.169)	0.179 (0.149-0.217)	0.231 (0.193-0.281)	0.274 (0.226-0.336)	0.332 (0.265-0.422)	0.377 (0.294-0.489)	0.422 (0.321-0.562)	0.469 (0.346-0.642)	0.532 (0.376-0.761)	0.581 (0.396-0.862)
12-hr	0.090 (0.075-0.108)	0.116 (0.097-0.141)	0.151 (0.126-0.184)	0.180 (0.148-0.220)	0.218 (0.174-0.277)	0.248 (0.193-0.321)	0.277 (0.211-0.369)	0.308 (0.227-0.422)	0.349 (0.247-0.499)	0.381 (0.260-0.565)
24-hr	0.058 (0.051-0.067)	0.077 (0.068-0.088)	0.101 (0.089-0.117)	0.121 (0.106-0.141)	0.148 (0.125-0.178)	0.168 (0.139-0.207)	0.189 (0.153-0.238)	0.210 (0.166-0.272)	0.239 (0.181-0.322)	0.261 (0.191-0.364)
2-day	0.034 (0.030-0.039)	0.046 (0.040-0.053)	0.061 (0.054-0.071)	0.074 (0.064-0.086)	0.091 (0.077-0.109)	0.104 (0.086-0.128)	0.117 (0.095-0.147)	0.131 (0.103-0.169)	0.149 (0.113-0.201)	0.163 (0.120-0.228)
3-day	0.024 (0.021-0.028)	0.033 (0.029-0.038)	0.044 (0.039-0.051)	0.054 (0.047-0.063)	0.067 (0.056-0.080)	0.076 (0.063-0.094)	0.087 (0.070-0.109)	0.097 (0.076-0.125)	0.111 (0.084-0.150)	0.122 (0.089-0.170)
4-day	0.020 (0.017-0.023)	0.027 (0.024-0.031)	0.037 (0.032-0.042)	0.044 (0.039-0.052)	0.055 (0.047-0.067)	0.064 (0.053-0.078)	0.072 (0.059-0.091)	0.081 (0.064-0.105)	0.093 (0.071-0.126)	0.103 (0.075-0.143)
7-day	0.012 (0.011-0.014)	0.017 (0.015-0.020)	0.024 (0.021-0.028)	0.029 (0.026-0.034)	0.037 (0.031-0.044)	0.042 (0.035-0.052)	0.048 (0.039-0.061)	0.054 (0.043-0.070)	0.063 (0.048-0.085)	0.069 (0.051-0.097)
10-day	0.009 (0.008-0.010)	0.013 (0.011-0.015)	0.018 (0.016-0.021)	0.022 (0.019-0.026)	0.028 (0.023-0.033)	0.032 (0.027-0.039)	0.037 (0.030-0.046)	0.041 (0.033-0.054)	0.048 (0.036-0.065)	0.053 (0.039-0.074)
20-day	0.005 (0.005-0.006)	0.008 (0.007-0.009)	0.011 (0.009-0.012)	0.013 (0.012-0.015)	0.017 (0.014-0.020)	0.020 (0.016-0.024)	0.023 (0.018-0.029)	0.026 (0.020-0.034)	0.030 (0.023-0.041)	0.034 (0.025-0.047)
30-day	0.004 (0.004-0.005)	0.006 (0.005-0.007)	0.008 (0.007-0.010)	0.010 (0.009-0.012)	0.013 (0.011-0.016)	0.016 (0.013-0.019)	0.018 (0.015-0.023)	0.021 (0.016-0.027)	0.024 (0.018-0.033)	0.027 (0.020-0.038)
45-day	0.003 (0.003-0.004)	0.005 (0.004-0.005)	0.006 (0.006-0.007)	0.008 (0.007-0.009)	0.010 (0.009-0.012)	0.012 (0.010-0.015)	0.014 (0.011-0.018)	0.016 (0.013-0.021)	0.019 (0.015-0.026)	0.022 (0.016-0.030)
60-day	0.003 (0.002-0.003)	0.004 (0.003-0.004)	0.005 (0.005-0.006)	0.007 (0.006-0.008)	0.009 (0.007-0.010)	0.010 (0.009-0.013)	0.012 (0.010-0.015)	0.014 (0.011-0.018)	0.016 (0.012-0.022)	0.019 (0.014-0.026)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

FIGURE 3.1

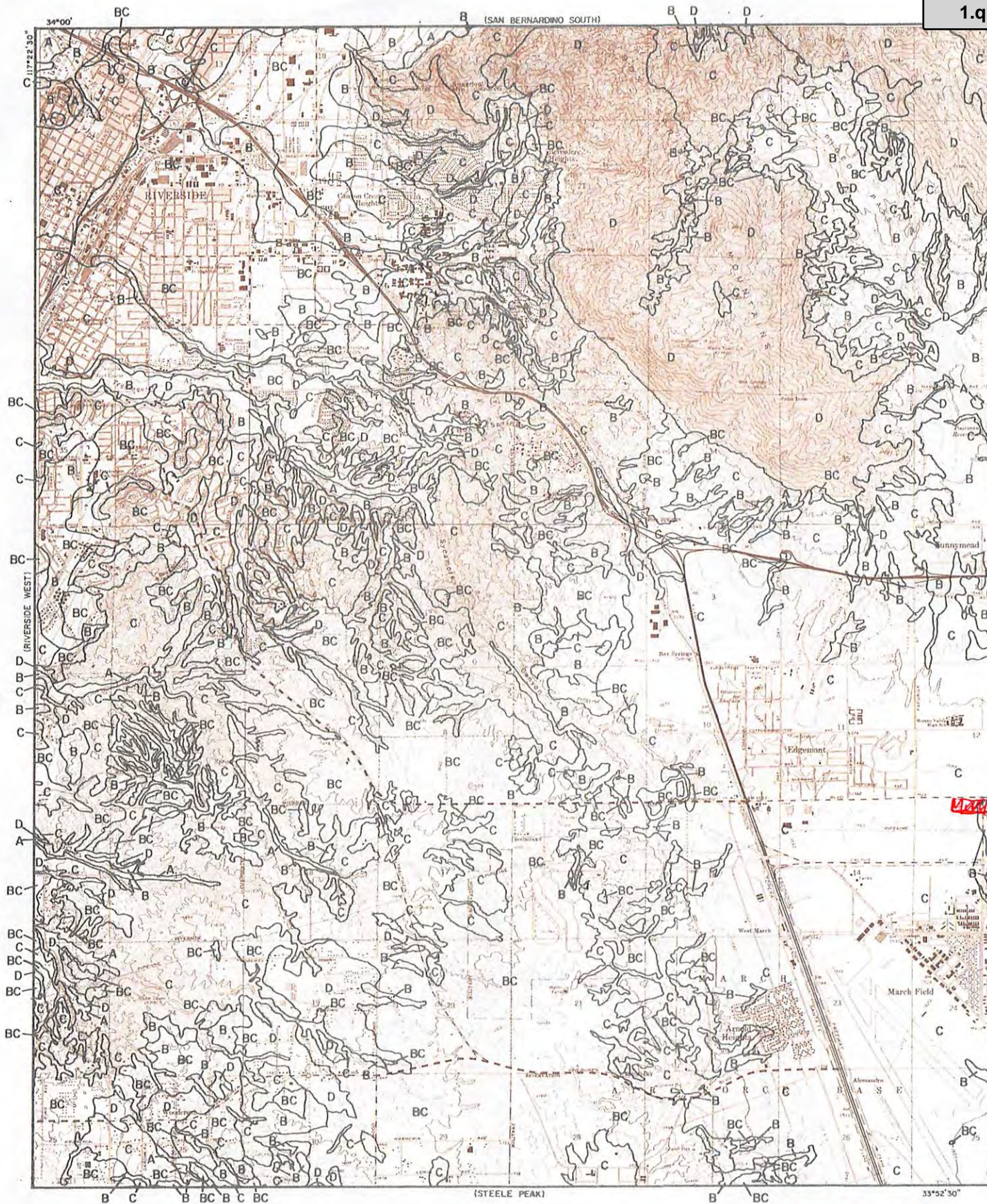


FIGURE 3.2

LEGEND

— SOILS GROUP BOUNDARY
 A SOILS GROUP DESIGNATION

RCFC & WCD
 Hydrology Manual

0 FEET 5000

HYDROLOGIC SOILS GROUP MAP
FOR
RIVERSIDE-EAST

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

HYDRAULIC ELEMENTS - I PROGRAM PACKAGE

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.

1461 FORD STREET, SUITE 105

REDLANDS, CA 92373

PHONE: (909) 748-7777 FAX: (909) 748-7776

TIME/DATE OF STUDY: 09:54 09/28/2020

=====
Problem Descriptions:

APN 297-170-002 & 003

POST-DEVELOPMENT DRAINAGE STUDY

STORM DRAIN PIPE SIZING (LINE A)

>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<

PIPE SLOPE(FEET/FEET) = 0.0069

PIPEFLOW(CFS) = 81.93

MANNINGS FRICTION FACTOR = 0.013000

>>>>>SOFFIT-FLOW PIPE DIAMETER(FEET) = 3.472, USE 3.5'

=====

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Figure 4.1
Page 1 of 1

HYDRAULIC ELEMENTS - I PROGRAM PACKAGE

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Analysis prepared by:

THATCHER ENGINEERING & ASSOCIATES, INC.

1461 FORD STREET, SUITE 105

REDLANDS, CA 92373

PHONE: (909) 748-7777 FAX: (909) 748-7776

TIME/DATE OF STUDY: 10:13 09/28/2020

=====
Problem Descriptions:

APN 297-170-002 & 003

POST-DEVELOPMENT DRAINAGE STUDY

STORM DRAIN PIPE SIZING (LINE E)

>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<

PIPE SLOPE(FEET/FEET) = 0.0170

PIPEFLOW(CFS) = 33.87

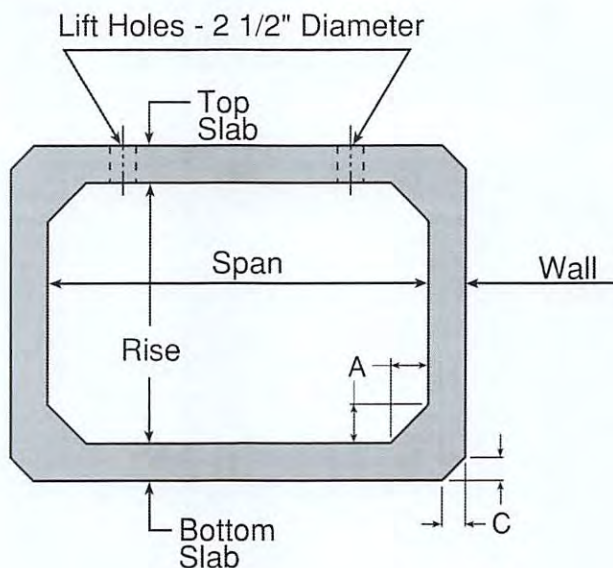
MANNINGS FRICTION FACTOR = 0.013000

>>>>>SOFFIT-FLOW PIPE DIAMETER(FEET) = 2.106, USE 2.5'

=====

Attachment: Appendix 12-Preliminary Drainage Study (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

**FastCast™ Drycast
PreGasketed
Stormwater Storage**



Typical Section

Standard Box Dimensions					
Span (Ft.)	Rise (Ft.)	Top Slab (In.)	Bottom Slab (In.)	Wall (In.)	Weight (Lbs./ft.)
3	2	7	6	4	848
3	3	7	6	4	952
4	2	7 1/2	6	5	1146
4	3	7 1/2	6	5	1276
4	4	7 1/2	6	5	1405
5	2	8	7	6	1541
5	3	8	7	6	1696
5	4	8	7	6	1851
5	5	8	7	6	2006
6	2	8	7	7	1821
6	3	8	7	7	2002
6	4	8	7	7	2183
6	5	8	7	7	2364
6	6	8	7	7	2545
7	2	8	8	8	2238
7	3	8	8	8	2446
7	4	8	8	8	2652
7	5	8	8	8	2859
7	6	8	8	8	3066
7	7	8	8	8	3272

Standard Box Dimensions					
Span (Ft.)	Rise (Ft.)	Top Slab (In.)	Bottom Slab (In.)	Wall (In.)	Weight (Lbs./ft.)
8	3	8	8	8	2652
8	4	8	8	8	2859
8	5	8	8	8	3066
8	6	8	8	8	3272
8	7	8	8	8	3479
8	8	8	8	8	3686
9	4	9	9	9	3511
9	5	9	9	9	3744
9	6	9	9	9	3976
9	7	9	9	9	4209
9	8	9	9	9	4441
9	9	9	9	9	4674
10	4	10	10	10	4228
10	5	10	10	10	4486
10	6	10	10	10	4745
10	7	10	10	10	5003
10	8	10	10	10	5261
10	9	10	10	10	5520
10	10	10	10	10	5778

Standard Box Dimensions					
Span (Ft.)	Rise (Ft.)	Top Slab (In.)	Bottom Slab (In.)	Wall (In.)	Weight (Lbs./ft.)
11	4	11	11	11	5010
11	5	11	11	11	5294
11	6	11	11	11	5578
11	7	11	11	11	5862
11	8	11	11	11	6146
11	9	11	11	11	6430
11	10	11	11	11	6715
11	11	11	11	11	6999
12	4	12	12	12	5856
12	5	12	12	12	6166
12	6	12	12	12	6476
12	7	12	12	12	6786
12	8	12	12	12	7096
12	9	12	12	12	7406
12	10	12	12	12	7716
12	11	12	12	12	8026
12	12	12	12	12	8336

- Note:**
- A = Wall thickness
 - C = 2" for 4", 5" and 6" wall
 - C = 4" for 7" and greater wall
 - Contact manufacturer for standard joint lengths.

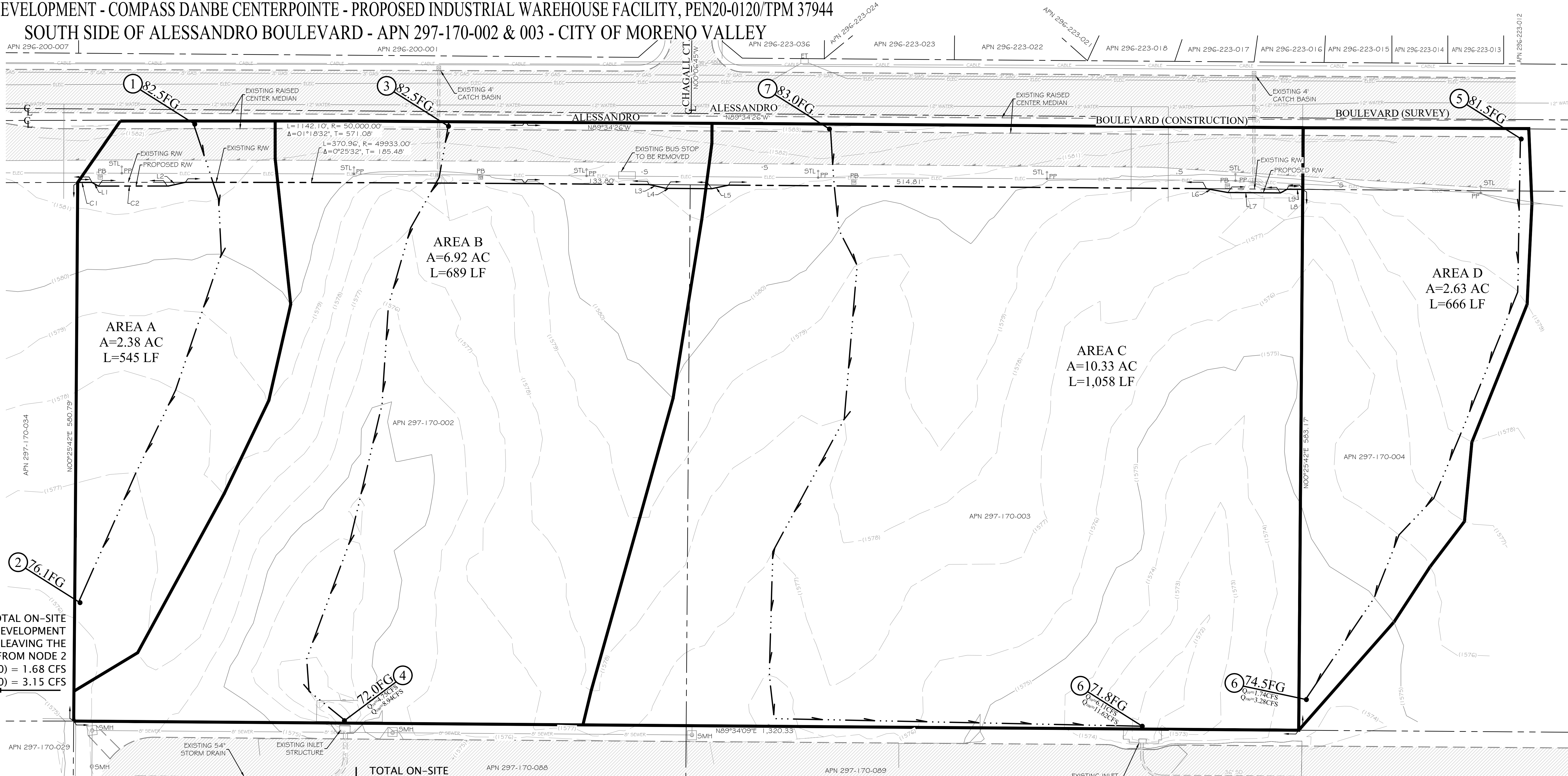
Figure 4.3

-No Scale-
All dimensions subject to allowable specification tolerances.

TITLE	PLANT	STATE	SECTION.PAGE	DATE	
Reinforced Concrete Precast Box Section	Grand Prairie Houston	TX	4.1	11-12-15	

TRIBUTARY AREA MAP

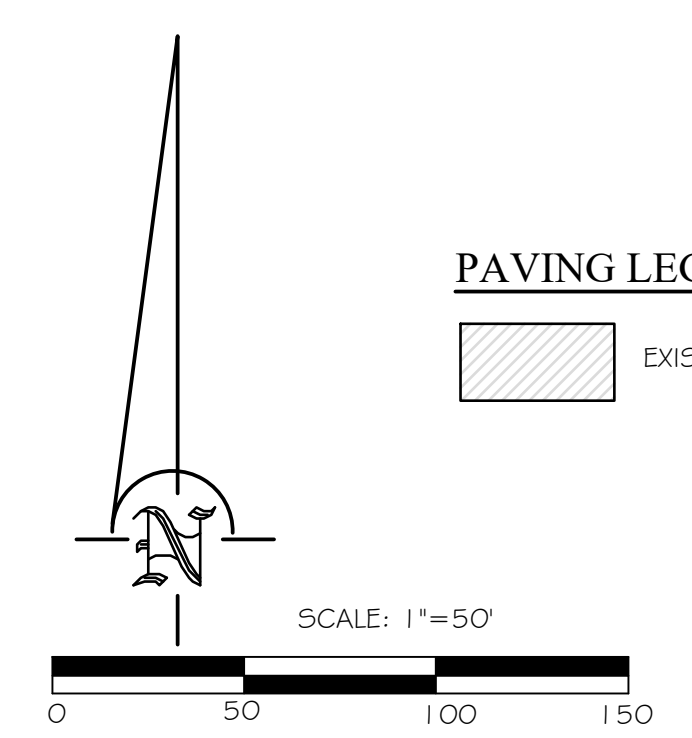
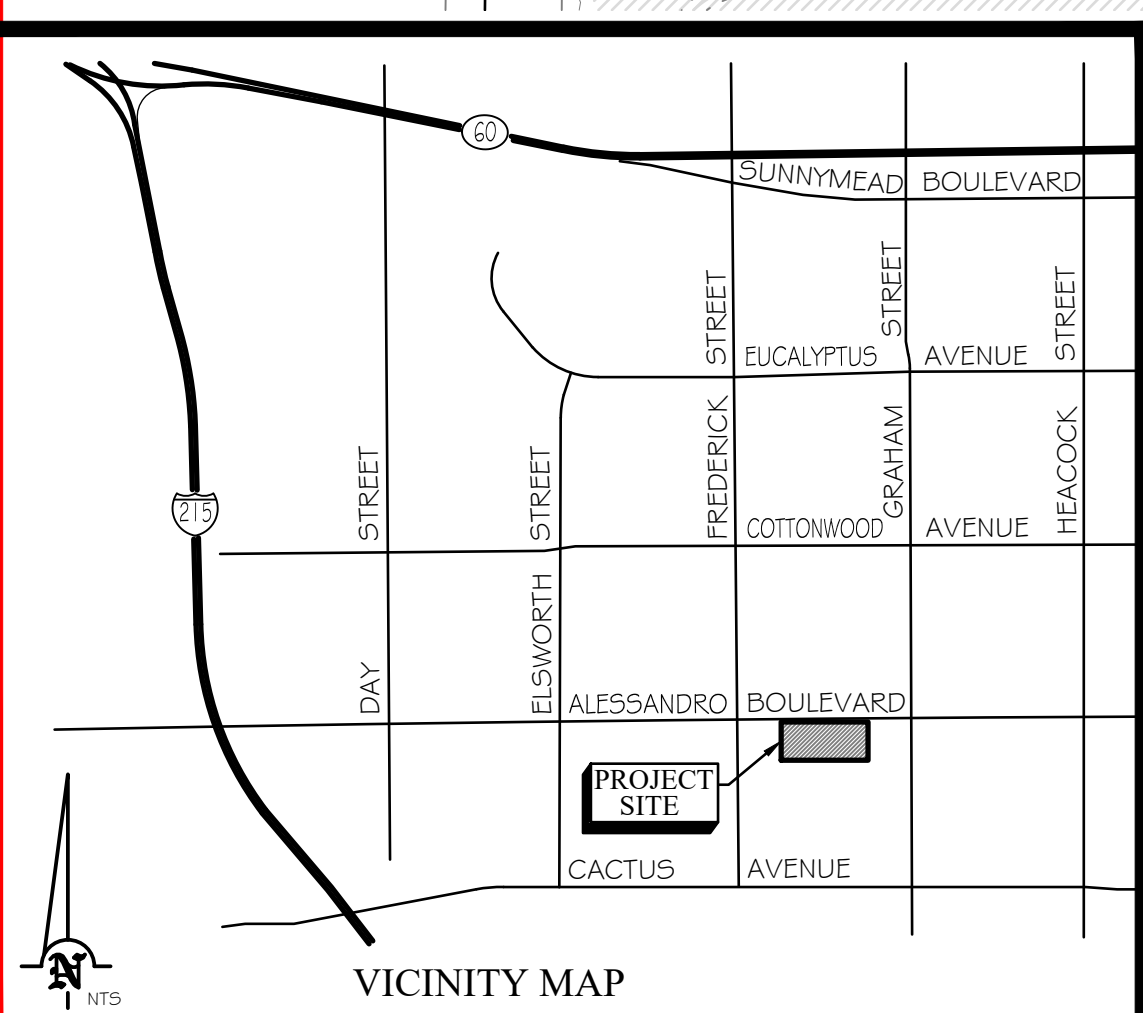
PRE-DEVELOPMENT - COMPASS DANBE CENTERPOINTE - PROPOSED INDUSTRIAL WAREHOUSE FACILITY, PEN20-0120/TPM 37944
 SOUTH SIDE OF ALESSANDRO BOULEVARD - APN 297-170-002 & 003 - CITY OF MORENO VALLEY



TOTAL ON-SITE
 PRE-DEVELOPMENT
 FLOWS LEAVING THE
 SITE FROM NODE 2
 Q(10) = 1.68 CFS
 Q(100) = 3.15 CFS

TOTAL ON-SITE
 PRE-DEVELOPMENT
 FLOWS LEAVING THE
 SITE FROM NODE 4
 Q(10) = 4.75 CFS
 Q(100) = 8.94 CFS

TOTAL ON-SITE
 PRE-DEVELOPMENT
 FLOWS LEAVING THE SITE
 FROM CONFLUENCE NODE 6
 Q(10) = 7.71 CFS
 Q(100) = 14.64 CFS



LINE DATA

LINE	BEARING	DISTANCE
L1	N59°30'55"W	7.89'
L2	N77°40'24"E	18.74'
L3	N77°12'47"W	18.69'
L4	N89°34'26"W	49.33'
L5	N78°03'57"E	18.69'
L6	N79°46'02"E	23.49'
L7	N89°34'26"W	56.75'
L8	N60°53'25"E	8.11'
L9	N89°34'26"W	16.97'

CURVE DATA

LINE	Δ	R	T	L
C1	00°01'04"	49933.00'	7.71'	15.41'
C2	00°05'12"	49929.00'	37.73'	75.46'

PAVING LEGEND

EXISTING AC PAVING

LEGEND

- ① ELEV.
- L=165'
- A=1.44 AC
- FLOWLINE
- TRIBUTARY BOUNDARY
- NODE # & ELEV.
- FLOWLINE LENGTH
- SUB AREA
- FLOWLINE
- TRIBUTARY BOUNDARY

LEGEND

- ET ELECTRIC TRANSFORMER
- INV INVERT ELEVATION
- PB PULL BOX
- PL PROPERTY LINE
- PP EX. POWER POLE
- RW RIGHT-OF-WAY
- SMH SEWER MANHOLE
- STL EX. STREET LIGHT

SOURCE OF SURVEY
 TOPOGRAPHIC SURVEY
 DATED DECEMBER 2019
 AS CONDUCTED BY
**PARTNER ENGINEERING
 AND SCIENCE, INC.**
 1761 EAST GARRY AVENUE
 SANTA ANA, CA 92705
 PHONE: (714) 477-8657

SOIL ENGINEER
 REPORT DATED JANUARY 31, 2020
 PROJECT NO. 21631-20
 AS CONDUCTED BY
NORCAL ENGINEERING
 10641 HUMBOLT STREET
 LOS ALAMITOS, CA 90720
 PHONE: (562) 799-9469
 FAX: (562) 799-9459

PROPERTY OWNER:
**MORENO VALLEY
 CENTERPOINTE**
 C/O CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

PREPARED FOR/APPLICANT:
CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

TRIBUTARY AREA MAP
 PEN20-0120/TPM37944
 PRE-DEVELOPMENT - APN 297-170-002 & 003
 COMPASS DANBE CENTERPOINTE
 PROPOSED INDUSTRIAL WAREHOUSE FACILITY
 SOUTH SIDE OF ALESSANDRO BOULEVARD
 CITY OF MORENO VALLEY

thatcher engineering & associates, inc.
 1461 10th Street, Suite 105, Redlands, CA 92373
 • land planning
 • civil engineering
 • landscape architecture
 phone 909.748.7777
 fax 909.748.7776
 Patrick C. Flanagan, Jr., R.C.E. 86046
 No. 86046
 Exp. 9/30/22
 CIVIL
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA

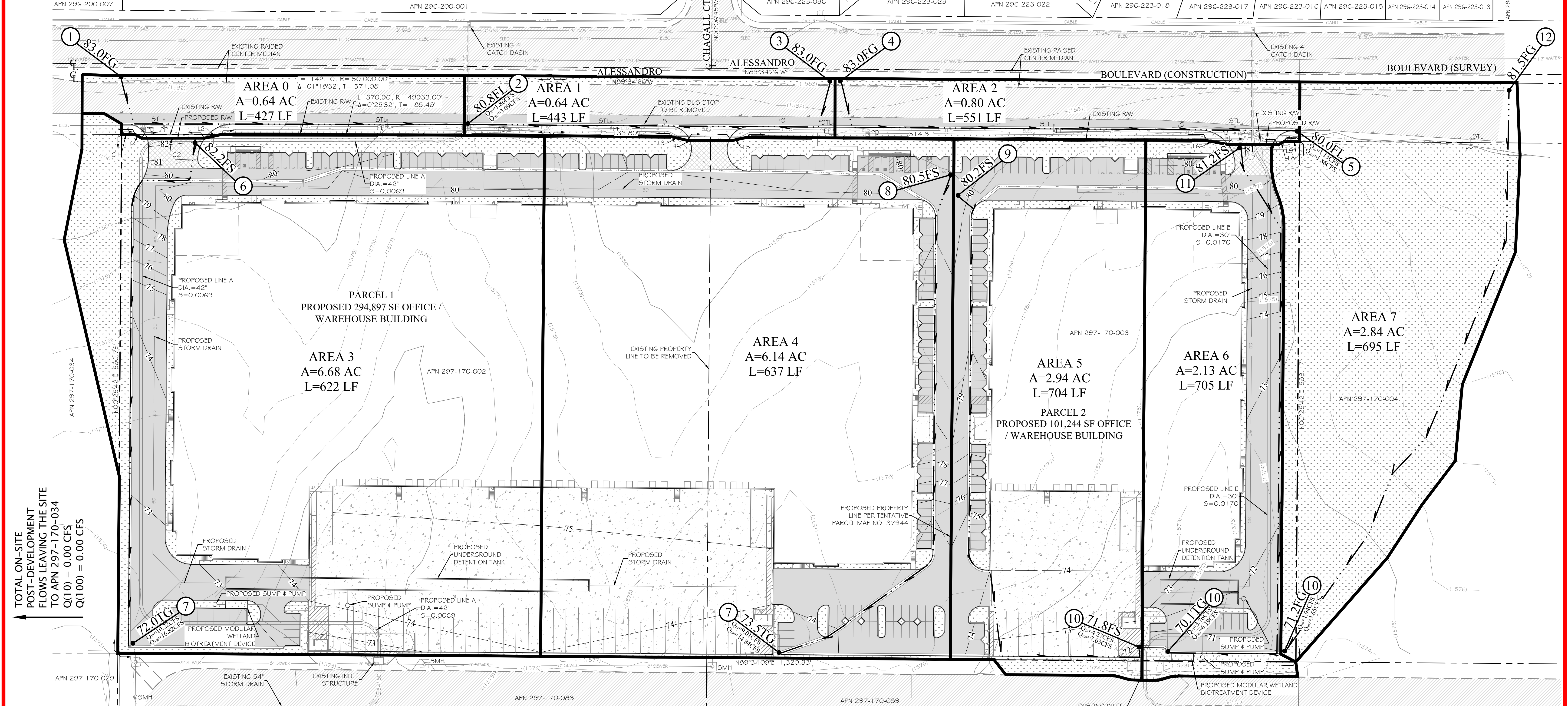
Patrick C. Flanagan, Jr., R.C.E. 86046 Exp. Sep 30, 2020

Job Number:	Date Prepared:	Drawn By:	Reference Number:
162012	2/18/21	RL	162012TAM

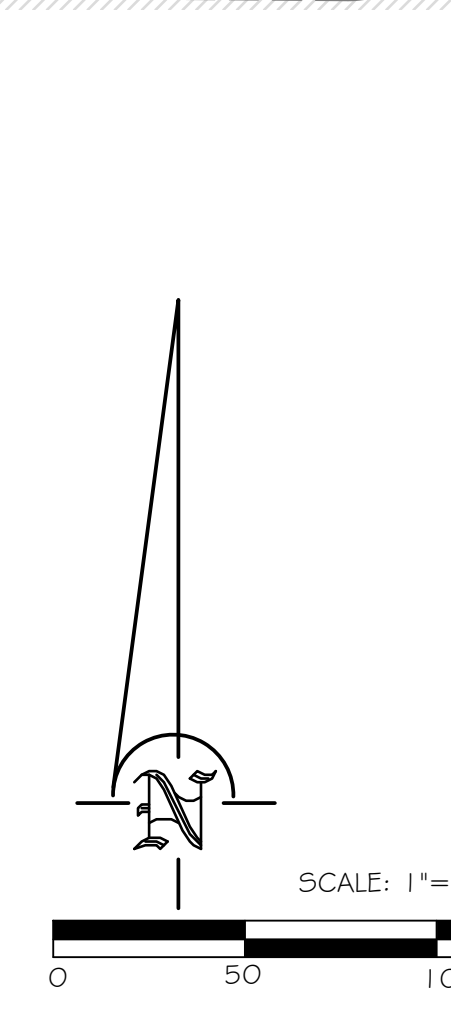
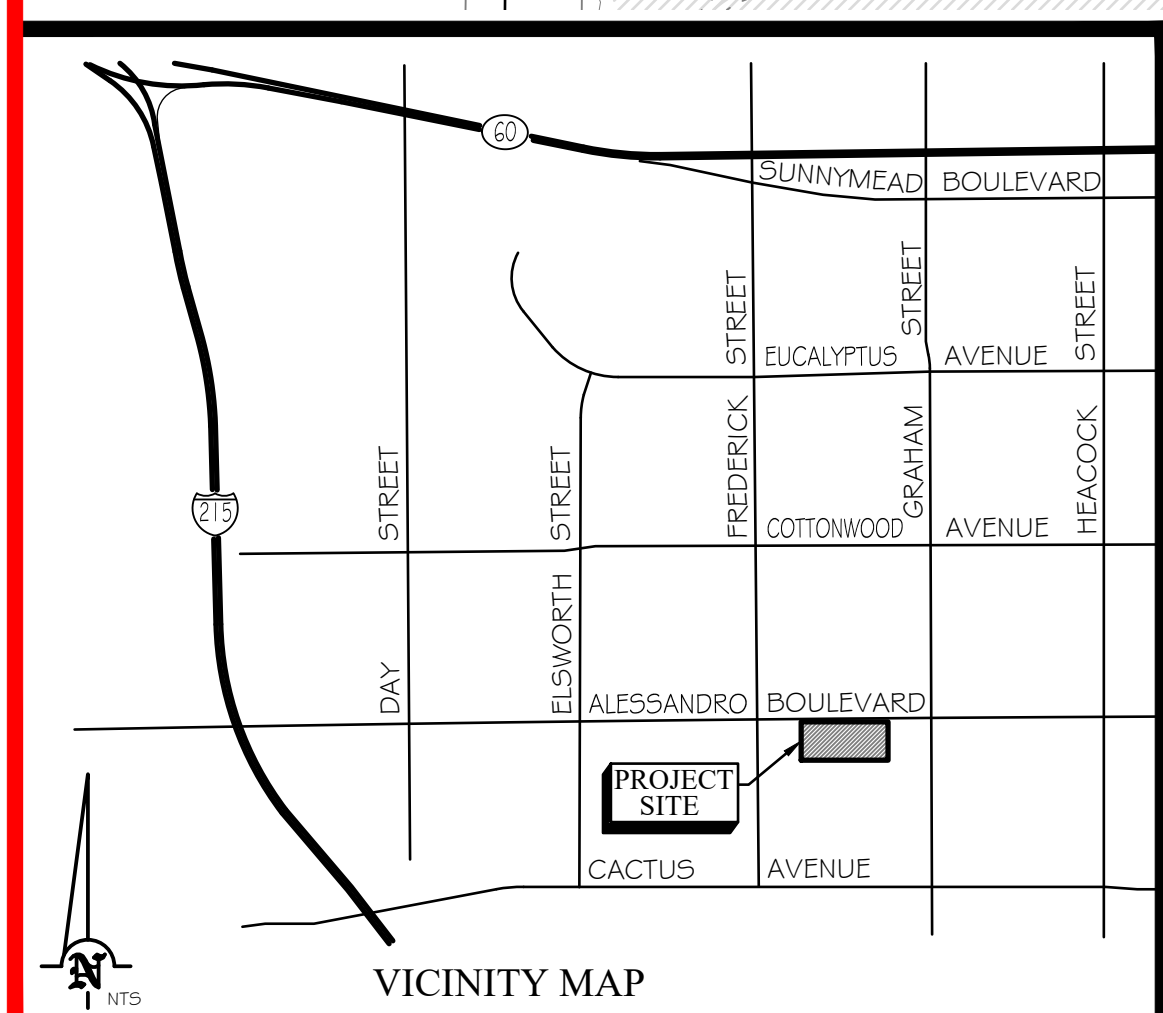
TRIBUTARY AREA MAP

POST-DEVELOPMENT - COMPASS DANBE CENTERPOINTE - PROPOSED INDUSTRIAL WAREHOUSE FACILITY, PEN20-0120/TPM 37944

SOUTH SIDE OF ALESSANDRO BOULEVARD - APN 297-170-002 & 003 - CITY OF MORENO VALLEY



TOTAL ON-SITE
POST-DEVELOPMENT
FLOWS LEAVING THE SITE
TO APN 297-170-034
Q(10) = 0.00 CFS
Q(100) = 0.00 CFS



TOTAL ON-SITE
POST-DEVELOPMENT
FLOWS LEAVING THE SITE
FROM CONFLUENCE NODE 6
Q(10) = 0.00 CFS
Q(100) = 0.00 CFS

LINE DATA

LINE	BEARING	DISTANCE
L1	N59°38'55"W	7.89'
L2	N77°40'24"E	18.74'
L3	N77°12'47"W	18.69'
L4	N89°34'26"W	49.33'
L5	N79°03'57"E	18.69'
L6	N79°46'02"E	23.49'
L7	N89°34'26"W	56.75'
L8	N60°53'25"E	8.11'
L9	N89°34'26"W	16.97'

PAVING LEGEND

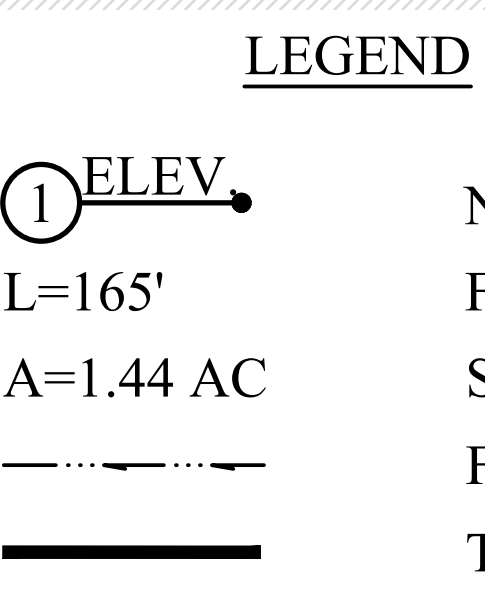
- PROPOSED/EXISTING LANDSCAPE
- PROPOSED AC PAVING
- PROPOSED PCC PAVING
- PROPOSED DECORATIVE PAVING
- EXISTING AC PAVING

CURVE DATA

LINE	Δ	R	T	L
C1	00°01'04"	49933.00'	7.71'	15.41'
C2	00°05'12"	49929.00'	37.73'	75.46'

LEGEND

- AC ASPHALT CONCRETE
- CF CURB FACE
- DIA DIAMETER
- ET ELECTRIC TRANSFORMER
- FF FINISHED FLOOR
- FG FINISHED GROUND
- FL FLOWLINE
- FS FINISHED SURFACE
- PB PULL BOX
- PCC PORTLAND CEMENT CONCRETE
- PL PROPERTY LINE
- PP EX. POWER POLE
- RAW RIGHT-OF-WAY
- SMH SEWER MANHOLE
- STL EX. STREET LIGHT
- TC TOP OF CURB
- TG TOP OF GRATE



TOTAL ON-SITE
POST-DEVELOPMENT
FLOWS LEAVING THE SITE
FROM CONFLUENCE NODE 10
Q(10) = 0.00 CFS
Q(100) = 0.00 CFS

SOURCE OF SURVEY
TOPOGRAPHIC SURVEY DATED DECEMBER 2019 AS CONDUCTED BY PARTNER ENGINEERING AND SCIENCE, INC. 1761 EAST GARRY AVENUE SANTA ANA, CA 92705 PHONE: (714) 477-8657

SOIL ENGINEER
REPORT DATED JANUARY 31, 2020 PROJECT NO. 21631-20 AS CONDUCTED BY NORCAL ENGINEERING 10641 HUMBOLT STREET LOS ALAMITOS, CA 90720 PHONE: (562) 799-9469 FAX: (562) 799-9459

PROPERTY OWNER:
MORENO VALLEY CENTERPOINTE
C/O CDRE HOLDINGS 17 LLC
ATTN: MARK BACHLI
523 MAIN STREET
EL SEGUNDO, CA 90245
(310) 428-3302

PREPARED FOR/APPLICANT:
CDRE HOLDINGS 17 LLC
ATTN: MARK BACHLI
523 MAIN STREET
EL SEGUNDO, CA 90245
(310) 428-3302

TRIBUTARY AREA MAP
PEN20-0120/TPM37944
POST-DEVELOPMENT - APN 297-170-002 & 003
COMPASS DANBE CENTERPOINTE
PROPOSED INDUSTRIAL WAREHOUSE FACILITY
SOUTH SIDE OF ALESSANDRO BOULEVARD
CITY OF MORENO VALLEY

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phone 909.748.7777
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PATRICK C. FLANAGAN, JR.
No. 86046
Exp. 9/30/22
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

Patrick C. Flanagan, Jr. R.C.E. 86046 Exp. Sep 30, 2020

Job Number:	Date Prepared:	Drawn By:	Reference Number:
162012	2/18/21	RL	162012TAM



Compass Danbe Centerpointe

NOISE IMPACT ANALYSIS

CITY OF MORENO VALLEY

PREPARED BY:

Bill Lawson, PE, INCE
blawson@urbanxroads.com
(949) 584-3148

Sama Shami
sshami@urbanxroads.com
(949) 945-4407

NOVEMBER 6, 2020

13661-05 Noise Study

TABLE OF CONTENTS

TABLE OF CONTENTS	III
APPENDICES	IV
LIST OF EXHIBITS	IV
LIST OF TABLES	IV
LIST OF ABBREVIATED TERMS	VI
EXECUTIVE SUMMARY	1
1 INTRODUCTION	3
1.1 Site Location.....	3
1.2 Project Description.....	3
2 FUNDAMENTALS	7
2.1 Range of Noise	7
2.2 Noise Descriptors.....	8
2.3 Sound Propagation.....	8
2.4 Noise Control	10
2.5 Noise Barrier Attenuation.....	10
2.6 Land Use Compatibility With Noise	10
2.7 Community Response to Noise.....	11
2.8 Vibration	11
3 REGULATORY SETTING	15
3.1 State of California Noise Requirements.....	15
3.2 State of California Green Building Standards Code	15
3.3 City of Moreno Valley General Plan Noise Element	16
3.4 Operational Noise Standards	18
3.5 Construction Noise Standards	19
3.5 Vibration Standards	20
3.6 March Air Reserve Base/Inland Port Airport Land Use Compatibility	20
4 SIGNIFICANCE CRITERIA	23
4.1 CEQA Guidelines Not Further Analyzed	23
4.2 Noise-Sensitive Receivers	23
4.3 Non-Noise-Sensitive Receivers	24
4.4 Significance Criteria Summary	25
5 EXISTING NOISE LEVEL MEASUREMENTS	27
5.1 Measurement Procedure and Criteria	27
5.2 Noise Measurement Locations	27
5.3 Noise Measurement Results	28
6 METHODS AND PROCEDURES	31
6.1 FHWA Traffic Noise Prediction Model	31
6.2 Off-Site Traffic Noise Prediction Model Inputs.....	31
7 OFF-SITE TRANSPORTATION NOISE IMPACTS	35
7.1 Traffic Noise Contours	35
7.2 Existing Project Traffic Noise Level Increases	37
7.3 Existing plus Ambient Growth Project Traffic Noise Level Increases.....	37

8	SENSITIVE RECEIVER LOCATIONS.....	39
9	OPERATIONAL NOISE IMPACTS	41
9.1	Operational Noise Sources.....	41
9.2	Reference Noise Levels	41
9.3	CadnaA Noise Prediction Model	45
9.4	Project Operational Noise Levels.....	45
9.5	Project Operational Noise Level Compliance.....	46
9.6	Project Operational Noise Level Increases	47
10	CONSTRUCTION IMPACTS.....	51
10.1	Construction Noise Levels.....	51
10.2	Construction Reference Noise Levels	51
10.3	Typical Construction Noise Analysis.....	53
10.4	Typical Construction Noise Level Compliance	54
10.5	Nighttime Concrete Pour Noise Analysis	54
10.6	Typical Construction Vibration Impacts.....	55
11	REFERENCES.....	58
12	CERTIFICATION.....	61

APPENDICES

APPENDIX 3.1: CITY OF MORENO VALLEY MUNICIPAL CODE
APPENDIX 5.1: STUDY AREA PHOTOS
APPENDIX 5.2: NOISE LEVEL MEASUREMENT WORKSHEETS
APPENDIX 7.1: OFF-SITE TRAFFIC NOISE CONTOURS
APPENDIX 9.1: CADNAA OPERATIONAL NOISE MODEL INPUTS
APPENDIX 10.1: CADNAA CONSTRUCTION NOISE MODEL INPUTS

LIST OF EXHIBITS

EXHIBIT 1-A: LOCATION MAP.....	4
EXHIBIT 1-B: SITE PLAN.....	5
EXHIBIT 2-A: TYPICAL NOISE LEVELS.....	7
EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION	11
EXHIBIT 2-C: TYPICAL LEVELS OF GROUND-BORNE VIBRATION.....	13
EXHIBIT 3-A: LAND USE NOISE COMPATIBILITY CRITERIA	17
EXHIBIT 3-B: FUTURE AIRPORT NOISE LEVEL CONTOURS	21
EXHIBIT 5-A: NOISE MEASUREMENT LOCATIONS.....	29
EXHIBIT 8-A: SENSITIVE RECEIVER LOCATIONS.....	40
EXHIBIT 9-A: OPERATIONAL NOISE SOURCE LOCATIONS	42
EXHIBIT 10-A: TYPICAL CONSTRUCTION NOISE SOURCE LOCATIONS	52

LIST OF TABLES

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS	1
TABLE 3-1: OPERATIONAL NOISE STANDARDS AT 200 FEET FROM THE SOURCE	19
TABLE 3-2: CONSTRUCTION NOISE STANDARDS FROM THE SOURCE LAND USE	20
TABLE 4-1: SIGNIFICANCE CRITERIA SUMMARY	25
TABLE 5-1: 24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS	28
TABLE 6-1: OFF-SITE ROADWAY PARAMETERS	32
TABLE 6-2: AVERAGE DAILY TRAFFIC VOLUMES	32
TABLE 6-3: TIME OF DAY VEHICLE SPLITS.....	33
TABLE 6-4: WITHOUT PROJECT VEHICLE MIX	33
TABLE 6-5: EXISTING WITH PROJECT VEHICLE MIX.....	33
TABLE 6-6: EXISTING PLUS AMBIENT GROWTH WITH PROJECT VEHICLE MIX	33
TABLE 7-1: EXISTING WITHOUT PROJECT NOISE CONTOURS	35
TABLE 7-2: EXISTING WITH PROJECT NOISE CONTOURS.....	36
TABLE 7-3: EXISTING PLUS AMBIENT GROWTH WITHOUT PROJECT NOISE CONTOURS	36
TABLE 7-4: EXISTING PLUS AMBIENT GROWTH WITH PROJECT NOISE CONTOURS	36
TABLE 7-5: EXISTING WITH PROJECT TRAFFIC NOISE LEVEL INCREASES.....	38
TABLE 7-6: EXISTING PLUS AMBIENT GROWTH WITH PROJECT TRAFFIC NOISE INCREASES	38
TABLE 9-1: REFERENCE NOISE LEVEL MEASUREMENTS.....	43
TABLE 9-2: ENTRY GATE & TRUCK MOVEMENTS BY LOCATION	44
TABLE 9-3: DAYTIME PROJECT OPERATIONAL NOISE LEVELS.....	46
TABLE 9-4: NIGHTTIME PROJECT OPERATIONAL NOISE LEVELS	46
TABLE 9-5: OPERATIONAL NOISE LEVEL COMPLIANCE.....	47
TABLE 9-6: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES	48
TABLE 9-7: NIGHTTIME OPERATIONAL NOISE LEVEL INCREASES	49
TABLE 10-1: TYPICAL CONSTRUCTION REFERENCE NOISE LEVELS	53
TABLE 10-2: TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY	54
TABLE 10-3: TYPICAL CONSTRUCTION NOISE LEVEL COMPLIANCE	54
TABLE 10-4: UNMITIGATED NIGHTTIME CONCRETE POUR NOISE LEVEL COMPLIANCE	55
TABLE 10-5: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT	57
TABLE 10-6: TYPICAL CONSTRUCTION EQUIPMENT VIBRATION LEVELS	57

LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
ANSI	American National Standards Institute
Calveno	California Vehicle Noise
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
Hz	Hertz
INCE	Institute of Noise Control Engineering
L_{eq}	Equivalent continuous (average) sound level
L_{max}	Maximum level measured over the time interval
L_{min}	Minimum level measured over the time interval
MARB/IPA	March Air Reserve Base / Inland Port Airport
mph	Miles per hour
OPR	Office of Planning and Research
PPV	Peak particle velocity
Project	Compass Danbe Centerpointe
REMEL	Reference Energy Mean Emission Level
RMS	Root-mean-square
VdB	Vibration Decibels

EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to determine the potential noise impacts and the necessary noise mitigation measures, if any, for the proposed Compass Danbe Centerpointe development (“Project”). The Project site is located south of Alessandro Boulevard on either side of Chagall Court in the City of Moreno Valley. The Project is proposed to consist of up to 396,488 square feet (sf) of warehouse use. The site is currently designated as Commercial in the City’s General Plan, which would require a land use and zoning change to Light Industrial use.

The results of this Compass Danbe Centerpointe Noise Impact Analysis are summarized below based on the significance criteria in Section 4 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines (1). Table ES-1 shows the findings of significance for each potential noise and/or vibration impact under CEQA. All impacts are considered less than significant without mitigation.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Off-Site Traffic Noise	7	<i>Less Than Significant</i>	-
Operational Noise	9	<i>Less Than Significant</i>	-
Construction Noise	10	<i>Less Than Significant</i>	-
Construction Vibration		<i>Less Than Significant</i>	-
Nighttime Concrete Pour		<i>Less Than Significant</i>	-

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the proposed Compass Danbe Centerpointe (“Project”). This noise study briefly describes the proposed Project, provides information regarding noise fundamentals, sets out the local regulatory setting, presents the study methods and procedures for transportation related CNEL traffic noise analysis, and evaluates the future exterior noise environment. In addition, this study includes an analysis of the potential Project-related long-term stationary-source operational noise and short-term construction noise and vibration impacts.

1.1 SITE LOCATION

The proposed project is located south of Alessandro Boulevard on either side of Chagall Court in the City of Moreno Valley as shown on Exhibit 1-A. The March Air Reserve Base/Inland Port Airport (MARB/IPA) is located approximately 0.9 miles south of the Project site. The Project site is bordered to the west by vacant land, to the east by vacant land, to the north by commercial and residential uses, and to the south are existing industrial buildings.

This proposed Project includes a General Plan Amendment (GPA) and a Zone Change (ZC). The site is currently designated as Commercial in the City’s General Plan, which would require a land use and zoning change to Light Industrial use. The proposed changes are consistent with the zones to the west, south and east of the subject site and adjacent properties. The amendment is in keeping with the uses surrounding the project site.

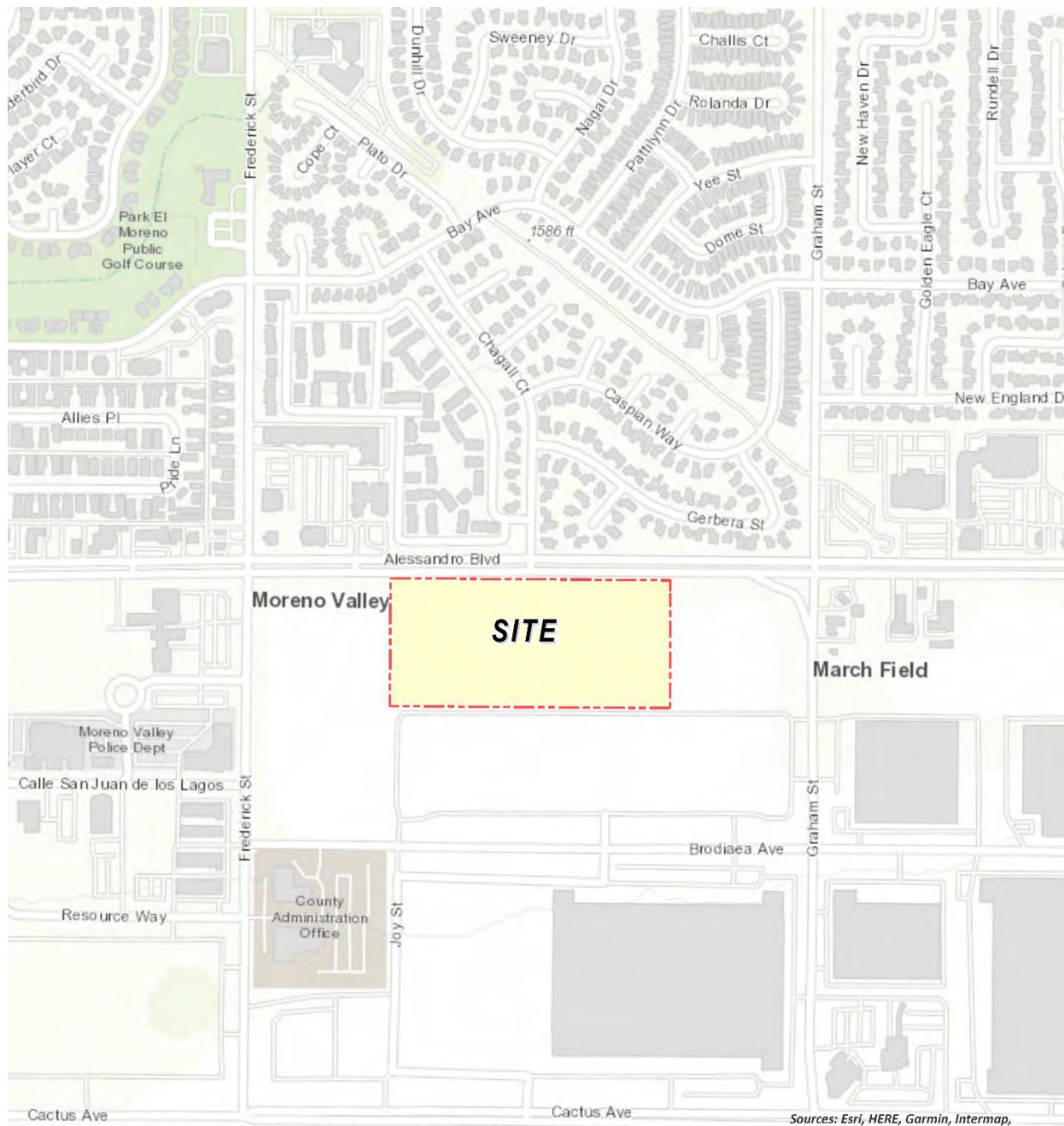
1.2 PROJECT DESCRIPTION

Exhibit 1-B illustrates a preliminary site plan for the Project. The Project is anticipated to be developed within a single phase with an anticipated opening year of 2022. The proposed Project consists of the following uses:

- Building 1: 206,665 square feet (sf) of warehousing (70% of total building sf) and 88,571 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 295,236 sf for Building 1
- Building 2: 70,876 sf of warehousing (70% of total building sf) and 30,376 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 101,252 sf for Building 2

The on-site Project-related noise sources are expected to include: loading dock activity, entry gate & truck movements, roof-top air conditioning units, and trash enclosure activity. This noise analysis is intended to describe noise level impacts associated with the expected typical operational activities at the Project site. This report assumes the Project will operate 24-hours daily for seven days per week. At the time this noise analysis was prepared, the future tenants of the proposed Project were unknown however any tenant would operate consistent with a high-cube warehouse.

EXHIBIT 1-A: LOCATION MAP

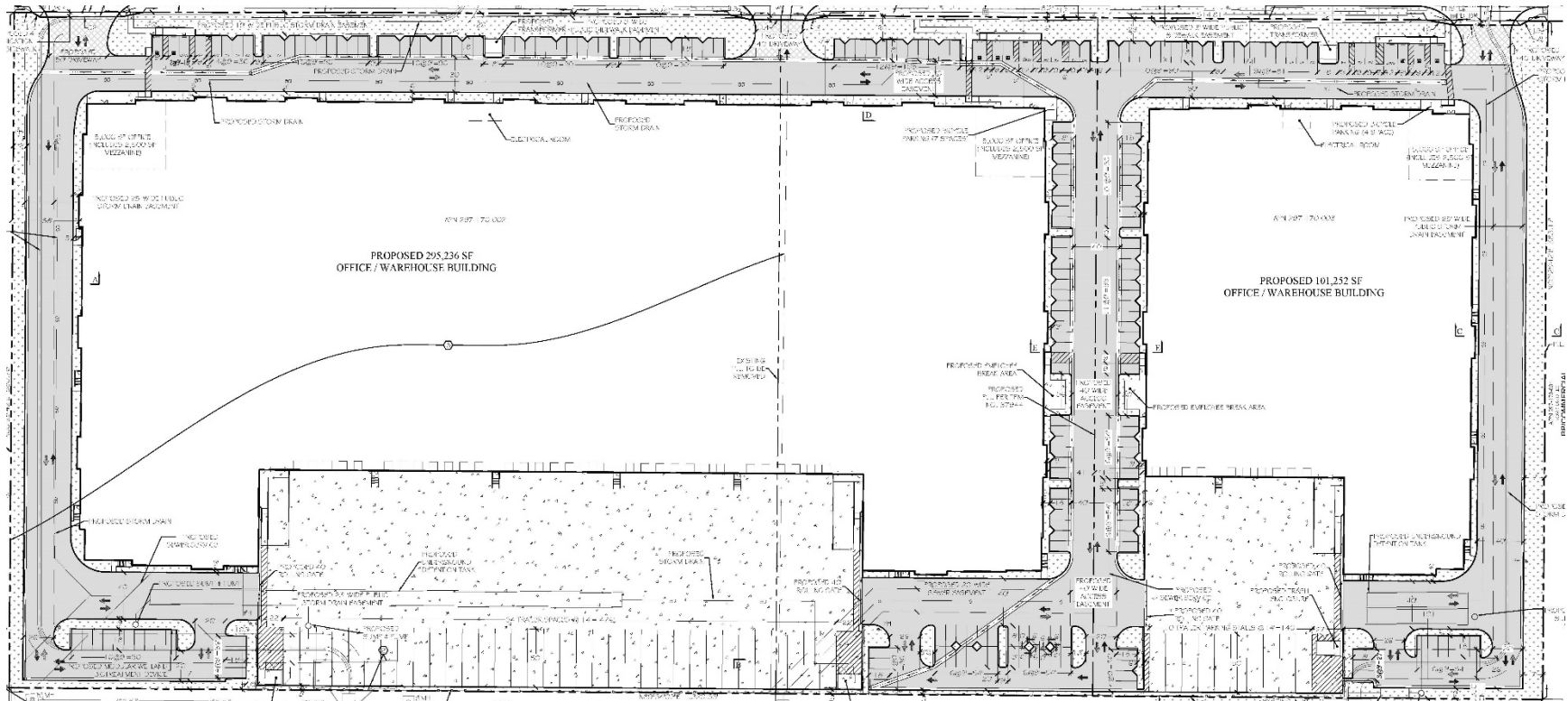


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS



Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

EXHIBIT 1-B: SITE PLAN



Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

2 FUNDAMENTALS

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

EXHIBIT 2-A: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	SPEECH INTERFERENCE
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80	LOUD	
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70		
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60	MODERATE	SLEEP DISTURBANCE
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50		
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud (2). The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA

at approximately 100 feet, which can cause serious discomfort (3). Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

2.2 NOISE DESCRIPTORS

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most used figure is the equivalent level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period (typically one hour) and is commonly used to describe the “average” noise levels within the environment.

To describe the time-varying character of environmental noise, the City of Moreno Valley relies on the L_{25} , L_{17} , L_8 and L_{max} , percentile noise levels to describe the stationary source noise level limits. The percentile noise descriptors are the noise levels equaled or exceeded during 25 percent, 17 percent, and 8 percent of a stated time. Sound levels associated with the L_8 typically describe transient or short-term events, while levels associated with the L_{25} describe the base or typical noise conditions. The City of Moreno Valley relies on the percentile noise levels to describe the stationary source noise level limits. While the L_{25} describes the noise levels occurring 25 percent of the time, the L_{eq} accounts for the total energy (average) observed for the entire hour.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment, however. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Moreno Valley relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources.

2.3 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. Based on guidance from the U.S. Department of Transportation, Federal Highway Administration (FHWA), Office of Environment and Planning, Noise and Air Quality Branch, the way noise reduces with distance depends on the following factors.

2.3.1 GEOMETRIC SPREADING

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling

of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source (2).

2.3.2 GROUND ABSORPTION

The propagation path of noise from a highway to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source (4).

2.3.3 ATMOSPHERIC EFFECTS

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects (2).

2.3.4 SHIELDING

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an “out of sight, out of mind” effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearest residents. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of-sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure (4).

2.3.5 REFLECTION

Field studies conducted by the FHWA have shown that the reflection from barriers and buildings does not substantially increase noise levels (4). If all the noise striking a structure was reflected back to a given receiving point, the increase would be theoretically limited to 3 dBA. Further, not

all the acoustical energy is reflected back to same point. Some of the energy would go over the structure, some is reflected to points other than the given receiving point, some is scattered by ground coverings (e.g., grass and other plants), and some is blocked by intervening structures and/or obstacles (e.g., the noise source itself). Additionally, some of the reflected energy is lost due to the longer path that the noise must travel. FHWA measurements made to quantify reflective increases in traffic noise have not shown an increase of greater than 1-2 dBA; an increase that is not perceptible to the average human ear.

2.4 NOISE CONTROL

Noise control is the process of obtaining an acceptable noise environment for an observation point or receiver by controlling the noise source, transmission path, receiver, or all three. This concept is known as the source-path-receiver concept. In general, noise control measures can be applied to these three elements.

2.5 NOISE BARRIER ATTENUATION

Effective noise barriers can reduce noise levels by up to 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receiver. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source (4).

2.6 LAND USE COMPATIBILITY WITH NOISE

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, recreation areas or buildings where people normally sleep. Although the West Valley Detention Center is a temporary holding facility, there are beds at this facility for temporary stays. Therefore as a conservative measure, the individuals held at the West Valley Detention Center are considered sensitive receptors for the purposes of this analysis.

As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized (5).

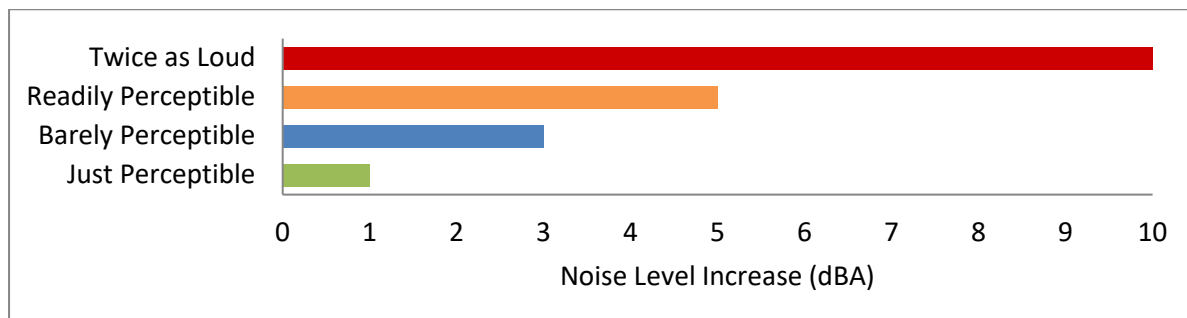
2.7 COMMUNITY RESPONSE TO NOISE

Community responses to noise varies depending upon everyone's susceptibility to noise and personal attitudes about noise. Several factors are related to the level of community annoyance including:

- Fear associated with noise producing activities;
- Socio-economic status and educational level;
- Perception that those affected are being unfairly treated;
- Attitudes regarding the usefulness of the noise-producing activity;
- Belief that the noise source can be controlled.

Approximately ten percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints will occur. Twenty-five percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment (6). Surveys have shown that about ten percent of the people exposed to traffic noise of 60 dBA will report being highly annoyed with the noise, and each increase of one dBA is associated with approximately two percent more people being highly annoyed. When traffic noise exceeds 60 dBA or aircraft noise exceeds 55 dBA, people may begin to complain (6). Despite this variability in behavior on an individual level, the population can be expected to exhibit the following responses to changes in noise levels as shown on Exhibit 2-B. A change of 3 dBA are considered *barely perceptible*, and changes of 5 dBA are considered *readily perceptible*. (4)

EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION



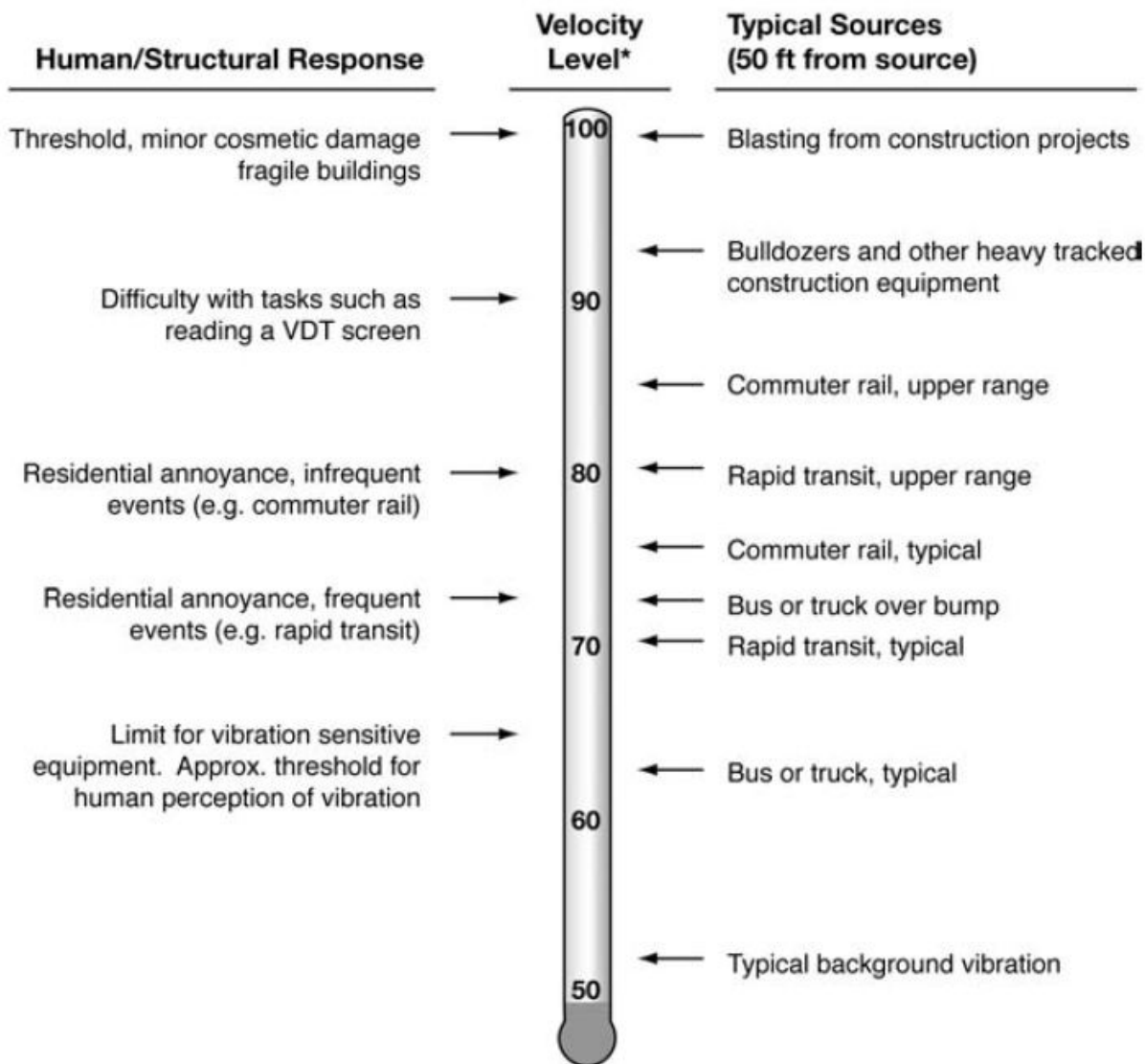
2.8 VIBRATION

Per the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* (7), vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. Decibel notation (VdB) serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment and/or activities

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Exhibit 2-C illustrates common vibration sources and the human and structural response to ground-borne vibration.

EXHIBIT 2-C: TYPICAL LEVELS OF GROUND-BORNE VIBRATION



* RMS Vibration Velocity Level in VdB relative to 10⁻⁶ inches/second

Source: Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual.

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

3 REGULATORY SETTING

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared per guidelines adopted by the Governor's Office of Planning and Research (OPR). (8) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2 STATE OF CALIFORNIA GREEN BUILDING STANDARDS CODE

The State of California's Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. (9) These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other areas where noise contours are not readily available. If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class (STC) rating of the wall and roof-ceiling assemblies must be at least 50. For those developments in areas where noise contours are not readily available and the noise level exceeds 65 dBA L_{eq} for any hour of operation, a wall and roof-ceiling combined STC rating of 45, and exterior windows with a minimum STC rating of 40 are required (Section 5.507.4.1).

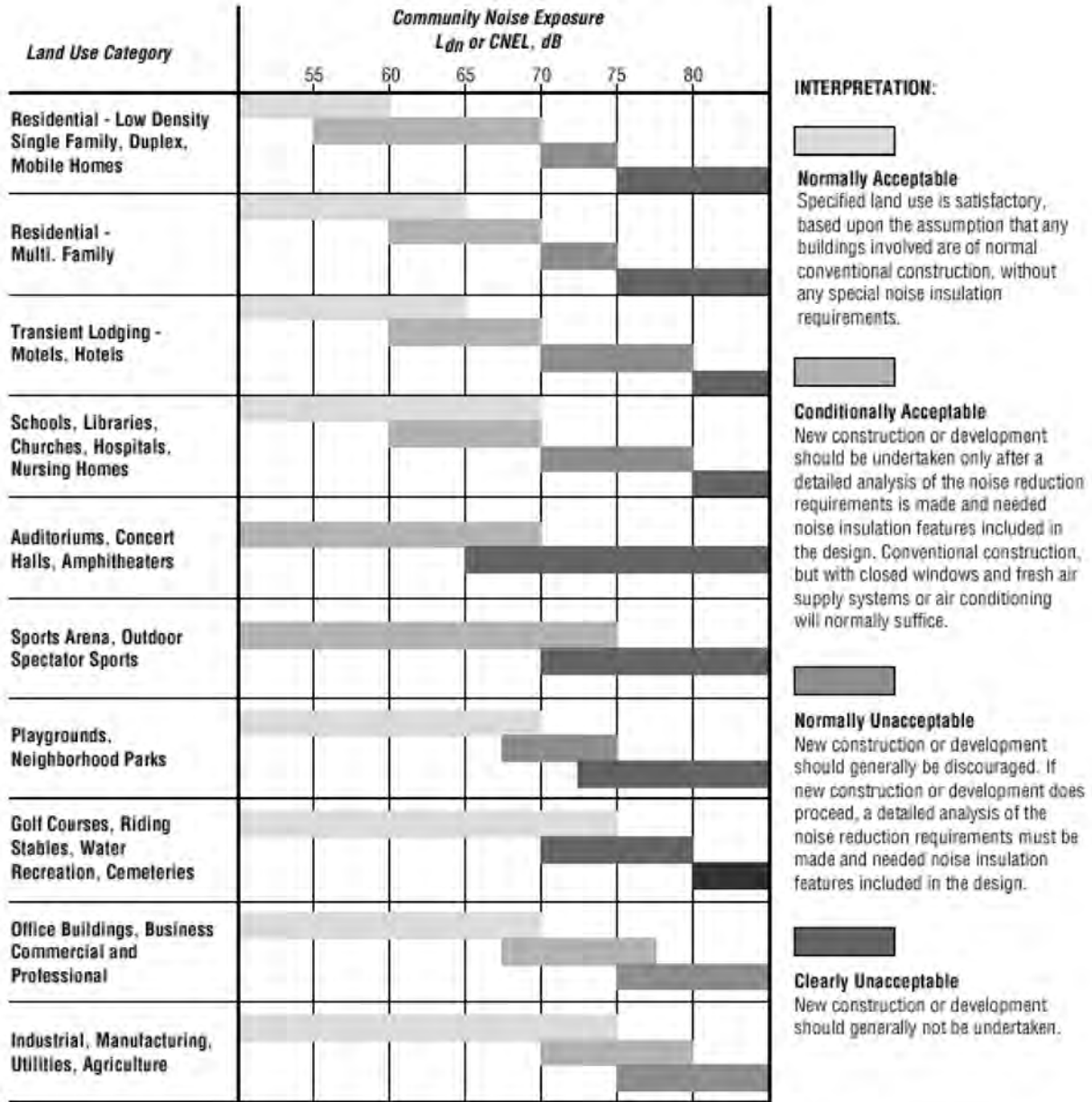
3.3 CITY OF MORENO VALLEY GENERAL PLAN NOISE ELEMENT

The City of Moreno Valley Noise Element typically provides the standards for land use compatibility for community noise exposure. However, the City of Moreno Valley General Plan does not include a noise element or specific transportation-related noise standards. Rather, noise is considered in the Environmental Safety section of the General Plan Safety Element. (10) While the General Plan provides background and noise fundamentals, it does not identify criteria to assess the impacts associated with off-site transportation-related noise impacts. Therefore, for this analysis, the transportation noise criteria are derived from standards contained in the California Office of Planning and Research (OPR) *General Plan Guidelines*. (8)

The OPR land use/noise compatibility standards are used by many California cities and counties and specify the maximum noise levels allowable for new developments impacted by transportation noise sources. The OPR land use/noise compatibility criteria, found in Figure 2 of the *General Plan Guidelines, Appendix D: Noise Element Guidelines*, identify the criteria for industrial land uses such as the Project, as shown on Exhibit 3-A. When the unmitigated exterior noise levels approach 70 dBA CNEL industrial land use is considered *normally acceptable*. With exterior noise levels ranging from 70 to 80 dBA CNEL, industrial land uses are considered *conditionally acceptable*, and with exterior noise levels greater than 80 dBA CNEL, they are considered *normally unacceptable*. For *normally unacceptable* land use, *new construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.* (8) For the purposes of this analysis, industrial land use such as the Project does not contain outdoor living areas requiring exterior noise mitigation as outlined in the OPR *General Plan Guidelines*, and therefore, only the interior noise levels experienced by employees at the Project site are evaluated against the appropriate noise level standards.

The purpose of the transportation noise criteria is to protect, create, and maintain an environment free from noise and vibration that may jeopardize the health or welfare of sensitive receptors, or degrade quality of life. City General Policies (City of Moreno Valley General Plan, pp.9-31, 9-32) act to ensure that when exterior noise levels exceed 65 dBA CNEL at sensitive receivers, mitigation is provided to ensure that interior noise levels of 45 dBA CNEL are maintained. General Plan Policies in this regard are consistent with, and support, the California Building Code interior noise standards.

EXHIBIT 3-A: LAND USE NOISE COMPATIBILITY CRITERIA



Source: OPR General Plan Guidelines, Appendix D: Noise Element Guidelines, Figure 2.

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

3.4 OPERATIONAL NOISE STANDARDS

To analyze noise impacts originating from a designated fixed location or private property such as the Compass Danbe Centerpointe Project, stationary-source (operational) noise such as the expected loading dock activity, entry gate & truck movements, roof-top air conditioning units, and trash enclosure activity are typically evaluated against standards established under a City's Municipal Code.

The City of Moreno Valley Municipal Code, Chapter 11.80 *Noise Regulation*, provides performance standards and noise control guidelines for determining and mitigating non-transportation or stationary-source noise impacts from operations at private properties. The City of Moreno Valley Municipal Code defines *Maximum Sound Levels (in dB(A)) for Source Land Uses* in Table 11.80.030-2 for *Residential* and *Commercial* land uses. As defined by the Municipal Code, Section 11.80.020 *Definitions*, *Commercial* land use means all uses of land not otherwise classified as residential, and *Residential* land use means all uses of land primarily for dwelling units, as well as hospitals, schools, colleges and universities, and places of religious assembly. (11) For the purpose of this analysis, the Compass Danbe Centerpointe Project is considered *Commercial* land use since it is not classified as residential. Based on this standard, the operational noise level limits for commercial land use, from Table 11.80.030-2, of 65 dBA L_{eq} during the daytime (8:00 a.m. to 10:00 p.m.) hours and 60 dBA L_{eq} during the nighttime (10:01 p.m. to 7:59 a.m.) hours shall apply to the operational noise source activities from the Project.

Further, Section 11.80.030 (C) *Prohibited Acts, Nonimpulsive Sound Decibel Limits*, states: *No person shall maintain, create, operate or cause to be operated on private property any source of sound in such a manner as to create any nonimpulsive sound which exceeds the limits set forth for the source land use category (as defined in Section 11.80.020) in Table 11.80.030-2 when measured at a distance of two hundred (200) feet or more from the real property line of the source of the sound, if the sound occurs on a privately owned property...* (11) Therefore, at a distance of 200 feet from the property line, the Project's operational noise levels shall not exceed the 65 dBA L_{eq} daytime and 60 dBA L_{eq} nighttime noise level standards for commercial land uses, as shown on Table 3-1.

The City of Moreno Valley Municipal Code also identifies continuous sound level limits in Table 11.80.030-1 based on the Center for Disease Control and Prevention and the National Institute for Occupational Safety and Health (NIOSH) noise exposure guidelines. A division of the U.S. Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The City of Moreno Valley noise level threshold starts at 90 dBA for more than eight hours per day, and for every increase, the exposure time is reduced. The City of Moreno Valley identifies noise level thresholds of 92 dBA for more than 6 hours per day, 95 dBA for more than 4 hour per day, 97 dBA for more than 3 hours per day, and up to 100 dBA for more than 2 hours per day. However, this noise study uses the more restrictive City of Moreno Valley commercial noise level limits identified on Table 11.80.030-2 for source land uses in the Municipal Code, shown on Table 3-1 of this report, to evaluate the potential operational noise levels due to the operation of the Project.

TABLE 3-1: OPERATIONAL NOISE STANDARDS AT 200 FEET FROM THE SOURCE

City	Source Land use	Noise Level Standards (dBA Leq) ¹	
		Daytime	Nighttime
Moreno Valley	Commercial	65	60

¹ City of Moreno Valley Municipal Code, Chapter 11.80 Noise Regulation, Table 11.80.030-2 Maximum Sound Levels (in dB(A)) for Source Land Uses when measured at a distance of 200 feet from the property line of the source land use (Appendix 3.1). Leq represents a steady state sound level containing the same total energy as a time varying signal over a given period. "Daytime" = 8:00 a.m. to 10:00 p.m.; "Nighttime" = 10:01 p.m. to 7:59 a.m.

3.5 CONSTRUCTION NOISE STANDARDS

To analyze noise impacts originating from the construction of the Compass Danbe Centerpointe site, noise from construction activities are typically evaluated against standards established under a City's Municipal Code. The Municipal Code noise standards for construction are described below for the City of Moreno Valley to determine the potential noise impacts at the nearest receiver locations. The construction-related noise standards are shown on Table 3-2.

The Municipal Code noise standards for construction are described below for the City of Moreno Valley to determine the potential noise impacts at the nearest sensitive receiver locations. As a subset of its stationary-source noise regulations, the City Municipal Code establishes permitted hours of construction activity. More specifically, Municipal Code Section 11.80.030 (D)(7), *Construction and Demolition*, provides the following:

No person shall operate, or cause operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between the hours of eight p.m. and seven a.m. the following day such that the sound there from creates a noise disturbance, except for emergency work by public service utilities or for other work approved by the city manager or designee.

Therefore, based on the Section 11.80.030 (D)(7) construction regulations, a construction-related *noise disturbance* occurs if Project construction activity occurs outside of the permitted hours. However, for this analysis, the stationary-source noise level limits of 65 dBA Leq during the daytime hours and 60 dBA Leq during the nighttime hours are used as appropriate thresholds for the nearest sensitive land uses (e.g. residential homes) in the Project study area. In addition, grading operations shall be limited to the hours identified in Section 8.21.050 (O) of 7:00 a.m. to 6:00 p.m., Monday through Friday, and 8:00 a.m. to 4:00 p.m. on weekends and holidays or as approved by the City Engineer. The City of Moreno Valley construction noise standards are shown on Table 3-2 and included in Appendix 3.1. As previously discussed in Section 3.4, the construction noise level threshold used in this noise study represents a conservative approach, since it is more restrictive than the continuous sound level limits of Table 11.80.030-1 of the City of Moreno Valley Municipal Code.

TABLE 3-2: CONSTRUCTION NOISE STANDARDS FROM THE SOURCE LAND USE

City	Permitted Hours of Construction Activity	Construction Noise Level Standard (dBA Leq) ²	
		Daytime	Nighttime
Moreno Valley ¹	General Activity: 7:00 a.m. to 8:00 p.m. on any day. Grading is limited to 7:00 a.m. to 6:00 p.m. Monday to Friday; 8:00 a.m. to 4:00 p.m. on weekends and holidays.	65	60 ³

¹ City of Moreno Valley Municipal Code, Section 11.80.030 (D)(7) and Section 8.21.050 (O) (Appendix 3.1).

² Acceptable threshold for determining the relative significance of short-term Project construction noise levels, based on the City of Moreno Valley stationary noise standards shown on Table 3-1.

³ Any nighttime construction activity requires an exemption from the City of Moreno Valley Municipal Code as indicated in Section 11.80.030 (E)(8) for a special event permit (Section 11.80.040). The special event permit application shall be submitted to the City of Moreno Valley Planning Department for approval and meet the requirements of Municipal Code Section 11.80.040.

"Daytime" = 8:00 a.m. to 10:00 p.m.; "Nighttime" = 10:01 p.m. to 7:59 a.m.

3.5 VIBRATION STANDARDS

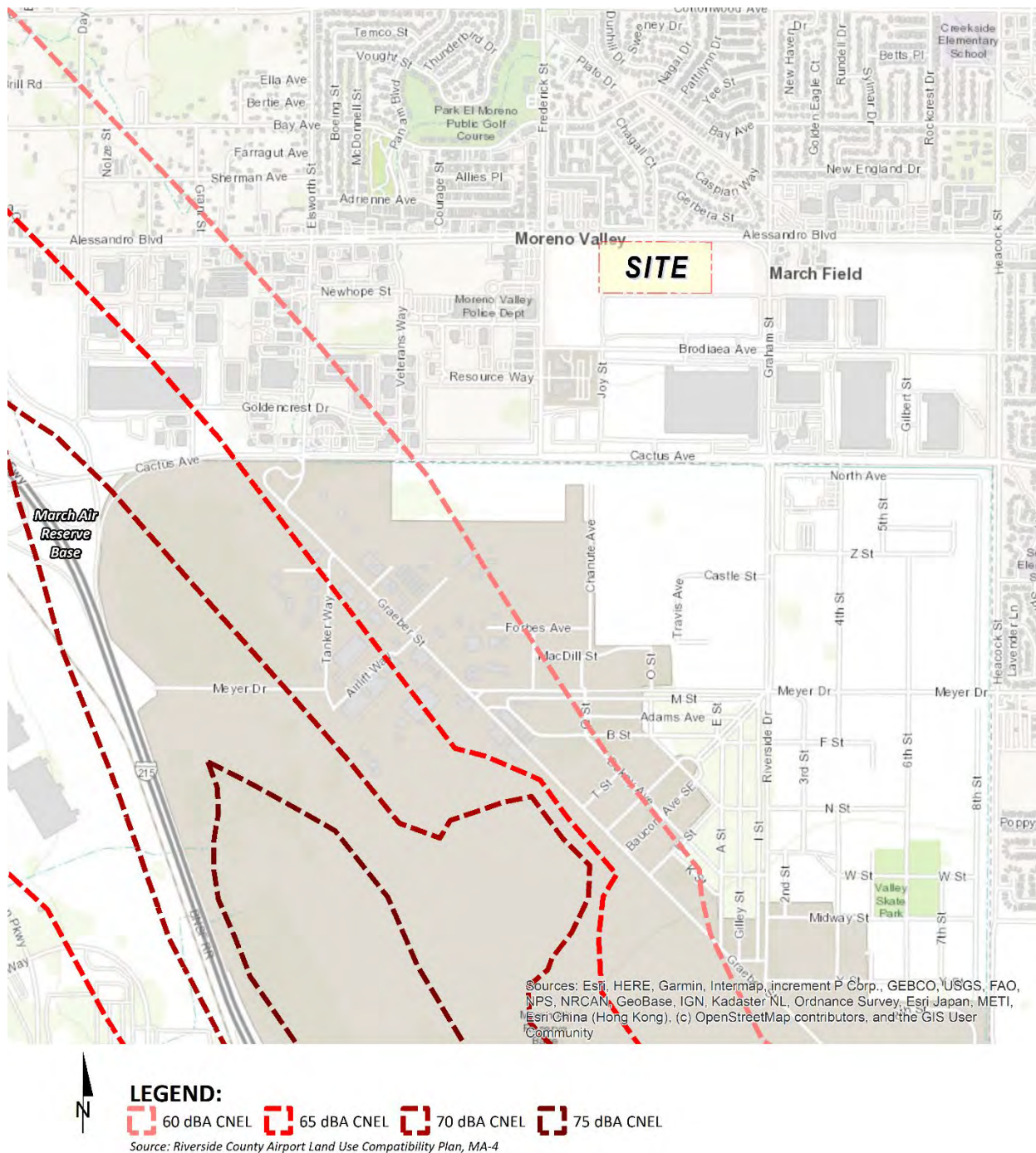
Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. (7) To analyze vibration impacts originating from the operation and construction of the Compass Danbe Centerpointe, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code, if such standards exist. However, the City of Moreno Valley does not identify specific vibration level limits and instead relies on the Federal Transit Administration (FTA) methodology. The FTA *Transit Noise and Vibration Impact Assessment* methodology provides guidelines for the maximum-acceptable vibration criteria for different types of land uses. These guidelines allow 90 VdB for industrial (workshop) use, 84 VdB for office use and 78 VdB for daytime residential uses and 72 VdB for nighttime uses in buildings where people normally sleep. (7)

3.6 MARCH AIR RESERVE BASE/INLAND PORT AIRPORT LAND USE COMPATIBILITY

The March Air Reserve Base/Inland Port Airport (MARB/IPA) is located approximately 0.9-miles south of the Project site. The *March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan* (MARB/IPA LUCP) includes the policies for determining the land use compatibility of the Project. The MARB/IPA, Map MA-1, indicates that the Project site is located within Compatibility Zone D and Zone E, which Table MA-1 Compatibility Zone Factors indicates is considered to have a *moderate to low* noise impact. Further, the Project site is located outside of the 60 dBA CNEL noise level contour boundary. Moreover, the Basic Compatibility Criteria, listed in Table MA-2 of the MARB/IPA LUCP identifies no prohibited uses for either zones. (12) The MARB/IPA LUCP does not identify industrial-use specific noise compatibility standards, and therefore, the City of Moreno Valley *Land Use Compatibility for Community Noise Exposure* matrix, previously discussed in Section 3.3, is used to assess potential aircraft-related noise levels at the Project site. The City of Moreno Valley guidelines indicate that industrial uses, such as the Project, are considered *normally acceptable* with exterior noise levels of up to 70 dBA CNEL. (13) The noise

contour boundaries of MARB/IPA are presented on Exhibit 3-B of this report and show that the Project is considered *normally acceptable* land use since it is located outside of the 60 dBA CNEL contour boundary. Further, Table MA-2 indicates that no uses are prohibited in this area.

EXHIBIT 3-B: FUTURE AIRPORT NOISE LEVEL CONTOURS



Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

4 SIGNIFICANCE CRITERIA

The following significance criteria are based on currently adopted guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (14) For the purposes of this report, impacts would be potentially significant if the Project results in or causes:

- A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- B. Generation of excessive ground-borne vibration or ground-borne noise levels?
- C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

While the City of Moreno Valley General Plan Guidelines provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts, they do not define the levels at which increases are considered substantial for use under Guideline A. CEQA Appendix G Guideline C applies to nearby public and private airports, if any, and the Project's land use compatibility.

4.1 CEQA GUIDELINES NOT FURTHER ANALYZED

In Section 3.6, the noise contour boundaries of MARB/IPA are presented on Exhibit 3-B of this report and show that the Project is considered *normally acceptable* land use since it is located outside of the 60 dBA CNEL contour. Moreover, Table MA-2 of the MARB/IPA LUCP indicates that no uses are prohibited in this area, and therefore, impacts are considered *less than significant*, and no further noise analysis is provided under Guideline C.

4.2 NOISE-SENSITIVE RECEIVERS

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders the noise impact significant*. (15)

Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding human reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called *ambient* environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged. The Federal Interagency Committee on Noise (FICON) (16) developed guidance to be used for the assessment

of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (L_{eq}).

As previously stated, the approach used in this noise study recognizes *that there is no single noise increase that renders the noise impact significant*, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (15) For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria may be exceeded. Therefore, for this analysis, FICON identifies a *readily perceptible* 5 dBA or greater project-related noise level increase is considered a significant impact when the noise criteria for a given land use is exceeded. Per the FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance.

The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with guidance provided by both the Federal Highway Administration (4 p. 9) and Caltrans (17 p. 2_48).

4.3 NON-NOISE-SENSITIVE RECEIVERS

Since the City of Moreno Valley General Plan Safety Element does not identify criteria to assess the impacts associated with off-site transportation-related noise impacts, the OPR land use/noise compatibility criteria, found in Figure 2 of the *General Plan Guidelines, Appendix D: Noise Element Guidelines* is used to determine potential impacts at adjacent land uses. As previously shown on Exhibit 3-A, the *normally acceptable* exterior noise level for non-noise-sensitive land use, such as industrial use, is 70 dBA CNEL. Noise levels greater than 70 dBA CNEL are considered *conditionally acceptable* according to the *Land Use Compatibility Criteria*. (8)

To determine if Project-related traffic noise level increases are significant at off-site non-noise-sensitive land uses, a *barely perceptible* 3 dBA criteria is used. When the without Project noise levels are greater than the *normally acceptable* 70 dBA CNEL land use compatibility criteria, a *barely perceptible* 3 dBA or greater noise level increase is considered a significant impact since the noise level criteria is already exceeded. The noise level increases used to determine significant impacts for non-noise-sensitive land uses is generally consistent with the FICON noise

level increase thresholds for noise-sensitive land uses but instead rely on the OPR land use/noise compatibility criteria, found in Figure 2 of the *General Plan Guidelines, Appendix D: Noise Element Guidelines normally acceptable 70 dBA CNEL exterior noise level criteria.*

4.4 SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. Table 4-1 shows the significance criteria summary matrix.

TABLE 4-1: SIGNIFICANCE CRITERIA SUMMARY

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site	Noise-Sensitive ¹	if ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		if ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
		if ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
	Non-Noise-Sensitive ²	if ambient is > 70 dBA CNEL	≥ 3 dBA CNEL Project increase	
Operational	Noise-Sensitive ¹	At 200' from the property line of the source ³	65 dBA Leq	60 dBA Leq
		if ambient is < 60 dBA Leq ¹	≥ 5 dBA Leq Project increase	
		if ambient is 60 - 65 dBA Leq ¹	≥ 3 dBA Leq Project increase	
		if ambient is > 65 dBA Leq ¹	≥ 1.5 dBA Leq Project increase	
		Vibration Level Threshold ⁴	78 VdB	72 VdB
Construction	Noise-Sensitive	At 200' from the property line of the source ³	65 dBA Leq	60 dBA Leq
		Vibration Level Threshold ⁴	78 VdB	n/a

¹ FICON, 1992.

² OPR General Plan Guidelines, Figure 2 Land Use Compatibility Criteria.

³ City of Moreno Valley Municipal Code, Chapter 11.80 Noise Regulation (Appendix 3.1).

⁴ Federal Transit Administration, Transit Noise and Vibration Impact Assessment.

"Daytime" = 8:00 a.m. - 10:00 p.m.; "Nighttime" = 10:01 p.m. - 7:59 a.m.

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

5 EXISTING NOISE LEVEL MEASUREMENTS

To assess the existing noise level environment, 24-hour noise level measurements were taken at five locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit 5-A provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Wednesday, September 16th, 2020. Appendix 5.1 includes study area photos.

5.1 MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (18)

5.2 NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent every part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines which indicate that, *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources.* (2) Further, FTA guidance states, *that it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community.* (7)

Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence, because each receiver measurement represents a group of buildings that share acoustical equivalence. (7) In other words, the area represented by the receiver shares similar shielding, terrain, and geometric relationship to the reference noise source. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearest sensitive receiver locations allows for a comparison of the before and after Project noise levels

and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels.

5.3 NOISE MEASUREMENT RESULTS

The noise measurements presented below focus on the average or equivalent sound levels (L_{eq}). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table 5-1 identifies the hourly daytime (8:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 8:00 a.m.) noise levels at each noise level measurement location.

Table 5-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 provides summary worksheets of the noise levels for each hour as well as the minimum, maximum, L_1 , L_2 , L_5 , L_8 , L_{25} , L_{50} , L_{90} , L_{95} , and L_{99} percentile noise levels observed during the daytime and nighttime periods.

The background ambient noise levels in the Project study area are dominated by the transportation-related noise associated with surface streets. This includes the auto and heavy truck activities on study area roadway segments near the noise level measurement locations.

TABLE 5-1: 24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS

Location ¹	Description	Energy Average Noise Level (dBA L_{eq}) ²		CNEL
		Daytime	Nighttime	
L1	Located north of the Project site on Alessandro Boulevard near existing single-family residential home at 13994 Chagall Court.	68.7	67.3	73.8
L2	Located east of the Project site by existing Motel 6 at 23581 Alessandro Boulevard.	61.1	56.3	64.1
L3	Located southwest of the Project site by the Moreno Valley City Hall at 14177 Frederick Street.	57.3	55.9	62.4
L4	Located northwest of the Project site on Fredrick Street near existing single-family residential home at 13979 Frederick Street.	66.0	63.5	70.6
L5	Located north of the Project site on Alessandro Boulevard near existing multi-family residential homes at 13933 Chagall Court.	71.0	67.9	74.8



¹ See Exhibit 5-A for the noise level measurement locations.

² Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.

"Daytime" = 8:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 8:00 a.m.

EXHIBIT 5-A: NOISE MEASUREMENT LOCATIONS



LEGEND:
 N
 Measurement Locations

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

6 METHODS AND PROCEDURES

The following section outlines the methods and procedures used to model and analyze the future traffic noise environment. Consistent with the *Land Use Compatibility Criteria*, all transportation related noise levels are presented in terms of the 24-hour CNEL's.

6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

The expected roadway noise level increases from vehicular traffic were calculated by Urban Crossroads, Inc. using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (19) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (20) Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period. Research conducted by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis. (21)

6.2 OFF-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

Table 6-1 presents the roadway parameters used to assess the Project's off-site dBA CNEL transportation noise impacts. Table 6-1 identifies the 4 study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications per the City of Moreno Valley General Plan Circulation Element, and the posted vehicle speeds. The ADT volumes used in this study area presented on Table 6-2 are based on the *Alessandro Warehouse Traffic Analysis*, prepared by Urban Crossroads, Inc. for the following traffic scenarios under both Without and With Project alternatives: Existing (2020), and Existing plus Ambient Growth plus Project (EAP). (22)

The ADT volumes vary for each roadway segment based on the existing traffic volumes and the combination of project traffic distributions. This analysis relies on a comparative evaluation of the off-site traffic noise impacts, without and with project ADT traffic volumes from the Project traffic study.

TABLE 6-1: OFF-SITE ROADWAY PARAMETERS

ID	Roadway	Segment	Receiving Existing Land Use ¹	Distance from Centerline to Receiving Land Use (Feet) ²	Vehicle Speed (mph) ³
1	Graham St.	s/o Alessandro Bl.	Non-Sensitive	44'	40
2	Alessandro Bl.	w/o Frederick St.	Sensitive	55'	45
3	Alessandro Bl.	w/o Graham St.	Sensitive	55'	45
4	Alessandro Bl.	e/o Graham St.	Non-Sensitive	55'	45

¹ Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

² Distance to receiving land use is based upon the right-of-way distances.

³ Alessandro Warehouse Traffic Analysis, Urban Crossroads, Inc.

TABLE 6-2: AVERAGE DAILY TRAFFIC VOLUMES

ID	Roadway	Segment	Average Daily Traffic Volumes ¹			
			Existing 2020		Existing Plus Ambient Growth	
			Without Project	With Project	Without Project	With Project
1	Graham St.	s/o Alessandro Bl.	11,231	11,765	11,684	12,219
2	Alessandro Bl.	w/o Frederick St.	38,736	38,794	40,171	40,227
3	Alessandro Bl.	w/o Graham St.	38,944	39,592	40,517	41,163
4	Alessandro Bl.	e/o Graham St.	41,770	41,799	43,458	43,484

¹ Alessandro Warehouse Traffic Analysis, Urban Crossroads, Inc.

To quantify the off-site noise levels, the Project related truck trips were added to the heavy truck category in the FHWA noise prediction model. The addition of the Project related truck trips increases the percentage of heavy trucks in the vehicle mix. This approach recognizes that the FHWA noise prediction model is significantly influenced by the number of heavy trucks in the vehicle mix.

Table 6-3 provides the time of day (daytime, evening, and nighttime) vehicle splits. The daily Project truck trip-ends were assigned to the individual off-site study area roadway segments based on the Project truck trip distribution percentages documented in the *Traffic Impact Analysis*. Using the Project truck trips in combination with the Project trip distribution, Urban Crossroads, Inc. calculated the number of additional Project truck trips and vehicle mix percentages for each of the study area roadway segments. Table 6-4 shows the traffic flow by vehicle type (vehicle mix) used for all without Project traffic scenarios, and Tables 6-5 and 6-6 show the vehicle mixes used for the with Project traffic scenarios.

TABLE 6-3: TIME OF DAY VEHICLE SPLITS

Vehicle Type	Time of Day Splits ¹			Total of Time of Day Splits
	Daytime	Evening	Nighttime	
Autos	77.50%	12.90%	9.60%	100.00%
Medium Trucks	84.80%	4.90%	10.30%	100.00%
Heavy Trucks	86.50%	2.70%	10.80%	100.00%

¹ County of Riverside Office of Industrial Hygiene. Values rounded to the nearest one-hundredth.

"Daytime" = 7:00 a.m. to 7:00 p.m.; "Evening" = 7:00 p.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

TABLE 6-4: WITHOUT PROJECT VEHICLE MIX

Classification	Total % Traffic Flow			Total
	Autos	Medium Trucks	Heavy Trucks	
All Segments	98.89%	0.70%	0.42%	100.00%

Based on an existing vehicle count taken at Frederick Street and Alessandro Boulevard (Alessandro Warehouse Traffic Analysis, Urban Crossroads, Inc.). Vehicle mix percentage values rounded to the nearest one-hundredth.

Due to the added Project truck trips, the increase in Project traffic volumes and the distributions of trucks on the study area road segments, the percentage of autos, medium trucks and heavy trucks will vary for each of the traffic scenarios. This explains why the existing and future traffic volumes and vehicle mixes vary between seemingly identical study area roadway segments.

TABLE 6-5: EXISTING WITH PROJECT VEHICLE MIX

ID	Roadway	Segment	With Project ¹			
			Autos	Medium Trucks	Heavy Trucks	Total ²
1	Graham St.	s/o Alessandro Bl.	97.03%	1.12%	1.84%	100.00%
2	Alessandro Bl.	w/o Frederick St.	99.00%	0.70%	0.30%	100.00%
3	Alessandro Bl.	w/o Graham St.	98.57%	0.82%	0.60%	100.00%
4	Alessandro Bl.	e/o Graham St.	99.00%	0.70%	0.30%	100.00%

¹ Alessandro Warehouse Traffic Analysis, Urban Crossroads, Inc.

² Total of vehicle mix percentage values rounded to the nearest one-hundredth.

TABLE 6-6: EXISTING PLUS AMBIENT GROWTH WITH PROJECT VEHICLE MIX

ID	Roadway	Segment	With Project ¹			
			Autos	Medium Trucks	Heavy Trucks	Total ²
1	Graham St.	s/o Alessandro Bl.	97.10%	1.11%	1.79%	100.00%
2	Alessandro Bl.	w/o Frederick St.	99.00%	0.70%	0.30%	100.00%
3	Alessandro Bl.	w/o Graham St.	98.59%	0.82%	0.59%	100.00%
4	Alessandro Bl.	e/o Graham St.	99.00%	0.70%	0.30%	100.00%

¹ Alessandro Warehouse Traffic Analysis, Urban Crossroads, Inc.

² Total of vehicle mix percentage values rounded to the nearest one-hundredth.

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

7 OFF-SITE TRANSPORTATION NOISE IMPACTS

To assess the off-site transportation CNEL noise level impacts associated with the proposed Project, noise contours were developed based on the *Alessandro Warehouse Traffic Analysis*. (22) Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway.

7.1 TRAFFIC NOISE CONTOURS

Noise contours were used to assess the Project's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area.

Tables 7-1 through 7-4 present a summary of the exterior dBA CNEL traffic noise levels without barrier attenuation. Roadway segments are analyzed from the without Project to the with Project conditions in each of the following timeframes: Existing (2020), and Existing plus Ambient Growth plus Project (EAP). Appendix 7.1 includes a summary of the dBA CNEL traffic noise level contours for each of the traffic scenarios.

TABLE 7-1: EXISTING WITHOUT PROJECT NOISE CONTOURS

ID	Road	Segment	Receiving Existing Land Use ¹	CNEL at Receiving Land Use (dBA) ²	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Graham St.	s/o Alessandro Bl.	Non-Sensitive	66.9	RW	59	127
2	Alessandro Bl.	w/o Frederick St.	Sensitive	72.7	84	180	388
3	Alessandro Bl.	w/o Graham St.	Sensitive	72.8	84	181	390
4	Alessandro Bl.	e/o Graham St.	Non-Sensitive	73.1	88	190	408

¹ Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

² The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-2: EXISTING WITH PROJECT NOISE CONTOURS

ID	Road	Segment	Receiving Existing Land Use ¹	CNEL at Receiving Land Use (dBA) ²	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Graham St.	s/o Alessandro Bl.	Non-Sensitive	68.9	RW	80	173
2	Alessandro Bl.	w/o Frederick St.	Sensitive	72.7	84	181	389
3	Alessandro Bl.	w/o Graham St.	Sensitive	73.3	92	197	425
4	Alessandro Bl.	e/o Graham St.	Non-Sensitive	73.1	88	190	409

¹ Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

² The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-3: EXISTING PLUS AMBIENT GROWTH WITHOUT PROJECT NOISE CONTOURS

ID	Road	Segment	Receiving Existing Land Use ¹	CNEL at Receiving Land Use (dBA) ²	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Graham St.	s/o Alessandro Bl.	Non-Sensitive	67.1	RW	61	131
2	Alessandro Bl.	w/o Frederick St.	Sensitive	72.9	86	185	398
3	Alessandro Bl.	w/o Graham St.	Sensitive	72.9	86	186	400
4	Alessandro Bl.	e/o Graham St.	Non-Sensitive	73.2	90	195	419

¹ Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

² The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 7-4: EXISTING PLUS AMBIENT GROWTH WITH PROJECT NOISE CONTOURS

ID	Road	Segment	Receiving Existing Land Use ¹	CNEL at Receiving Land Use (dBA) ²	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Graham St.	s/o Alessandro Bl.	Non-Sensitive	69.0	RW	82	176
2	Alessandro Bl.	w/o Frederick St.	Sensitive	72.9	86	185	398
3	Alessandro Bl.	w/o Graham St.	Sensitive	73.5	94	202	435
4	Alessandro Bl.	e/o Graham St.	Non-Sensitive	73.2	90	195	420

¹ Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

² The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.

"RW" = Location of the respective noise contour falls within the right-of-way of the road.

7.2 EXISTING PROJECT TRAFFIC NOISE LEVEL INCREASES

An analysis of existing traffic noise levels plus traffic noise generated by the proposed Project has been included in this report to fully analyze all the existing traffic scenarios identified in the *Alessandro Warehouse Traffic Analysis*. This condition is provided solely for informational purposes and will not occur, since the Project will not be fully developed and occupied under Existing conditions. Table 7-1 shows the Existing without Project conditions CNEL noise levels. The Existing without Project exterior noise levels are expected to range from 66.9 to 73.1 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-2 shows the Existing with Project conditions will range from 68.9 to 73.3 dBA CNEL. Table 7-5 shows that the Project off-site traffic noise level impacts will range from 0.0 to 2.0 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Table 4-1, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases on receiving land uses due to the Project-related traffic.

7.3 EXISTING PLUS AMBIENT GROWTH PROJECT TRAFFIC NOISE LEVEL INCREASES

Table 7-3 presents the Existing plus Ambient Growth without Project conditions CNEL noise levels. The Existing plus Ambient Growth without Project exterior noise levels are expected to range from 67.1 to 73.2 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-4 shows the Existing plus Ambient Growth with Project conditions will range from 69.0 to 73.5 dBA CNEL. Table 7-6 shows that the Project off-site traffic noise level increases will range from 0.0 to 1.9 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Table 4-1, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases on receiving land uses due to the Project-related traffic.

TABLE 7-5: EXISTING WITH PROJECT TRAFFIC NOISE LEVEL INCREASES

ID	Road	Segment	Receiving Existing Land Use ¹	CNEL at Receiving Land Use (dBA) ²			Incremental Noise Level Increase Threshold ³	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Graham St.	s/o Alessandro Bl.	Non-Sensitive	66.9	68.9	2.0	n/a	No
2	Alessandro Bl.	w/o Frederick St.	Sensitive	72.7	72.7	0.0	1.5	No
3	Alessandro Bl.	w/o Graham St.	Sensitive	72.8	73.3	0.6	1.5	No
4	Alessandro Bl.	e/o Graham St.	Non-Sensitive	73.1	73.1	0.0	3.0	No

¹ Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

³ Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

TABLE 7-6: EXISTING PLUS AMBIENT GROWTH WITH PROJECT TRAFFIC NOISE INCREASES

ID	Road	Segment	Receiving Existing Land Use ¹	CNEL at Receiving Land Use (dBA) ²			Incremental Noise Level Increase Threshold ³	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Graham St.	s/o Alessandro Bl.	Non-Sensitive	67.1	69.0	1.9	n/a	No
2	Alessandro Bl.	w/o Frederick St.	Sensitive	72.9	72.9	0.0	1.5	No
3	Alessandro Bl.	w/o Graham St.	Sensitive	72.9	73.5	0.5	1.5	No
4	Alessandro Bl.	e/o Graham St.	Non-Sensitive	73.2	73.2	0.0	3.0	No

¹ Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

³ Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

8 SENSITIVE RECEIVER LOCATIONS

To assess the potential for long-term operational and short-term construction noise impacts, the following sensitive receiver locations, as shown on Exhibit 8-A, were identified as representative locations for analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, outpatient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

To describe the potential off-site Project noise levels, five receiver locations in the vicinity of the Project site were identified. All distances are measured from the Project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever is closer to the Project site. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA, as previously described in Section 5.2. Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the project boundary to each receiver location.

- R1: Location R1 represents the existing noise sensitive residence at 13994 Chagall Court, approximately 152 feet north of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R1 is placed at the residential building façade. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.
- R2: Location R2 represents the Motel 6 at 23581 Alessandro Blvd, approximately 1,023 feet east of the Project site. Receiver R2 is placed at the building façade. A 24-hour noise measurement was taken near this location, L2, to describe the existing ambient noise environment.
- R3: Location R3 represents the Moreno Valley City Hall at 14177 Frederick Street, approximately 744 feet west of the Project site. Receiver R3 is placed at the building façade. A 24-hour noise measurement near this location, L3, is used to describe the existing ambient noise environment.
- R4: Location R4 represents the existing noise sensitive residence at 13979 Frederick Street, approximately 784 feet northwest of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R4 is placed at the residential building façade. A 24-hour noise measurement near this location, L4, is used to describe the existing ambient noise environment.

R5: Location R5 represents the existing noise sensitive residences at 13933 Chagall Court, approximately 217 feet north of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R5 is placed at the residential building façade. A 24-hour noise measurement near this location, L5, is used to describe the existing ambient noise environment.

EXHIBIT 8-A: SENSITIVE RECEIVER LOCATIONS



LEGEND:
 N
 ● Receiver Locations
 — Distance from receiver to Project site boundary (in feet)
 6' Existing Barrier Height (in feet)
 — Existing Barrier

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

9 OPERATIONAL NOISE IMPACTS

This section analyzes the potential stationary-source operational noise impacts at the nearest receiver locations, identified in Section 8, resulting from the operation of the proposed Compass Danbe Centerpointe Project. Exhibit 9-A identifies the representative noise source locations used to assess the operational noise levels.

9.1 OPERATIONAL NOISE SOURCES

At the time this noise analysis was prepared the future tenants of the proposed Project were unknown. Therefore, this operational noise analysis is intended to describe noise level impacts associated with the expected typical of daytime and nighttime activities at the Project site. To present the potential worst-case noise conditions, this analysis assumes the Project would be operational 24 hours per day, seven days per week. Consistent with similar warehouse uses, the Project business operations would primarily be conducted within the enclosed buildings, except for traffic movement, parking, as well as loading and unloading of trucks at designated loading bays. The on-site Project-related noise sources are expected to include: loading dock activity, entry gate & truck movements, roof-top air conditioning units, and trash enclosure activity.

9.2 REFERENCE NOISE LEVELS

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. This section provides a detailed description of the reference noise level measurements shown on Table 9-1 used to estimate the Project operational noise impacts. It is important to note that the following projected noise levels assume the worst-case noise environment with the loading dock activity, entry gate & truck movements, roof-top air conditioning units, and trash enclosure activity all operating continuously. These sources of noise activity will likely vary throughout the day.

EXHIBIT 9-A: OPERATIONAL NOISE SOURCE LOCATIONS



- LEGEND:**
- Site Boundary
 - Roof-Top Air Conditioning Unit
 - Entry Gate & Truck Movements
 - Loading Dock Activity
 - Trash Enclosure Activity

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 9-1: REFERENCE NOISE LEVEL MEASUREMENTS

Noise Source ¹	Noise Source Height (Feet)	Min./Hour ²		Reference Noise Level (dBA Leq) @ 50 Feet	Sound Power Level (dBA) ³
		Day	Night		
Loading Dock Activity	8'	60	60	65.7	111.5
Entry Gate & Truck Movements	8'	- ⁴	- ⁴	58.0	89.7
Roof-Top Air Conditioning Units	5'	39	28	57.2	88.9
Trash Enclosure Activity	5'	5	5	57.3	89.0

¹ As measured by Urban Crossroads, Inc.

² Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site. "Daytime" = 8:00 a.m. - 10:00 p.m.; "Nighttime" = 10:01 p.m. - 7:59 a.m.

³ Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source. Numbers may vary due to size differences between point and area noise sources.

⁴ Entry Gate & Truck Movements are calculate based on the number of events by time of day (See Table 9-2).

9.2.1 MEASUREMENT PROCEDURES

The reference noise level measurements presented in this section were collected using a Larson Davis LxT Type 1 precisions sound level meter (serial number 01146). The LxT sound level meter was calibrated using a Larson-Davis calibrator, Model CAL 200, was programmed in "slow" mode to record noise levels in "A" weighted form and was located at approximately five feet above the ground elevation for each measurement. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (18)

9.2.2 LOADING DOCK ACTIVITY

To describe the loading dock activities, a reference noise level measurement was collected to represent the truck activities. The reference noise level measurement was taken in the center of the loading dock activity area and represents multiple concurrent noise sources resulting in a combined noise level of 65.7 dBA Leq at a uniform distance of 50 feet. Specifically, the reference noise level measurement represents one truck located approximately 30 feet from the noise level meter with another truck passing by to park roughly 20 feet away, both with their engines idling. Throughout the reference noise level measurement, a separate docked and running reefer truck was located approximately 50 feet east of the measurement location. Additional background noise sources included truck pass-by noise, truck drivers talking to each other next to docked trucks, and air brake release noise when trucks parked.

9.2.3 ENTRY GATE & TRUCK MOVEMENTS

An entry gate and truck movements reference noise level measurement were taken over a 15-minute period and represents multiple noise sources producing a reference noise level of 58.0 dBA Leq at 50 feet. The noise sources included at this measurement location account for the

rattling and squeaking during normal opening and closing operations, the gate closure equipment, truck engines idling outside the entry gate, truck movements through the entry gate, and background truck court activities and forklift backup alarm noise.

Consistent with the *Alessandro Warehouse Traffic Analysis*, the Project is expected to generate a total of approximately 742 trip-ends per day (actual vehicles) and includes 224 truck trip-ends per day. (22) This noise study relies on the actual Project trips (as opposed to the passenger car equivalents) to accurately account for the effect of individual truck trips on the study area roadway network. Using the estimated number of truck trips in combination with time of day vehicle splits, the number of entry gate and truck movements by driveway location were calculated. As shown on Table 9-2, this information is then used to calculate the entry gate and truck movements operational noise source activity based on the number of events by time of day.

TABLE 9-2: ENTRY GATE & TRUCK MOVEMENTS BY LOCATION

Entry Gate & Truck Movement Location ¹	Total Project Truck Trips ²	Trip Dist. ³		Truck Trips by Location ⁴	Time of Day Vehicle Splits ⁵			Truck Movements ⁶		
		In	Out		Day	Evening	Night	Day	Evening	Night
Driveway 1	224	90%	10%	112	86.50%	2.70%	10.80%	97	3	12
Driveway 3		10%	90%	112	86.50%	2.70%	10.80%	97	3	12

¹ Driveway locations as shown on Exhibit 9-A.

² Total Project truck trips according to Table 4-2 of the Alessandro Warehouse Traffic Analysis.

³ Project truck trip distribution according to Exhibit 4-2 of the Alessandro Warehouse Traffic Analysis.

⁴ Calculated trip trucks per location represents the product of the total (inbound and outbound) project truck trips by and the trip distribution.

⁵ Heavy truck time of day vehicle splits as shown on Table 6-3.

⁶ Calculated time of day entry gate and truck movements by location.

9.2.4 ROOF-TOP AIR CONDITIONING UNITS

The noise level measurements describe a single mechanical roof-top air conditioning unit. The reference noise level represents a Lennox SCA120 series 10-ton model packaged air conditioning unit. At the uniform reference distance of 50 feet, the reference noise levels are 57.2 dBA L_{eq} . Based on the typical operating conditions observed over a four-day measurement period, the roof-top air conditioning units are estimated to operate for and average 39 minutes per hour during the daytime hours, and 28 minutes per hour during the nighttime hours. These operating conditions reflect peak summer cooling requirements with measured temperatures approaching 96 degrees Fahrenheit (°F) with average daytime temperatures of 82°F. For this noise analysis, the air conditioning units are expected to be located on the roof of the Project buildings.

9.2.5 TRASH ENCLOSURE ACTIVITY

The measured reference noise level at the uniform 50-foot reference distance is 57.3 dBA L_{eq} for the trash enclosure activity. The trash enclosure activity noise levels include two metal gates opening and closing, metal scraping against concrete floor sounds, dumpster movement on metal wheels, trash dropping into the metal dumpster, and background parking lot vehicle movements.

Noise associated with trash enclosure activities is conservatively expected to occur for 5 minutes per hour.

9.3 CADNAA NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels.

Using the ISO 9613 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level at each receiver and the partial noise level contributions by noise source. Consistent with the ISO 9613 protocol, the CadnaA noise prediction model relies on the reference sound power level (L_w) to describe individual noise sources. While sound pressure levels (e.g. L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish as a result of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment.

The operational noise level calculations provided in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 9.1 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

9.4 PROJECT OPERATIONAL NOISE LEVELS

Using the reference noise levels to represent the proposed Project operations that include loading dock activity, entry gate & truck movements, roof-top air conditioning units, and trash enclosure activity, Urban Crossroads, Inc. calculated the operational source noise levels that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations and at 200 feet from the property line of the source. Tables 9-3 shows the Project operational noise levels during the daytime hours of 8:00 a.m. to 10:00 p.m. The daytime hourly noise levels at the off-site receiver locations are expected to range from 35.1 to 55.6 dBA L_{eq} .

TABLE 9-3: DAYTIME PROJECT OPERATIONAL NOISE LEVELS

Noise Source ¹	Operational Noise Levels by Receiver Location (dBA Leq)					
	R1	R2	R3	R4	R5	at 200'
Loading Dock Activity	34.9	43.3	48.8	31.5	32.7	55.4
Entry Gate & Truck Movements	25.6	30.4	33.3	31.0	30.4	41.0
Roof-Top Air Conditioning Units	37.4	25.9	26.5	27.6	36.6	29.1
Trash Enclosure Activity	1.0	14.3	18.2	2.7	1.3	25.2
Total (All Noise Sources)	39.5	43.6	48.9	35.1	38.8	55.6

¹ See Exhibit 9-A for the noise source locations. CadnaA noise model calculations are included in Appendix 9.1.

Table 9-4 shows the Project operational noise levels during the nighttime hours of 10:01 p.m. to 7:59 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 32.8 to 55.4 dBA L_{eq} . The differences between the daytime and nighttime noise levels is largely related to the duration of noise activity (Table 9-1).

TABLE 9-4: NIGHTTIME PROJECT OPERATIONAL NOISE LEVELS

Noise Source ¹	Operational Noise Levels by Receiver Location (dBA Leq)					
	R1	R2	R3	R4	R5	at 200'
Loading Dock Activity	34.9	43.3	48.8	31.5	32.7	55.4
Entry Gate & Truck Movements	16.5	21.3	24.2	21.9	21.3	32.0
Roof-Top Air Conditioning Units	35.0	23.5	24.1	25.2	34.2	26.7
Trash Enclosure Activity	0.0	13.3	17.2	1.8	0.4	24.3
Total (All Noise Sources)	38.0	43.4	48.8	32.8	36.7	55.4

¹ See Exhibit 9-A for the noise source locations. CadnaA noise model calculations are included in Appendix 9.1.

9.5 PROJECT OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Moreno Valley exterior noise level standards at the nearest noise-sensitive receiver locations. Table 9-5 shows the operational noise levels associated with Compass Danbe Centerpointe Project will satisfy the City of Moreno Valley 65 dBA L_{eq} daytime and 60 dBA L_{eq} nighttime exterior noise level standards at all the nearest receiver locations and at 200 feet from the property line of the source. Therefore, the operational noise impacts are considered *less than significant* at the nearest noise-sensitive receiver locations.

TABLE 9-5: OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location ¹	Project Operational Noise Levels (dBA Leq) ²		Noise Level Standards (dBA Leq) ³		Noise Level Standards Exceeded? ⁴	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	39.5	38.0	65	60	No	No
R2	43.6	43.4	65	60	No	No
R3	48.9	48.8	65	60	No	No
R4	35.1	32.8	65	60	No	No
R5	38.8	36.7	65	60	No	No
at 200'	55.6	55.4	65	60	No	No

¹ See Exhibit 8-A for the receiver locations.

² Proposed Project operational noise levels as shown on Tables 9-3 and 9-4.

³ Exterior noise level standards for source (commercial) land use, as shown on Table 4-1.

⁴ Do the estimated Project operational noise source activities exceed the noise level standards?

"Daytime" = 8:00 a.m. - 10:00 p.m.; "Nighttime" = 10:01 p.m. - 7:59 a.m.

9.6 PROJECT OPERATIONAL NOISE LEVEL INCREASES

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearest receiver locations potentially impacted by Project operational noise sources. Since the units used to measure noise, decibels (dB), are logarithmic units, the Project-operational and existing ambient noise levels cannot be combined using standard arithmetic equations. (2) Instead, they must be logarithmically added using the following base equation:

$$SPL_{Total} = 10\log_{10}[10^{SPL1/10} + 10^{SPL2/10} + \dots + 10^{SPLn/10}]$$

Where "SPL1," "SPL2," etc. are equal to the sound pressure levels being combined, or in this case, the Project-operational and existing ambient noise levels. The difference between the combined Project and ambient noise levels describe the Project noise level increases to the existing ambient noise environment. As indicated on Tables 9-6 and 9-7, the Project is not expected to generate a measurable daytime and nighttime operational noise level increase dBA Leq at the nearest receiver locations and at 200 feet from the property line of the source. Project-related operational noise level increases will satisfy the operational noise level increase significance criteria presented in Table 4-1. Therefore, the incremental Project operational noise level increase is considered *less than significant* at all receiver locations.

TABLE 9-6: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

Receiver Location ¹	Total Project Operational Noise Level ²	Measurement Location ³	Reference Ambient Noise Levels ⁴	Combined Project and Ambient ⁵	Project Increase ⁶	Increase Criteria ⁷	Increase Criteria Exceeded?
R1	39.5	L1	68.7	68.7	0.0	1.5	No
R2	43.6	L2	61.1	61.2	0.1	3.0	No
R3	48.9	L3	57.3	57.9	0.6	5.0	No
R4	35.1	L4	66.0	66.0	0.0	1.5	No
R5	38.8	L5	71.0	71.0	0.0	1.5	No
at 200'	55.6	L1	68.7	68.9	0.2	1.5	No

¹ See Exhibit 8-A for the receiver locations.
² Total Project daytime operational noise levels as shown on Table 9-3.
³ Reference noise level measurement locations as shown on Exhibit 5-A.
⁴ Observed daytime ambient noise levels as shown on Table 5-1.
⁵ Represents the combined ambient conditions plus the Project activities.
⁶ The noise level increase expected with the addition of the proposed Project activities.
⁷ Significance increase criteria as shown on Table 4-1.

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

TABLE 9-7: NIGHTTIME OPERATIONAL NOISE LEVEL INCREASES

Receiver Location ¹	Total Project Operational Noise Level ²	Measurement Location ³	Reference Ambient Noise Levels ⁴	Combined Project and Ambient ⁵	Project Increase ⁶	Increase Criteria ⁷	Increase Criteria Exceeded?
R1	38.0	L1	67.3	67.3	0.0	1.5	No
R2	43.4	L2	56.3	56.5	0.2	5.0	No
R3	48.8	L3	55.9	56.7	0.8	5.0	No
R4	32.8	L4	63.5	63.5	0.0	3.0	No
R5	36.7	L5	67.9	67.9	0.0	1.5	No
at 200'	55.4	L1	67.3	67.6	0.3	1.5	No

¹ See Exhibit 8-A for the receiver locations.
² Total Project nighttime operational noise levels as shown on Table 9-4.
³ Reference noise level measurement locations as shown on Exhibit 5-A.
⁴ Observed nighttime ambient noise levels as shown on Table 5-1.
⁵ Represents the combined ambient conditions plus the Project activities.
⁶ The noise level increase expected with the addition of the proposed Project activities.
⁷ Significance increase criteria as shown on Table 4-1.

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

10 CONSTRUCTION IMPACTS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 10-A shows the construction noise source locations in relation to the nearest sensitive receiver locations previously described in Section 8.

To prevent high levels of construction noise from impacting noise-sensitive land uses, City of Moreno Valley Municipal Code Section 11.80.030 (D)(7) limits general construction activities within 200 feet of residential uses to weekdays, between 7:00 a.m. and 8:00 p.m. In addition, grading operations shall be limited to the hours identified in Section 8.21.050 (O) of 7:00 a.m. to 6:00 p.m., Monday through Friday, and 8:00 a.m. to 4:00 p.m. on weekends and holidays or as approved by the City Engineer.

10.1 CONSTRUCTION NOISE LEVELS

Noise generated by the Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment is expected to occur in the following stages:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

This construction noise analysis was prepared using reference noise level measurements taken by Urban Crossroads, Inc. to describe the typical construction activity noise levels for each stage of Project construction. The construction reference noise level measurements represent a list of typical construction activity noise levels.

10.2 CONSTRUCTION REFERENCE NOISE LEVELS

To describe the Project construction noise levels, measurements were collected for similar activities at several construction sites. Table 10-1 provides a summary of the construction reference noise level measurements. Since the reference noise levels were collected at varying distances of 30 feet and 50 feet, all construction noise level measurements presented on Table 10-1 have been adjusted for consistency to describe a uniform reference distance of 50 feet.

EXHIBIT 10-A: TYPICAL CONSTRUCTION NOISE SOURCE LOCATIONS



- LEGEND:**
- N
 - Receiver Locations
 - Distance from receiver to Project site boundary (in feet)
 - Existing Barrier Height (in feet)
 - Existing Barrier

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 10-1: TYPICAL CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Reference Construction Activity ¹	Reference Noise Level @ 50 Feet (dBA Leq)	Highest Reference Noise Level (dBA Leq)
Site Preparation	Scraper Turnaround & Pass-by 4 with Blades	72.6	72.6
	Backhoe	64.2	
	Water Truck Pass-By & Backup Alarm	71.9	
Grading	Rough Grading Activities	73.5	73.5
	Water Truck Pass-By & Backup Alarm	71.9	
	Construction Vehicle Maintenance Activities	67.5	
Building Construction	Foundation Trenching	68.2	71.6
	Framing	62.3	
	Concrete Mixer Backup Alarms & Air Brakes	71.6	
Paving	Concrete Mixer Truck Movements	71.2	71.2
	Concrete Paver Activities	65.6	
	Concrete Mixer Pour & Paving Activities	65.9	
Architectural Coating	Air Compressors	65.2	65.2
	Generator	64.9	
	Crane	62.3	

¹ Reference construction noise level measurements taken by Urban Crossroads, Inc.

10.3 TYPICAL CONSTRUCTION NOISE ANALYSIS

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearest sensitive receiver locations were completed. To assess the worst-case construction noise levels, the Project construction noise analysis relies on the highest noise level impacts when the equipment with the highest reference noise level is operating at the closest point from the edge of primary construction activity (Project site boundary) to each receiver location. As shown on Table 10-2, the construction noise levels are expected to range from 56.3 to 63.7 dBA Leq at the nearest receiver locations and at 200 feet from the property line of the source. Appendix 10.1 includes the detailed CadnaA construction noise model inputs.

TABLE 10-2: TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location ¹	Construction Noise Levels (dBA Leq)					
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels ²
R1	61.0	61.9	60.0	56.5	53.6	61.9
R2	55.4	56.3	54.4	50.9	48.0	56.3
R3	57.0	57.9	56.0	52.5	49.6	57.9
R4	56.4	57.3	55.4	52.3	49.0	57.3
R5	59.0	59.9	58.0	54.7	51.6	59.9
at 200'	62.8	63.7	61.8	57.6	55.4	63.7

¹ Noise receiver locations are shown on Exhibit 10-A.

² Construction noise level calculations based on distance from the project site boundaries (construction activity area) to the nearest receiver locations. CadnaA construction noise model inputs are included in Appendix 10.1.

10.4 TYPICAL CONSTRUCTION NOISE LEVEL COMPLIANCE

The construction noise analysis shows that the nearest receiver locations will satisfy the City of Moreno Valley daytime 65 dBA Leq significance threshold during Project construction activities as shown on Table 10-3. Therefore, the noise impacts due to Project construction noise is considered *less than significant* at all receiver locations and at 200 feet from the property line of the source.

TABLE 10-3: TYPICAL CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location ¹	Construction Noise Levels (dBA Leq)		
	Highest Construction Noise Levels ²	Threshold ³	Threshold Exceeded? ⁴
R1	61.9	65	No
R2	56.3	65	No
R3	57.9	65	No
R4	57.3	65	No
R5	59.9	65	No
at 200'	63.7	65	No

¹ Noise receiver locations are shown on Exhibit 10-A.

² Highest construction noise level calculations based on distance from the construction noise source activity to the nearest receiver locations as shown on Table 10-2.

³ Construction noise level thresholds as shown on Table 4-1.

⁴ Do the estimated Project construction noise levels exceed the construction noise level threshold?

10.5 NIGHTTIME CONCRETE POUR NOISE ANALYSIS

Nighttime concrete pouring activities may occur as a part of Project construction activities. Nighttime concrete pouring activities are often used to support reduced concrete mixer truck transit times and lower air temperatures than during the daytime hours and are generally limited to the actual buildings area as shown on Exhibit 10-B. Since the nighttime concrete pours may take place outside the permitted City of Moreno Valley Municipal Code, Section 11.80.030 (D)(7)

hours of 7:00 a.m. to 8:00 p.m. on any day and grading is limited to 7:00 a.m. to 6:00 p.m. Monday to Friday and 8:00 a.m. to 4:00 p.m. on weekends and holidays, the Project Applicant will be required to obtain authorization for nighttime work from the City of Moreno Valley. Table 10-4 shows the concrete pour activities (paving) noise will range from 50.9 to 57.6 dBA L_{eq} at the nearest sensitive receiver locations and at 200 feet from the property line of the source. Therefore, the unmitigated nighttime concrete pour noise level impacts are considered *less than significant* at the nearest noise-sensitive receiver locations and at 200 feet from the property line.

TABLE 10-4: NIGHTTIME CONCRETE POUR NOISE LEVEL COMPLIANCE

Receiver Location ¹	Construction Noise Levels (dBA L_{eq})		
	Paving Construction ²	Nighttime Construction Standard ³	Threshold Exceeded? ⁴
R1	56.5	60	No
R2	50.9	60	No
R3	52.5	60	No
R4	52.3	60	No
R5	54.7	60	No
at 200'	57.6	60	No

¹ Noise receiver locations are shown on Exhibit 10-B.

² Construction noise level calculations based on distance from the project building area to the property line of adjacent uses as shown on Table 10-4.

³ Construction noise level standards as shown on Table 3-2.

⁴ Do the estimated Project construction noise levels exceed the construction noise level threshold?

10.6 TYPICAL CONSTRUCTION VIBRATION IMPACTS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. Ground-borne vibration levels resulting from typical construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA). (7) However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used. Ground vibration levels associated with various types of construction equipment are summarized on Table 10-5. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential Project construction vibration levels using the following vibration assessment methods defined by the FTA. To describe the human response (annoyance) associated with vibration impacts the FTA provides the following equation: $L_{vdB}(D) = L_{vdB}(25 \text{ ft}) - 30\log(D/25)$

EXHIBIT 10-B: NIGHTTIME CONCRETE POUR NOISE SOURCE AND RECEIVER LOCATIONS



- LEGEND:**
- Site Boundary
 - Nighttime Concrete Pour Activity (Building Area)
 - Receiver Locations
 - Distance from receiver to concrete pour activity (in feet)
 - Existing Barrier
 - Existing Barrier Height (in feet)

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE 10-5: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Vibration Decibels (VdB) at 25 feet
Small bulldozer	58
Jackhammer	79
Loaded Trucks	86
Large bulldozer	87

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual

Table 10-6 presents the expected typical construction equipment vibration levels at the nearest receiver locations. At distances ranging from 152 feet to 1,023 feet from typical Project construction activities (at the Project site boundary), construction vibration levels are estimated to range from 38.6 to 63.5 VdB and will remain below the FTA Transit Noise and Vibration Impact Assessment maximum acceptable vibration criteria of 78 VdB for daytime residential uses, and 84 VdB for daytime office use at all receiver locations and at 200 feet from the property line of the source. Therefore, the Project-related vibration impacts are considered *less than significant* during typical construction activities at the Project site.

TABLE 10-6: TYPICAL CONSTRUCTION EQUIPMENT VIBRATION LEVELS

Receiver Location ¹	Distance to Construction Activity (Feet)	Receiver Vibration Levels (VdB) ²					Threshold VdB ³	Threshold Exceeded? ⁴
		Small Bulldozer	Jackhammer	Loaded Trucks	Large Bulldozer	Highest Vibration Levels		
R1	152'	34.5	55.5	62.5	63.5	63.5	78	No
R2	1,023'	9.6	30.6	37.6	38.6	38.6	78	No
R3	744'	13.8	34.8	41.8	42.8	42.8	84	No
R4	784'	13.1	34.1	41.1	42.1	42.1	78	No
R5	217'	29.8	50.8	57.8	58.8	58.8	78	No
at 200'	200'	30.9	51.9	58.9	59.9	59.9	78	No

¹ Noise receiver locations are shown on Exhibit 10-A.

² Based on the Vibration Source Levels of Construction Equipment included on Table 10-5.

³ FTA Transit Noise and Vibration Impact Assessment maximum acceptable vibration criteria as shown in Section 3.5.

⁴ Does the vibration level exceed the maximum acceptable vibration threshold?

Further, vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating simultaneously adjacent to the Project site perimeter.

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

11 REFERENCES

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

12 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed Compass Danbe Centerpointe Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 336-5979.

Bill Lawson, P.E., INCE
Principal
URBAN CROSSROADS, INC.
260 E. Baker Street, Suite 200
Costa Mesa, CA 92626
(949) 336-5979
blawson@urbanxroads.com



EDUCATION

Master of Science in Civil and Environmental Engineering
California Polytechnic State University, San Luis Obispo • December, 1993

Bachelor of Science in City and Regional Planning
California Polytechnic State University, San Luis Obispo • June, 1992

PROFESSIONAL REGISTRATIONS

PE – Registered Professional Traffic Engineer – TR 2537 • January, 2009
AICP – American Institute of Certified Planners – 013011 • June, 1997–January 1, 2012
PTP – Professional Transportation Planner • May, 2007 – May, 2013
INCE – Institute of Noise Control Engineering • March, 2004

PROFESSIONAL AFFILIATIONS

ASA – Acoustical Society of America
ITE – Institute of Transportation Engineers

PROFESSIONAL CERTIFICATIONS

Certified Acoustical Consultant – County of Orange • February, 2011
FHWA-NHI-142051 Highway Traffic Noise Certificate of Training • February, 2013

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 3.1:
CITY OF MORENO VALLEY MUNICIPAL CODE

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Chapter 11.80 NOISE REGULATION**11.80.010 Legislative findings.**

It is found and declared that:

A. Excessive sound within the limits of the city is a condition which has existed for some time, and the amount and intensity of such sound is increasing.

B. Such excessive sound is a detriment to the public health, safety, and welfare and quality of life of the residents of the city.

C. The necessity in the public interest for the provisions and prohibitions hereinafter contained and enacted is declared as a matter of legislative determination and public policy, and it is further declared that the provisions and prohibitions hereinafter contained and enacted are in pursuance of and for the purpose of securing and promoting the public health, safety, welfare and quality of life of the city and its inhabitants. (Ord. 740 § 1.2, 2007)

11.80.020 Definitions.

For purposes of this chapter, certain words and phrases used herein are defined as follows:

“A-weighted sound level” means the sound pressure level in decibels as measured with a sound level meter using the A-weighting network. The unit of measurement is the dB(A).

“Commercial” means all uses of land not otherwise classified as residential, as defined in this section.

“Construction” means any site preparation, and/or any assembly, erection, repair, or alteration, excluding demolition, of any structure, or improvements to real property.

“Continuous airborne sound” means sound that is measured by the slow-response setting of a meter manufactured to the specifications of ANSI Section 1.4-1983 (R2006) “Specification for Sound Level Meters,” or its successor.

“Daytime” means eight a.m. to ten p.m. the same day.

“Decibel” (dB) means a unit for measuring the amplitude of sound, equal to twenty (20) times the logarithm to the base ten (10) of the ratio of the pressure of the sound measured to the reference pressure, which is twenty (20) microPascals (twenty (20) microNewtons per square meter.)

“Demolition” means any dismantling, intentional destruction or removal of structures or other improvements to real property.

“Disturb” means to interrupt, interfere with, or hinder the enjoyment of peace or quiet or the normal listening activities or the sleep, rest or mental concentration of the hearer.

“Emergency” means any occurrence or set of circumstances involving actual or imminent physical trauma or significant property damage which necessitates immediate action. Economic loss alone shall not constitute an emergency. It shall be the burden of an alleged violator to prove an “emergency.”

“Emergency work” means any work made necessary to restore property to a safe condition following an emergency, or to protect persons or property threatened by an imminent emergency, to the extent such work is, in fact, necessary to protect persons or property from exposure to imminent danger or damage.

“Frequency” means the number of complete oscillation cycles per unit of time.

“Impulsive sound” means sound of short duration, usually less than one second, with an abrupt onset and rapid decay. Examples of sources of impulsive sound include explosions, drop forge impacts, and discharge of firearms.

“Nighttime” means 10:01 p.m. to 7:59 a.m. the following day.

“Noise disturbance” means any sound which:

1. Disturbs a reasonable person of normal sensitivities;

- 2. Exceeds the sound level limits set forth in this chapter; or
- 3. Is plainly audible as defined in this section. Where no specific distance is set forth for the determination of audibility, references to noise disturbance shall be deemed to mean plainly audible at a distance of two hundred (200) feet from the real property line of the source of the sound, if the sound occurs on privately owned property, or from the source of the sound, if the sound occurs on public right-of-way, public space or other publicly owned property.

“Person” means any person, person’s firm, association, copartnership, joint venture, corporation, or any entity public or private in nature.

“Plainly audible” means that the sound or noise produced or reproduced by any particular source, can be clearly distinguished from ambient noise by a person using his/her normal hearing faculties.

“Public right-of-way” means any street, avenue, boulevard, sidewalk, bike path or alley, or similar place normally accessible to the public which is owned or controlled by a governmental entity.

“Public space” means any park, recreational or community facility, or lot which contains at least one building that is open to the general public during its hours of operation.

“Residential” means all uses of land primarily for dwelling units, as well as hospitals, schools, colleges and universities, and places of religious assembly.

“Sound” means an oscillation in pressure, particle displacement, particle velocity or other physical parameter, in a medium with internal forces that causes compression and rarefaction of that medium capable of producing an auditory impression. The description of sound may include any characteristic of such sound, including duration, intensity and frequency.

“Sound level” means the weighted sound pressure level as measured in dB(A) by a sound level meter and as specified in American National Standards Institute (ANSI) specifications for sound-level meters (ANSI Section 1.4-1971 (R1976)). If the frequency weighting employed is not indicated, the A-weighting shall apply.

“Sound level meter” means an instrument, demonstrably capable of accurately measuring sound levels as defined above.

All technical definitions not defined above shall be in accordance with applicable publications and standards of the American National Standards Institute (ANSI). (Ord. 740 § 1.2, 2007)

11.80.030 Prohibited acts.

A. General Prohibition. It is unlawful and a violation of this chapter to maintain, make, cause, or allow the making of any sound that causes a noise disturbance, as defined in Section [11.80.020](#).

B. Sound causing permanent hearing loss.

1. Sound level limits. Based on statistics from the Center for Disease Control and Prevention and the National Institute for Occupational Safety and Health, Table 1 and Table 1-A specify sound level limits which, if exceeded, will have a high probability of producing permanent hearing loss in anyone in the area where the sound levels are being exceeded. No sound shall be permitted within the city which exceeds the parameters set forth in Tables 11.80.030-1 and 11.80.030-1-A of this chapter:

**Table 11.80.030-1
MAXIMUM CONTINUOUS SOUND LEVELS***

Duration per Day	
Continuous Hours	Sound level [db(A)]
8	90
6	92
4	95
3	97

2	100
1.5	102
1	105
0.5	110
0.25	115

* When the daily sound exposure is composed of two or more periods of sound exposure at different levels, the combined effect of all such periods shall constitute a violation of this section if the sum of the percent of allowed period of sound exposure at each level exceeds 100 percent

**Table 11.80.030-1A
MAXIMUM IMPULSIVE SOUND
LEVELS**

Number of Repetitions per 24-Hour Period	Sound level [dB(A)]
1	145
10	135
100	125

2. Exemptions. No violation shall exist if the only persons exposed to sound levels in excess of those listed in Tables 11.80.030-1 and 11.80.030-1A are exposed as a result of:

- a. Trespass;
- b. Invitation upon private property by the person causing or permitting the sound; or
- c. Employment by the person or a contractor of the person causing or permitting the sound.

C. Nonimpulsive Sound Decibel Limits. No person shall maintain, create, operate or cause to be operated on private property any source of sound in such a manner as to create any nonimpulsive sound which exceeds the limits set forth for the source land use category (as defined in Section 11.80.020) in Table 11.80.030-2 when measured at a distance of two hundred (200) feet or more from the real property line of the source of the sound, if the sound occurs on privately owned property, or from the source of the sound, if the sound occurs on public right-of-way, public space or other publicly owned property. Any source of sound in violation of this subsection shall be deemed prima facie to be a noise disturbance.

**Table 11.80.030-2
MAXIMUM SOUND LEVELS (IN dB(A)) FOR SOURCE LAND USES**

Residential		Commercial	
Daytime	Nighttime	Daytime	Nighttime
60	55	65	60

D. Specific Prohibitions. In addition to the general prohibitions set out in subsection A of this section, and unless otherwise exempted by this chapter, the following specific acts, or the causing or permitting thereof, are regulated as follows:

1. Motor Vehicles. No person shall operate or cause to be operated a public or private motor vehicle, or combination of vehicles towed by a motor vehicle, that creates a sound exceeding the sound level limits in Table 11.80.030-2 when the vehicle(s) are not otherwise subject to noise regulations provided for by the California [Vehicle Code](#).

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

2. Radios, Televisions, Electronic Audio Equipment, Musical Instruments or Similar Devices from a Stationary Source. No person shall operate, play or permit the operation or playing of any radio, tape player, television, electronic audio equipment, musical instrument, sound amplifier or other mechanical or electronic sound making device that produces, reproduces or amplifies sound in such a manner as to create a noise disturbance. However, this subsection shall not apply to any use or activity exempted in subsection E of this section and any use or activity for which a special permit has been issued pursuant to Section [11.80.040](#).

3. Radios, Electronic Audio Equipment, or Similar Devices from a Mobile Source Such as a Motor Vehicle. Sound amplification or reproduction equipment on or in a motor vehicle is subject to regulation in accordance with the California [Vehicle Code](#) when upon the public right-of-way. When upon public space or publicly owned property other than the public right-of-way or upon private property open to the public, sound amplification or reproduction equipment shall not be operated in such a manner that it is plainly audible at a distance of fifty (50) feet in any direction from the vehicle.

4. Portable, Hand-Held Music or Sound Amplification or Reproduction Equipment. Such equipment shall not be operated on a public right-of-way, public space or other publicly owned property in such a manner as to be plainly audible at a distance of fifty (50) feet in any direction from the operator.

5. Loudspeakers and Public Address Systems.

a. Except as permitted by Section [11.80.040](#), no person shall operate, or permit the operation of, any loudspeaker, public address system or similar device, for any commercial purpose:

1. Which produces, reproduces or amplifies sound in such a manner as to create a noise disturbance; or
2. During nighttime hours on a public right-of-way, public space or other publicly owned property.

b. No person shall operate, or permit the operation of, any loudspeaker, public address system or similar device, for any noncommercial purpose, during nighttime hours in such a manner as to create a noise disturbance.

6. Animals. No person shall own, possess or harbor an animal or bird that howls, barks, meows, squawks, or makes other sounds that:

- a. Create a noise disturbance;
- b. Are of frequent or continued duration for ten (10) or more consecutive minutes and are plainly audible at a distance of fifty (50) feet from the real property line of the source of the sound; or
- c. Are intermittent for a period of thirty (30) or more minutes and are plainly audible at a distance of fifty (50) feet from the real property line of the source of the sound.

7. Construction and Demolition. No person shall operate or cause the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of eight p.m. and seven a.m. the following day such that the sound there from creates a noise disturbance, except for emergency work by public service utilities or for other work approved by the city manager or designee. This section shall not apply to the use of power tools as provided in subsection (D)(9) of this section.

8. Emergency Signaling Devices. No person shall intentionally sound or permit the sounding outdoors of any fire, burglar or civil defense alarm, siren or whistle, or similar stationary emergency signaling device, except for emergency purposes or for testing as follows:

- a. Testing of a stationary emergency signaling device shall not occur between seven p.m. and seven a.m. the following day;
- b. Testing of a stationary emergency signaling device shall use only the minimum cycle test time, in no case to exceed sixty (60) seconds;
- c. Testing of a complete emergency signaling system, including the functioning of the signaling device and the personnel response to the signaling device, shall not occur more than once in each calendar month. Such testing shall only occur only on weekdays between seven a.m. and seven p.m. and shall be exempt from the time limit specified in subsection (D)(8)(2) of this section.

9. Power Tools. No person shall operate or permit the operation of any mechanically, electrically or gasoline motor-driven tool during nighttime hours so as to cause a noise disturbance across a residential real property boundary.

10. Pumps, Air Conditioners, Air-Handling Equipment and Other Continuously Operating Equipment. Notwithstanding the general prohibitions of subsection a of this section, no person shall operate or permit the operation of any pump, air

conditioning, air-handling or other continuously operating motorized equipment in a state of disrepair or in a manner which otherwise creates a noise disturbance distinguishable from normal operating sounds.

E. Exemptions. The following uses and activities shall be exempt from the sound level regulations except the maximum sound levels provided in Tables 11.80.030-1 and 11.80.030-1A:

1. Sounds resulting from any authorized emergency vehicle when responding to an emergency call or acting in time of an emergency.
 2. Sounds resulting from emergency work as defined in Section [11.80.020](#)
 3. Any aircraft operated in conformity with, or pursuant to, federal law, federal air regulations and air traffic control instruction used pursuant to and within the duly adopted federal air regulations; and any aircraft operating under technical difficulties in any kind of distress, under emergency orders of air traffic control, or being operated pursuant to and subsequent to the declaration of an emergency under federal air regulations.
 4. All sounds coming from the normal operations of interstate motor and rail carriers, to the extent that local regulation of sound levels of such vehicles has been preempted by the Noise Control Act of 1972 (42 U.S.C. § 4901 et seq.) or other applicable federal laws or regulations
 5. Sounds from the operation of motor vehicles, to the extent they are regulated by the California [Vehicle Code](#).
 6. Any constitutionally protected noncommercial speech or expression conducted within or upon a any public right-of-way, public space or other publicly owned property constituting an open or a designated public forum in compliance with any applicable reasonable time, place and manner restrictions on such speech or expression or otherwise pursuant to legal authority.
 7. Sounds produced at otherwise lawful and permitted city-sponsored events, organized sporting events, school assemblies, school playground activities, by permitted fireworks, and by permitted parades on public right-of-way, public space or other publicly owned property.
 8. An event for which a temporary use permit or special event permit has been issued under other provisions of this code, where the provisions of Section [11.80.040](#) are met, the permit granted expressly grants an exemption from specific standards contained in this chapter, and the permittee and all persons under the permittee's reasonable control actually comply with all conditions of such permit. Violation of any condition of such a permit related to sound or sound equipment shall be a violation of this chapter and punishable as such.
- F. Nothing in this chapter shall be construed to limit, modify or repeal any other regulation elsewhere in this code relating to the regulation of noise sources, nor shall any such other regulation be read to permit the emission of noise in violation of any provision of this chapter. (Ord. 740 § 1.2, 2007)

11.80.040 Special provisions for temporary use and special event permits.

The exemption by permit set forth in Section [11.80.030](#)(E)(8) shall be subject to the following requirements and conditions:

- A. The permit application shall include the name, address and telephone number of the permit applicant; the date, hours and location for which the permit is requested; and the nature of the event or activity. It shall also specify the types of sounds and/or sound equipment to be permitted, the proposed duration of such sound, the specific standards from which the sound is to be exempted, and the reasons for each requested exemption.
- B. The permit shall be issued provided the proposed activity meets the requirements of this section and the issuing official determines that the sound to be emitted at the event as proposed would not be detrimental to the public health, safety or welfare, that the event cannot reasonably achieve its legitimate aims and purposes without the exemption and that the sound levels proposed will not unreasonably damage the peace and quiet enjoyment of the lawful users of surrounding properties, nor constitute a public nuisance.
- C. The official issuing the permit may prescribe any reasonable conditions or requirements he/she deems necessary to minimize noise disturbances upon the community or the surrounding neighborhood, and/or to protect the health, safety or welfare of the public, including participants in the permitted event, including use of mufflers, screens or other sound-attenuating devices.
- D. Any permit granted must be in writing and shall contain all conditions upon which the permit shall be effective.

E. No more than six events requiring a sound limit exemption may be held at any particular location upon privately owned or controlled property per calendar year, provided further that the number of events shall not exceed the number permitted under the regulations for the type of permit issued. For purposes of this subsection, “location” means a legal parcel of real property or a complete shopping or commercial center or mall sharing common parking and access even if comprised of multiple legal parcels.

F. The exemption from sound limits under such permit shall not exceed maximum period of four hours in one twenty-four (24) hour day.

G. The permit will only be granted for hours between nine a.m. and ten p.m. on all days other than Friday and Saturday; and, on Friday and Saturday, between the hours of nine a.m. and one a.m. of the following day, except in the following circumstances:

1. A permit may be granted for hours between nine a.m. on New Year’s Eve and one a.m. the following day (New Year’s Day).

2. A permit may be granted for hours between nine a.m. and two a.m. the following day if there are no residences, hospitals, or nursing homes within a 0.5 mile radius of the property where the function is taking place.

H. Functions for which the permits are issued shall be limited to a continuous airborne sound level not to exceed seventy (70) dB(A), as measured two hundred (200) feet from the real property boundary of the source property if on private property, or from the source if on public right-of-way, public space or other publicly owned property. (Ord. 740 § 1.2, 2007)

11.80.050 Measurement or assessment of sound.

A. Measurement With Sound Meter.

1. The measurement of sound shall be made with a sound level meter meeting the standards prescribed by ANSI Section 1.4-1983 (R2006). The instruments shall be maintained in calibration and good working order. A calibration check shall be made of the system at the time of any sound level measurement. Measurements recorded shall be taken so as to provide a proper representation of the source of the sound. The microphone during measurement shall be positioned so as not to create any unnatural enhancement or diminution of the measured sound. A windscreen for the microphone shall be used at all times. However, a violation of this chapter may occur without the occasion of the measurements being made as otherwise provided.

2. The slow meter response of the sound level meter shall be used in order to best determine the average amplitude.

3. The measurement shall be made at any point on the property into which the sound is being transmitted and shall be made at least three feet away from any ground, wall, floor, ceiling, roof and other plane surface.

4. In case of multiple occupancy of a property, the measurement may be made at any point inside the premises to which any complainant has right of legal private occupancy; provided that the measurement shall not be made within three feet of any ground, wall, floor, ceiling, roof or other plane surface.

5. All measurements of sound provided for in this chapter will be made by qualified officials of the city who are designated by the city manager or designee to operate the apparatus used to make the measurements.

B. Assessment Without Sound Level Meter. Any police officer, code enforcement officer, or other official designated by the city manager or designee who hears a noise or sound that is plainly audible, as defined in Section [11.80.020](#), in violation of this chapter, may enforce this chapter and shall assess the noise or sound according to the following standards:

1. The primary means of detection shall be by means of the official’s normal hearing faculties, not artificially enhanced.

2. The official shall first attempt to have a direct line of sight and hearing to the vehicle or real property from which the sound or noise emanates so that the official can readily identify the offending source of the sound or noise and the distance involved. If the official is unable to have a direct line of sight and hearing to the vehicle or real property from which the sound or noise emanates, then the official shall confirm the source of the sound or noise by approaching the suspected vehicle or real property until the official is able to obtain a direct line of sight and hearing, and confirm the source of the sound or noise that was heard at the place of the original assessment of the sound or noise.

3. The official need not be required to identify song titles, artists, or lyrics in order to establish a violation. (Ord. 740 § 1.2, 2007)

11.80.060 Violation.

A. **Violation of Sound Level Limits.** Any person violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punishable by a fine not to exceed one thousand dollars (\$1,000.00) and/or six months in the county jail, or both. Notwithstanding the foregoing, any violation of the provisions of this chapter may, in the discretion of the citing officer or the city attorney, be cited and/or prosecuted as an infraction or be subject to civil citation pursuant to Chapter [1.10](#).

B. **Joint and Several Responsibility.** In addition to the person causing the offending sound, the owner, tenant or lessee of property, or a manager, overseer or agent, or any other person lawfully entitled to possess the property from which the offending sound is emitted at the time the offending sound is emitted, shall be responsible for compliance with this chapter if the additionally responsible party knows or should have known of the offending noise disturbance. It shall not be a lawful defense to assert that some other person caused the sound. The lawful possessor or operator of the premises shall be responsible for operating or maintaining the premises in compliance with this chapter and may be cited regardless of whether or not the person actually causing the sound is also cited.

C. **Violation May be Declared a Public Nuisance.** The operation or maintenance of any device, equipment, instrument, vehicle or machinery in violation of any provisions of this chapter which endangers the public health, safety and quality of life of residents in the area is declared to be a public nuisance, and may be subject to abatement summarily or by a restraining order or injunction issued

by a court of competent jurisdiction. (Ord. 824 § 1.2, 2011; Ord. 740 § 1.2, 2007)

View the [mobile version](#).

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 5.1:
STUDY AREA PHOTOS

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

JN: 13661 Study Area Photos



L1_E

33, 55' 2.670000", 117, 15' 23.370000"



L1_N

33, 55' 2.670000", 117, 15' 23.370000"



L1_S

33, 55' 2.670000", 117, 15' 23.370000"



L1_W

33, 55' 2.680000", 117, 15' 23.400000"



L2_E

33, 55' 0.510000", 117, 15' 4.860000"



L2_N

33, 55' 0.530000", 117, 15' 4.860000"

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

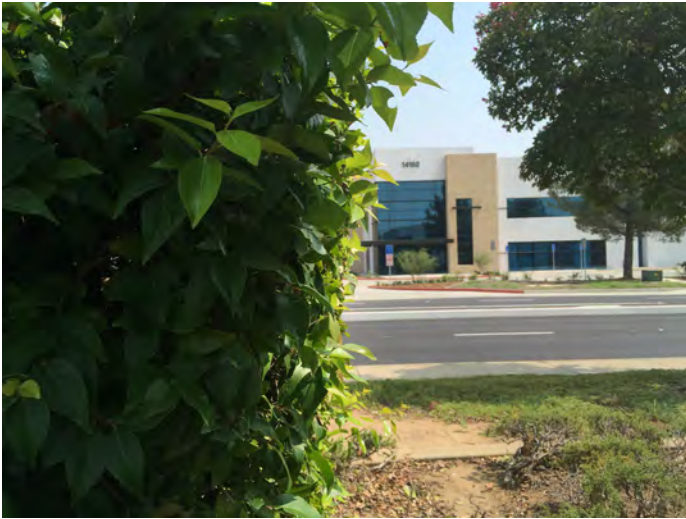
JN: 13661 Study Area Photos



L2_S
33, 55' 0.500000", 117, 15' 4.860000"



L2_W
33, 55' 0.500000", 117, 15' 4.860000"



L3_E
33, 54' 55.230000", 117, 15' 40.840000"



L3_N
33, 54' 55.400000", 117, 15' 40.460000"



L3_S
33, 54' 55.230000", 117, 15' 40.840000"



L3_W
33, 54' 55.240000", 117, 15' 40.900000"

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

JN: 13661 Study Area Photos



L4_E
33, 55' 3.930000", 117, 15' 40.540000"



L4_N
33, 55' 3.930000", 117, 15' 40.540000"



L4_S
33, 55' 4.040000", 117, 15' 40.680000"



L4_W
33, 55' 3.960000", 117, 15' 40.620000"



L5_E
33, 55' 2.500000", 117, 15' 28.810000"



L5_N
33, 55' 4.070000", 117, 15' 27.910000"

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

JN: 13661 Study Area Photos



L5_S

33, 55' 2.520000", 117, 15' 28.840000"



L5_W

33, 55' 2.520000", 117, 15' 28.870000"

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 5.2:
NOISE LEVEL MEASUREMENT WORKSHEETS

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

24-Hour Noise Level Measurement Summary

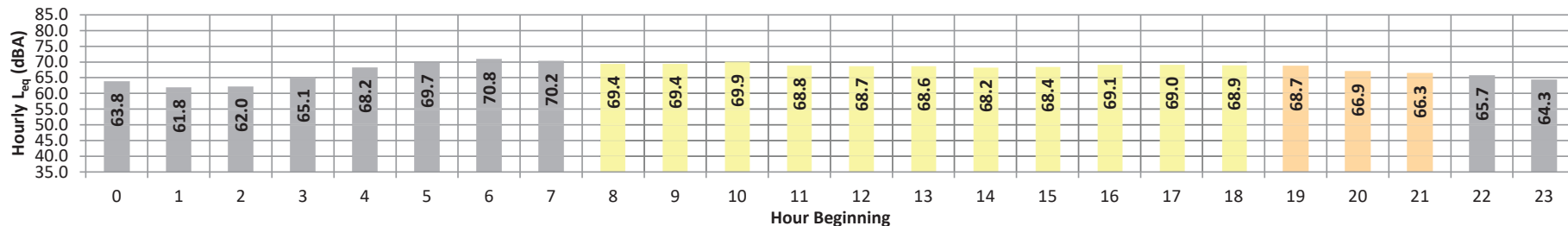
Date: Wednesday, September 16, 2020
 Project: Compass Danbe Centerpointe

Location: L1 - Located north of the Project site on Alessandro
 Boulevard near existing single-family residential home at
 13994 Chagall Court.

Meter: Piccolo II

JN: 13661
 Analyst: P. Mara

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	63.8	76.0	48.5	75.4	74.4	71.5	69.1	60.9	54.7	49.5	49.1	48.6	63.8	10.0	73.8
	1	61.8	73.8	48.5	73.3	72.4	69.4	67.1	58.9	53.7	49.3	48.9	48.6	61.8	10.0	71.8
	2	62.0	74.3	49.8	73.8	72.9	69.5	67.2	58.6	53.5	50.4	50.2	49.9	62.0	10.0	72.0
	3	65.1	76.7	50.8	76.3	75.3	72.7	70.7	63.0	56.0	51.5	51.2	50.9	65.1	10.0	75.1
	4	68.2	78.8	54.3	78.3	77.4	75.1	73.6	67.9	61.6	55.6	55.0	54.5	68.2	10.0	78.2
	5	69.7	79.2	56.3	78.8	78.0	76.3	75.2	70.5	63.9	57.4	56.8	56.4	69.7	10.0	79.7
	6	70.8	81.5	56.9	80.9	79.9	77.1	75.5	71.1	65.7	58.5	57.6	57.0	70.8	10.0	80.8
Day	7	70.2	79.1	56.9	78.6	77.9	76.1	74.9	71.4	66.3	58.3	57.5	57.0	70.2	0.0	70.2
	8	69.4	78.5	54.6	78.0	77.2	75.3	74.4	70.6	65.1	56.3	55.4	54.7	69.4	0.0	69.4
	9	69.4	78.4	52.8	77.9	77.2	75.4	74.2	70.6	65.2	55.4	54.0	53.0	69.4	0.0	69.4
	10	69.9	80.9	49.3	80.3	79.1	76.1	74.3	70.4	65.3	52.7	51.1	49.5	69.9	0.0	69.9
	11	68.8	78.0	47.9	77.6	76.8	74.8	73.7	70.0	65.2	51.0	49.7	48.2	68.8	0.0	68.8
	12	68.7	77.8	50.4	77.3	76.6	74.8	73.7	69.9	64.4	53.3	51.6	50.6	68.7	0.0	68.7
	13	68.6	78.0	50.7	77.6	76.6	74.5	73.4	70.0	64.8	53.9	52.4	50.9	68.6	0.0	68.6
	14	68.2	77.1	51.9	76.7	75.9	74.1	72.9	69.5	64.8	55.2	53.4	52.2	68.2	0.0	68.2
	15	68.4	90.2	52.3	89.3	87.9	83.2	80.4	69.7	65.4	55.5	54.0	52.6	68.4	0.0	68.4
	16	69.1	78.8	53.1	78.3	77.4	75.0	73.8	69.7	65.9	55.9	54.5	53.4	69.1	0.0	69.1
	17	69.0	80.7	54.0	80.1	79.2	76.0	73.9	69.9	65.8	56.9	55.4	54.2	69.0	0.0	69.0
	18	68.9	79.1	53.6	78.6	77.7	75.0	73.6	69.3	64.9	56.0	54.8	53.8	68.9	0.0	68.9
Evening	19	68.7	80.7	51.3	80.1	79.0	75.4	73.1	67.9	61.4	53.4	52.2	51.5	68.7	5.0	73.7
	20	66.9	77.9	50.3	77.2	76.3	73.9	72.4	66.7	59.6	51.9	51.0	50.4	66.9	5.0	71.9
	21	66.3	77.6	50.6	76.9	75.8	73.4	71.6	65.6	59.3	52.2	51.3	50.7	66.3	5.0	71.3
Night	22	65.7	85.6	48.6	84.8	83.5	78.3	74.7	65.6	58.6	50.8	49.6	48.8	65.7	10.0	75.7
	23	64.3	76.0	49.0	75.5	74.5	71.6	69.8	62.4	56.3	50.3	49.6	49.1	64.3	10.0	74.3
Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq} (dBA)		
Day	Min	68.2	77.1	47.9	76.7	75.9	74.1	72.9	69.3	64.4	51.0	49.7	48.2	24-Hour	Daytime	Nighttime
	Max	69.9	90.2	54.6	89.3	87.9	83.2	80.4	70.6	65.9	56.9	55.4	54.7			
Energy Average		69.0	Average:		79.2	78.3	75.8	74.4	70.0	65.2	54.7	53.3	52.1	68.2	68.7	67.3
Evening	Min	66.3	77.6	50.3	76.9	75.8	73.4	71.6	65.6	59.3	51.9	51.0	50.4			
	Max	68.7	80.7	51.3	80.1	79.0	75.4	73.1	67.9	61.4	53.4	52.2	51.5	24-Hour CNEL (dBA)		
Energy Average		67.4	Average:		78.1	77.1	74.2	72.4	66.7	60.1	52.5	51.5	50.9	73.8		
Night	Min	61.8	73.8	48.5	73.3	72.4	69.4	67.1	58.6	53.5	49.3	48.9	48.6			
	Max	70.8	85.6	56.9	84.8	83.5	78.3	75.5	71.4	66.3	58.5	57.6	57.0			
Energy Average		67.3	Average:		77.4	76.5	73.5	71.4	64.3	58.2	52.6	52.0	51.5			

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

24-Hour Noise Level Measurement Summary

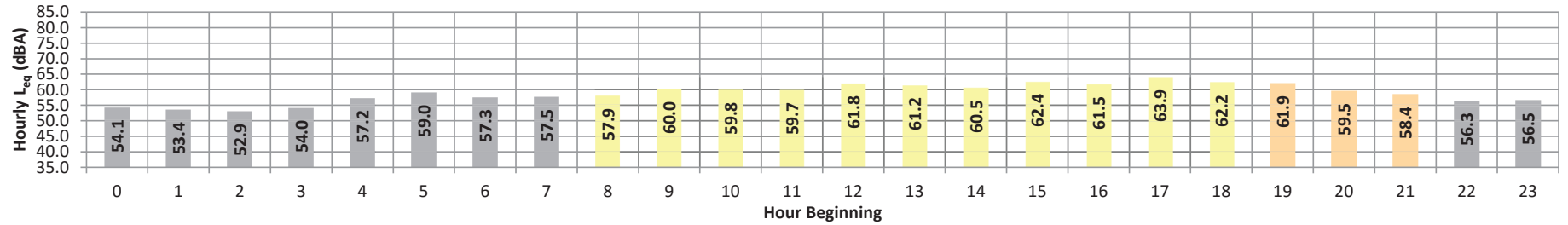
Date: Wednesday, September 16, 2020
 Project: Compass Danbe Centerpointe

Location: L2 - Located east of the Project site by existing Motel 6 at
 23581 Alessandro Boulevard.

Meter: Piccolo II

JN: 13661
 Analyst: P. Mara

Hourly L_{eq} dBA Readings (unadjusted)



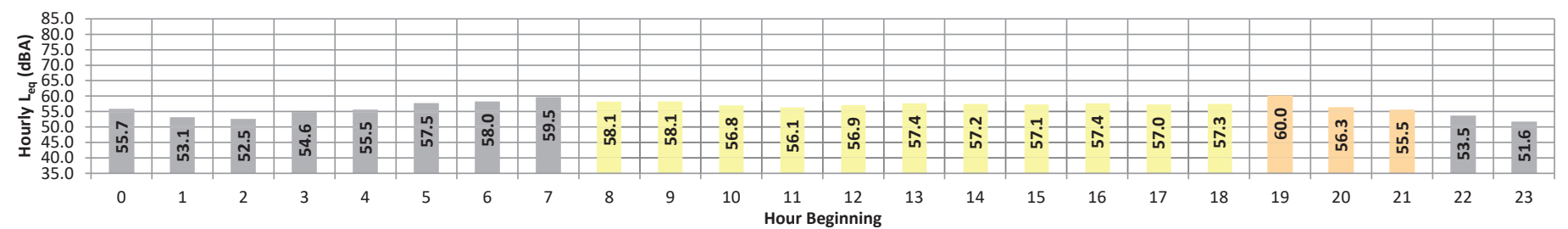
Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	54.1	62.8	48.5	62.5	62.1	60.8	59.1	53.3	50.8	49.0	48.8	48.6	54.1	10.0	64.1
	1	53.4	63.5	48.5	63.1	62.2	58.9	56.7	52.6	50.5	49.0	48.8	48.6	53.4	10.0	63.4
	2	52.9	61.5	48.4	60.9	60.4	58.3	56.9	52.6	50.3	48.9	48.7	48.5	52.9	10.0	62.9
	3	54.0	63.9	48.7	63.0	62.0	60.4	58.8	52.5	50.7	49.3	49.0	48.8	54.0	10.0	64.0
	4	57.2	66.5	51.2	66.2	65.8	64.2	62.2	55.6	53.3	51.7	51.5	51.3	57.2	10.0	67.2
	5	59.0	68.7	52.5	68.4	67.9	66.0	63.2	57.7	55.4	53.2	53.0	52.6	59.0	10.0	69.0
	6	57.3	65.5	52.5	65.0	64.5	62.6	61.3	57.4	55.0	53.1	52.8	52.6	57.3	10.0	67.3
Day	7	57.5	65.2	53.0	64.8	64.3	62.5	61.1	57.8	55.7	53.7	53.4	53.1	57.5	0.0	57.5
	8	57.9	65.6	52.4	65.3	64.9	63.6	62.4	57.7	55.6	53.0	52.7	52.5	57.9	0.0	57.9
	9	60.0	68.5	53.4	68.1	67.4	66.0	64.8	59.9	57.0	54.2	53.9	53.5	60.0	0.0	60.0
	10	59.8	70.8	52.9	69.9	68.7	66.0	64.2	58.6	56.2	53.8	53.4	53.0	59.8	0.0	59.8
	11	59.7	66.7	54.4	66.3	65.9	64.7	63.7	60.0	58.0	55.6	55.1	54.6	59.7	0.0	59.7
	12	61.8	69.9	56.5	69.4	68.7	67.0	65.6	62.1	59.9	57.3	56.9	56.6	61.8	0.0	61.8
	13	61.2	70.1	54.5	69.7	69.0	66.9	65.9	61.1	58.5	55.5	55.1	54.6	61.2	0.0	61.2
	14	60.5	69.4	54.2	68.5	67.6	65.5	64.3	60.7	58.4	55.2	54.7	54.3	60.5	0.0	60.5
	15	62.4	72.4	54.8	71.8	70.9	68.9	66.8	61.5	59.2	56.1	55.5	55.0	62.4	0.0	62.4
	16	61.5	68.7	56.2	68.2	67.7	66.3	65.1	61.8	59.9	57.4	56.9	56.4	61.5	0.0	61.5
	17	63.9	74.7	56.5	74.0	73.2	70.2	67.8	62.7	60.7	57.8	57.2	56.6	63.9	0.0	63.9
	18	62.2	70.9	54.9	70.4	69.8	67.9	66.5	62.6	59.7	56.1	55.6	55.0	62.2	0.0	62.2
Evening	19	61.9	71.4	54.5	70.6	69.7	67.6	66.0	62.3	59.1	55.6	55.1	54.7	61.9	5.0	66.9
	20	59.5	69.1	52.0	68.5	67.9	66.3	64.6	58.9	55.7	52.9	52.6	52.2	59.5	5.0	64.5
	21	58.4	66.8	51.9	66.5	66.1	64.5	63.2	58.0	55.6	52.7	52.3	52.0	58.4	5.0	63.4
Night	22	56.3	66.2	50.8	65.8	65.1	62.9	60.5	55.2	53.1	51.3	51.1	50.9	56.3	10.0	66.3
	23	56.5	66.6	50.1	66.4	66.0	63.3	61.1	54.7	52.2	50.5	50.3	50.2	56.5	10.0	66.5
Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq} (dBA)		
Day	Min	57.9	65.6	52.4	65.3	64.9	63.6	62.4	57.7	55.6	53.0	52.7	52.5	24-Hour	Daytime	Nighttime
	Max	63.9	74.7	56.5	74.0	73.2	70.2	67.8	62.7	60.7	57.8	57.2	56.6			
Energy Average		61.3	Average:		69.2	68.5	66.6	65.2	60.8	58.5	55.6	55.2	54.7	59.6 | 61.1 | 56.3		
Evening	Min	58.4	66.8	51.9	66.5	66.1	64.5	63.2	58.0	55.6	52.7	52.3	52.0	24-Hour CNEL (dBA)		
	Max	61.9	71.4	54.5	70.6	69.7	67.6	66.0	62.3	59.1	55.6	55.1	54.7			
Energy Average		60.2	Average:		68.5	67.9	66.1	64.6	59.7	56.8	53.7	53.3	52.9	64.1		
Night	Min	52.9	61.5	48.4	60.9	60.4	58.3	56.7	52.5	50.3	48.9	48.7	48.5	24-Hour CNEL (dBA)		
	Max	59.0	68.7	53.0	68.4	67.9	66.0	63.2	57.8	55.7	53.7	53.4	53.1			
Energy Average		56.3	Average:		64.6	64.0	61.9	60.0	54.6	52.4	50.7	50.4	50.2	64.1		

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

24-Hour Noise Level Measurement Summary

Date: Wednesday, September 16, 2020 Location: L3 - Located southwest of the Project site by the Moreno Valley City Hall at 14177 Frederick Street. Meter: Piccolo II JN: 13661
 Project: Compass Danbe Centerpointe Analyst: P. Mara

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	55.7	62.3	53.0	61.9	61.2	59.4	58.4	56.1	54.6	53.3	53.2	53.1	55.7	10.0	65.7
	1	53.1	61.8	49.4	61.3	60.5	57.8	56.3	52.8	50.9	49.9	49.7	49.5	53.1	10.0	63.1
	2	52.5	60.9	48.7	60.6	60.0	58.0	56.5	51.5	50.1	49.2	49.0	48.8	52.5	10.0	62.5
	3	54.6	64.0	50.9	63.6	63.1	59.9	57.7	53.8	52.2	51.3	51.1	51.0	54.6	10.0	64.6
	4	55.5	63.7	51.6	63.4	62.8	60.8	59.4	55.1	53.2	52.1	51.9	51.7	55.5	10.0	65.5
	5	57.5	65.3	53.1	64.9	64.3	62.6	61.4	57.8	55.3	53.6	53.4	53.2	57.5	10.0	67.5
	6	58.0	66.0	53.5	65.7	65.2	63.3	62.0	58.1	55.7	54.0	53.8	53.6	58.0	10.0	68.0
Day	7	59.5	69.4	53.9	69.0	68.2	65.2	63.0	58.9	56.7	54.5	54.3	54.0	59.5	0.0	59.5
	8	58.1	66.8	52.6	66.4	65.8	63.7	62.2	57.8	55.3	53.2	52.9	52.7	58.1	0.0	58.1
	9	58.1	66.6	49.9	66.2	65.6	63.8	62.4	58.7	55.6	51.2	50.8	50.1	58.1	0.0	58.1
	10	56.8	66.1	47.5	65.7	65.1	62.9	61.4	57.1	53.3	49.0	48.4	47.8	56.8	0.0	56.8
	11	56.1	64.6	48.3	64.2	63.7	61.7	60.2	56.6	53.6	49.4	48.9	48.4	56.1	0.0	56.1
	12	56.9	66.6	49.3	66.2	65.4	62.7	61.1	56.6	53.7	50.3	49.8	49.4	56.9	0.0	56.9
	13	57.4	65.2	50.2	64.8	64.2	62.5	61.4	58.1	55.2	51.4	50.9	50.4	57.4	0.0	57.4
	14	57.2	65.8	48.7	65.3	64.7	63.0	61.7	57.9	54.2	50.0	49.4	48.9	57.2	0.0	57.2
	15	57.1	65.7	47.5	65.4	64.7	62.9	61.6	57.5	53.7	49.0	48.3	47.7	57.1	0.0	57.1
	16	57.4	66.5	48.4	66.1	65.5	63.4	62.0	57.8	54.0	49.6	49.1	48.6	57.4	0.0	57.4
	17	57.0	65.3	49.5	64.9	64.3	62.4	61.1	57.5	54.6	50.6	50.0	49.6	57.0	0.0	57.0
	18	57.3	66.2	49.8	65.7	64.8	62.7	61.6	57.7	54.4	50.8	50.3	49.9	57.3	0.0	57.3
Evening	19	60.0	73.6	50.2	72.9	71.2	66.5	63.2	56.5	53.6	50.9	50.6	50.3	60.0	5.0	65.0
	20	56.3	65.3	51.0	64.9	64.3	61.7	60.1	55.9	53.5	51.6	51.3	51.1	56.3	5.0	61.3
	21	55.5	64.8	49.3	64.2	63.5	60.8	59.0	55.5	53.0	50.2	49.8	49.4	55.5	5.0	60.5
Night	22	53.5	63.2	46.9	62.8	62.2	60.0	57.9	52.9	49.8	47.6	47.3	47.0	53.5	10.0	63.5
	23	51.6	59.9	47.2	59.1	58.3	56.6	55.5	51.8	49.3	47.7	47.5	47.3	51.6	10.0	61.6
Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq} (dBA)		
Day	Min	56.1	64.6	47.5	64.2	63.7	61.7	60.2	56.6	53.3	49.0	48.3	47.7	24-Hour	Daytime	Nighttime
	Max	58.1	66.8	52.6	66.4	65.8	63.8	62.4	58.7	55.6	53.2	52.9	52.7			
Energy Average		57.2	Average:		65.5	64.9	62.9	61.5	57.6	54.3	50.4	49.9	49.4	56.8 | 57.3 | 55.9		
Evening	Min	55.5	64.8	49.3	64.2	63.5	60.8	59.0	55.5	53.0	50.2	49.8	49.4	24-Hour CNEL (dBA)		
	Max	60.0	73.6	51.0	72.9	71.2	66.5	63.2	56.5	53.6	51.6	51.3	51.1	62.4		
Energy Average		57.7	Average:		67.3	66.3	63.0	60.8	56.0	53.3	50.9	50.6	50.3			
Night	Min	51.6	59.9	46.9	59.1	58.3	56.6	55.5	51.5	49.3	47.6	47.3	47.0			
	Max	59.5	69.4	53.9	69.0	68.2	65.2	63.0	58.9	56.7	54.5	54.3	54.0			
Energy Average		55.9	Average:		62.6	62.0	59.8	58.3	54.4	52.4	51.0	50.8	50.6			

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

24-Hour Noise Level Measurement Summary

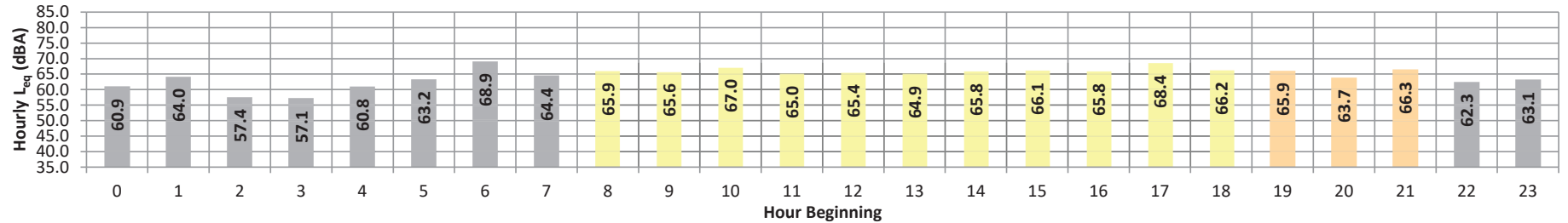
Date: Wednesday, September 16, 2020
 Project: Compass Danbe Centerpointe

Location: L4 - Located northwest of the Project site on Fredrick Street near existing single-family residential home at 13979 Frederick Street.

Meter: Piccolo II

JN: 13661
 Analyst: P. Mara

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	60.9	72.8	48.3	72.3	71.2	69.1	66.2	57.9	53.5	49.6	48.9	48.4	60.9	10.0	70.9
	1	64.0	73.4	60.5	72.8	72.2	68.2	66.3	62.7	62.1	61.0	60.8	60.5	64.0	10.0	74.0
	2	57.4	67.9	50.1	67.2	66.3	63.6	62.0	56.4	53.3	50.7	50.4	50.2	57.4	10.0	67.4
	3	57.1	66.2	49.4	65.9	65.3	63.2	61.7	57.1	53.5	50.1	49.9	49.5	57.1	10.0	67.1
	4	60.8	69.4	51.6	69.1	68.6	67.1	66.1	61.1	57.2	52.8	52.2	51.7	60.8	10.0	70.8
	5	63.2	71.9	53.7	71.6	71.0	69.4	67.9	63.6	60.0	54.8	54.3	53.9	63.2	10.0	73.2
	6	68.9	76.6	54.7	76.2	75.8	74.7	74.0	70.7	64.9	56.0	55.4	54.8	68.9	10.0	78.9
Day	7	64.4	72.3	55.6	71.8	71.2	69.9	68.8	65.2	62.1	57.0	56.3	55.8	64.4	0.0	64.4
	8	65.9	76.1	54.1	75.6	75.0	72.8	71.2	65.3	61.7	56.0	55.1	54.3	65.9	0.0	65.9
	9	65.6	73.9	58.0	73.5	73.0	71.3	70.0	65.8	63.4	59.4	58.7	58.2	65.6	0.0	65.6
	10	67.0	78.2	54.5	77.9	77.1	74.0	71.8	65.3	62.1	56.9	55.7	54.7	67.0	0.0	67.0
	11	65.0	74.0	53.9	73.5	73.0	71.5	70.3	64.8	61.5	56.3	55.1	54.1	65.0	0.0	65.0
	12	65.4	75.3	55.1	74.5	73.6	72.0	70.3	65.0	62.2	57.3	56.4	55.3	65.4	0.0	65.4
	13	64.9	73.9	55.6	73.5	72.8	70.8	69.1	65.3	62.2	57.7	56.8	55.8	64.9	0.0	64.9
	14	65.8	76.1	54.1	75.6	74.8	72.2	70.4	65.5	62.3	56.6	55.3	54.4	65.8	0.0	65.8
	15	66.1	76.1	54.9	75.5	74.8	72.5	70.6	65.9	62.5	57.5	56.3	55.1	66.1	0.0	66.1
	16	65.8	74.8	55.6	74.4	73.7	71.8	70.1	66.1	63.1	58.0	56.9	55.9	65.8	0.0	65.8
	17	68.4	80.0	55.6	79.4	78.2	75.7	73.4	67.2	63.3	58.0	56.9	55.9	68.4	0.0	68.4
18	66.2	75.5	55.3	75.0	74.4	72.8	70.5	66.2	63.1	57.6	56.4	55.5	66.2	0.0	66.2	
Evening	19	65.9	77.1	54.1	76.5	76.0	72.9	70.4	64.6	61.5	56.1	55.1	54.2	65.9	5.0	70.9
	20	63.7	73.6	52.7	72.9	72.2	70.4	68.8	63.7	59.5	54.4	53.6	52.9	63.7	5.0	68.7
	21	66.3	79.9	50.8	79.1	77.6	73.8	71.0	61.9	58.3	52.9	51.7	51.0	66.3	5.0	71.3
Night	22	62.3	73.2	50.5	72.6	71.9	69.4	67.4	61.0	57.0	52.0	51.3	50.7	62.3	10.0	72.3
	23	63.1	79.3	47.5	76.1	74.1	69.3	66.9	58.5	54.3	49.1	48.3	47.7	63.1	10.0	73.1
Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq} (dBA)		
Day	Min	64.9	73.9	53.9	73.5	72.8	70.8	69.1	64.8	61.5	56.0	55.1	54.1	24-Hour	Daytime	Nighttime
	Max	68.4	80.0	58.0	79.4	78.2	75.7	73.4	67.2	63.4	59.4	58.7	58.2			
Energy Average		66.1	Average:		75.3	74.6	72.5	70.7	65.7	62.5	57.4	56.3	55.4	65.1 | 66.0 | 63.5		
Evening	Min	63.7	73.6	50.8	72.9	72.2	70.4	68.8	61.9	58.3	52.9	51.7	51.0	24-Hour CNEL (dBA)		
	Max	66.3	79.9	54.1	79.1	77.6	73.8	71.0	64.6	61.5	56.1	55.1	54.2			
Energy Average		65.5	Average:		76.2	75.3	72.4	70.1	63.4	59.8	54.5	53.5	52.7	70.6		
Night	Min	57.1	66.2	47.5	65.9	65.3	63.2	61.7	56.4	53.3	49.1	48.3	47.7			
	Max	68.9	79.3	60.5	76.2	75.8	74.7	74.0	70.7	64.9	61.0	60.8	60.5			
Energy Average		63.5	Average:		71.5	70.7	68.2	66.5	61.0	57.3	52.9	52.4	52.0			

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

24-Hour Noise Level Measurement Summary

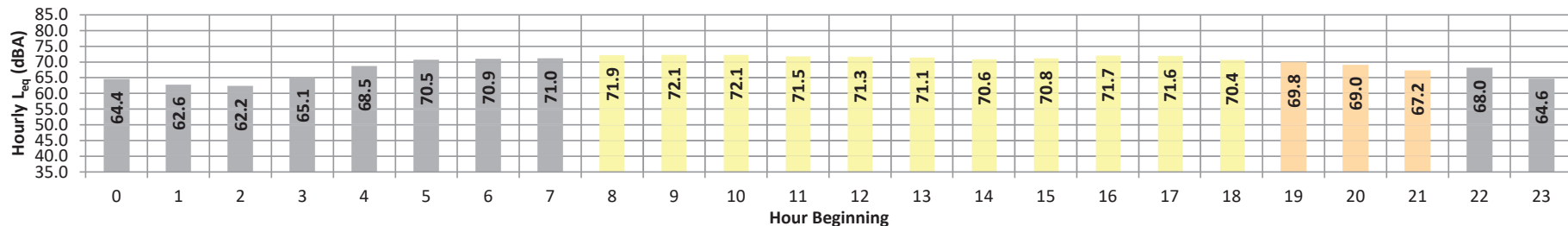
Date: Wednesday, September 16, 2020
 Project: Compass Danbe Centerpointe

Location: L5 - Located north of the Project site on Alessandro
 Boulevard near existing multi-family residential homes at
 13933 Chagall Court.

Meter: Piccolo II

JN: 13661
 Analyst: P. Mara

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}	
Night	0	64.4	75.8	50.6	75.4	74.7	71.9	69.6	62.8	56.9	51.4	51.1	50.7	64.4	10.0	74.4	
	1	62.6	73.9	50.6	73.5	72.8	70.2	67.7	60.9	55.7	51.5	51.0	50.7	62.6	10.0	72.6	
	2	62.2	73.3	52.3	72.9	72.1	69.7	67.8	59.9	55.5	52.8	52.5	52.3	62.2	10.0	72.2	
	3	65.1	75.7	52.0	75.3	74.6	72.3	70.6	64.5	58.3	52.8	52.4	52.1	65.1	10.0	75.1	
	4	68.5	78.7	55.5	78.2	77.5	75.2	73.7	68.5	63.0	56.5	56.0	55.6	68.5	10.0	78.5	
	5	70.5	79.4	57.8	79.0	78.4	76.7	75.5	71.5	66.0	58.9	58.3	57.9	70.5	10.0	80.5	
	6	70.9	79.9	58.5	79.6	78.9	76.8	75.6	71.7	67.2	60.0	59.1	58.6	70.9	10.0	80.9	
7	71.0	78.5	59.3	78.2	77.7	76.4	75.7	72.5	68.2	60.7	59.9	59.4	71.0	0.0	71.0		
Day	8	71.9	80.2	60.5	79.7	78.9	77.2	76.3	73.3	68.9	62.3	61.5	60.7	71.9	0.0	71.9	
	9	72.1	80.4	57.7	80.0	79.3	77.7	76.7	73.3	69.3	60.8	59.4	58.0	72.1	0.0	72.1	
	10	72.1	80.8	57.8	80.3	79.4	77.5	76.2	73.4	69.8	60.8	59.4	58.1	72.1	0.0	72.1	
	11	71.5	79.7	56.2	79.3	78.6	76.6	75.8	72.9	69.1	58.7	57.5	56.5	71.5	0.0	71.5	
	12	71.3	79.9	56.3	79.5	78.7	76.8	75.6	72.8	68.7	59.1	57.6	56.5	71.3	0.0	71.3	
	13	71.1	79.0	57.8	78.5	78.0	76.4	75.4	72.6	68.9	60.6	59.3	58.0	71.1	0.0	71.1	
	14	70.6	77.8	56.5	77.5	77.0	75.9	75.0	72.1	68.4	59.8	58.2	56.7	70.6	0.0	70.6	
	15	70.8	79.2	58.2	78.8	78.0	75.9	74.8	72.1	68.8	60.9	59.5	58.3	70.8	0.0	70.8	
	16	71.7	82.0	58.7	81.5	80.4	77.1	75.2	72.2	69.0	61.6	59.9	58.8	71.7	0.0	71.7	
	17	71.6	81.0	58.7	80.5	79.8	77.6	75.8	72.2	68.9	61.6	60.1	58.9	71.6	0.0	71.6	
	18	70.4	78.9	58.1	78.6	77.9	75.8	74.5	71.6	68.1	60.4	59.4	58.3	70.4	0.0	70.4	
Evening	19	69.8	79.1	56.6	78.6	77.9	75.8	74.5	70.6	66.0	58.9	57.9	56.8	69.8	5.0	74.8	
	20	69.0	78.6	55.8	78.3	77.7	75.4	73.9	69.2	64.6	57.6	56.7	56.0	69.0	5.0	74.0	
	21	67.2	76.2	54.9	75.8	75.1	73.4	72.3	67.8	62.9	56.4	55.6	55.1	67.2	5.0	72.2	
Night	22	68.0	79.6	51.5	79.3	78.7	75.2	72.6	66.5	60.9	53.6	52.7	51.7	68.0	10.0	78.0	
	23	64.6	74.9	51.5	74.4	73.7	71.7	70.2	63.8	58.3	52.6	52.1	51.6	64.6	10.0	74.6	
Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq} (dBA)			
Day	Min	70.4	77.8	56.2	77.5	77.0	75.8	74.5	71.6	68.1	58.7	57.5	56.5	24-Hour	Daytime	Nighttime	
	Max	72.1	82.0	60.5	81.5	80.4	77.7	76.7	73.4	69.8	62.3	61.5	60.7				
Energy Average		71.4	Average:			79.5	78.7	76.8	75.6	72.6	68.9	60.6	59.2	58.1			
Evening	Min	67.2	76.2	54.9	75.8	75.1	73.4	72.3	67.8	62.9	56.4	55.6	55.1	69.9	71.0	67.9	
	Max	69.8	79.1	56.6	78.6	77.9	75.8	74.5	70.6	66.0	58.9	57.9	56.8				
Energy Average		68.8	Average:			77.5	76.9	74.9	73.6	69.2	64.5	57.6	56.7	55.9	24-Hour CNEL (dBA)		
Night	Min	62.2	73.3	50.6	72.9	72.1	69.7	67.7	59.9	55.5	51.4	51.0	50.7	74.8			
	Max	71.0	79.9	59.3	79.6	78.9	76.8	75.7	72.5	68.2	60.7	59.9	59.4				
Energy Average		67.9	Average:			76.4	75.7	73.3	71.5	65.6	60.2	54.4	53.9	53.5			

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 7.1:
OFF-SITE TRAFFIC NOISE CONTOURS

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing (2020) Road Name: Graham St. Road Segment: s/o Alessandro Bl.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 11,231 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 784 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 50 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 98.89% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 86.5% 2.7% 10.8% 0.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 36.551 Medium Trucks: 36.308 Heavy Trucks: 36.332				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	66.51	-2.43	1.94	-1.20	-4.61	0.000	0.000		
Medium Trucks:	77.72	-23.95	1.98	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	82.99	-26.17	1.98	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	64.8	64.5	62.7	56.7	65.3	65.9			
Medium Trucks:	54.5	54.6	48.2	46.7	55.2	55.4			
Heavy Trucks:	57.6	57.7	48.7	50.0	58.3	58.4			
Vehicle Noise:	65.9	65.7	63.0	57.8	66.4	66.9			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			25	55	118	254			
CNEL:			27	59	127	274			

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing (2020) Road Name: Alessandro Bl. Road Segment: w/o Graham St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,944 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 2,718 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 98.89% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 58.3% 2.7% 10.8% 0.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.46	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-19.07	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-21.28	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.8	70.5	68.7	62.7	71.3	71.9			
Medium Trucks:	60.3	60.4	54.0	52.5	60.9	61.2			
Heavy Trucks:	62.9	61.3	54.0	55.3	63.0	63.1			
Vehicle Noise:	71.8	71.4	69.0	63.7	72.2	72.8			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			77	167	359	774			
CNEL:			84	181	390	840			

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing (2020) Road Name: Alessandro Bl. Road Segment: w/o Frederick St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,736 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 2,704 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 98.89% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 58.3% 2.7% 10.8% 0.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.43	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-19.09	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-21.31	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.8	70.5	68.7	62.7	71.3	71.9			
Medium Trucks:	60.3	60.4	54.0	52.5	60.9	61.2			
Heavy Trucks:	62.9	61.3	54.0	55.2	62.9	63.1			
Vehicle Noise:	71.8	71.3	69.0	63.7	72.2	72.7			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			77	166	358	772			
CNEL:			84	180	388	837			

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing (2020) Road Name: Alessandro Bl. Road Segment: e/o Graham St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,770 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 2,916 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
					VehicleType	Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 98.89% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 58.3% 2.7% 10.8% 0.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.76	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-18.76	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-20.98	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	70.8	69.0	63.0	71.6	72.2			
Medium Trucks:	60.6	60.7	54.3	52.8	61.2	61.5			
Heavy Trucks:	63.2	61.6	54.3	55.6	63.3	63.4			
Vehicle Noise:	72.1	71.7	69.3	64.0	72.5	73.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			81	175	377	811			
CNEL:			88	190	408	880			

Tuesday, November 3, 2020

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Graham St. Road Segment: s/o Alessandro Bl.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 11,765 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 821 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 50 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 97.03% Medium Trucks: 84.8% 4.9% 10.3% 1.12% Heavy Trucks: 86.5% 2.7% 10.8% 1.84%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 36.551 Medium Trucks: 36.308 Heavy Trucks: 36.332				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	66.51	-2.31	1.94	-1.20	-4.61	0.000	0.000		
Medium Trucks:	77.72	-21.67	1.98	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	82.99	-19.52	1.98	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	64.9	64.6	62.8	56.8	65.4	66.0			
Medium Trucks:	56.8	56.9	50.5	49.0	57.4	57.7			
Heavy Trucks:	64.2	64.4	55.4	56.6	65.0	65.1			
Vehicle Noise:	68.0	67.9	63.8	60.1	68.5	68.9			
Centerline Distance to Noise Contour (in feet)									
70 dBA 65 dBA 60 dBA 55 dBA									
Ldn: 35 76 163 352									
CNEL: 37 80 173 373									

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Alessandro Bl. Road Segment: w/o Graham St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 39,592 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 2,764 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 98.57% Medium Trucks: 84.8% 4.9% 10.3% 0.82% Heavy Trucks: 81.2% 3.8% 15.0% 0.60%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.51	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-18.28	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-19.62	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.9	70.6	68.8	62.7	71.4	72.0			
Medium Trucks:	61.1	61.2	54.8	53.3	61.7	62.0			
Heavy Trucks:	64.6	64.5	57.1	58.4	66.1	66.2			
Vehicle Noise:	72.2	71.9	69.2	64.4	72.8	73.3			
Centerline Distance to Noise Contour (in feet)									
70 dBA 65 dBA 60 dBA 55 dBA									
Ldn: 85 183 394 850									
CNEL: 92 197 425 915									

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Alessandro Bl. Road Segment: w/o Frederick St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 38,794 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 2,708 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 99.00% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 81.2% 3.8% 15.0% 0.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.45	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-19.09	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-22.75	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	70.8	70.5	68.7	62.7	71.3	71.9			
Medium Trucks:	60.3	60.4	54.0	52.5	60.9	61.2			
Heavy Trucks:	61.5	61.3	54.0	55.2	62.9	63.1			
Vehicle Noise:	71.6	71.3	69.0	63.7	72.2	72.7			
Centerline Distance to Noise Contour (in feet)									
70 dBA 65 dBA 60 dBA 55 dBA									
Ldn: 77 166 359 773									
CNEL: 84 181 389 838									

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: Existing + Project Road Name: Alessandro Bl. Road Segment: e/o Graham St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,799 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 2,918 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 99.00% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 81.2% 3.8% 15.0% 0.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.77	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-18.76	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-22.42	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	70.8	69.0	63.0	71.6	72.2			
Medium Trucks:	60.6	60.7	54.3	52.8	61.2	61.5			
Heavy Trucks:	61.8	61.6	54.3	55.6	63.3	63.4			
Vehicle Noise:	72.0	71.7	69.3	64.1	72.5	73.1			
Centerline Distance to Noise Contour (in feet)									
70 dBA 65 dBA 60 dBA 55 dBA									
Ldn: 81 175 377 812									
CNEL: 88 190 409 881									

Tuesday, November 3, 2020

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: EA Without Project Road Name: Graham St. Road Segment: s/o Alessandro Bl.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 11,684 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 816 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 50 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 98.89% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 86.5% 2.7% 10.8% 0.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 36.551 Medium Trucks: 36.308 Heavy Trucks: 36.332				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	66.51	-2.26	1.94	-1.20	-4.61	0.000	0.000		
Medium Trucks:	77.72	-23.78	1.98	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	82.99	-26.00	1.98	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	65.0	64.7	62.9	56.8	65.5	66.1			
Medium Trucks:	54.7	54.8	48.4	46.9	55.3	55.6			
Heavy Trucks:	57.8	57.9	48.9	50.1	58.5	58.6			
Vehicle Noise:	66.1	65.8	63.2	58.0	66.6	67.1			
Centerline Distance to Noise Contour (in feet)									
70 dBA 65 dBA 60 dBA 55 dBA									
Ldn: 26 56 121 260									
CNEL: 28 61 131 282									

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: EA Without Project Road Name: Alessandro Bl. Road Segment: w/o Graham St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 40,517 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 2,828 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 98.89% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 58.3% 2.7% 10.8% 0.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.63	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-18.89	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-21.11	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.0	70.7	68.9	62.9	71.5	72.1			
Medium Trucks:	60.5	60.6	54.2	52.7	61.1	61.3			
Heavy Trucks:	63.1	61.5	54.2	55.4	63.1	63.3			
Vehicle Noise:	72.0	71.5	69.2	63.9	72.4	72.9			
Centerline Distance to Noise Contour (in feet)									
70 dBA 65 dBA 60 dBA 55 dBA									
Ldn: 80 171 369 795									
CNEL: 86 186 400 862									

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: EA Without Project Road Name: Alessandro Bl. Road Segment: w/o Frederick St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 40,171 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 2,804 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 98.89% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 58.3% 2.7% 10.8% 0.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.59	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-18.93	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-21.15	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.0	70.6	68.9	62.8	71.4	72.0			
Medium Trucks:	60.5	60.5	54.2	52.6	61.1	61.3			
Heavy Trucks:	63.1	61.5	54.2	55.4	63.1	63.2			
Vehicle Noise:	71.9	71.5	69.2	63.9	72.4	72.9			
Centerline Distance to Noise Contour (in feet)									
70 dBA 65 dBA 60 dBA 55 dBA									
Ldn: 79 170 367 791									
CNEL: 86 185 398 857									

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: EA Without Project Road Name: Alessandro Bl. Road Segment: e/o Graham St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 43,458 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 3,033 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 98.89% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 58.3% 2.7% 10.8% 0.42%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.93	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-18.59	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-20.81	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.3	71.0	69.2	63.2	71.8	72.4			
Medium Trucks:	60.8	60.9	54.5	53.0	61.4	61.7			
Heavy Trucks:	63.4	61.8	54.5	55.7	63.4	63.6			
Vehicle Noise:	72.3	71.8	69.5	64.2	72.7	73.2			
Centerline Distance to Noise Contour (in feet)									
70 dBA 65 dBA 60 dBA 55 dBA									
Ldn: 83 180 387 833									
CNEL: 90 195 419 903									

Tuesday, November 3, 2020

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: EA With Project Road Name: Graham St. Road Segment: s/o Alessandro Bl.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 12,219 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 853 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 50 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 44.0 feet Centerline Dist. to Observer: 44.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 97.10% Medium Trucks: 84.8% 4.9% 10.3% 1.11% Heavy Trucks: 86.5% 2.7% 10.8% 1.79%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 36.551 Medium Trucks: 36.308 Heavy Trucks: 36.332				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	66.51	-2.14	1.94	-1.20	-4.61	0.000	0.000		
Medium Trucks:	77.72	-21.57	1.98	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	82.99	-19.49	1.98	-1.20	-5.50	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	65.1	64.8	63.0	56.9	65.6	66.2			
Medium Trucks:	56.9	57.0	50.6	49.1	57.5	57.8			
Heavy Trucks:	64.3	64.4	55.4	56.6	65.0	65.1			
Vehicle Noise:	68.1	68.0	63.9	60.2	68.6	69.0			
Centerline Distance to Noise Contour (in feet)									
Ldn: 70 dBA 36 65 dBA 77 60 dBA 166 55 dBA 358									
CNEL: 38 82 176 379									

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: EA With Project Road Name: Alessandro Bl. Road Segment: w/o Graham St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 41,163 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 2,873 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 98.59% Medium Trucks: 84.8% 4.9% 10.3% 0.82% Heavy Trucks: 81.2% 3.8% 15.0% 0.59%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.68	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-18.13	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-19.53	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.1	70.7	69.0	62.9	71.5	72.1			
Medium Trucks:	61.3	61.3	55.0	53.4	61.9	62.1			
Heavy Trucks:	64.7	64.5	57.2	58.5	66.1	66.3			
Vehicle Noise:	72.3	72.0	69.4	64.6	73.0	73.5			
Centerline Distance to Noise Contour (in feet)									
Ldn: 70 dBA 87 65 dBA 187 60 dBA 404 55 dBA 869									
CNEL: 94 202 435 937									

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: EA With Project Road Name: Alessandro Bl. Road Segment: w/o Frederick St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 40,227 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 2,808 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 99.00% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 81.2% 3.8% 15.0% 0.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.60	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-18.93	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-22.59	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.0	70.6	68.9	62.8	71.4	72.1			
Medium Trucks:	60.5	60.5	54.2	52.6	61.1	61.3			
Heavy Trucks:	61.6	61.5	54.2	55.4	63.1	63.2			
Vehicle Noise:	71.8	71.5	69.2	63.9	72.4	72.9			
Centerline Distance to Noise Contour (in feet)									
Ldn: 70 dBA 79 65 dBA 171 60 dBA 367 55 dBA 792									
CNEL: 86 185 398 858									

Tuesday, November 3, 2020

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL									
Scenario: EA With Project Road Name: Alessandro Bl. Road Segment: e/o Graham St.					Project Name: Compass Danbe Centro Job Number: 13661				
SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS				
Highway Data					Site Conditions (Hard = 10, Soft = 15)				
Average Daily Traffic (Adt): 43,484 vehicles Peak Hour Percentage: 6.98% Peak Hour Volume: 3,035 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 73 feet					Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15				
Site Data					Vehicle Mix				
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 55.0 feet Centerline Dist. to Observer: 55.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 77.5% 12.9% 9.6% 99.00% Medium Trucks: 84.8% 4.9% 10.3% 0.70% Heavy Trucks: 81.2% 3.8% 15.0% 0.30%				
					Noise Source Elevations (in feet)				
					Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0				
					Lane Equivalent Distance (in feet)				
					Autos: 41.446 Medium Trucks: 41.232 Heavy Trucks: 41.253				
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	68.46	2.94	1.12	-1.20	-4.67	0.000	0.000		
Medium Trucks:	79.45	-18.59	1.15	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	84.25	-22.25	1.15	-1.20	-5.38	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	71.3	71.0	69.2	63.2	71.8	72.4			
Medium Trucks:	60.8	60.9	54.5	53.0	61.4	61.7			
Heavy Trucks:	62.0	61.8	54.5	55.7	63.4	63.6			
Vehicle Noise:	72.1	71.8	69.5	64.2	72.7	73.2			
Centerline Distance to Noise Contour (in feet)									
Ldn: 70 dBA 83 65 dBA 180 60 dBA 387 55 dBA 834									
CNEL: 90 195 420 904									

Tuesday, November 3, 2020

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 9.1:
CADNAA OPERATIONAL NOISE MODEL INPUTS

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

13661 -Compass Danbe Centerpointe

CadnaA Noise Prediction Model: 13661.cna

Date: 03.11.20

Analyst: S. Shami

Calculation Configuration

Configuration	
Parameter	Value
General	
Country	(user defined)
Max. Error (dB)	0.00
Max. Search Radius (#(Unit,LEN))	2000.01
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (#(Unit,LEN))	999.99
Min. Length of Section (#(Unit,LEN))	1.01
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Reference Time Day (min)	960.00
Reference Time Night (min)	480.00
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	5.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	2
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rcvr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	
	Incl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (#(Unit,TEMP))	10
rel. Humidity (%)	70
Ground Absorption G	0.50
Wind Speed for Dir. (#(Unit,SPEED))	3.0
Roads (RLS-90)	
Strictly acc. to RLS-90	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height (ft)	Coordinates			
			Day (dBA)	Night (dBA)	CNEL (dBA)	Day (dBA)	Night (dBA)	CNEL (dBA)	Type	Auto	Noise Type		X (ft)	Y (ft)	Z (ft)	
RECEIVERS		R1	39.5	38.0	44.7	65.0	60.0	0.0				5.00	a	6256312.79	2278949.58	5.00
RECEIVERS		R2	43.6	43.4	50.0	65.0	60.0	0.0				5.00	a	6257887.44	2278566.77	5.00
RECEIVERS		R3	48.9	48.8	55.5	65.0	60.0	0.0				5.00	a	6254819.51	2278120.58	5.00
RECEIVERS		R4	35.1	32.8	39.7	65.0	60.0	0.0				5.00	a	6254829.93	2279082.21	5.00
RECEIVERS		R5	38.8	36.6	43.4	65.0	60.0	0.0				5.00	a	6255752.80	2279018.15	5.00
RECEIVERS		@ 200	55.5	55.4	62.1	65.0	60.0	0.0				5.00	a	6257067.66	2278236.19	5.00

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li		Operating Time			KO (dB)	Height		Coordinates			
			Day (dBA)	Evening (dBA)	Night (dBA)	Type	Value (dBA)	norm. (dBA)	Day (min)	Special (min)		Night (min)	(ft)	(ft)	X (ft)	Y (ft)	Z (ft)
POINTSOURCE		TRASH03	89.0	89.0	89.0	Lw	89		75.00	0.00	45.00	0.0	5.00	a	6255782.68	2278218.71	5.00
POINTSOURCE		TRASH02	89.0	89.0	89.0	Lw	89		75.00	0.00	45.00	0.0	5.00	a	6256273.56	2278214.72	5.00
POINTSOURCE		TRASH01	89.0	89.0	89.0	Lw	89		75.00	0.00	45.00	0.0	5.00	a	6256682.17	2278244.65	5.00
POINTSOURCE		AC01	88.9	88.9	88.9	Lw	88.9		585.00	0.00	252.00	0.0	5.00	g	6255642.95	2278707.03	50.00
POINTSOURCE		AC02	88.9	88.9	88.9	Lw	88.9		585.00	0.00	252.00	0.0	5.00	g	6256420.94	2278702.03	50.00
POINTSOURCE		AC03	88.9	88.9	88.9	Lw	88.9		585.00	0.00	252.00	0.0	5.00	g	6256787.64	2278696.43	50.00

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li		Operating Time			Moving Pt. Src			Height (ft)		
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number				
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)		dB(A)	(min)	(min)	(min)	Day	Evening		Night	(mph)
LINESOURCE		DWY01	92.9	77.8	83.8	69.6	54.5	60.5	PWL-Pt	89.7					97.0	3.0	12.0	6.2	8
LINESOURCE		DWY03	92.6	77.5	83.5	69.6	54.5	60.5	PWL-Pt	89.7					97.0	3.0	12.0	6.2	8
LINESOURCE		DWY1&3	91.2	76.1	82.1	72.6	57.5	63.5	PWL-Pt	89.7					194.0	6.0	24.0	6.2	8

Name	Height		Coordinates			
	Begin (ft)	End (ft)	x (ft)	y (ft)	z (ft)	Ground (ft)
LINESOURCE	8.00	a	6255770.89	2278288.20	8.00	0.00
			6255586.95	2278291.38	8.00	0.00
			6255585.68	2278722.08	8.00	0.00
			6255613.67	2278746.25	8.00	0.00
			6255616.85	2278800.33	8.00	0.00
LINESOURCE	8.00	a	6256695.05	2278275.81	8.00	0.00
			6256834.86	2278281.92	8.00	0.00
			6256833.64	2278704.02	8.00	0.00
			6256816.56	2278733.30	8.00	0.00
			6256812.94	2278793.79	8.00	0.00
LINESOURCE	8.00	a	6256285.49	2278285.21	8.00	0.00
			6256524.87	2278283.25	8.00	0.00

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li		Operating Time			Height (ft)	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special		Night
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)		dB(A)	(min)	(min)		(min)
AREASOURCE		DOCK01	111.5	111.5	111.5	72.0	72.0	72.0	Lw	111.5					8
AREASOURCE		DOCK02	111.5	111.5	111.5	76.8	76.8	76.8	Lw	111.5					8

Name	Height		Coordinates			
	Begin (ft)	End (ft)	x (ft)	y (ft)	z (ft)	Ground (ft)
AREASOURCE	8.00	a	6255771.27	2278400.50	8.00	0.00
			6256285.56	2278396.31	8.00	0.00
			6256285.43	2278208.79	8.00	0.00
			6255770.64	2278212.94	8.00	0.00
AREASOURCE	8.00	a	6256525.91	2278394.45	8.00	0.00
			6256694.80	2278393.11	8.00	0.00
			6256695.20	2278205.05	8.00	0.00
			6256524.15	2278206.72	8.00	0.00

Barrier(s)

Name	M.	ID	Absorption		Z-Ext.	Cantilever	Height		Coordinates						
			left	right			horz.	vert.	Begin	End	x	y	z	Ground	
			(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
BARRIEREXISTING		0						6.00	a			6255572.68	2278951.74	6.00	0.00
												6255611.75	2278933.51	6.00	0.00
												6256126.07	2278933.51	6.00	0.00
BARRIEREXISTING		0						5.00	a			6256248.99	2278952.24	5.00	0.00
												6256281.89	2278922.97	5.00	0.00
												6256870.71	2278924.11	5.00	0.00
												6257366.73	2278920.70	5.00	0.00
												6257486.99	2278920.70	5.00	0.00

Building(s)

Name	M.	ID	RB	Residents	Absorption	Height	Coordinates				
							Begin (ft)	x (ft)	y (ft)	z (ft)	Ground (ft)
BUILDING		BUILDING00001	x	0		45.00	a	6255623.77	2278719.79	45.00	0.00
								6255664.95	2278719.93	45.00	0.00
								6255664.95	2278723.08	45.00	0.00
								6255715.31	2278723.08	45.00	0.00
								6255715.45	2278725.42	45.00	0.00
								6255742.49	2278725.69	45.00	0.00
								6255742.63	2278722.67	45.00	0.00
								6255792.72	2278721.99	45.00	0.00
								6255792.72	2278724.59	45.00	0.00
								6255819.48	2278724.87	45.00	0.00
								6255819.76	2278722.40	45.00	0.00
								6255900.59	2278721.44	45.00	0.00
								6255900.59	2278724.18	45.00	0.00
								6255928.18	2278724.18	45.00	0.00
								6255928.04	2278720.89	45.00	0.00
								6255977.72	2278720.75	45.00	0.00
								6255977.72	2278723.77	45.00	0.00
								6256005.31	2278723.63	45.00	0.00

Name	M.	ID	RB	Residents	Absorption	Height	Coordinates			
							Begin (ft)	x (ft)	y (ft)	z (ft)
							6256005.17	2278720.61	45.00	0.00
							6256054.86	2278720.06	45.00	0.00
							6256054.72	2278723.22	45.00	0.00
							6256082.44	2278723.08	45.00	0.00
							6256082.58	2278719.79	45.00	0.00
							6256131.99	2278719.65	45.00	0.00
							6256131.85	2278722.40	45.00	0.00
							6256159.57	2278722.40	45.00	0.00
							6256159.57	2278719.65	45.00	0.00
							6256240.27	2278718.69	45.00	0.00
							6256240.41	2278721.85	45.00	0.00
							6256267.45	2278721.44	45.00	0.00
							6256267.58	2278718.56	45.00	0.00
							6256317.40	2278718.28	45.00	0.00
							6256317.26	2278721.30	45.00	0.00
							6256344.44	2278721.16	45.00	0.00
							6256344.58	2278718.28	45.00	0.00
							6256395.22	2278717.73	45.00	0.00
							6256395.22	2278716.36	45.00	0.00
							6256438.73	2278716.36	45.00	0.00
							6256438.59	2278687.54	45.00	0.00
							6256439.55	2278687.26	45.00	0.00
							6256439.41	2278634.70	45.00	0.00
							6256442.29	2278634.42	45.00	0.00
							6256442.43	2278606.02	45.00	0.00
							6256439.41	2278606.02	45.00	0.00
							6256439.14	2278538.63	45.00	0.00
							6256442.43	2278538.77	45.00	0.00
							6256442.16	2278510.49	45.00	0.00
							6256439.00	2278510.63	45.00	0.00
							6256438.59	2278421.70	45.00	0.00
							6256441.61	2278421.56	45.00	0.00
							6256441.74	2278393.70	45.00	0.00
							6256438.86	2278393.43	45.00	0.00
							6256438.73	2278340.45	45.00	0.00
							6256437.63	2278340.45	45.00	0.00
							6256437.63	2278311.77	45.00	0.00
							6256407.57	2278312.04	45.00	0.00
							6256407.71	2278310.94	45.00	0.00
							6256357.34	2278310.80	45.00	0.00
							6256357.20	2278308.61	45.00	0.00
							6256329.89	2278308.61	45.00	0.00
							6256329.75	2278311.49	45.00	0.00
							6256285.29	2278311.77	45.00	0.00
							6256285.56	2278396.31	45.00	0.00
							6255771.27	2278400.50	45.00	0.00
							6255771.07	2278315.45	45.00	0.00
							6255741.49	2278315.64	45.00	0.00
							6255741.58	2278312.96	45.00	0.00
							6255714.19	2278312.87	45.00	0.00
							6255714.19	2278316.11	45.00	0.00
							6255663.60	2278316.40	45.00	0.00
							6255663.60	2278320.89	45.00	0.00
							6255623.23	2278320.98	45.00	0.00
							6255623.23	2278347.71	45.00	0.00
							6255619.22	2278347.71	45.00	0.00
							6255619.22	2278400.58	45.00	0.00
							6255616.16	2278400.77	45.00	0.00
							6255616.26	2278428.93	45.00	0.00
							6255619.51	2278428.93	45.00	0.00
							6255619.51	2278506.34	45.00	0.00
							6255616.74	2278506.62	45.00	0.00
							6255616.93	2278534.78	45.00	0.00
							6255619.60	2278534.78	45.00	0.00
							6255619.89	2278612.38	45.00	0.00
							6255617.02	2278612.28	45.00	0.00
							6255617.02	2278640.54	45.00	0.00
							6255620.27	2278640.44	45.00	0.00
							6255620.46	2278693.41	45.00	0.00
							6255623.42	2278693.41	45.00	0.00
							6255623.51	2278707.92	45.00	0.00
BUILDING		BUILDING00002	x	0		45.00 a	6256527.92	2278715.46	45.00	0.00
							6256561.48	2278715.33	45.00	0.00
							6256561.75	2278716.67	45.00	0.00
							6256611.83	2278716.00	45.00	0.00
							6256612.10	2278718.95	45.00	0.00
							6256639.22	2278718.82	45.00	0.00

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Name	M.	ID	RB	Residents	Absorption	Height	Coordinates			
							Begin	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)
							6256639.09	2278716.13	45.00	0.00
							6256690.77	2278715.46	45.00	0.00
							6256691.04	2278718.41	45.00	0.00
							6256718.30	2278718.15	45.00	0.00
							6256718.70	2278715.73	45.00	0.00
							6256769.05	2278714.79	45.00	0.00
							6256769.18	2278711.70	45.00	0.00
							6256800.19	2278711.43	45.00	0.00
							6256800.19	2278684.72	45.00	0.00
							6256803.55	2278684.58	45.00	0.00
							6256803.28	2278631.95	45.00	0.00
							6256805.97	2278631.68	45.00	0.00
							6256806.24	2278603.49	45.00	0.00
							6256803.28	2278603.36	45.00	0.00
							6256802.88	2278525.75	45.00	0.00
							6256806.10	2278525.49	45.00	0.00
							6256805.83	2278497.56	45.00	0.00
							6256803.01	2278497.56	45.00	0.00
							6256802.61	2278420.09	45.00	0.00
							6256805.70	2278419.96	45.00	0.00
							6256805.83	2278391.76	45.00	0.00
							6256802.48	2278391.76	45.00	0.00
							6256802.61	2278338.87	45.00	0.00
							6256797.11	2278338.87	45.00	0.00
							6256797.24	2278313.09	45.00	0.00
							6256773.48	2278312.82	45.00	0.00
							6256773.61	2278308.26	45.00	0.00
							6256694.40	2278308.93	45.00	0.00
							6256694.80	2278393.11	45.00	0.00
							6256525.91	2278394.45	45.00	0.00
							6256526.04	2278408.28	45.00	0.00
							6256523.09	2278408.28	45.00	0.00
							6256523.09	2278436.47	45.00	0.00
							6256526.31	2278436.47	45.00	0.00
							6256526.31	2278510.05	45.00	0.00
							6256523.62	2278509.91	45.00	0.00
							6256523.35	2278538.37	45.00	0.00
							6256526.17	2278538.37	45.00	0.00
							6256526.55	2278605.63	45.00	0.00
							6256523.57	2278605.86	45.00	0.00
							6256523.57	2278634.03	45.00	0.00
							6256526.55	2278633.80	45.00	0.00
							6256526.78	2278686.70	45.00	0.00
							6256527.92	2278686.93	45.00	0.00

APPENDIX 10.1:

CADNAA CONSTRUCTION NOISE MODEL INPUTS

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Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

13661 -Compass Danbe Centerpointe

CadnaA Noise Prediction Model: 13661_Construction.cna

Date: 03.11.20

Analyst: S. Shami

Calculation Configuration

Configuration	
Parameter	Value
General	
Country	(user defined)
Max. Error (dB)	0.00
Max. Search Radius (#(Unit,LEN))	2000.01
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (#(Unit,LEN))	999.99
Min. Length of Section (#(Unit,LEN))	1.01
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Reference Time Day (min)	960.00
Reference Time Night (min)	480.00
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	5.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	2
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rcvr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	
	Incl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (#(Unit,TEMP))	10
rel. Humidity (%)	70
Ground Absorption G	0.50
Wind Speed for Dir. (#(Unit,SPEED))	3.0
Roads (RLS-90)	
Strictly acc. to RLS-90	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height (ft)	Coordinates			
			Day (dBA)	Night (dBA)	CNEL (dBA)	Day (dBA)	Night (dBA)	CNEL (dBA)	Type	Auto	Noise Type		X (ft)	Y (ft)	Z (ft)	
RECEIVERS	R1		61.9	61.9	68.6	65.0	60.0	0.0				5.00	a	6256312.79	2278949.58	5.00
RECEIVERS	R2		56.3	56.3	63.0	65.0	60.0	0.0				5.00	a	6257887.44	2278566.77	5.00
RECEIVERS	R3		57.9	57.9	64.5	65.0	60.0	0.0				5.00	a	6254819.51	2278120.58	5.00
RECEIVERS	R4		57.3	57.3	64.0	65.0	60.0	0.0				5.00	a	6254829.93	2279082.21	5.00
RECEIVERS	R5		59.9	59.9	66.6	65.0	60.0	0.0				5.00	a	6255752.80	2279018.15	5.00
RECEIVERS	@ 200		63.7	63.7	70.4	65.0	60.0	0.0				5.00	a	6257067.66	2278236.19	5.00

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Operating Time			Height (ft)
			Day (dBA)	Evening (dBA)	Night (dBA)	Day (dBA)	Evening (dBA)	Night (dBA)	Type	Value dB(A)	norm.	Day (min)	Special (min)	Night (min)	
SITEBOUNDARY		SITEBOUNDARY00001	122.1	122.1	122.1	73.5	73.5	73.5	Lw"	73.5					8

Name	Height		Coordinates			
	Begin (ft)	End (ft)	x (ft)	y (ft)	z (ft)	Ground (ft)
SITEBOUNDARY	8.00	a	6256864.04	2278199.25	8.00	0.00
			6255558.59	2278209.31	8.00	0.00
			6255562.07	2278802.36	8.00	0.00
			6256865.47	2278793.43	8.00	0.00

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Barrier(s)

Name	M.	ID	Absorption		Z-Ext.	Cantilever			Height		Coordinates			
			left	right		horz.	vert.	Begin	End	x	y	z	Ground	
					(ft)	(ft)	(ft)	(ft)	a	(ft)	(ft)	(ft)	(ft)	
BARRIEREXISTING		0						6.00	a	6255572.68	2278951.74	6.00	0.00	
										6255611.75	2278933.51	6.00	0.00	
										6256126.07	2278933.51	6.00	0.00	
BARRIEREXISTING		0						5.00	a	6256248.99	2278952.24	5.00	0.00	
										6256281.89	2278922.97	5.00	0.00	
										6256870.71	2278924.11	5.00	0.00	
										6257366.73	2278920.70	5.00	0.00	
										6257486.99	2278920.70	5.00	0.00	

Attachment: Appendix J-Noise Impact Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)



**ALESSANDRO WAREHOUSE
TRAFFIC ANALYSIS
CITY OF MORENO VALLEY**

PREPARED BY:

Aric Evatt, PTP
aevatt@urbanxroads.com

Charlene So, PE
cso@urbanxroads.com

Connor Paquin
cpaquin@urbanxroads.com



JUNE 15, 2021

13276-03 TA Report

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

TABLE OF CONTENTS

TABLE OF CONTENTS	III
APPENDICES	V
LIST OF EXHIBITS	V
LIST OF TABLES	V
LIST OF ABBREVIATED TERMS	VII
1 SUMMARY OF FINDINGS	1
1.1 Summary of Findings.....	1
1.2 Project Overview.....	1
1.3 Analysis Scenarios	3
1.4 Study Area.....	4
1.5 Analysis Findings	6
1.6 Recommended Improvements	6
1.7 Truck Access and Circulation.....	9
2 METHODOLOGIES	11
2.1 Level of Service	11
2.2 Intersection Capacity Analysis	11
2.3 Traffic Signal Warrant Analysis Methodology.....	13
2.4 Minimum Level of Service (LOS)	13
2.5 Thresholds of Significance.....	14
3 AREA CONDITIONS	17
3.1 Existing Circulation Network.....	17
3.2 City of Moreno Valley General Plan Circulation Element	17
3.3 Truck Routes	17
3.4 Transit Service.....	22
3.5 Bicycle & Pedestrian Facilities.....	22
3.6 Existing (2020) Traffic Counts	22
3.7 Intersection Operations Analysis	25
3.8 Recommended Improvements	25
4 PROJECTED FUTURE TRAFFIC	29
4.1 Project Trip Generation.....	29
4.2 Project Trip Distribution.....	31
4.3 Modal Split.....	31
4.4 Project Trip Assignment	37
4.5 Background Traffic	37
4.6 Near-Term Traffic Forecasts	37
5 EAP (2022) TRAFFIC CONDITIONS	39
5.1 Roadway Improvements	39
5.2 EAP Traffic Volume Forecasts	39
5.3 Intersection Operations Analysis	39
5.4 Queueing Analysis.....	39
5.5 Recommended Improvements	43
6 LOCAL AND REGIONAL FUNDING MECHANISMS	45
6.1 Transportation Uniform Mitigation Fee (TUMF) Program.....	45

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

6.2 City of Moreno Valley Development Impact Fee (DIF) Program 45

7 REFERENCES..... 47

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDICES

APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT
 APPENDIX 3.1: EXISTING TRAFFIC COUNTS
 APPENDIX 3.2: EXISTING (2020) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS
 APPENDIX 5.1: EAP (2022) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

LIST OF EXHIBITS

EXHIBIT 1-1: PRELIMINARY SITE PLAN 2
 EXHIBIT 1-2: LOCATION MAP..... 5
 EXHIBIT 1-3: SUMMARY OF LOS 7
 EXHIBIT 1-4: SITE ADJACENT ROADWAY AND SITE ACCESS RECOMMENDATIONS..... 8
 EXHIBIT 1-5: TRUCK ACCESS 10
 EXHIBIT 2-1: CITY OF MORENO VALLEY LEVEL OF SERVICE (LOS) STANDARDS..... 15
 EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS..... 18
 EXHIBIT 3-2: CITY OF MORENO VALLEY GENERAL PLAN CIRCULATION ELEMENT 19
 EXHIBIT 3-3: CITY OF MORENO VALLEY GENERAL PLAN ROADWAY CROSS-SECTIONS 20
 EXHIBIT 3-4: EXISTING TRUCK ROUTES 21
 EXHIBIT 3-5: EXISTING TRANSIT ROUTES 23
 EXHIBIT 3-6: EXISTING PEDESTRIAN FACILITIES..... 24
 EXHIBIT 3-7: EXISTING (2020) TRAFFIC VOLUMES (IN PCE)..... 26
 EXHIBIT 3-8: EXISTING (2020) SUMMARY OF LOS 27
 EXHIBIT 4-1: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION..... 35
 EXHIBIT 4-2: PROJECT (TRUCK) TRIP DISTRIBUTION 36
 EXHIBIT 4-3: PROJECT ONLY TRAFFIC VOLUMES (IN PCE) 38
 EXHIBIT 5-1: EAP (2022) TRAFFIC VOLUMES (IN PCE) 40
 EXHIBIT 5-2: EAP (2022) SUMMARY OF LOS..... 41

LIST OF TABLES

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS 4
 TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS..... 12
 TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS..... 13
 TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2020) CONDITIONS 28
 TABLE 4-1: PROJECT TRIP GENERATION RATES 30
 TABLE 4-2: PROJECT TRIP GENERATION SUMMARY (ACTUAL VEHICLES) 32
 TABLE 4-3: PROJECT TRIP GENERATION SUMMARY (PCE) 33
 TABLE 4-4: TRIP GENERATION COMPARISON 34
 TABLE 5-1: INTERSECTION ANALYSIS FOR EAP (2022) CONDITIONS 42

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CA MUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CMP	Congestion Management Program
DIF	Development Impact Fee
EAP	Existing Plus Ambient Growth Plus Project
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
N/A	Not Applicable
PCE	Passenger Car Equivalent
PHF	Peak Hour Factor
Project	Alessandro Warehouse
RCTC	Riverside County Transportation Commission
RTA	Riverside Transit Authority
SCAQMD	South Coast Air Quality Management District
sf	Square Feet
TA	Traffic Analysis
TUMF	Transportation Uniform Mitigation Fee
WRCOG	Western Riverside Council of Governments
V/C	Volume to Capacity

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Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

1 SUMMARY OF FINDINGS

This report presents the results of the traffic analysis (TA) for the proposed Alessandro Warehouse development (“Project”) located south of Alessandro Boulevard on either side of Chagall Court in the City of Moreno Valley as shown on Exhibit 1-1.

The purpose of this traffic analysis is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project, to recommend improvements to achieve acceptable circulation system operational conditions, and determine conformance with the General Plan goals and policies. This traffic study has been prepared in accordance with the City of Moreno Valley Transportation Engineering Division’s Traffic Impact Analysis Preparation Guide (June 2020) and consultation with City of Moreno Valley staff during the scoping process. (1) The approved Project Traffic Study Scoping agreement is provided in Appendix 1.1 of this TA.

1.1 SUMMARY OF FINDINGS

The Project is proposing to construct the following improvements as design features in conjunction with development of the site:

- Project to construct Alessandro Boulevard at its ultimate half-section width as a divided major arterial (134-foot right-of-way) between the Project’s western and eastern boundaries in compliance with applicable City of Moreno Valley standards.
- Project to construct Driveway 1, Driveway 2, and Driveway 3 with stop controls for the northbound traffic in order to facilitate site access. All driveways will be restricted to right-in/right-out access only. If receiving lanes are available to the west and east, the third eastbound through lane should also be striped per the ultimate roadway cross-section.
- The Project should modify the existing eastbound left turn pocket at the intersection of Graham Street and Alessandro Boulevard to accommodate a 250-foot left turn lane.

Additional details and intersection lane geometrics are provided in Section 1.6 *Recommended Improvements* of this report.

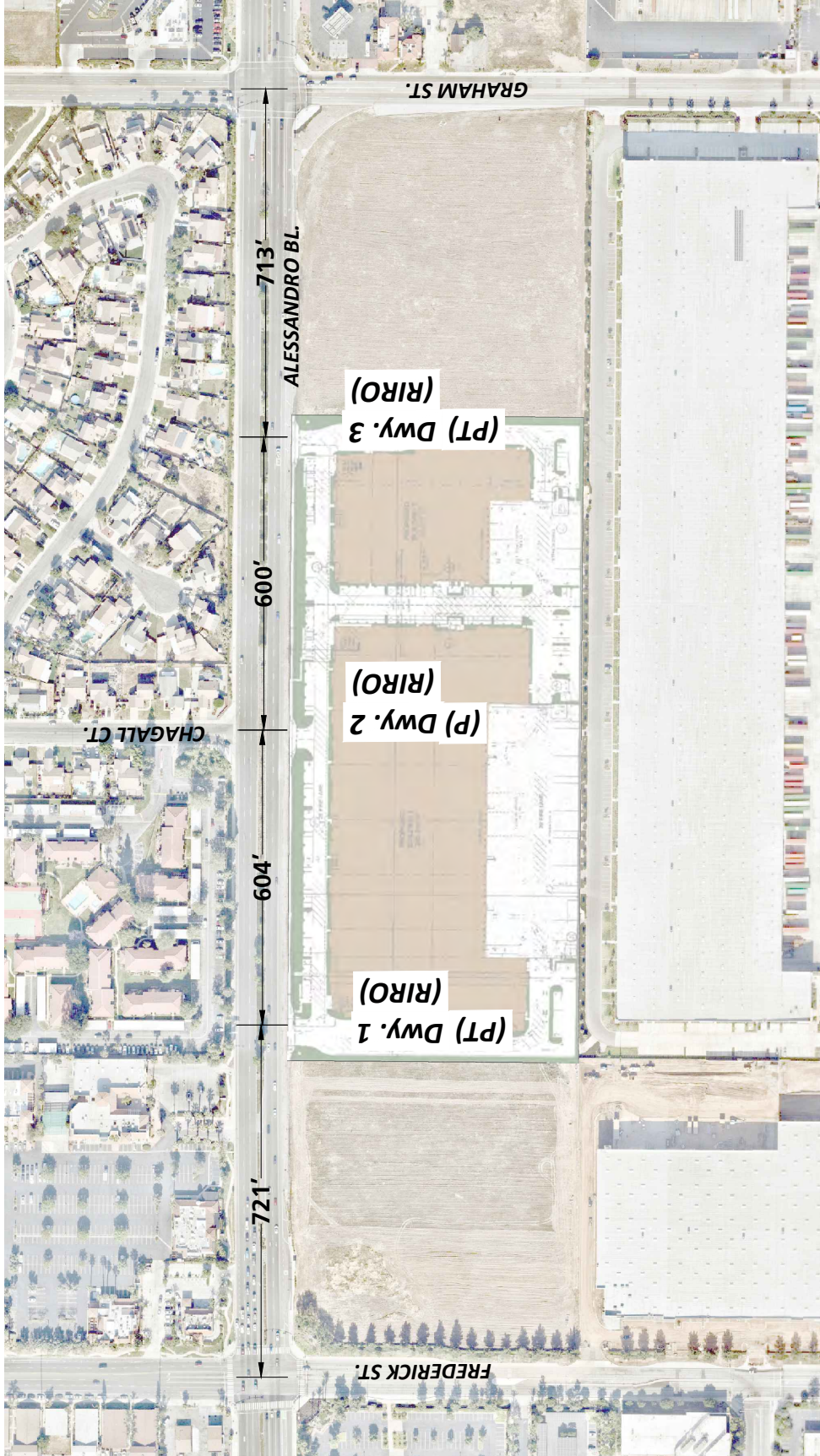
1.2 PROJECT OVERVIEW

In an effort to calculate and evaluate a conservative trip generation for the proposed Project, the following mix of uses have been evaluated for the Project:

- Building 1: 206,665 square feet (sf) of warehousing (70% of total building sf) and 88,571 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 295,236 sf for Building 1
- Building 2: 70,876 sf of warehousing (70% of total building sf) and 30,376 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 101,252 sf for Building 2

The Project will be developed in a single phase and has a projected Opening Year of 2022. Vehicular access will be provided via 3 driveways along Alessandro Boulevard (see Exhibit 1-1). All driveways are proposed to be restricted to right-in/right-out access only.

EXHIBIT 1-1: PRELIMINARY SITE PLAN



LEGEND:

- RIRO = RIGHT-IN/RIGHT-OUT ONLY ACCESS
- FULL = FULL ACCESS
- P = PASSENGER CARS ONLY
- PT = PASSENGER CARS AND TRUCKS



13276 - siteplan.dwg



Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, 2017. (2) The Project is estimated to generate a net total of 742 trip-ends per day on a typical weekday with approximately 59 AM peak hour trips and 64 PM peak hour trips (actual vehicles). The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

1.2.1 SITE PLAN DRIVEWAY LOCATIONS

As shown on Exhibit 1-1 and based on the City of Moreno Valley General Plan classification as a Divided Major Arterial, all driveways are anticipated to meet the minimum required driveway spacing of 250-feet between driveways per the City of Moreno Valley Municipal Code (9.11.080-14). However, access at these driveways will be restricted to right-in/right-out access only due to the existing raised median between Frederick Street and Graham Street.

1.3 ANALYSIS SCENARIOS

For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2020)
- Existing plus Ambient Growth plus Project (EAP)

1.3.1 EXISTING (2020) CONDITIONS

Information for Existing (2020) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared. Due to the currently ongoing COVID-19 pandemic, schools and businesses within the study area were closed or operating at less than full capacity at the time this study was prepared. As such, historic traffic counts from 2018 were utilized in conjunction with a 4.04% growth factor to reflect 2020 conditions (2% per year, compounded annually).

1.3.2 EAP (2022) CONDITIONS

To account for growth in traffic between Existing (2020) and EAP (2022) traffic conditions, a compounded annual traffic growth rate of 2.0 percent per year compounded annually was assumed (4.04 percent total aggregate growth in background traffic for the period from 2020 through 2022). The 2.0 percent annual growth rate is intended to capture non-specific ambient traffic growth. The purpose of this analysis scenario is to determine if the addition of Project traffic is anticipated to result in any new deficiencies.

1.4 STUDY AREA

To ensure that this TA satisfies the City of Moreno Valley's traffic study requirements, Urban Crossroads, Inc. prepared a project traffic study scoping package for review by City of Moreno Valley staff prior to the preparation of this report.

The 5 study area intersections shown on Exhibit 1-2 and listed in Table 1-1 were selected for this TA based on the City of Moreno Valley's Traffic Study Guidelines and in consultation with City of Moreno Valley staff. Pursuant to the Traffic Study Guidelines, the City requires analysis of intersections where the Project would contribute 50 or more peak hour trips.¹ In an effort to conduct a conservative analysis, the trip generation for the proposed Project has been utilized to determine if the 50 peak hour trip criteria has been met at the study area intersections.

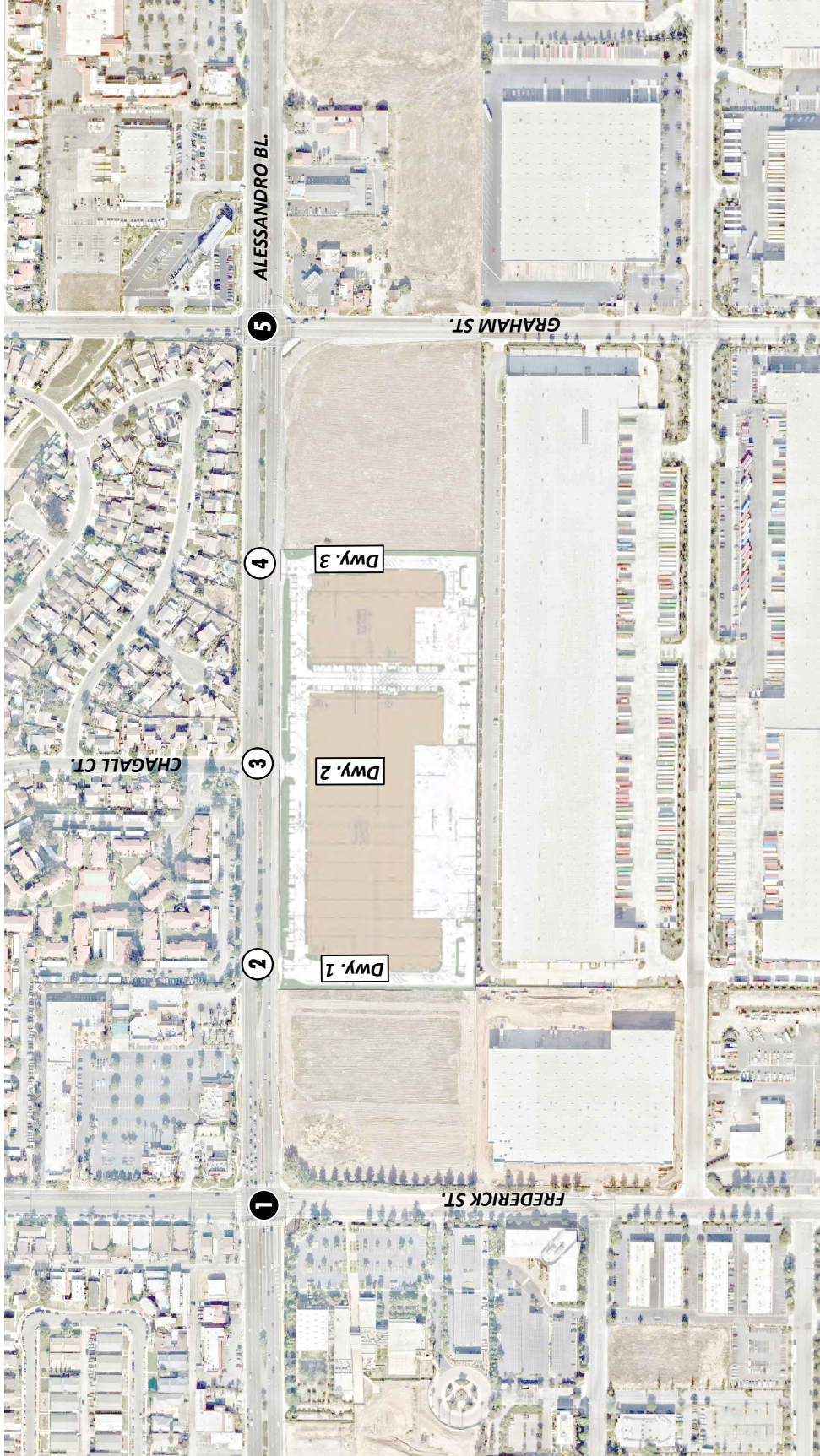
TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

ID	Intersection Location	Jurisdiction	CMP?
1	Frederick St. & Alessandro Bl.	City of Moreno Valley	No
2	Driveway 1 & Alessandro Bl. – Future Intersection	City of Moreno Valley	No
3	Driveway 2 & Alessandro Bl. – Future Intersection	City of Moreno Valley	No
4	Driveway 3 & Alessandro Bl. – Future Intersection	City of Moreno Valley	No
5	Graham St. & Alessandro Bl.	City of Moreno Valley	No

The intent of a Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. Counties within California have developed CMPs with varying methods and strategies to meet the intent of the CMP legislation. The County of Riverside CMP became effective with the passage of Proposition 111 in 1990 and updated most recently in 2011. The Riverside County Transportation Commission (RCTC) adopted the 2011 CMP for the County of Riverside in December 2011. (3) There are no CMP intersections in this study area.

¹ The "50 or more peak hour trips" intersection analytic protocol stipulated in the City's Traffic Study Guidelines is consistent with standard industry practice. It is noted further that the 50 peak hour trip threshold is employed by other agencies throughout Southern California including the County of Riverside, County of San Bernardino, and the County of Orange.

EXHIBIT 1-2: LOCATION MAP



LEGEND:

- ① = EXISTING INTERSECTION ANALYSIS LOCATION
- ② = FUTURE INTERSECTION ANALYSIS LOCATION



13276 - locmap.dwg



1.5 ANALYSIS FINDINGS

This section provides a summary of analysis findings. Section 2 *Methodologies* provides information on the methodologies used in the analysis and Section 5 *EAP (2022) Traffic Analysis* includes the detailed analysis. A summary of LOS results for all analysis scenarios is presented on Exhibit 1-3. Based on a comparison of Existing to EAP (2022) traffic conditions, the addition of Project traffic is not anticipated result in any deficiencies at the study area intersections. All study area intersections are anticipated to continue to operate at acceptable levels and no improvements are necessary for EAP (2022) traffic conditions.

1.6 RECOMMENDED IMPROVEMENTS

1.6.1 SITE ADJACENT ROADWAY IMPROVEMENTS








The recommended site-adjacent roadway improvements for the Project are described below. Exhibit 1-4 illustrates the site-adjacent roadway improvement recommendations.

Alessandro Boulevard – Alessandro Boulevard is an east-west oriented roadway located along the Project’s northern boundary. Construct Alessandro Boulevard at its ultimate half-section width as a Divided Major Arterial (134-foot right-of-way) between the Project’s western boundary and the Project’s eastern boundary in compliance with applicable City of Moreno Valley standards.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the Project site.

Sight distance at each project access point should be reviewed with respect to standard Caltrans and City of Moreno Valley sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

EXHIBIT 1-3: SUMMARY OF LOS

#	Intersection	Existing (2020)	EAP (2022)
1	Frederick St. & Alessandro Bl.		
2	Dwy. 1 & Alessandro Bl.	NA	
3	Dwy. 2 & Alessandro Bl.	NA	
4	Dwy. 3 & Alessandro Bl.	NA	
5	Graham St. & Alessandro Bl.		

LEGEND:






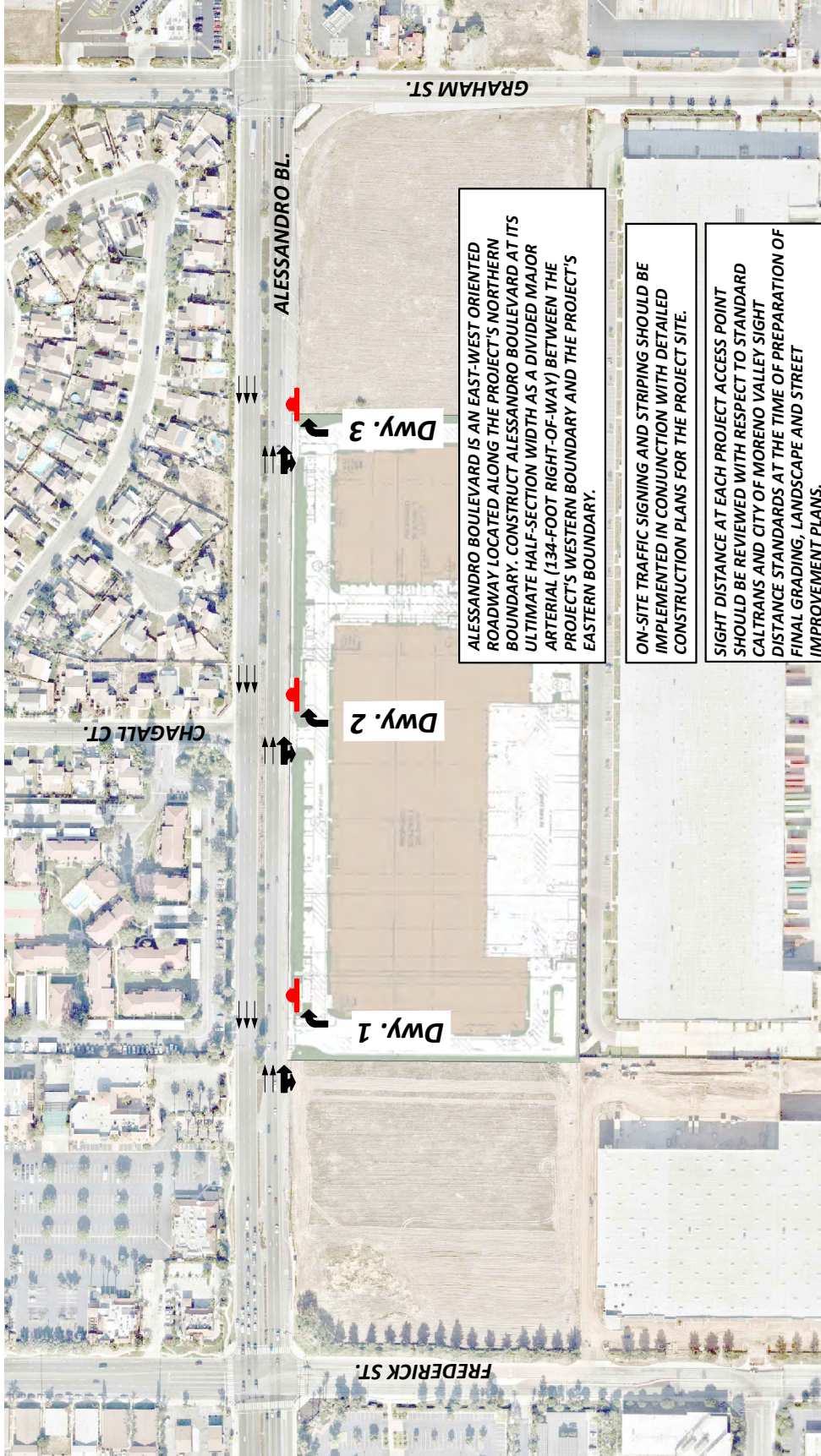
-  = AM PEAK HOUR
-  = PM PEAK HOUR
-  = LOS A-D
-  = LOS E
-  = LOS F
- NA = NOT AN ANALYSIS LOCATION FOR THIS SCENARIO

EXHIBIT 1-4: SITE ADJACENT ROADWAY AND SITE ACCESS RECOMMENDATIONS



LEGEND:

- = STOP SIGN IMPROVEMENT
- = EXISTING LANE
- = LANE IMPROVEMENT



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1.6.2 SITE ACCESS IMPROVEMENTS

The recommended site access driveway improvements for the Project are described below. Exhibit 1-4 also illustrates the site access improvements. Construction of on-site and site adjacent improvements shall occur in conjunction with adjacent Project development activity or as needed for Project access purposes.

Driveway 1, Driveway 2, and Driveway 3 on Alessandro Boulevard – Install a stop control on the northbound approach and construct the intersection with the following geometrics:

- Northbound Approach: One right turn lane.
- Southbound Approach: Not Applicable (N/A)
- Eastbound Approach: Two through lanes and one shared through-right turn lane. 3rd shared through-right turn lane should be accommodated if the receiving lanes are in place on either side of the project between Frederick Street and Graham Street.
- Westbound Approach: Three through lanes.

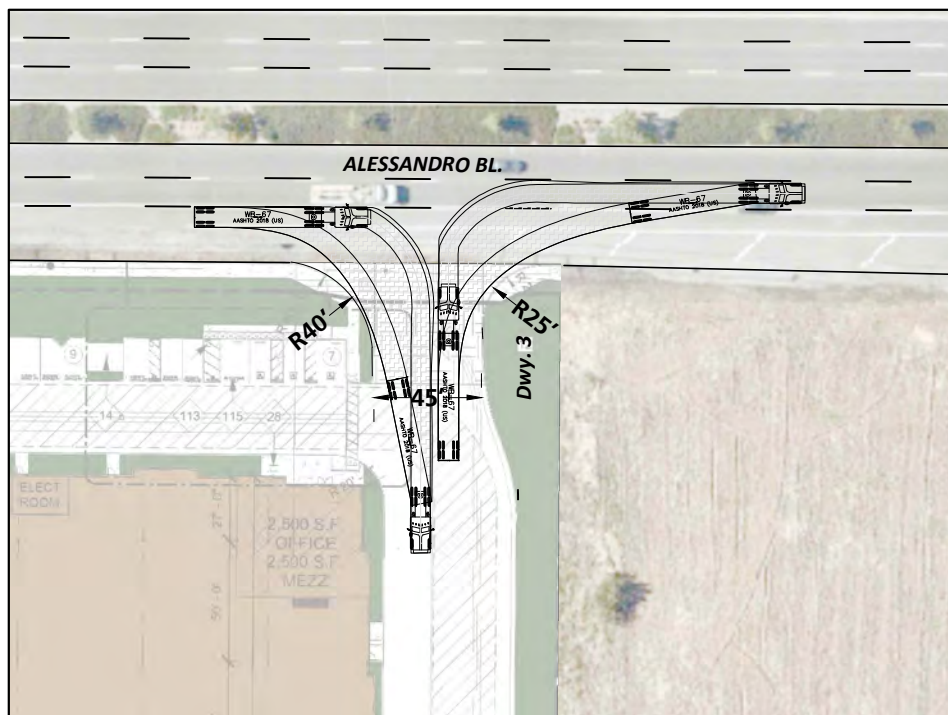
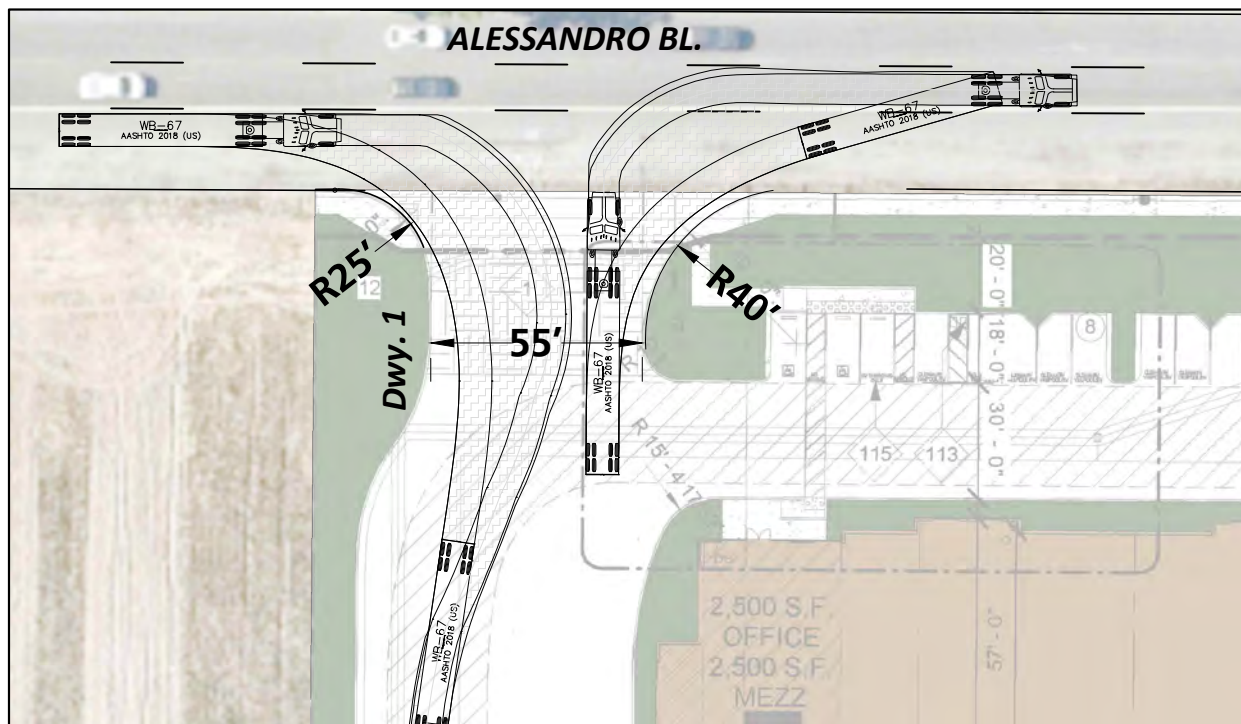
Graham Street at Alessandro Boulevard – A queueing analysis has been evaluated during the morning and evening peak hours at the intersection of Graham Street and Alessandro Boulevard to determine if there is sufficient stacking in the northbound and eastbound left turn pockets to accommodate Project traffic. The northbound left turn lane on Graham Street provides 185-feet of stacking while the eastbound left turn lane on Alessandro Boulevard provides 150-feet of stacking. Based on the queueing analysis, the existing northbound left turn pocket is anticipated to accommodate the 95th percentile peak hour queues under EAP (2022) traffic conditions with at most 105-feet of stacking required during the PM peak hour. The Project should modify the existing eastbound left turn pocket at the intersection of Graham Street and Alessandro Boulevard to accommodate a 250-foot left turn lane.

Wherever necessary, roadways adjacent to the Project, site access points and site-adjacent intersections will be constructed to be consistent with the identified roadway classifications and respective cross-sections in the City of Moreno Valley General Plan Circulation Element.

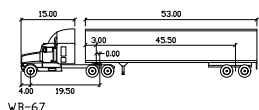
1.7 TRUCK ACCESS AND CIRCULATION

Due to the typical wide turning radius of large trucks, a truck turning template has been overlaid on the site plan at each applicable Project driveway and site adjacent intersection anticipated to be utilized by heavy trucks in order to determine appropriate curb radii and to verify that trucks will have sufficient space to execute turning maneuvers (see Exhibit 1-5). As shown, Driveway 1 and Driveway 3 on Alessandro Boulevard are anticipated to accommodate the wide turning radius of heavy trucks as currently designed.

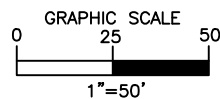
EXHIBIT 1-5: TRUCK ACCESS



LEGEND:



	Feet		Feet
Tractor Width	4.00	Lock to Lock Time	6.0
Trailer Width	3.00	Steering Angle	28.4
Tractor Track	8.00	Articulating Angle	73.4
Trailer Track	8.50		



2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are consistent with City of Moreno Valley's traffic study guidelines for LOS-based traffic operations analysis. (1)

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (4) The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Moreno Valley requires signalized intersection operations analysis based on the methodology described in the HCM. (4) Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections, LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 2-1. Study area intersections have been evaluated using the Synchro (Version 10) analysis software package.

Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A	F
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B	F
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C	F
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D	F
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E	F
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up	F	F

Source: HCM 6th Edition

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g. $PHF = \frac{\text{Hourly Volume}}{4 \times \text{Peak 15-minute Flow Rate}}$). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows, while lower PHF values are indicative of greater variability of flow during the peak hour. (4)

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Moreno Valley requires the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (4) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2).

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay Per Vehicle (Seconds)	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Little or no delays.	0 to 10.00	A	F
Short traffic delays.	10.01 to 15.00	B	F
Average traffic delays.	15.01 to 25.00	C	F
Long traffic delays.	25.01 to 35.00	D	F
Very long traffic delays.	35.01 to 50.00	E	F
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F	F

Source: HCM 6th Edition

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole.

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by the California Department of Transportation (Caltrans) and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. The existing intersections are currently signalized and with the proposed access restrictions, the driveway locations would not be suitable for the implementation of a traffic signal. As such, no traffic signal warrant analysis has been prepared for this TA.

2.4 MINIMUM LEVEL OF SERVICE (LOS)

The definition of an intersection deficiency in the City of Moreno Valley is based on the City of Moreno Valley General Plan Circulation Element. The City of Moreno Valley General Plan states that target LOS C or LOS D be maintained along City roads (including intersections) wherever possible. Exhibit 2-1 depicts the level of service standards within the City. LOS D is applicable to intersections and roadway segments that are adjacent to freeway on/off ramps and/or adjacent to employment generating land uses. LOS C is applicable to all other intersections and roadway segments. Boundary intersections are assumed to be LOS D.

2.5 THRESHOLDS OF SIGNIFICANCE

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies.

2.5.1 SIGNALIZED INTERSECTIONS

Per the City of Moreno Valley TA Guidelines, the following LOS will be utilized for signalized study area intersections:

- Any signalized study intersection operating at acceptable LOS without project traffic in which the addition of project traffic causes the intersection to degrade to unacceptable LOS shall identify improvements to provide acceptable LOS.
- Any signalized study intersection that is operating at unacceptable LOS without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

2.5.2 UNSIGNALIZED INTERSECTIONS

Per the City of Moreno Valley TA Guidelines, the following LOS will be utilized for unsignalized study area intersections:

- a) The addition of project related traffic causes the intersection to degrade from an acceptable LOS to unacceptable LOS.
OR
- b) The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at unacceptable LOS,
AND
- c) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

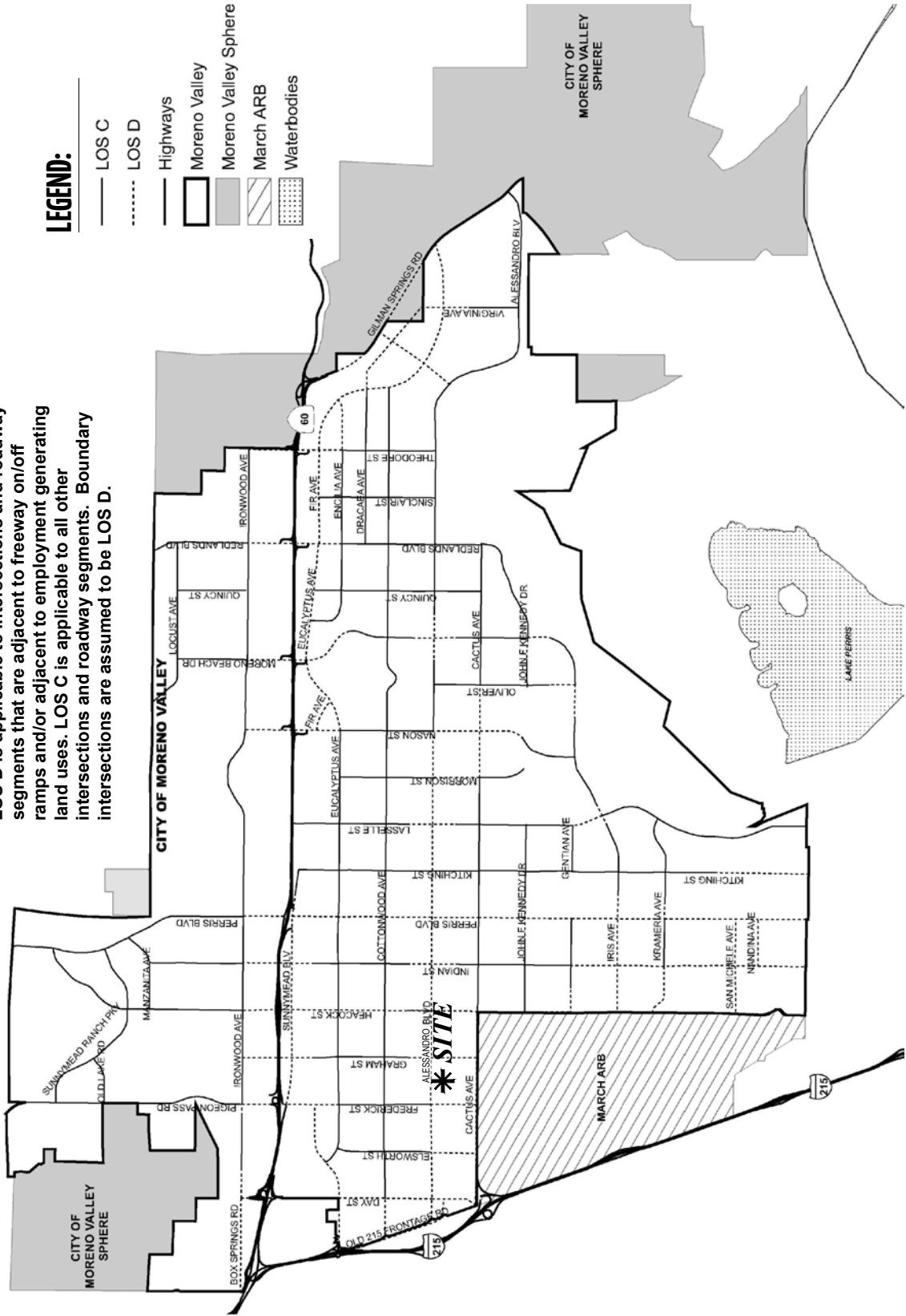
The proposed significance thresholds will be applied at study area intersections for the purposes of determining project-related impacts. If the conditions above are satisfied, improvements should be identified that achieve LOS D or better for a) above or to pre-project LOS and delay for case b) above.

EXHIBIT 2-1: CITY OF MORENO VALLEY LEVEL OF SERVICE (LOS) STANDARDS

LOS D is applicable to intersections and roadway segments that are adjacent to freeway on/off ramps and/or adjacent to employment generating land uses. LOS C is applicable to all other intersections and roadway segments. Boundary intersections are assumed to be LOS D.

LEGEND:

- LOS C
- - - - - LOS D
- Highways
- ▭ Moreno Valley
- ▭ Moreno Valley Sphere
- ▨ March ARB
- ▤ Waterbodies



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Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Moreno Valley General Plan Circulation Network, and a review of existing peak hour intersection operations analysis.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the scoping agreement with City of Moreno Valley staff (Appendix 1.1), the study area includes a total of 5 existing and future intersections as shown previously on Exhibit 1-2. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 CITY OF MORENO VALLEY GENERAL PLAN CIRCULATION ELEMENT

The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on the City of Moreno Valley General Plan Circulation Element, are described subsequently. Exhibit 3-2 shows the City of Moreno Valley General Plan Circulation Element and Exhibit 3-3 illustrates the City of Moreno Valley General Plan roadway cross-sections.

Divided Major Arterials can accommodate six travel lanes. These facilities typically provide access between the regional highway system and minor arterials. An example of a Divided Arterial within the study area includes:

- Alessandro Boulevard

Arterials can accommodate four travel lanes (with a 20-foot outer lane in each direction of travel). These facilities typically provide access between divided arterials and collector streets. An example of an Arterial within the study area includes:

- Frederick Street, north of Alessandro Boulevard

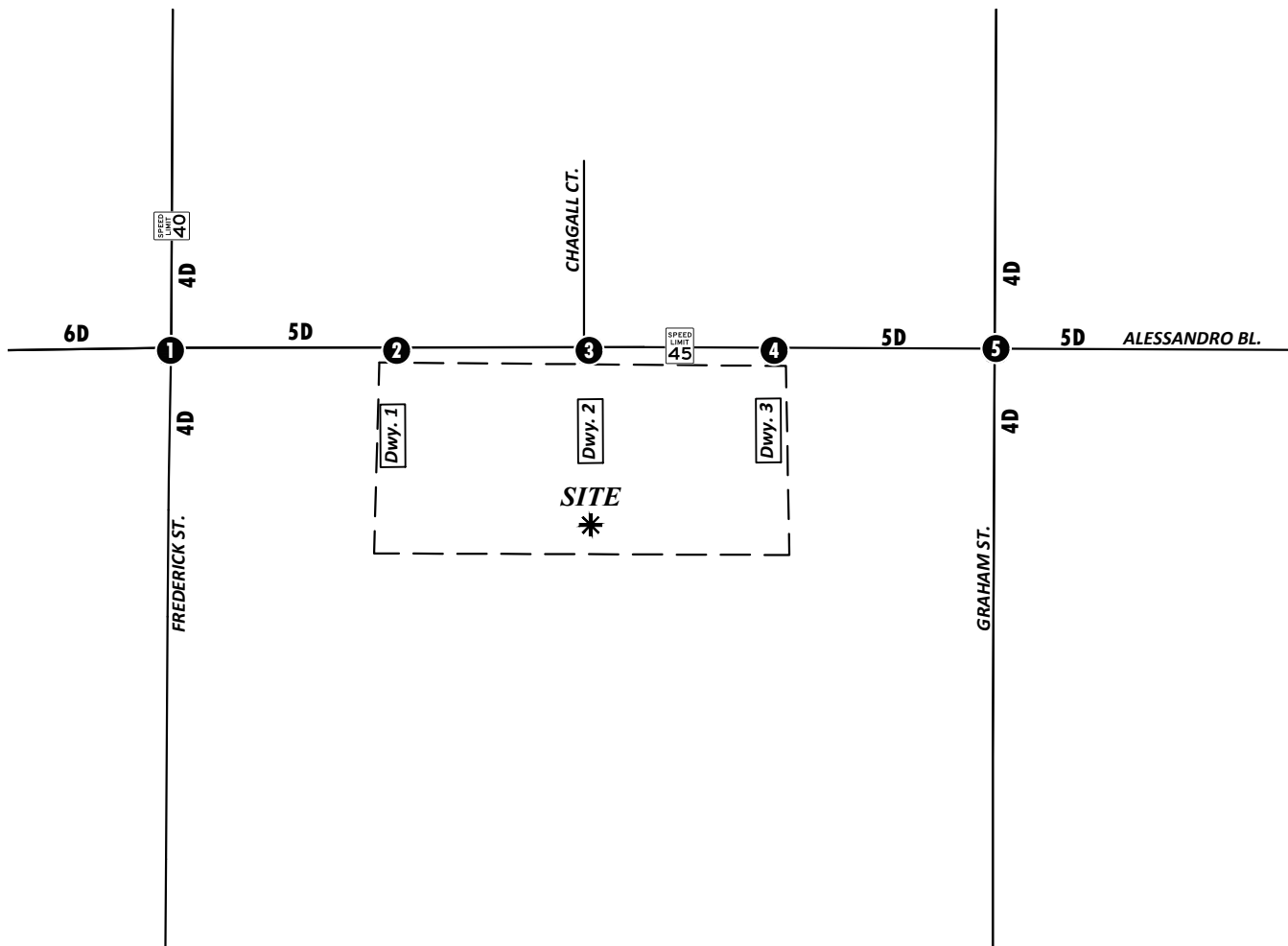
Minor Arterials can accommodate four travel lanes. These facilities typically provide access between divided arterials and collector streets. Examples of Minor Arterials within the study area includes:

- Frederick Street, south of Alessandro Boulevard
- Graham Street

3.3 TRUCK ROUTES

The City of Moreno Valley designated truck route map is shown on Exhibit 3-4. As shown on Exhibit 3-4, Alessandro Boulevard, Frederick Street, and Graham Street (between Alessandro Boulevard and Cactus Avenue only) are designated truck routes within the study area in City of Moreno Valley. The designated truck route map has been utilized to route truck traffic for Project trips throughout the study area.

EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



<p>1 Frederick St. & Alessandro Bl.</p>	<p>2 Dwy. 1 & Alessandro Bl.</p> <p>Future Intersection</p>	<p>3 Dwy. 2 & Alessandro Bl.</p> <p>Future Intersection</p>	<p>4 Dwy. 3 & Alessandro Bl.</p> <p>Future Intersection</p>	<p>5 Graham St. & Alessandro Bl.</p>
--	--	--	--	---

LEGEND:



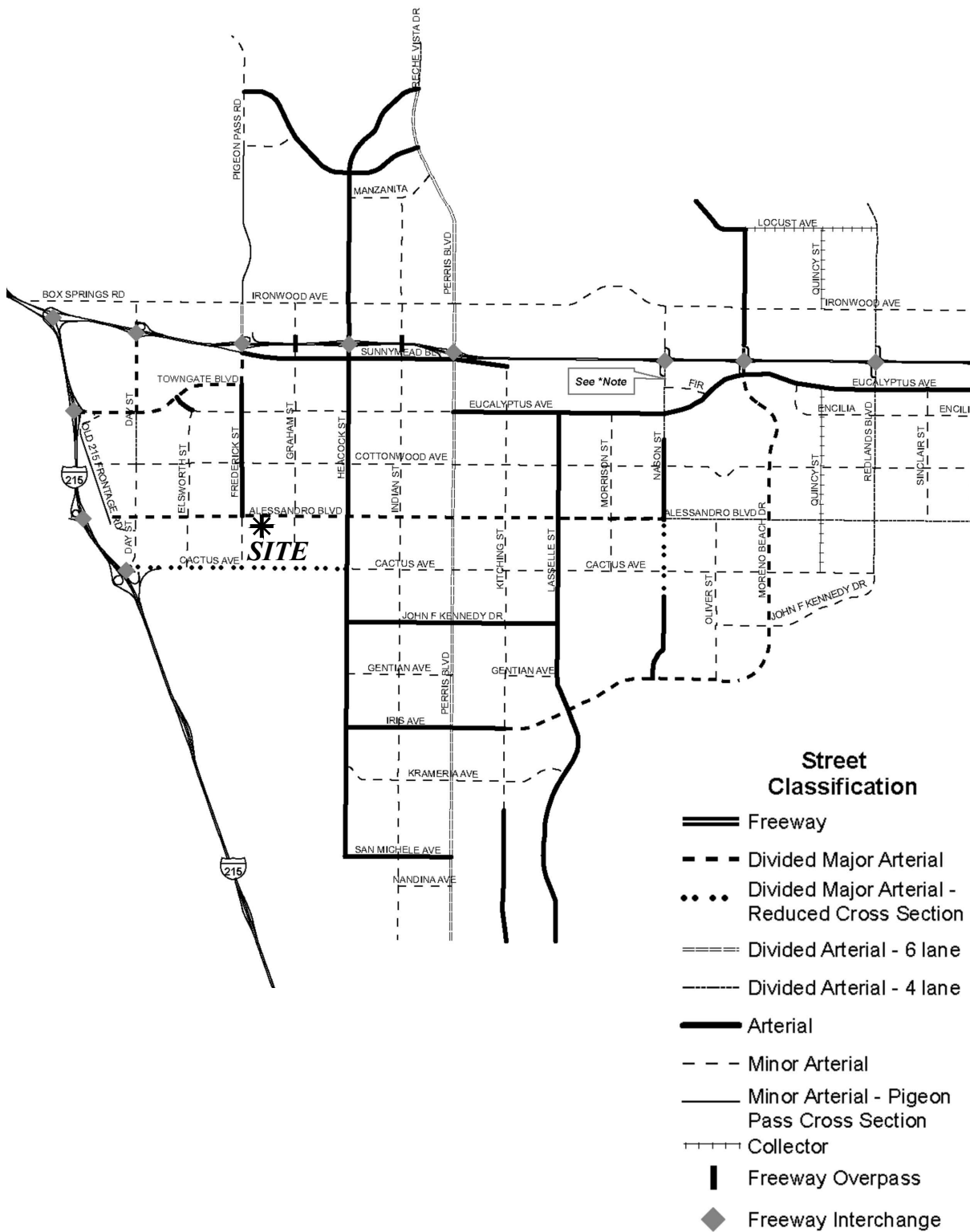
-  = TRAFFIC SIGNAL
- 4** = NUMBER OF LANES
- D** = DIVIDED
- U** = UNDIVIDED
- DEF** = DEFACTO RIGHT TURN
-  = SPEED LIMIT (MPH)

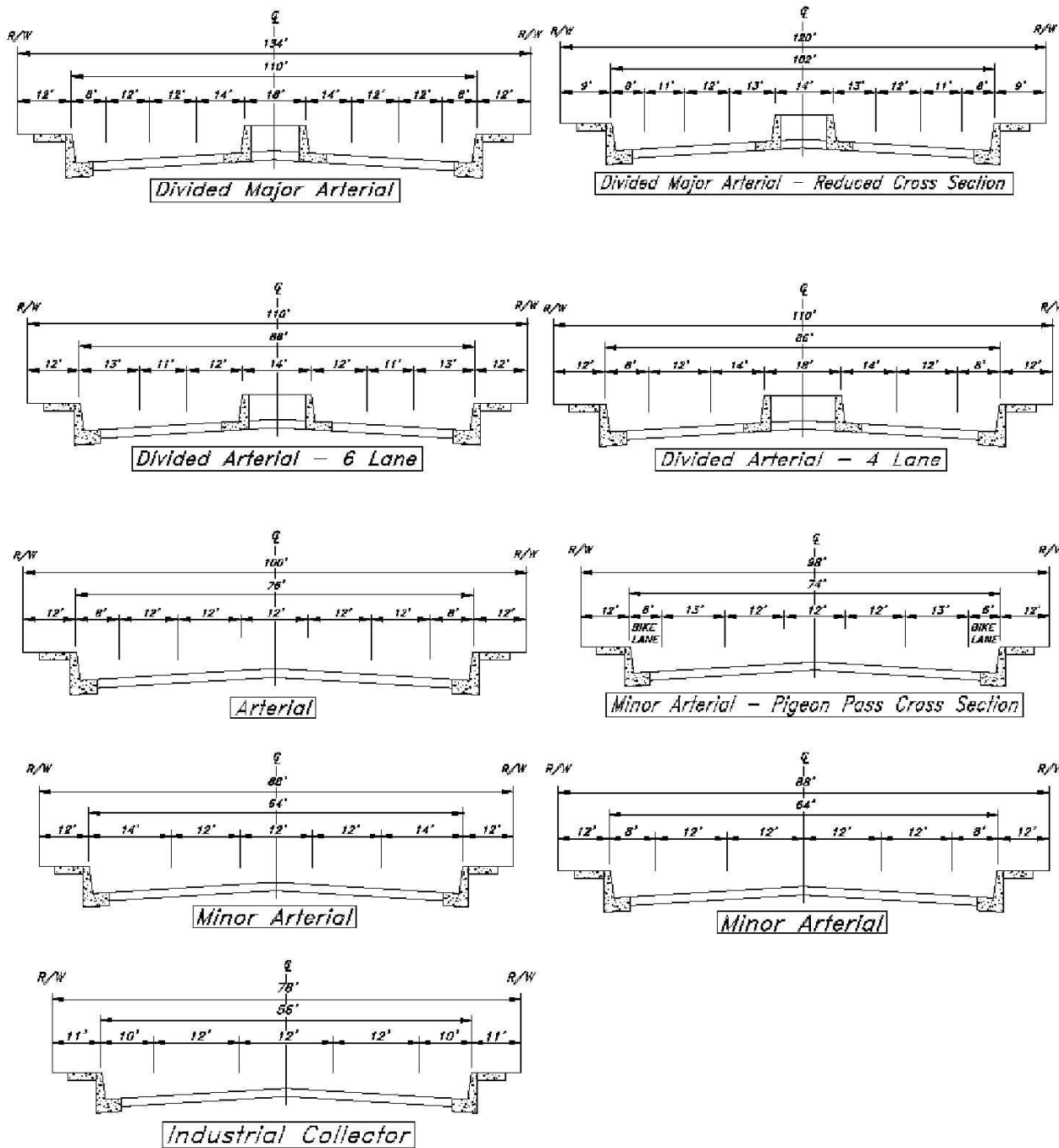


EXHIBIT 3-2: CITY OF MORENO VALLEY GENERAL PLAN CIRCULATION ELEMENT



Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

EXHIBIT 3-3: CITY OF MORENO VALLEY GENERAL PLAN ROADWAY CROSS-SECTIONS



Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

3.4 TRANSIT SERVICE

The study area is currently served by the Riverside Transit Authority (RTA), a public transit agency serving the unincorporated Riverside County region. As shown on Exhibit 3-5, RTA Route 20 serves Alessandro Boulevard within the study area and would likely serve the Project site. There are existing bus stops on south side at Frederick Street, Chagall Court, and Graham Street along Alessandro Boulevard. RTA Route 11 also serves the study area and runs along Frederick Street. Transit service is reviewed and updated by RTA periodically to address ridership, budget, and community demands. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.5 BICYCLE & PEDESTRIAN FACILITIES

Exhibit 3-6 illustrates the existing pedestrian facilities, including sidewalks and crosswalk locations. Bus stop locations are also identified, which are on both the north and south sides of Alessandro Boulevard at Frederick Street, Chagall Court, and Graham Street. Both intersections on Alessandro Boulevard at Frederick Street and Graham Street have crosswalks on all approaches. Alessandro Boulevard is currently striped with Class II (on-street) bike lanes. Sidewalks are in place along most of the study area roadways and intersections, with most of the southern side of Alessandro Boulevard between Frederick Street and Graham Street and also along the west side of Graham Street south of Alessandro Boulevard.

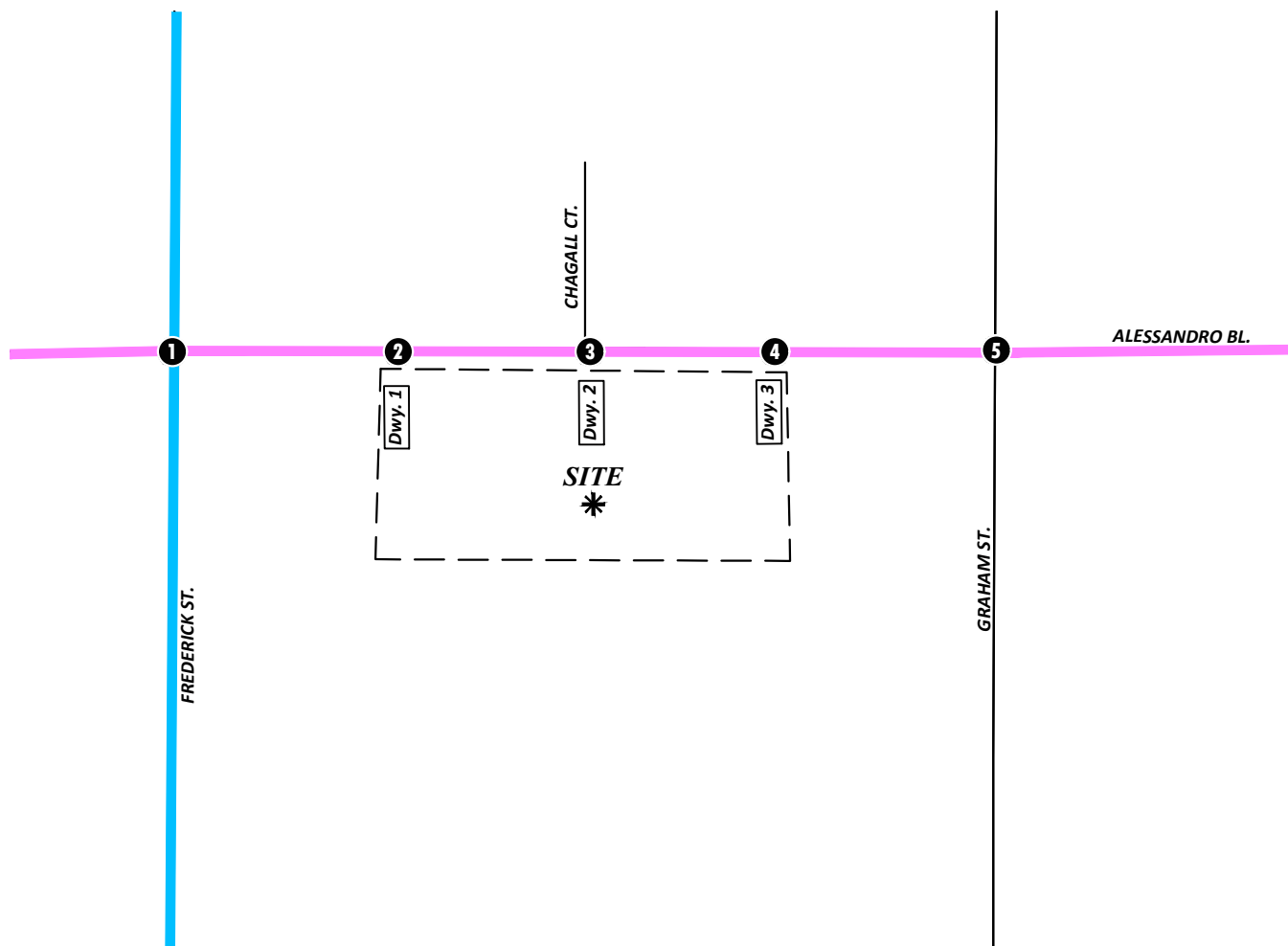
3.6 EXISTING (2020) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in April and May of 2018. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

Due to the currently ongoing COVID-19 pandemic, schools and businesses within the study area were closed or operating at less than full capacity at the time this study was prepared. As such, historic (2018) traffic counts were utilized in conjunction with a 4.04% growth factor to reflect 2020 conditions (2% per year, compounded annually). The 2018 weekday AM and weekday PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

EXHIBIT 3-5: EXISTING TRANSIT ROUTES

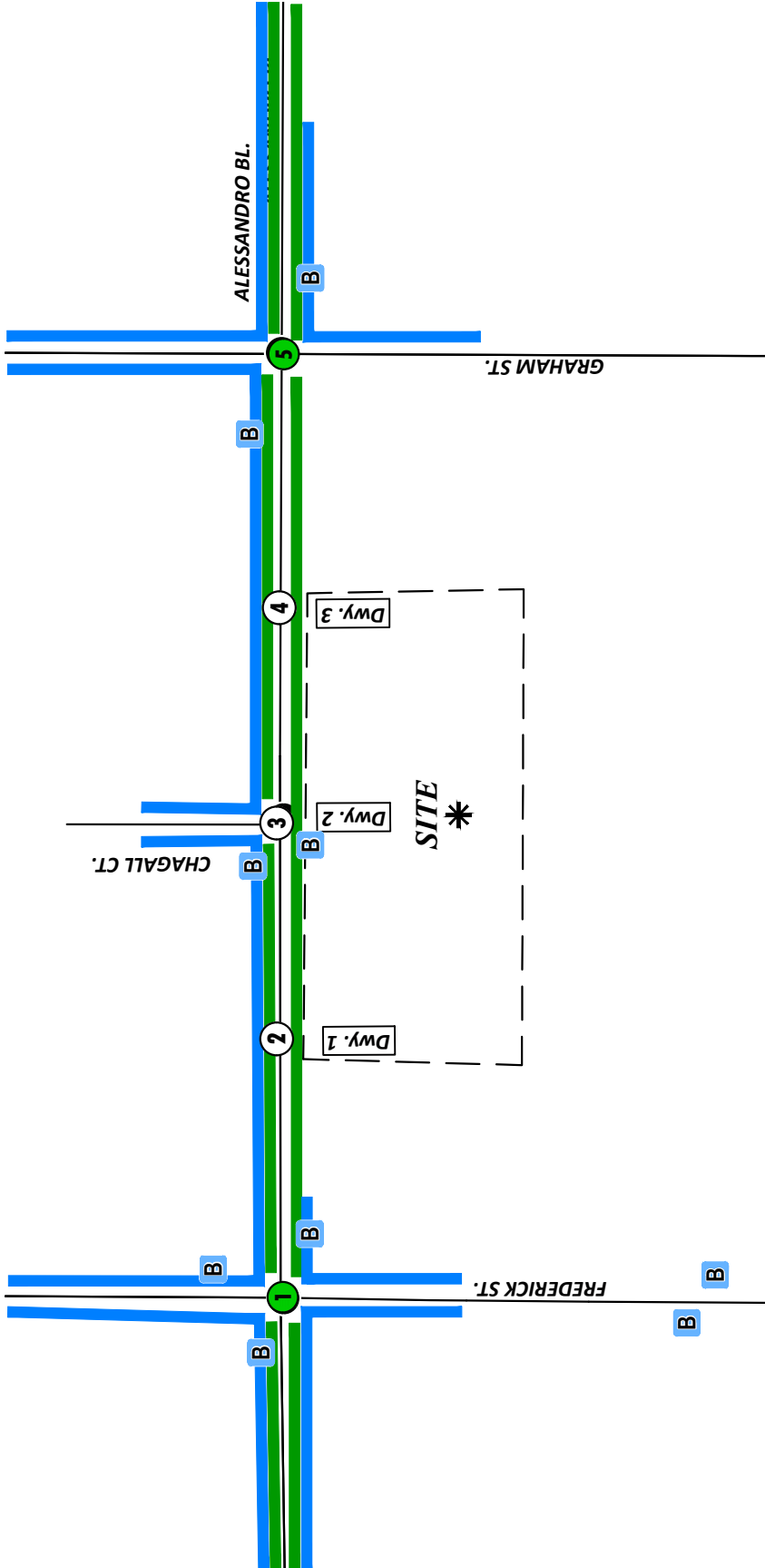


LEGEND:

- █ = RTA ROUTE 11
- █ = RTA ROUTE 20



EXHIBIT 3-6: EXISTING PEDESTRIAN FACILITIES



LEGEND:

- █ = SIDEWALK
- █ = BIKE LANE
- B = BUS STOP
- 0 = CROSSWALK ON FOUR APPROACHES
- 0 = FUTURE INTERSECTION



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The traffic counts collected in April and May of 2018 include the following vehicle classifications: Passenger Cars, 2-Axle Trucks, 3-Axle Trucks, and 4 or More Axle Trucks. To represent the effects large trucks, buses and recreational vehicles have on traffic flow; all trucks were converted into passenger car equivalent (PCE). By their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for them to accelerate and slow-down is much longer than for passenger cars and varies depending on the type of vehicle and number of axles. For the purpose of this analysis, a PCE factor of 1.5 has been applied to 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axle trucks to estimate each turning movement. These factors are consistent with the City's traffic study guidelines.

Existing weekday ADT volumes are shown on Exhibit 3-7. Consistent with other projects in the area, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

$$\text{Weekday PM Peak Hour (Approach Volume + Exit Volume)} \times 14.32 = \text{Leg Volume}$$

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 6.98 percent. As such, the above equation utilizing a factor of 10.08 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 6.98 percent (i.e., $1/0.0698 = 14.32$) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses. Existing weekday AM and weekday PM peak hour intersection volumes (in PCE) are also shown on Exhibit 3-7.

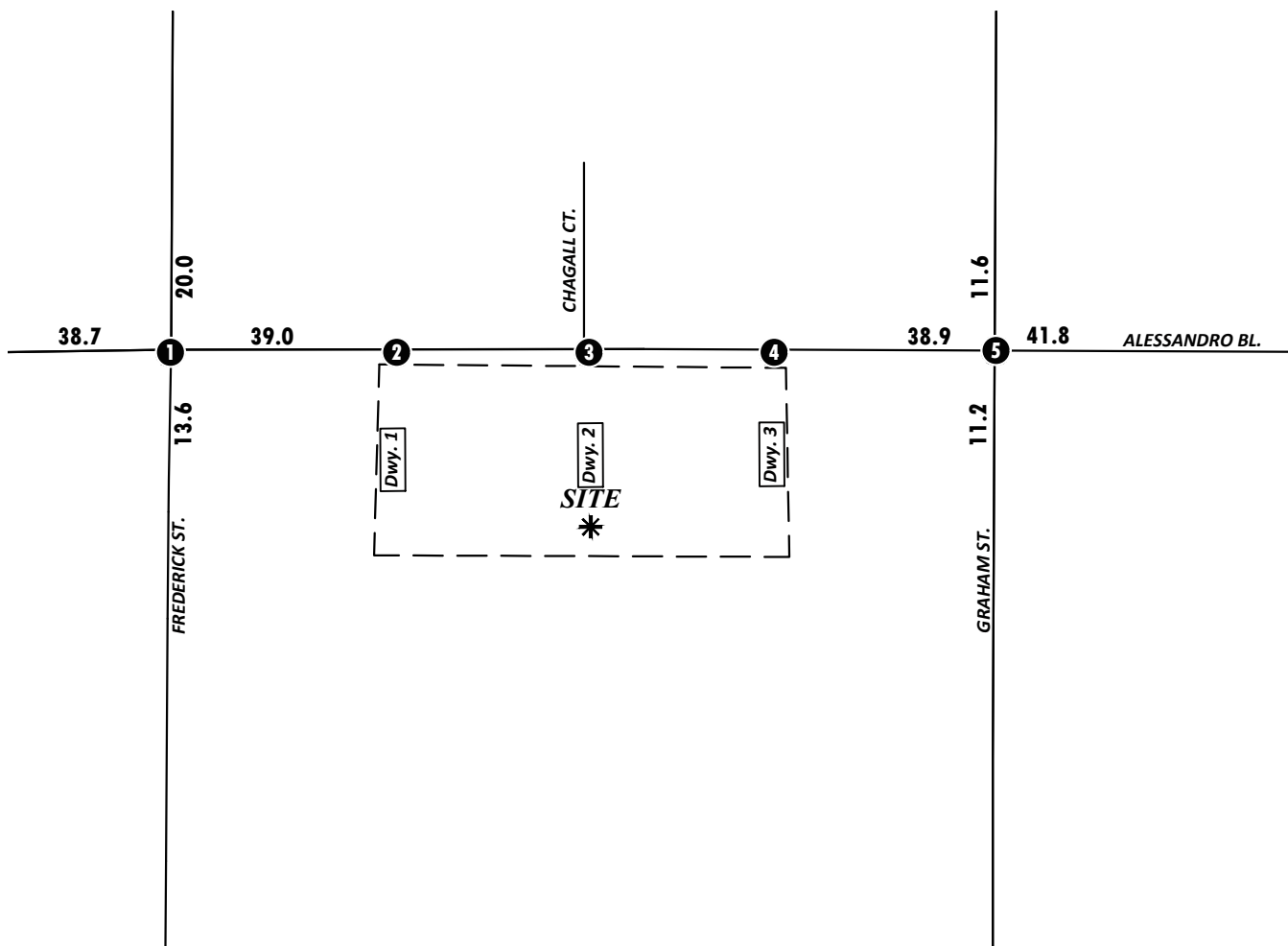
3.7 INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1 which indicates that the existing study area intersections are currently operating at an acceptable LOS during the peak hours. Consistent with Table 3-1, a summary of the peak hour intersection LOS for Existing conditions is shown on Exhibit 3-8. The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

3.8 RECOMMENDED IMPROVEMENTS

All study area intersections are currently operating at an acceptable LOS for Existing (2020) traffic conditions. As such, no improvements have been recommended.

EXHIBIT 3-7: EXISTING (2020) TRAFFIC VOLUMES (IN PCE)



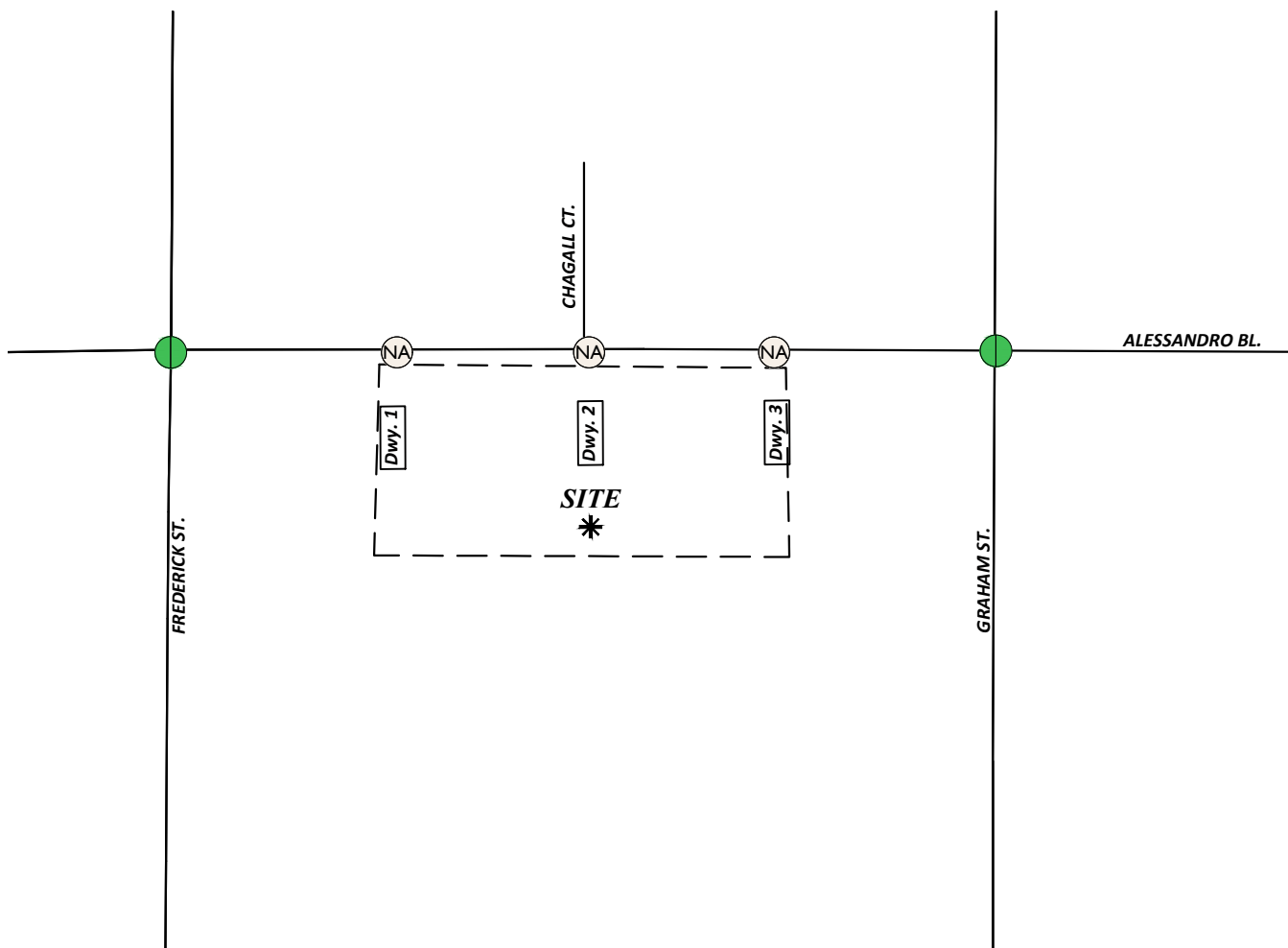
1	Frederick St. & Alessandro Bl.	2	Dwy. 1 & Alessandro Bl.	3	Dwy. 2 & Alessandro Bl.	4	Dwy. 3 & Alessandro Bl.	5	Graham St. & Alessandro Bl.
		<p>Future Intersection</p>		<p>Future Intersection</p>		<p>Future Intersection</p>			

LEGEND:

- 10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
- 10.0 = VEHICLES PER DAY (1000'S)



EXHIBIT 3-8: EXISTING (2020) SUMMARY OF LOS



LEGEND:

- = AM PEAK HOUR
- = PM PEAK HOUR
- = LOS A-D
- = LOS E
- = LOS F
- = NOT AN ANALYSIS LOCATION FOR THIS SCENARIO



Table 3-1

Intersection Analysis for Existing (2020) Conditions

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay (secs.) ²		Level of Service	
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R				
1	Frederick St. & Alessandro Bl.	TS	2	2	0	2	2	1	1	2	1	1	3	d	22.4	30.7	C	C
2	Driveway 1 & Alessandro Bl.		Future Intersection															
3	Driveway 2 & Alessandro Bl.		Future Intersection															
4	Driveway 3 & Alessandro Bl.		Future Intersection															
5	Graham St. & Alessandro Bl.	TS	1	2	0	1	2	0	1	2	1	1	3	d	20.4	32.6	C	C

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; d = Defacto Right Turn Lane

² Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ TS = Traffic Signal

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

4 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. In an effort to calculate and evaluate a conservative trip generation for the proposed Project, the following mix of uses have been evaluated for the Project:

- Building 1: 206,665 sf of warehousing (70% of total building sf) and 88,571 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 295,236 sf for Building 1
- Building 2: 70,876 sf of warehousing (70% of total building sf) and 30,376 sf of high-cube cold storage warehouse use (30% of total building sf) for a total of 101,252 sf for Building 2

The Project will be developed in a single phase and has a projected Opening Year of 2022. Vehicular access will be provided via 3 driveways along Alessandro Boulevard. All driveways are proposed to be restricted to right-in/right-out access only. Regional access to the Project site is available from the I-215 Freeway via Alessandro Boulevard and Cactus Avenue interchanges. Frederick Street to the north also provides access to the SR-60 Freeway.

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. Trip generation rates (in actual vehicles and PCE) for the Project are shown in Table 4-1. The Project's trip generation has been calculated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, 2017, for the following land uses. (2)

- ITE land use code 150 (Warehousing) has been used to derive site specific trip generation estimates for up to 277,541 sf (70% of Buildings 1 and 2). The vehicle mix has been obtained from the ITE's Trip Generation Manual Supplement (dated February 2020). (5) This study provides the following vehicle mix: AM Peak Hour: 87.0% passenger cars and 13.0% trucks; PM Peak Hour: 85.0% passenger cars and 15.0% trucks; Weekday Daily: 73.0% passenger cars and 27.0% trucks. The truck percentages were further broken down by axle type per the following South Coast Air Quality Management District (SCAQMD) recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%. (6)
- ITE land use code 157 (High-Cube Cold Storage Warehouse) has been used to derive site specific trip generation estimates for up to 118,947 sf (30% of Buildings 1 and 2). High-cube cold storage warehouses include warehouses characterized by the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. High-cube cold storage warehouses are facilities typified by temperature-controlled environments for frozen food or other perishable products. The High-Cube Cold Storage Warehouse vehicle mix (passenger cars versus trucks) has been obtained from the ITE's Trip Generation Manual Supplement (dated February 2020). (5) This study provides the following vehicle mix: AM Peak Hour: 73.0% passenger cars and 27.0% trucks; PM Peak Hour: 77.0% passenger cars and 23.0% trucks; Weekday Daily: 65.0% passenger cars and 35.0% trucks. The truck percentages were further broken down by axle type per the following SCAQMD recommended truck mix: 2-Axle = 34.7%; 3-Axle = 11.0%; 4+-Axle = 54.3%. (6)

Table 4-1

Project Trip Generation Rates

Land Use ¹	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Actual Vehicle Trip Generation Rates									
Warehousing ³	TSF	150	0.131	0.039	0.170	0.051	0.139	0.190	1.740
Passenger Cars (AM-87.0%; PM-85.0%; Daily-73.0%)			0.114	0.034	0.148	0.044	0.118	0.162	1.270
2-Axle Trucks (AM-2.17%; PM-2.51%; Daily-4.51%)			0.003	0.001	0.004	0.001	0.003	0.005	0.078
3-Axle Trucks (AM-2.69%; PM-3.11%; Daily-5.59%)			0.004	0.001	0.005	0.002	0.004	0.006	0.097
4-Axle+ Trucks (AM-8.14%; PM-9.39%; Daily-16.90%)			0.011	0.003	0.014	0.005	0.013	0.018	0.294
High-Cube Cold Storage Warehouse ³	TSF	157	0.085	0.025	0.110	0.032	0.088	0.120	2.120
Passenger Cars (AM-73.0%; PM-77.0%; Daily-65.0%)			0.062	0.018	0.080	0.025	0.067	0.092	1.378
2-Axle Trucks (AM-9.37%; PM-7.98%; Daily-12.15%)			0.008	0.002	0.010	0.003	0.007	0.010	0.257
3-Axle Trucks (AM-2.97%; PM-2.53%; Daily-3.85%)			0.003	0.001	0.003	0.001	0.002	0.003	0.082
4-Axle+ Trucks (AM-14.66%; PM-12.49%; Daily-19.01%)			0.012	0.004	0.016	0.004	0.011	0.015	0.403
Passenger Car Equivalent (PCE) Trip Generation Rates⁴									
Warehousing ³	TSF	150	0.131	0.039	0.170	0.051	0.139	0.190	1.740
Passenger Cars			0.114	0.034	0.148	0.044	0.118	0.162	1.270
2-Axle Trucks (PCE = 1.5)			0.004	0.001	0.006	0.002	0.005	0.007	0.118
3-Axle Trucks (PCE = 2.0)			0.007	0.002	0.009	0.003	0.009	0.012	0.194
4+-Axle Trucks (PCE = 3.0)			0.032	0.010	0.042	0.014	0.039	0.054	0.882
High-Cube Cold Storage Warehouse ³	TSF	157	0.085	0.025	0.110	0.032	0.088	0.120	2.120
Passenger Cars			0.062	0.018	0.080	0.025	0.067	0.092	1.378
2-Axle Trucks (PCE = 1.5)			0.012	0.004	0.016	0.004	0.010	0.014	0.386
3-Axle Trucks (PCE = 2.0)			0.005	0.002	0.007	0.002	0.004	0.006	0.163
4+-Axle Trucks (PCE = 3.0)			0.037	0.011	0.048	0.012	0.033	0.045	1.209

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).

² TSF = thousand square feet

³ Vehicle Mix Source: ITE Trip Generation Handbook Supplement (2020), Appendix C.

Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.

Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

⁴ PCE factors per City of Moreno Valley's TIA Guidelines: 2-axle = 1.5; 3-axle = 2.0; 4+-axle = 3.0.

PCE factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCEs allow the typical “real-world” mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in the City’s traffic study guidelines.

The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project in actual vehicles and PCE are shown in Table 4-2 and Table 4-3, respectively. The proposed Project is anticipated to generate 742 vehicle trip-ends per day with 59 AM peak hour trips and 64 PM peak hour trips (of which 224 trip-ends per day are associated with trucks with 8 AM peak hour truck trips and 9 PM peak hour truck trips) (see Table 4-2). The operations analyses utilize the PCE trip generation consistent with the City’s traffic study guidelines.

The site is currently zoned for commercial retail use (0.25 floor to area ratio which would allow 192,426 square feet of commercial retail use on 17.67 acres). As shown on Table 4-4, the proposed Project General Plan Amendment (light industrial) is anticipated to result in a reduction in trips as compared to the currently adopted General Plan Land Use (commercial).

4.2 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered to identify the route where the Project traffic would distribute.

The Project trip distribution was developed based on anticipated travel patterns to and from the Project site for both passenger cars and truck traffic and are consistent with other similar projects that have been reviewed and approved by City of Moreno Valley staff. The Project trip distribution patterns for both passenger cars and trucks were developed based on an understanding of existing travel patterns in the area, the geographical location of the site, and the site’s proximity to the regional arterial and state highway system.

The Project passenger car trip distribution pattern is graphically depicted on Exhibit 4-1, while the Project truck trip distribution pattern is graphically depicted on Exhibit 4-2. Each of these distribution patterns was reviewed by the City of Moreno Valley as part of the traffic study scoping process (see Appendix 1.1).

4.3 MODAL SPLIT

The traffic reducing potential of public transit, walking, or bicycling have not been considered in this TA. Essentially, the traffic projections are "conservative" in that these alternative travel modes might be able to reduce the forecasted traffic volumes (employee trips only).

Table 4-2

Project Trip Generation Summary (Actual Vehicles)

Land Use	Quantity	Units ¹	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Building 1:									
Warehousing (70%)	206.665	TSF							
Passenger Cars:			24	7	31	9	24	33	264
Truck Trips:									
2-axle:			1	0	1	0	1	1	16
3-axle:			1	0	1	0	1	1	20
4+-axle:			2	1	3	1	3	4	62
- Truck Trips			4	1	5	1	5	6	98
High-Cube Cold Storage (30%)	88.571	TSF							
Passenger Cars:			5	2	7	2	6	8	122
Truck Trips:									
2-axle:			1	0	1	0	1	1	24
3-axle:			0	0	0	0	0	0	8
4+-axle:			1	0	1	0	1	1	36
- Truck Trips			2	0	2	0	2	2	68
Total Passenger Cars (Building 1)			29	9	38	11	30	41	386
Total Trucks (Building 1)			6	1	7	1	7	8	166
BUILDING 1 TOTAL TRIPS (Actual Vehicles)			35	10	45	12	37	49	552
Building 2:									
Warehousing (70%)	70.876	TSF							
Passenger Cars:			8	2	10	3	8	11	90
Truck Trips:									
2-axle:			0	0	0	0	0	0	6
3-axle:			0	0	0	0	0	0	8
4+-axle:			1	0	1	0	1	1	22
- Truck Trips			1	0	1	0	1	1	36
High-Cube Cold Storage (30%)	30.376	TSF							
Passenger Cars:			2	1	3	1	2	3	42
Truck Trips:									
2-axle:			0	0	0	0	0	0	8
3-axle:			0	0	0	0	0	0	2
4+-axle:			0	0	0	0	0	0	12
- Truck Trips			0	0	0	0	0	0	22
Total Passenger Cars (Building 2)			10	3	13	4	10	14	132
Total Trucks (Building 2)			1	0	1	0	1	1	58
BUILDING 2 TOTAL TRIPS (Actual Vehicles)			11	3	14	4	11	15	190
Total Passenger Cars (Building 1 + Building 2)			39	12	51	15	40	55	518
Total Trucks (Building 1 + Building 2)			7	1	8	1	8	9	224
TOTAL TRIPS (Building 1 + Building 2)			46	13	59	16	48	64	742

¹ TSF = thousand square feet

Table 4-3

Project Trip Generation Summary (PCE)

Land Use	Quantity	Units ¹	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Building 1:									
Warehousing (70%)	206.665	TSF							
Passenger Cars:			24	7	31	9	24	33	264
Truck Trips:									
2-axle:			1	0	1	0	1	1	24
3-axle:			1	0	1	1	2	3	40
4+-axle:			7	2	9	3	8	11	182
- Truck Trips			9	2	11	4	11	15	246
High-Cube Cold Storage (30%)	88.571	TSF							
Passenger Cars:			5	2	7	2	6	8	122
Truck Trips:									
2-axle:			1	0	1	0	1	1	34
3-axle:			0	0	0	0	0	0	14
4+-axle:			3	1	4	1	3	4	108
- Truck Trips			4	1	5	1	4	5	156
Total Passenger Cars (Building 1)			29	9	38	11	30	41	386
Total Trucks (Building 1)			13	3	16	5	15	20	402
BUILDING 1 TOTAL TRIPS (PCE)			42	12	54	16	45	61	788
Building 2:									
Warehousing (70%)	70.876	TSF							
Passenger Cars:			8	2	10	3	8	11	90
Truck Trips:									
2-axle:			0	0	0	0	0	0	8
3-axle:			0	0	0	0	1	1	14
4+-axle:			2	1	3	1	3	4	64
- Truck Trips			2	1	3	1	4	5	86
High-Cube Cold Storage (30%)	30.376	TSF							
Passenger Cars:			2	1	3	1	2	3	42
Truck Trips:									
2-axle:			0	0	0	0	0	0	12
3-axle:			0	0	0	0	0	0	6
4+-axle:			1	0	1	0	1	1	38
- Truck Trips			1	0	1	0	1	1	56
Total Passenger Cars (Building 2)			10	3	13	4	10	14	132
Total Trucks (Building 2)			3	1	4	1	5	6	142
BUILDING 2 TOTAL TRIPS (PCE)			13	4	17	5	15	20	274
Total Passenger Cars (Building 1 + Building 2)			39	12	51	15	40	55	518
Total Trucks (Building 1 + Building 2)			16	4	20	6	20	26	544
TOTAL TRIPS (Building 1 + Building 2) (PCE)			55	16	71	21	60	81	1,062

¹ TSF = thousand square feet

Table 4-4

Trip Generation Comparison

Land Use ¹	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Actual Vehicle Trip Generation Rates									
Shopping Center	TSF	820	0.58	0.36	0.94	1.83	1.98	3.81	37.75

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).

² TSF = thousand square feet

Land Use	Quantity	Units ¹	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Existing General Plan Land Use:									
Commercial (Shopping Center) ²	192.426	TSF	112	69	181	352	381	733	7,264
Proposed Project (see Table 3):									
Alessandro Warehouse (PCE)	295.236	TSF	55	16	71	21	60	81	1,062
Net Reduction in Trip Generation:			-57	-53	-110	-331	-321	-652	-6,202

¹ TSF = thousand square feet

² Current General Plan land use and zoning is Commercial. Shopping Center (ITE 820) land use used to calculate trip generation. The square footage was calculated assuming a 0.25 floor-to-area ratio (FAR): 17.67 acres x 43,560 square feet/acre x 0.25 FAR

EXHIBIT 4-1: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION



LEGEND:

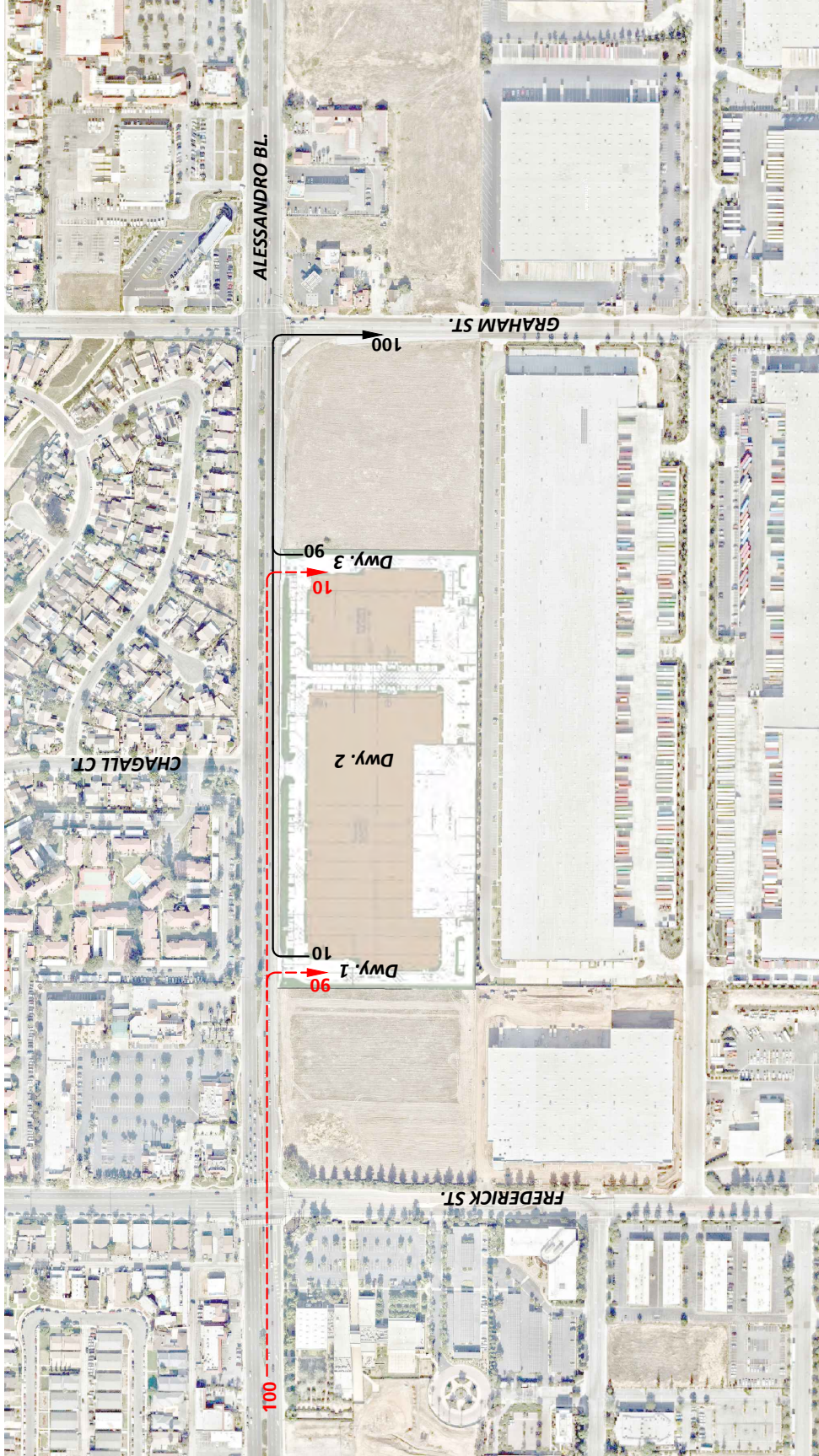
10 = PERCENT TO/FROM PROJECT

← = OUTBOUND

→ = INBOUND



EXHIBIT 4-2: PROJECT (TRUCK) TRIP DISTRIBUTION



LEGEND:

- 10 = PERCENT TO/FROM PROJECT
- = OUTBOUND
- - - = INBOUND



13276 - trip-1.dwg



4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project ADT and peak hour intersection turning movements volumes in PCE are shown on Exhibit 4-3.

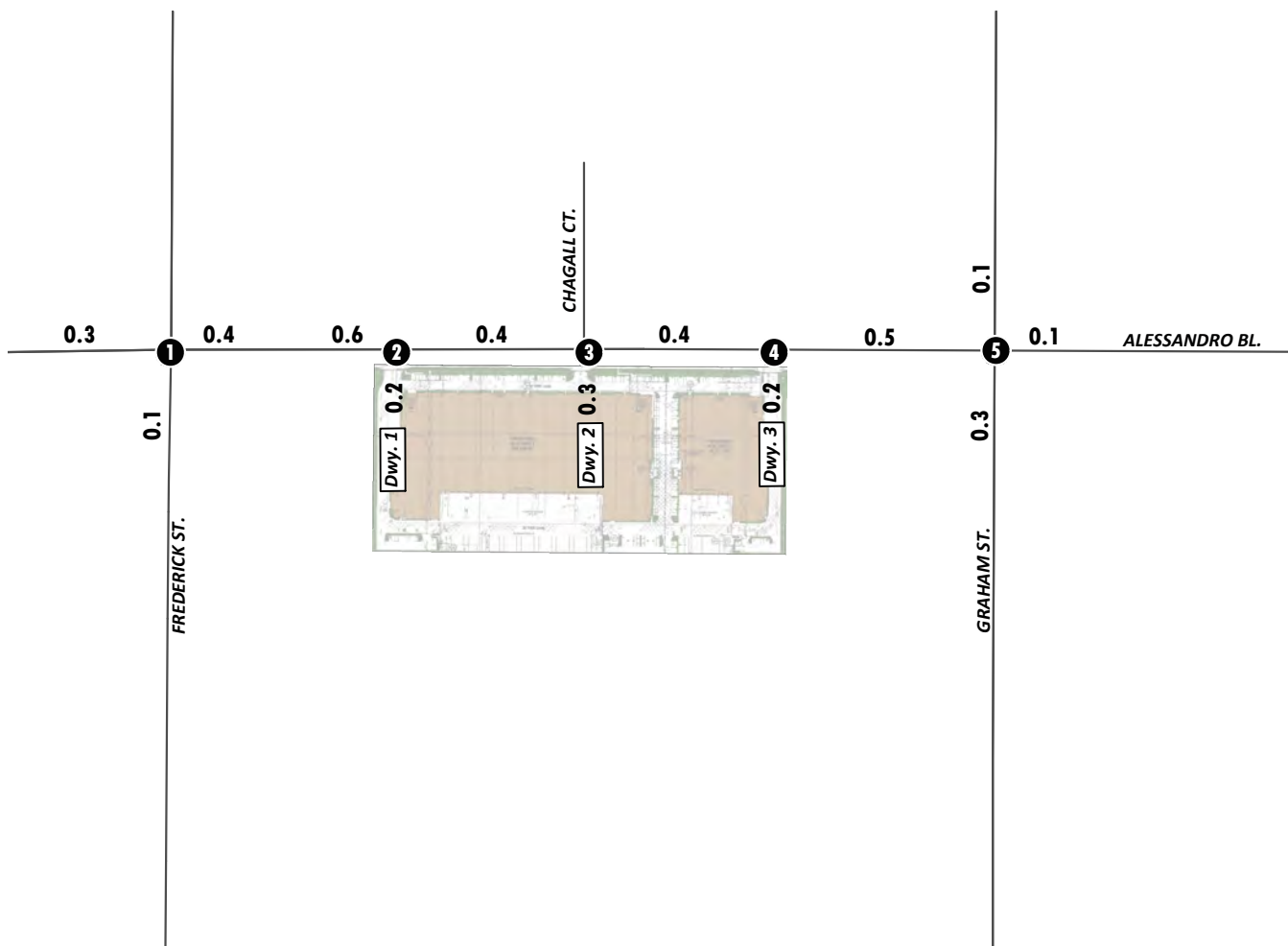
4.5 BACKGROUND TRAFFIC

To account for growth in traffic between Existing (2020) and EAP (2022) traffic conditions, an annual traffic growth rate of 2.0 percent per year, compounded annually, was assumed (4.04 percent total aggregate growth in background traffic for the period between 2020 and 2022). The 2.0 percent annual growth rate is intended to capture non-specific ambient traffic growth.

4.6 NEAR-TERM TRAFFIC FORECASTS

To provide a comprehensive assessment of potential transportation network deficiencies, a “buildup” analysis was performed in support of this work effort. The “buildup” method was used to approximate the EAP traffic forecasts and is intended to identify the deficiencies on both the existing and planned near-term circulation system. The “buildup” approach combines existing traffic counts with a background ambient growth factor to forecast the near-term 2022 traffic conditions. An ambient growth factor of 4.04% (2022) accounts for background (area-wide) traffic increases that occur over time, up to the year 2020 from the year 2020 (compounded two percent per year growth over a 2-year period). Traffic volumes generated by the Project are then added to assess the EAP (2022) traffic conditions. The 2022 roadway network is similar to the existing conditions roadway network with the exception of future roadways and intersections proposed to be developed by the Project.

EXHIBIT 4-3: PROJECT ONLY TRAFFIC VOLUMES (IN PCE)



1 Frederick St. & Alessandro Bl.	2 Dwy. 1 & Alessandro Bl.	3 Dwy. 2 & Alessandro Bl.	4 Dwy. 3 & Alessandro Bl.	5 Graham St. & Alessandro Bl.

LEGEND:

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
 10.0 = VEHICLES PER DAY (1000'S)



5 EAP (2022) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Existing plus Ambient Growth plus Project (EAP) conditions and the resulting intersection operations analysis.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for EAP conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for EAP conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).

5.2 EAP TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes and ambient growth factor of 4.04% (2022) which accounts for background (area-wide) traffic plus Project traffic. Exhibit 5-1 shows the ADT and peak hour intersection turning movement volumes in PCE, which can be expected for EAP (2022) traffic conditions.

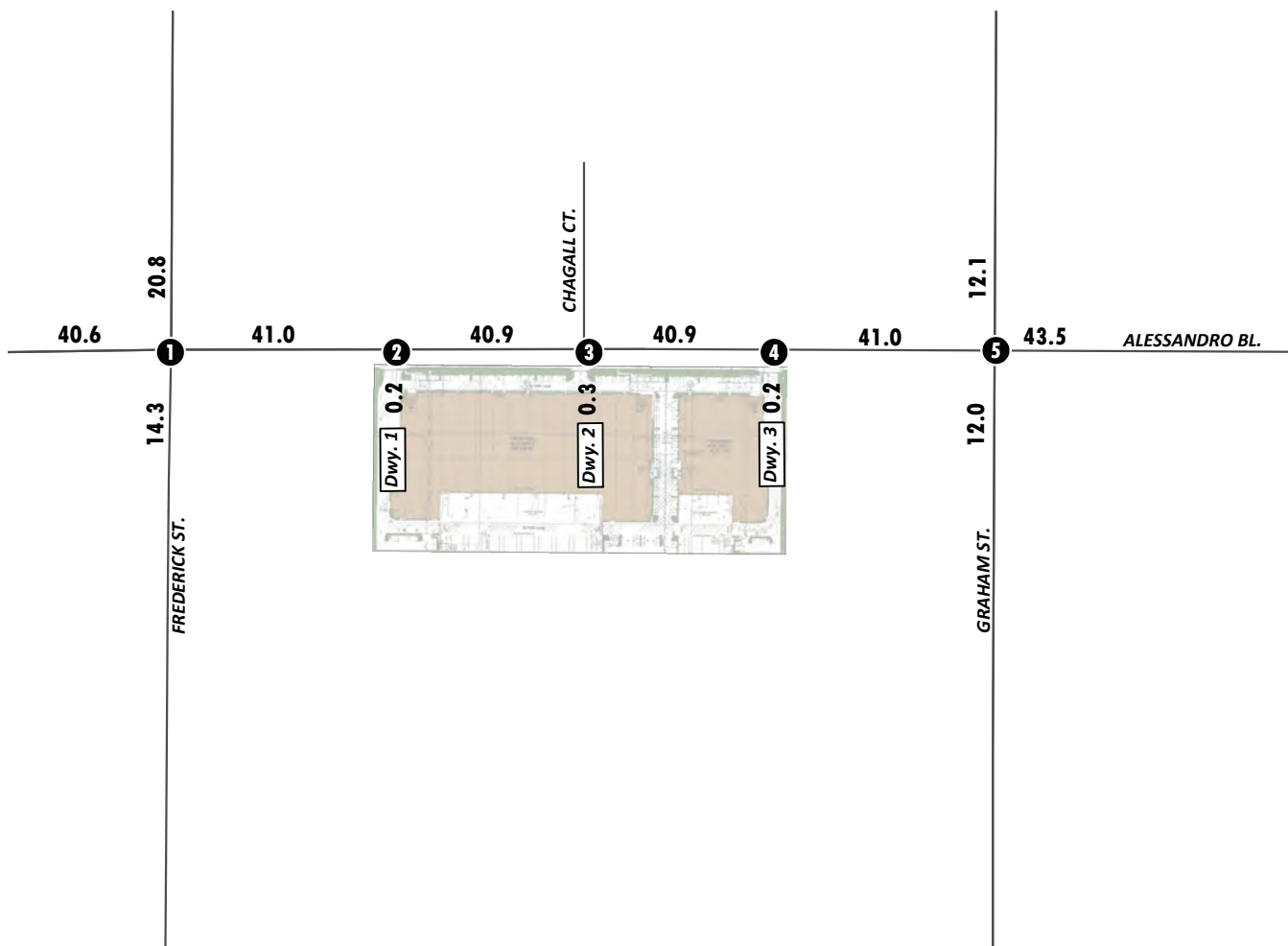
5.3 INTERSECTION OPERATIONS ANALYSIS

EAP peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 5-1, which indicates all of the study area intersections are anticipated to continue to operate at an acceptable LOS during the peak hours with the addition of Project traffic, consistent with Existing (2020) traffic conditions. Exhibit 5-2 summarizes the weekday AM and PM peak hour study area intersection LOS under EAP (2022) traffic conditions, consistent with the results provided in Table 5-1. The intersection operations analysis worksheets are included in Appendix 5.1 of this TA.

5.4 QUEUEING ANALYSIS

A queueing analysis has been evaluated during the morning and evening peak hours at the intersection of Graham Street and Alessandro Boulevard to determine if there is sufficient stacking in the northbound and eastbound left turn pockets to accommodate Project traffic. The northbound left turn lane on Graham Street provides 185-feet of stacking while the eastbound left turn lane on Alessandro Boulevard provides 150-feet of stacking. Based on the queueing analysis, the existing northbound left turn pocket is anticipated to accommodate the 95th percentile peak hour queues under EAP (2022) traffic conditions with at most 105-feet during the PM peak hour, however, the eastbound left turn lane should be modified to accommodate a minimum of 250-feet of storage (see Appendix 5.2).

EXHIBIT 5-1: EAP (2022) TRAFFIC VOLUMES (IN PCE)



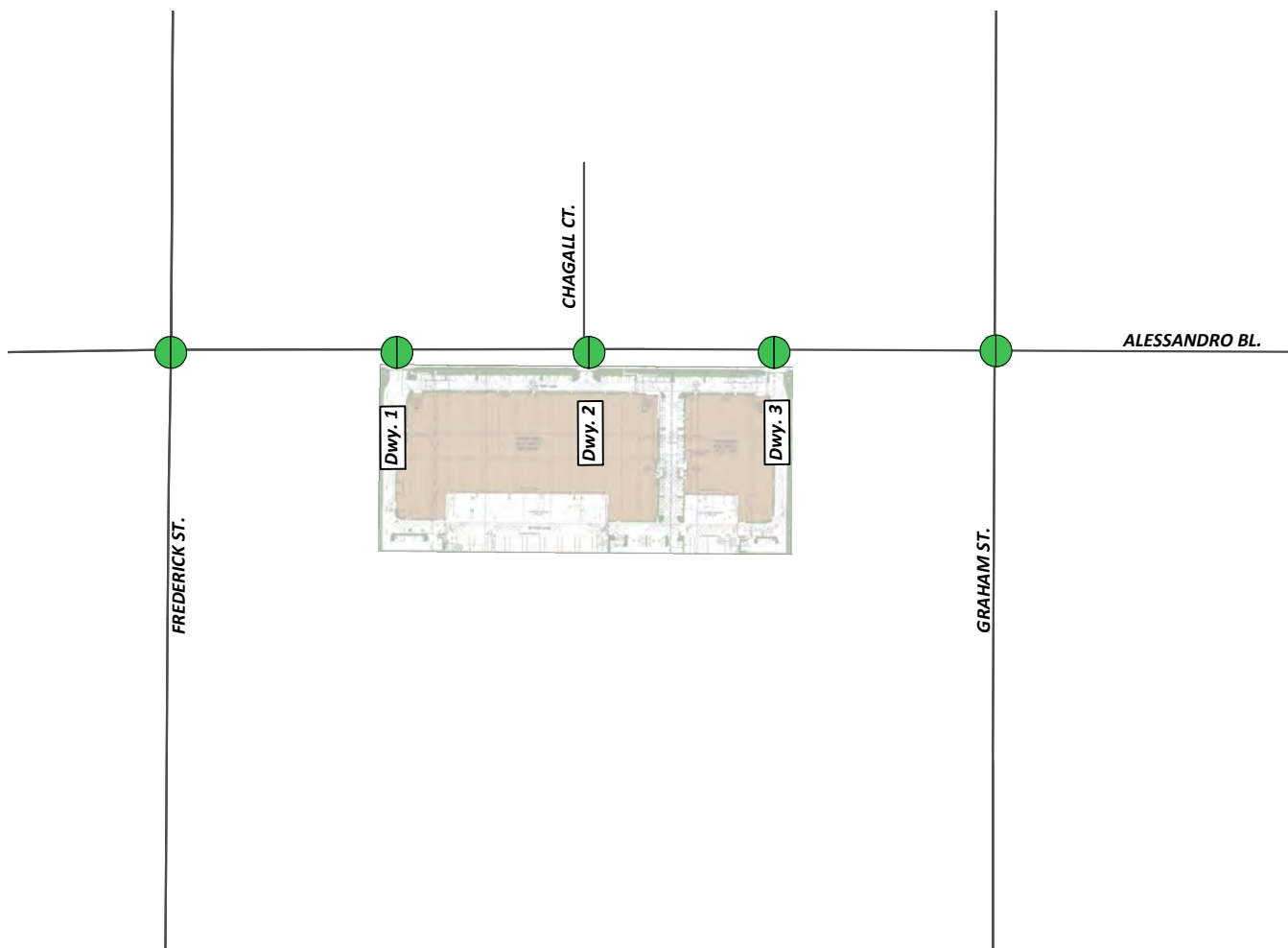
1	2	3	4	5
Frederick St. & Alessandro Bl.	Dwy. 1 & Alessandro Bl.	Dwy. 2 & Alessandro Bl.	Dwy. 3 & Alessandro Bl.	Graham St. & Alessandro Bl.
207(123) ↓ 279(312) ↓ 103(275) ↓ 170(172) ↑ 1603(903) ↑ 88(74) ↑	1861(1150) ←	1861(1150) ←	1861(1150) ←	95(56) ↓ 189(168) ↓ 99(152) ↓ 123(165) ↑ 1696(1005) ↑ 97(176) ↑
124(233) ↑ 556(1365) ↑ 79(131) ↑ 95(77) ↓ 282(339) ↓ 35(66) ↓	687(1704) → 14(4) → 3(9) →	666(1704) → 23(9) → 7(24) →	665(1725) → 9(3) → 3(15) →	46(118) ↓ 547(1468) ↓ 75(153) ↓ 69(81) ↓ 169(193) ↓ 16(77) ↓

LEGEND:

- 10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
- 10.0 = VEHICLES PER DAY (1000'S)



EXHIBIT 5-2: EAP (2022) SUMMARY OF LOS



LEGEND:

- = AM PEAK HOUR
- = PM PEAK HOUR
- = LOS A-D
- = LOS E
- = LOS F



Table 5-1

Intersection Analysis for EAP (2022) Conditions

#	Intersection	Traffic Control ²	Existing (2020)				EAP (2022)			
			Delay ¹ (secs.)		Level of Service		Delay ¹ (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Frederick St. & Alessandro Bl.	TS	22.4	30.7	C	C	23.4	33.8	C	C
2	Driveway 1 & Alessandro Bl.	<u>CSS</u>	Future Intersection				11.8	21.0	B	C
3	Driveway 2 & Alessandro Bl.	<u>CSS</u>	Future Intersection				11.8	22.3	B	C
4	Driveway 3 & Alessandro Bl.	<u>CSS</u>	Future Intersection				11.7	21.8	B	C
5	Graham St. & Alessandro Bl.	TS	20.4	32.6	C	C	22.0	34.0	C	C

¹ Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² CSS = Cross-street Stop; TS = Traffic Signal; CSS = Improvement

5.5 RECOMMENDED IMPROVEMENTS

The study area intersections are anticipated to operate at an acceptable LOS under EAP (2022) traffic conditions. As such, no intersection improvements have been recommended.

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Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

6 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements throughout the City of Moreno Valley are funded through a combination of project mitigation, fair share contributions or development impact fee programs, such as the Transportation Uniform Mitigation Fee (TUMF) program or the City's Development Impact Fee (DIF) program.

6.1 TRANSPORTATION UNIFORM MITIGATION FEE (TUMF) PROGRAM

The Western Riverside Council of Governments (WRCOG) is responsible for establishing and updating TUMF rates. The County may grant to developers a credit against the specific components of fees for the dedication of land or the construction of facilities identified in the list of improvements funded by each of these fee programs. Fees are based upon projected land uses and a related transportation need to address growth based upon a 2016 Nexus study.

TUMF is an ambitious regional program created to address cumulative impacts of growth throughout western Riverside County. Program guidelines are being handled on an iterative basis. Exemptions, credits, reimbursements and local administration are being deferred to primary agencies. The County of Riverside serves this function for the proposed Project. Fees submitted to the County are passed on to the WRCOG as the ultimate program administrator.

TUMF guidelines empower a local zone committee to prioritize and arbitrate certain projects. The Project is located in the Central Zone. The zone has developed a 5-year capital improvement program to prioritize public construction of certain roads. TUMF is focused on improvements necessitated by regional growth.

6.2 CITY OF MORENO VALLEY DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The City of Moreno Valley has created its own local DIF program to impose and collect fees from new residential, commercial and industrial development for the purpose of funding roadways and intersections necessary to accommodate City growth as identified in the City's General Plan Circulation Element. The City's DIF program includes facilities that are not part of, or which may exceed improvements identified and covered by the TUMF program. As a result, the pairing of the regional and local fee programs provides a more comprehensive funding and implementation plan to ensure an adequate and interconnected transportation system. Under the City's DIF program, the City may grant to developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the DIF program.

The timing to use the DIF fees is established through periodic capital improvement programs which are overseen by the City's Public Works Department. Periodic traffic counts, review of traffic accidents, and a review of traffic trends throughout the City are also periodically performed by City staff and consultants. The City uses this data to determine the timing of implementing the improvements listed in its facilities list. The Project Applicant would pay requisite DIF pursuant to incumbent City ordinance requirements.

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Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

7 REFERENCES

1. **City of Moreno Valley Transportation Engineering Division.** *Traffic Impact Analysis Preparation Guide.* Moreno Valley : s.n., June 2020.
2. **Institute of Transportation Engineers.** *Trip Generation.* 10th Edition. 2017.
3. **Riverside County Transportation Commission.** *2011 Riverside County Congestion Management Program.* County of Riverside : RCTC, December 14, 2011.
4. **Transportation Research Board.** *Highway Capacity Manual (HCM).* s.l. : National Academy of Sciences, 2016.
5. **Institute of Transportation Engineers (ITE).** *Trip Generation Manual Supplement.* February 2020.
6. **South Coast Air Quality Management District (SCAQMD).** *Warehouse Truck Trip Study Data Results and Usage.* June 2014.

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Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 1.1:
APPROVED TRAFFIC STUDY SCOPING AGREEMENT

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

EXHIBIT A

Project Scoping Form

This scoping form shall be submitted to the Lead Agency to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Approved
John Lj 9/14/20

Case Number:	PPA19-0025
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Alessandro Warehouse
Project Address:	South of Alessandro Boulevard on either side of Chagall Court
Project Opening Year:	2022
Project Description:	295,236 SF warehouse building (Building 1) & 101,252 SF warehouse building (Building 2). For the purposes of the traffic study, a mix of 30% high-cube cold storage warehouse (ITE 157) and 70% warehousing (ITE 150) is proposed.

	Consultant:	Developer: (Representative)
Name:	Charlene So, Urban Crossroads, Inc.	MIG
Address:		1650 Spruce Street, Suite 102 Riverside, CA 92507
Telephone:	949-861-0177	951-787-9222
Email:	cso@urbanxroads.com	

Trip Generation Information:

Trip Generation Data Source: ITE Trip Generation Manual, 10th Edition (2017)

Current General Plan Land Use:

Commercial

Proposed General Plan Land Use:

Business Park/Light Industrial

Current Zoning:

Community Commercial (CC)

Proposed Zoning:

Light Industrial

	Existing Trip Generation			Proposed Trip Generation (PCE)		
	In	Out	Total	In	Out	Total
AM Trips				55	16	71
PM Trips				21	60	81

Trip Internalization: Yes No (____% Trip Discount)

Pass-By Allowance: Yes No (____% Trip Discount)

Potential Screening Checks

Is your project screened from specific analyses (see Page 3 of the guidelines related to LOS assessment and Pages 22-23 for VMT screening criteria).

Is the project screened from LOS assessment? Yes No

LOS screening justification (see Page 3 of the guidelines): _____

Is the project screened from VMT assessment? Yes No

VMT screening justification (see Pages 22-23 of the guidelines): _____
Although the TAZ is a low VMT generating zone, the existing RivTAM inputs indicate that the existing employment within the zone consists of non-industrial employment.

Level of Service Scoping

- Proposed Trip Distribution (Attach Graphic for Detailed Distribution): See graphics

North	South	East	West
Varies %	Varies %	Varies %	Varies %

Link level of service and data collection:

X will be required Due to COVID-19, if there are no historic daily counts then we will estimate the ADT for the study area segments
 _____ will not be required

- Attach list of study intersections (and roadway segments if applicable) See Exhibit 2
- Attach site plan See Exhibit 1
- Other specific items to be addressed:
 - Site access
 - On-site circulation
 - Parking
 - Consistency with Plans supporting Bikes/Peds/Transit
 - Other Truck Turns at the Driveways
- Date of Traffic Counts We will obtain pre-COVID traffic counts and adjust using 2% per year
- Attach proposed analysis scenarios (years plus proposed forecasting approach)
- Attach proposed phasing approach (if the project is phased) No Phasing

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

VMT Scoping

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model Used RivTAM
- Attach WRCOG Screening VMT Assessment output or describe why it is not appropriate for use
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)

Analysis scenarios:

1. Existing (2020)
2. Existing plus Ambient Growth plus Project (2022)

As shown on Table 4, the proposed Project General Plan Amendment (light industrial) is anticipated to result in a reduction in trips as compared to the current General Plan Land Use (commercial). As such, no Horizon Year (2040) traffic conditions has been added.

VMT

Although TAZ 3712 is a low VMT generating zone based on home-based work VMT per worker, the existing RivTAM socioeconomic data indicate that the existing employment within the zone consists of non-industrial employment. As such, the Project is not screened out.

Assumed Conversion Factors

1,030 sf per employee (source: County of Riverside General Plan Appendix E Socioeconomic Build-Out Assumptions and Methodology)

Model Land Use Inputs

396,488 total sf / 1,030 sf per employee = 385 total employees (193 warehouse employees / 192 transportation employees)

EXHIBIT 1: PRELIMINARY SITE PLAN



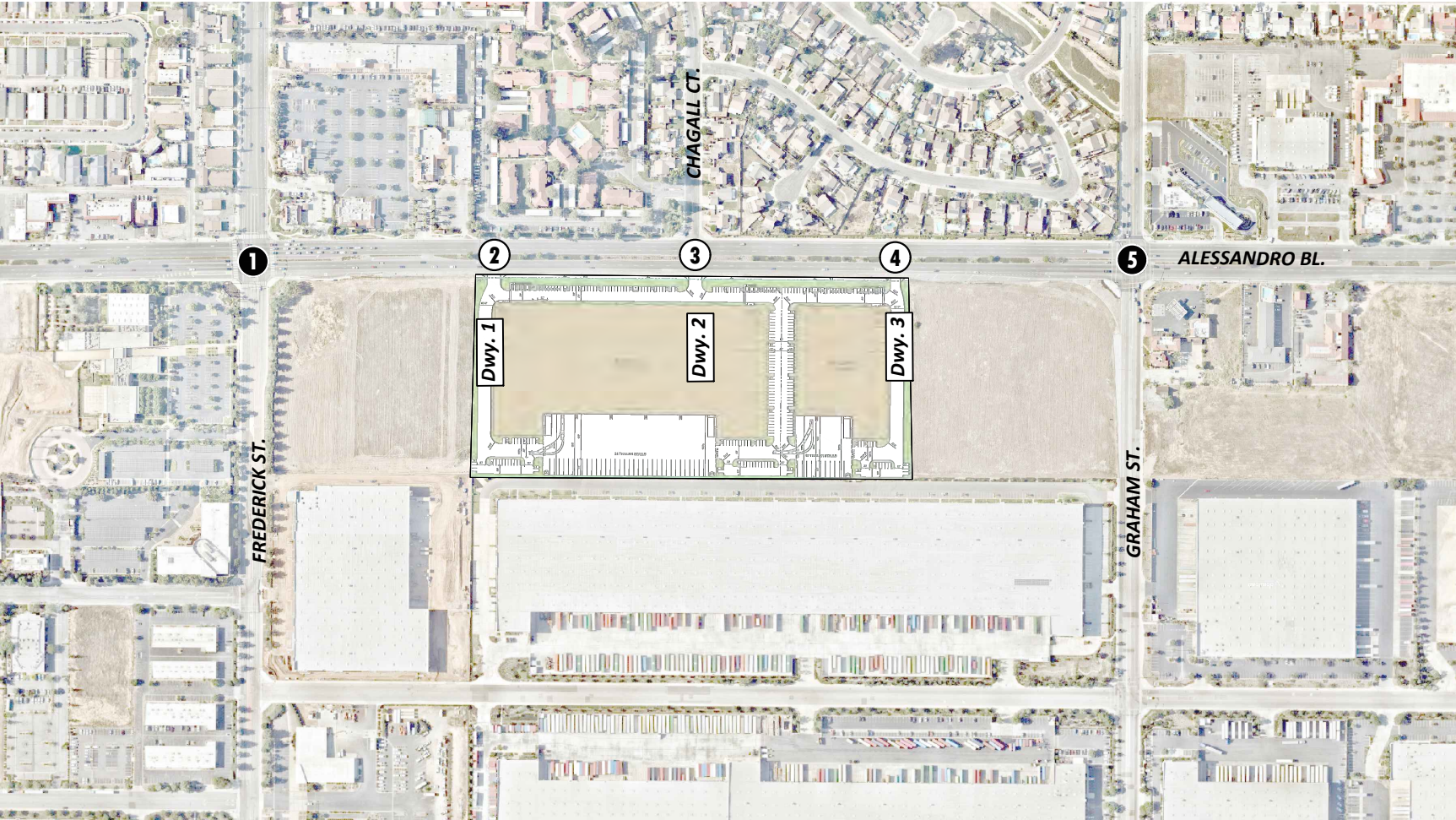
LEGEND:

- RIRO** = RIGHT-IN/RIGHT-OUT ONLY ACCESS
- FULL** = FULL ACCESS
- P** = PASSENGER CARS ONLY
- PT** = PASSENGER CARS AND TRUCKS



Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

EXHIBIT 2: LOCATION MAP

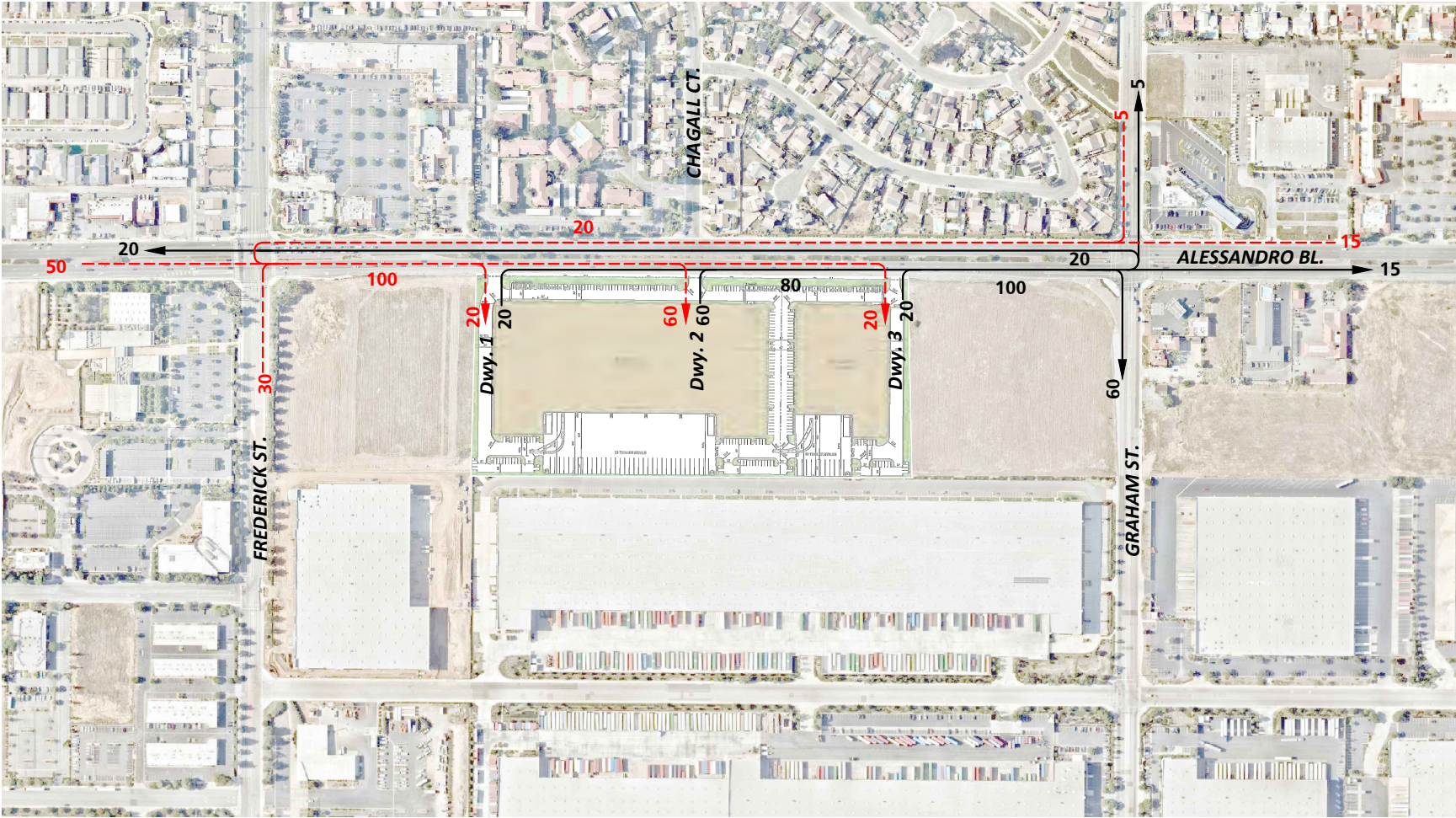


LEGEND:

- 0** = EXISTING INTERSECTION ANALYSIS LOCATION
- = FUTURE INTERSECTION ANALYSIS LOCATION



EXHIBIT 3: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION

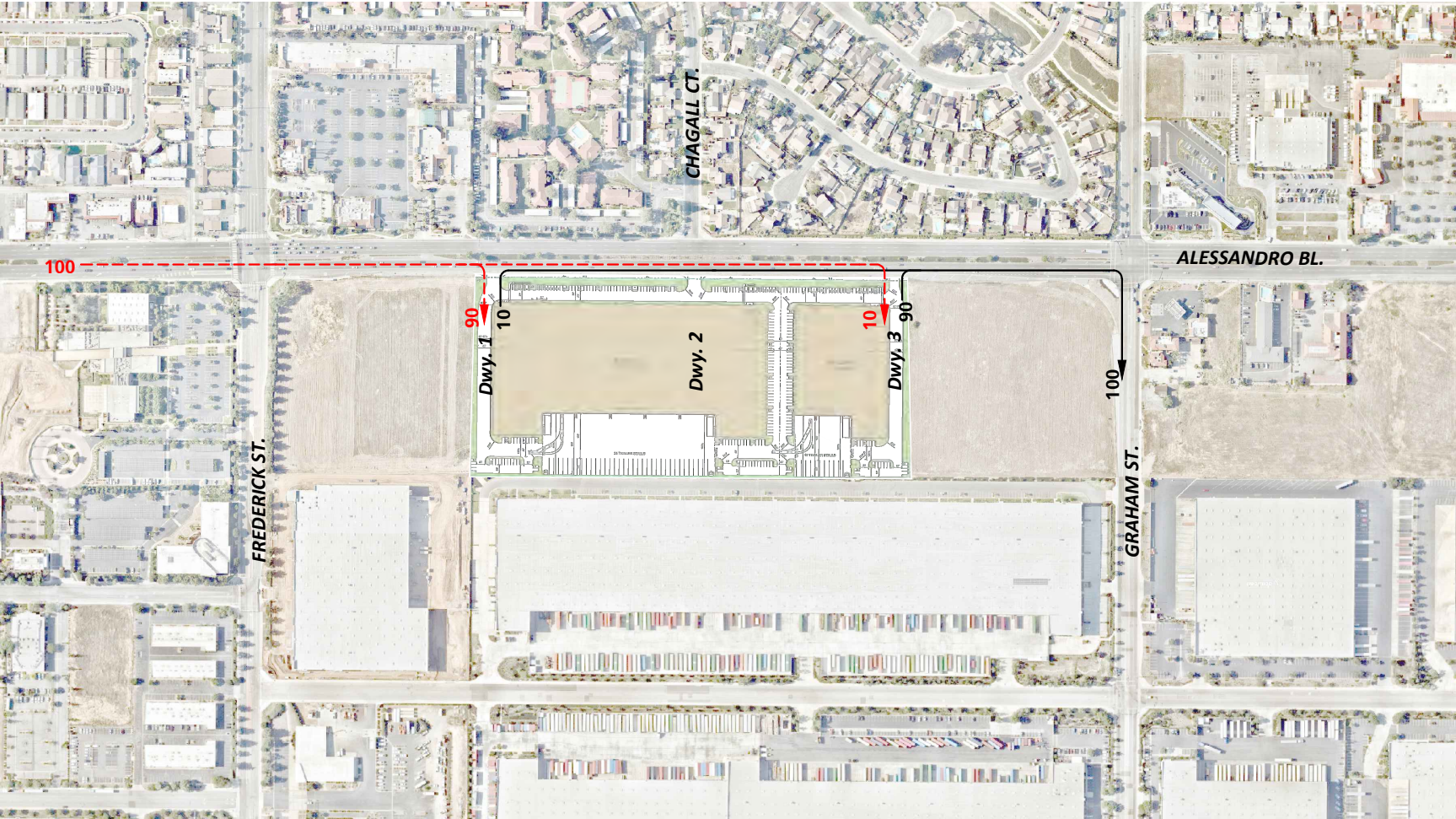


LEGEND:

- 10 = PERCENT TO/FROM PROJECT
- ← = OUTBOUND
- = INBOUND



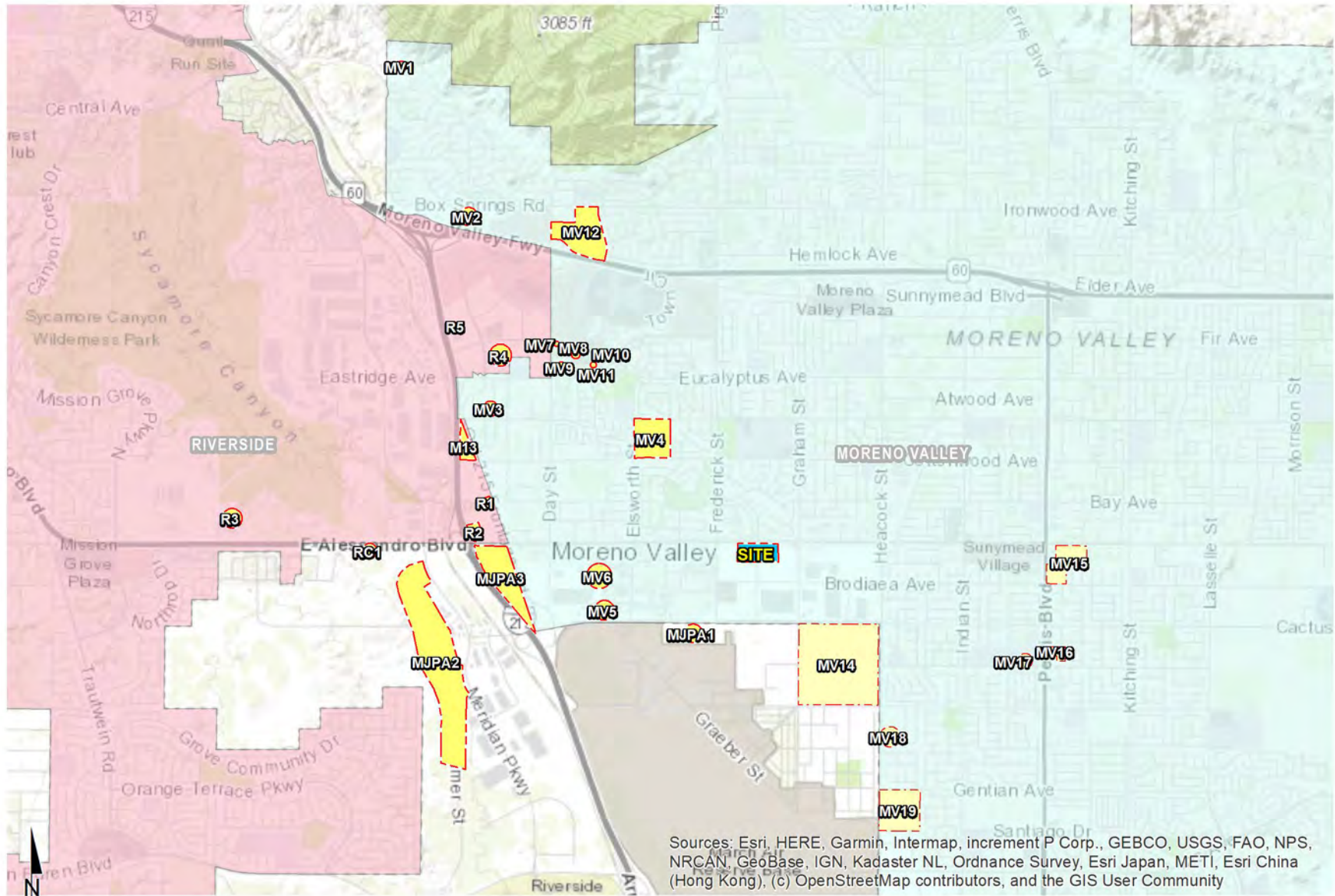
EXHIBIT 4: PROJECT (TRUCK) TRIP DISTRIBUTION



LEGEND:

- 10 = PERCENT TO/FROM PROJECT
- ← = OUTBOUND
- ← - - - = INBOUND

EXHIBIT 5: CUMULATIVE DEVELOPMENT LOCATION MAP



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124

Table 1

Project Trip Generation Rates

Land Use ¹	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Actual Vehicle Trip Generation Rates									
Warehousing ³	TSF	150	0.131	0.039	0.170	0.051	0.139	0.190	1.740
Passenger Cars (AM-87.0%; PM-85.0%; Daily-73.0%)			0.114	0.034	0.148	0.044	0.118	0.162	1.270
2-Axle Trucks (AM-2.17%; PM-2.51%; Daily-4.51%)			0.003	0.001	0.004	0.001	0.003	0.005	0.078
3-Axle Trucks (AM-2.69%; PM-3.11%; Daily-5.59%)			0.004	0.001	0.005	0.002	0.004	0.006	0.097
4-Axle+ Trucks (AM-8.14%; PM-9.39%; Daily-16.90%)			0.011	0.003	0.014	0.005	0.013	0.018	0.294
High-Cube Cold Storage Warehouse ³	TSF	157	0.085	0.025	0.110	0.032	0.088	0.120	2.120
Passenger Cars (AM-73.0%; PM-77.0%; Daily-65.0%)			0.062	0.018	0.080	0.025	0.067	0.092	1.378
2-Axle Trucks (AM-9.37%; PM-7.98%; Daily-12.15%)			0.008	0.002	0.010	0.003	0.007	0.010	0.257
3-Axle Trucks (AM-2.97%; PM-2.53%; Daily-3.85%)			0.003	0.001	0.003	0.001	0.002	0.003	0.082
4-Axle+ Trucks (AM-14.66%; PM-12.49%; Daily-19.01%)			0.012	0.004	0.016	0.004	0.011	0.015	0.403
Passenger Car Equivalent (PCE) Trip Generation Rates⁴									
Warehousing ³	TSF	150	0.131	0.039	0.170	0.051	0.139	0.190	1.740
Passenger Cars			0.114	0.034	0.148	0.044	0.118	0.162	1.270
2-Axle Trucks (PCE = 1.5)			0.004	0.001	0.006	0.002	0.005	0.007	0.118
3-Axle Trucks (PCE = 2.0)			0.007	0.002	0.009	0.003	0.009	0.012	0.194
4+-Axle Trucks (PCE = 3.0)			0.032	0.010	0.042	0.014	0.039	0.054	0.882
High-Cube Cold Storage Warehouse ³	TSF	157	0.085	0.025	0.110	0.032	0.088	0.120	2.120
Passenger Cars			0.062	0.018	0.080	0.025	0.067	0.092	1.378
2-Axle Trucks (PCE = 1.5)			0.012	0.004	0.016	0.004	0.010	0.014	0.386
3-Axle Trucks (PCE = 2.0)			0.005	0.002	0.007	0.002	0.004	0.006	0.163
4+-Axle Trucks (PCE = 3.0)			0.037	0.011	0.048	0.012	0.033	0.045	1.209

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).

² TSF = thousand square feet

³ Vehicle Mix Source: ITE Trip Generation Handbook Supplement (2020), Appendix C.

Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.

Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

⁴ PCE factors per SBCTA CMP: 2-axle = 1.5; 3-axle = 2.0; 4+-axle = 3.0.

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Table 2

Project Trip Generation Summary (Actual Vehicles)

Land Use	Quantity	Units ¹	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Building 1:									
Warehousing (70%)	206.665	TSF							
Passenger Cars:			24	7	31	9	24	33	264
Truck Trips:									
2-axle:			1	0	1	0	1	1	16
3-axle:			1	0	1	0	1	1	20
4+-axle:			2	1	3	1	3	4	62
- Truck Trips			4	1	5	1	5	6	98
High-Cube Cold Storage (30%)	88.571	TSF							
Passenger Cars:			5	2	7	2	6	8	122
Truck Trips:									
2-axle:			1	0	1	0	1	1	24
3-axle:			0	0	0	0	0	0	8
4+-axle:			1	0	1	0	1	1	36
- Truck Trips			2	0	2	0	2	2	68
Total Passenger Cars (Building 1)			29	9	38	11	30	41	386
Total Trucks (Building 1)			6	1	7	1	7	8	166
BUILDING 1 TOTAL TRIPS (Actual Vehicles)			35	10	45	12	37	49	552
Building 2:									
Warehousing (70%)	70.876	TSF							
Passenger Cars:			8	2	10	3	8	11	90
Truck Trips:									
2-axle:			0	0	0	0	0	0	6
3-axle:			0	0	0	0	0	0	8
4+-axle:			1	0	1	0	1	1	22
- Truck Trips			1	0	1	0	1	1	36
High-Cube Cold Storage (30%)	30.376	TSF							
Passenger Cars:			2	1	3	1	2	3	42
Truck Trips:									
2-axle:			0	0	0	0	0	0	8
3-axle:			0	0	0	0	0	0	2
4+-axle:			0	0	0	0	0	0	12
- Truck Trips			0	0	0	0	0	0	22
Total Passenger Cars (Building 2)			10	3	13	4	10	14	132
Total Trucks (Building 2)			1	0	1	0	1	1	58
BUILDING 2 TOTAL TRIPS (Actual Vehicles)			11	3	14	4	11	15	190
Total Passenger Cars (Building 1 + Building 2)			39	12	51	15	40	55	518
Total Trucks (Building 1 + Building 2)			7	1	8	1	8	9	224
TOTAL TRIPS (Building 1 + Building 2)			46	13	59	16	48	64	742

¹ TSF = thousand square feet

Table 3

Project Trip Generation Summary (PCE)

Land Use	Quantity	Units ¹	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Building 1:									
Warehousing (70%)	206.665	TSF							
Passenger Cars:			24	7	31	9	24	33	264
Truck Trips:									
2-axle:			1	0	1	0	1	1	24
3-axle:			1	0	1	1	2	3	40
4+-axle:			7	2	9	3	8	11	182
- Truck Trips			9	2	11	4	11	15	246
High-Cube Cold Storage (30%)	88.571	TSF							
Passenger Cars:			5	2	7	2	6	8	122
Truck Trips:									
2-axle:			1	0	1	0	1	1	34
3-axle:			0	0	0	0	0	0	14
4+-axle:			3	1	4	1	3	4	108
- Truck Trips			4	1	5	1	4	5	156
Total Passenger Cars (Building 1)			29	9	38	11	30	41	386
Total Trucks (Building 1)			13	3	16	5	15	20	402
BUILDING 1 TOTAL TRIPS (PCE)			42	12	54	16	45	61	788
Building 2:									
Warehousing (70%)	70.876	TSF							
Passenger Cars:			8	2	10	3	8	11	90
Truck Trips:									
2-axle:			0	0	0	0	0	0	8
3-axle:			0	0	0	0	1	1	14
4+-axle:			2	1	3	1	3	4	64
- Truck Trips			2	1	3	1	4	5	86
High-Cube Cold Storage (30%)	30.376	TSF							
Passenger Cars:			2	1	3	1	2	3	42
Truck Trips:									
2-axle:			0	0	0	0	0	0	12
3-axle:			0	0	0	0	0	0	6
4+-axle:			1	0	1	0	1	1	38
- Truck Trips			1	0	1	0	1	1	56
Total Passenger Cars (Building 2)			10	3	13	4	10	14	132
Total Trucks (Building 2)			3	1	4	1	5	6	142
BUILDING 2 TOTAL TRIPS (PCE)			13	4	17	5	15	20	274
Total Passenger Cars (Building 1 + Building 2)			39	12	51	15	40	55	518
Total Trucks (Building 1 + Building 2)			16	4	20	6	20	26	544
TOTAL TRIPS (Building 1 + Building 2) (PCE)			55	16	71	21	60	81	1,062

¹ TSF = thousand square feet

Table 4

Trip Generation Comparison

Land Use ¹	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Actual Vehicle Trip Generation Rates									
Shopping Center	TSF	820	0.58	0.36	0.94	1.83	1.98	3.81	37.75

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).

² TSF = thousand square feet

Land Use	Quantity	Units ¹	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Existing General Plan Land Use:									
Commercial (Shopping Center) ²	192.426	TSF	112	69	181	352	381	733	7,264
Proposed Project (see Table 3):									
Alessandro Warehouse (PCE)	295.236	TSF	55	16	71	21	60	81	1,062
Net Reduction in Trip Generation:			-57	-53	-110	-331	-321	-652	-6,202

¹ TSF = thousand square feet

² Current General Plan land use and zoning is Commercial. Shopping Center (ITE 820) land use used to calculate trip generation.

The square footage was calculated assuming a 0.25 floor-to-area ratio (FAR): 17.67 acres x 43,560 square feet/acre x 0.25 FAR

Table 5

Cumulative Development Land Use Summary

ID	Project Name	Land Use ¹	Quantity	Units ²
City of Moreno Valley				
MV1	Kincaid Development (Tract 33626)	SFDR	25	DU
MV2	Oak Park Partners (Tract 35414)	Multifamily	266	DU
MV3	Apollo III Development Group (PEN16-0064)	Multifamily	18	DU
MV4	Scottish Village	Multifamily	194	DU
MV5	Moreno Valley Cactus Center (PEN16-0131)	Warehouse	36.950	TSF
		Fast Food w/ Drive Thru	7.900	TSF
		Gas Station w/ Car Wash	28	VFP
MV6	PA 08-0047-0052 (Komar Cactus Plaza)	Hotel	110	Rooms
		Fast Food w/ Drive Thru	8.000	TSF
		Commercial	42.400	TSF
MV7	Residence Inn	Hotel	112	RM
MV8	The Quarter	Commercial Shopping Center	420.485	TSF
MV9	Holiday Inn Express	Hotel	104	RM
MV10	Fairfield Inn & Suites	Hotel	106	RM
MV11	TownGate Square	Office / Medical	170.000	TSF
MV12	Towngate Highlands	SFDR	293	DU
		Hotel	260	Rooms
		Sit-Down Restaurant	14.000	TSF
		Fast Food w/ Drive Thru	11.500	TSF
		Gas Station w/ Car Wash	12	VFP
MV13	Old 215	General Light Industrial	130	EMP
MV14	March Lifecare Campus Specific Plan	Medical Offices	190.000	TSF
		Commercial Retail	210.000	TSF
		Research & Education	200.000	TSF
		Hospital	50	Beds
		Institutional Residential	660	Beds
MV15	PEN16-0039	Multifamily	272	DU
MV16	TM 33607	Multifamily	52	DU
MV17	TM 36708	SFDR	122	DU
MV18	TM 32556	SFDR	32	DU
MV19	TM 34748	SFDR	135	DU
County of Riverside				
RC1	PP 25422	Warehouse	814.000	TSF
City of Riverside				
R1	P15-1035/P16-0556/P16-0567	Warehouse	176.149	TSF
R2	P14-0841 to P14-0848/P16-0472/P16-0474	Warehouse	73.200	TSF
		Commercial Retail	15.000	TSF
R3	Sycamore Hills Distribution Center	Warehouse	603.100	TSF
R4	P14-0294/P14-0295/P14-0297/P16-0497	Medical	524	Beds
R5	P19-0332	Car Wash	4.333	TSF
March Joint Powers Authority (MJPA)				
MJPA1	K4 Parcel	Warehouse	718.000	TSF
MJPA2	Meridian Business Park (West Campus)	Industrial Park	2,278.852	TSF
MJPA3	Freeway Business Center	Warehouse	709.083	TSF

¹ SFDR = Single Family Detached Residential

² DU = Dwelling Units; TSF = Thousand Square Feet; RM = Rooms; VFP = Vehicle Fueling Positions; EMP = Employees

APPENDIX 3.1:
EXISTING TRAFFIC COUNTS

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

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Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

**Volume Development
AM Peak Hour**

1: Frederick Street & Alessandro Boulevard

	PHF: 0.981		7:30 AM					Count Date: 5/17/2018					TOTAL
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	
Existing Total:	86	263	22	98	261	196	114	478	68	75	1,478	155	3,293
2-Axle:	2	7	0	1	8	4	1	11	0	3	21	0	59
3-Axle:	0	2	0	1	1	1	2	10	0	1	17	8	44
4+-Axle:	2	1	0	0	1	0	1	7	4	0	17	0	33
Existing PCE 2020:	92	271	22	99	268	199	119	508	76	77	1,539	163	3,433

2: Driveway 1 & Alessandro Boulevard

	PHF: 0.920							Count Date:					TOTAL
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	
Existing Total:								597			1,708		2,305
2-Axle:								12			24		36
3-Axle:								11			26		37
4+-Axle:								7			17		24
Existing PCE 2020:	0	0	0	0	0	0	0	629	0	0	1,779	0	2,408

3: Driveway 2 & Alessandro Boulevard

	PHF: 0.920							Count Date:					TOTAL
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	
Existing Total:								597			1,708		2,305
2-Axle:								12			24		36
3-Axle:								11			26		37
4+-Axle:								7			17		24
Existing PCE 2020:	0	0	0	0	0	0	0	629	0	0	1,779	0	2,408

4: Driveway 3 & Alessandro Boulevard

	PHF: 0.920							Count Date:					TOTAL
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	
Existing Total:								597			1,708		2,305
2-Axle:								12			24		36
3-Axle:								11			26		37
4+-Axle:								7			17		24
Existing PCE 2020:	0	0	0	0	0	0	0	629	0	0	1,779	0	2,408

5: Graham Street & Alessandro Boulevard

	PHF: 0.943		7:15 AM					Count Date: 4/26/2018					TOTAL
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	
Existing Total:	60	161	16	94	180	88	40	497	60	93	1,560	117	2,965
2-Axle:	3	2	0	3	3	2	1	10	1	0	19	2	47
3-Axle:	0	0	0	0	0	0	0	11	0	1	26	1	40
4+-Axle:	2	0	0	0	0	0	0	5	2	0	14	0	24
Existing PCE 2020:	66	162	16	95	182	89	41	524	65	94	1,624	119	3,076

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Volume Development
PM Peak Hour

1: Frederick Street & Alessandro Boulevard

	PHF: 0.940		4:00 PM					Count Date: 5/17/2018					TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing Total:	74	325	58	262	293	117	222	1,279	125	69	852	165	3,840
2-Axle:	0	2	0	1	6	0	0	15	2	0	10	0	37
3-Axle:	0	0	0	0	1	0	0	2	0	0	1	0	4
4+-Axle:	0	0	0	1	1	1	1	7	0	0	1	0	12
Existing PCE 2020:	74	326	58	265	300	119	224	1,303	126	69	860	165	3,888

2: Driveway 1 & Alessandro Boulevard

	PHF: 0.920							Count Date:					TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing Total:								1,599			1,086		2,685
2-Axle:								16			10		27
3-Axle:								2			1		3
4+-Axle:								8			1		9
Existing PCE 2020:	0	0	0	0	0	0	0	1,626	0	0	1,094	0	2,720

3: Driveway 2 & Alessandro Boulevard

	PHF: 0.920							Count Date:					TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing Total:								1,599			1,086		2,685
2-Axle:								16			10		27
3-Axle:								2			1		3
4+-Axle:								8			1		9
Existing PCE 2020:	0	0	0	0	0	0	0	1,626	0	0	1,094	0	2,720

4: Driveway 3 & Alessandro Boulevard

	PHF: 0.920							Count Date:					TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing Total:								1,599			1,086		2,685
2-Axle:								16			10		27
3-Axle:								2			1		3
4+-Axle:								8			1		9
Existing PCE 2020:	0	0	0	0	0	0	0	1,626	0	0	1,094	0	2,720

5: Graham Street & Alessandro Boulevard

	PHF: 0.940		4:00 PM					Count Date: 4/26/2018					TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing Total:	77	185	73	146	160	51	104	1,382	113	169	958	158	3,576
2-Axle:	1	1	0	1	2	3	0	10	6	0	6	0	31
3-Axle:	0	0	1	0	0	0	0	2	0	1	1	0	5
4+-Axle:	0	0	0	0	0	0	0	8	0	0	1	0	9
Existing PCE 2020:	78	186	74	146	161	53	104	1,405	116	170	964	158	3,615

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

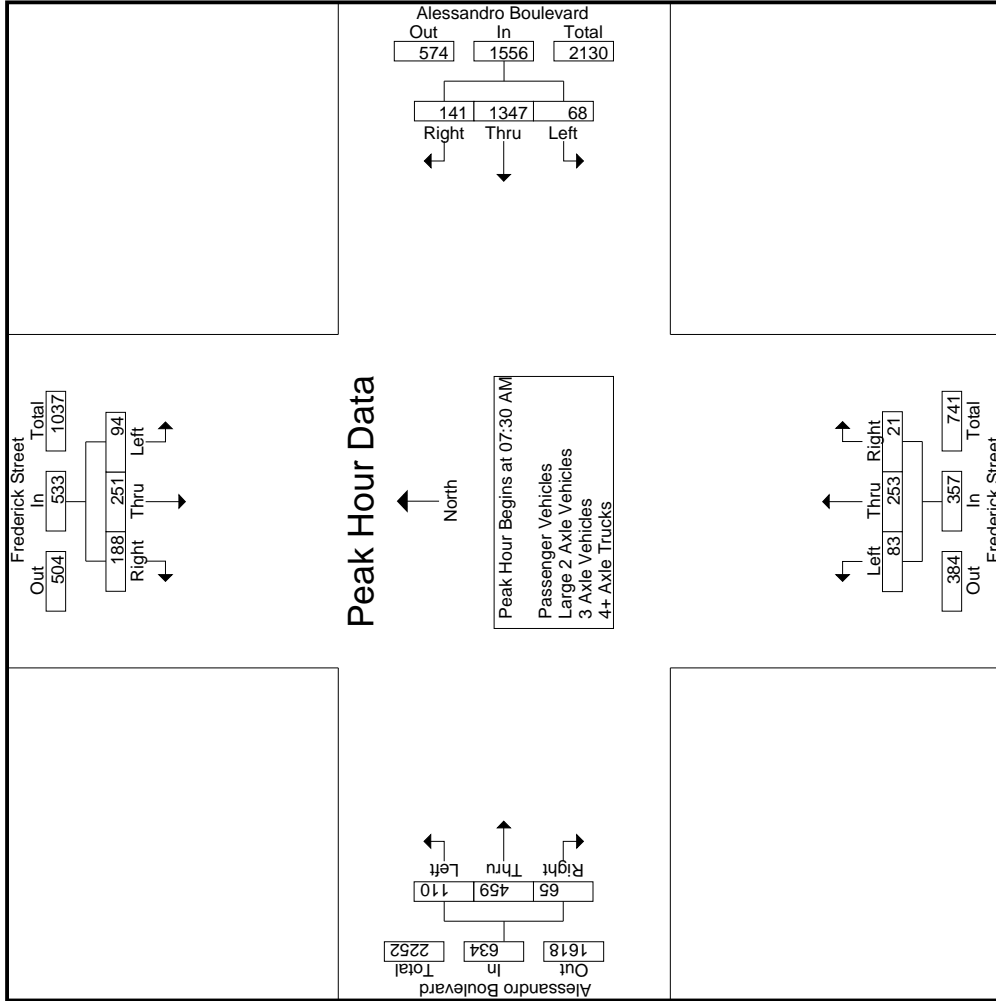
Start Time	Frederick Street Southbound						Alessandro Boulevard Westbound						Frederick Street Northbound						Alessandro Boulevard Eastbound					
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		Left		Thru		Right	
	Count	%	Count	%	Count	RTOR	Count	%	Count	RTOR	Count	RTOR	Count	%	Count	RTOR	Count	%	Count	RTOR	Count	%	Count	RTOR
07:00 AM	17	49	30	14	96	5	362	17	4	384	10	31	6	2	47	29	65	10	104	26	631	657		
07:15 AM	27	73	33	18	133	20	328	23	4	371	20	40	4	1	64	21	92	4	117	25	685	710		
07:30 AM	22	84	41	12	147	18	383	27	2	428	9	52	5	3	66	24	100	20	144	27	785	812		
07:45 AM	31	60	52	18	143	16	331	29	6	376	30	67	6	0	103	25	118	18	161	35	783	818		
Total	97	266	156	62	519	59	1404	96	16	1559	69	190	21	6	280	99	375	52	526	113	2884	2997		
08:00 AM	25	50	50	15	125	15	335	45	14	395	21	59	4	3	84	38	123	14	175	38	779	817		
08:15 AM	16	57	45	13	118	19	298	40	9	357	23	75	6	3	104	23	118	13	154	29	733	762		
08:30 AM	33	59	38	14	130	14	243	19	6	276	15	37	6	2	58	38	108	10	156	27	620	647		
08:45 AM	23	62	40	11	125	17	206	31	3	254	19	62	6	4	87	40	114	17	171	25	637	662		
Total	97	228	173	53	498	65	1082	135	32	1282	78	233	22	12	333	139	463	54	656	119	2769	2888		
Grand Total	194	494	329	115	1017	124	2486	231	48	2841	147	423	43	18	613	238	838	106	1182	232	5653	5885		
Approch %	19.1	48.6	32.4			4.4	87.5	8.1			24	69	7			20.1	70.9	9						
Total %	3.4	8.7	5.8			18	2.2	4.4			2.6	7.5	0.8			4.2	14.8	1.9			3.9	96.1		
Passenger Vehicles	190	476	320		1096	119	2405	228		2799	143	406	41		607	226	789	96		1161	0	0	5663	
% Passenger Vehicles	97.9	96.4	97.3		95.7	96.8	96.7	98.7		97.9	97.3	96	95.3		94.4	96.2	94.2	90.6		98	0	0	96.2	
Large 2 Axle Vehicles	3	13	6		25	4	33	1		38	2	13	1		16	4	19	3		27	0	0	106	
% Large 2 Axle Vehicles	1.5	2.6	1.8		2.6	2.2	1.3	0.4		1.3	1.4	3.1	2.3		2.5	1.7	2.3	2.8		2.2	0	0	1.8	
3 Axle Vehicles	1	4	2		9	1	24	1		26	0	2	1		4	5	21	0		26	0	0	65	
% 3 Axle Vehicles	0.5	0.8	0.6		1.7	0.8	0.8	1		0.9	0	0.5	2.3		0.6	2.1	2.5	0		2.1	0	0	1.1	
4+ Axle Trucks	0	1	1		2	0	24	1		26	2	2	0		4	3	9	7		19	0	0	51	
% 4+ Axle Trucks	0	0.2	0.3		0.2	0	1	0.4		0.9	1.4	0.5	0		0.6	1.3	1.1	6.6		0	0	0	0.9	

Start Time	Frederick Street Southbound						Alessandro Boulevard Westbound						Frederick Street Northbound						Alessandro Boulevard Eastbound					
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		Left		Thru		Right	
	Count	%	Count	%	Count	RTOR	Count	%	Count	RTOR	Count	RTOR	Count	%	Count	RTOR	Count	%	Count	RTOR	Count	%	Count	RTOR
07:00 AM to 08:45 AM - Peak 1 of 1	94	251	188		533	18	383	27		428	9	52	5		66	24	100	20		144	785			
Intersection Begins at 07:30 AM	22	84	41		147	16	331	29		376	30	67	6		103	25	118	18		161	783			
07:45 AM	31	60	52		143	15	335	45		395	21	59	4		84	38	123	14		175	779			
08:00 AM	25	50	50		125	16	383	27		428	9	52	5		66	24	100	20		144	785			
08:15 AM	16	57	45		118	19	298	40		357	23	75	6		87	40	114	17		171	785			
Total Volume	94	251	188		533	68	1347	141		1556	83	253	21		357	110	459	65		634	3080			
% App. Total	17.6	47.1	35.3		35.3	4.4	86.6	9.1		9.1	23.2	70.9	5.9		10.3	17.4	72.4	10.3		10.3	981			
PHF	.758	.747	.904		.906	.895	.879	.783		.909	.692	.843	.875		.858	.724	.933	.813		.906				

Counts Unlimited
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City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 2



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City of Moreno Valley
 N/S: Frederick Street
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 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 3

Start Time	Frederick Street Southbound			Alessandro Boulevard Westbound			Frederick Street Northbound			Alessandro Boulevard Eastbound					
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1	Peak Hour for Each Approach Begins at:														
	07:15 AM			07:15 AM			07:30 AM			08:00 AM					
+0 mins.	27	73	33	20	328	23	371	9	52	5	66	38	123	14	175
+15 mins.	22	84	41	18	383	27	428	30	67	6	103	23	118	13	154
+30 mins.	31	60	52	16	331	29	376	21	59	4	84	38	108	10	156
+45 mins.	25	50	50	15	335	45	395	23	75	6	104	40	114	17	171
Total Volume	105	267	176	69	1377	124	1570	83	253	21	357	139	463	54	656
% App. Total	19.2	48.7	32.1	4.4	87.7	7.9	91.7	23.2	70.9	5.9	21.2	70.6	8.2	8.2	8.2
PHF	.847	.795	.846	.863	.899	.689	.917	.692	.843	.875	.858	.869	.941	.794	.937

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City of Moreno Valley
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File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Frederick Street Southbound						Alessandro Boulevard Westbound						Frederick Street Northbound						Alessandro Boulevard Eastbound					
	Left	Thru	Right	RTOR	App. Total	Int. Total	Left	Thru	Right	RTOR	App. Total	Int. Total	Left	Thru	Right	RTOR	App. Total	Int. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
07:00 AM	17	48	29	14	94		5	352	17	4	374		10	30	6	2	46		26	59	8	6	93	
07:15 AM	26	70	32	17	128		19	325	21	3	365		20	39	4	1	63		20	87	4	2	111	
07:30 AM	21	83	38	11	142		18	375	27	2	420		8	51	5	3	64		24	90	18	10	132	
07:45 AM	31	59	52	18	142		16	316	29	6	361		29	64	6	0	99		24	114	17	11	155	
Total	95	260	151	60	506		58	1368	94	15	1520		67	184	21	6	272		94	350	47	29	491	
08:00 AM	25	46	48	13	119		14	317	45	14	376		21	58	4	3	83		36	116	14	6	166	
08:15 AM	15	53	45	13	113		16	287	40	9	343		21	70	6	3	97		22	113	12	4	147	
08:30 AM	33	56	38	14	127		14	236	19	6	269		15	35	5	2	55		35	103	8	5	146	
08:45 AM	22	61	38	10	121		17	197	30	3	244		19	59	5	3	83		39	107	15	6	161	
Total	95	216	169	50	480		61	1037	134	32	1232		76	222	20	11	318		132	439	49	21	620	
Grand Total	190	476	320	110	986		119	2405	228	47	2752		143	406	41	17	590		226	789	96	50	1111	
Apprch %	19.3	48.3	32.5				4.3	87.4	8.3				20.3	71	8.6				20.3	71	8.6			
Total %	3.5	8.8	5.9		18.1		2.2	44.2	4.2		50.6		4.2	14.5	1.8		10.8		4.2	14.5	1.8		20.4	

3.1-6

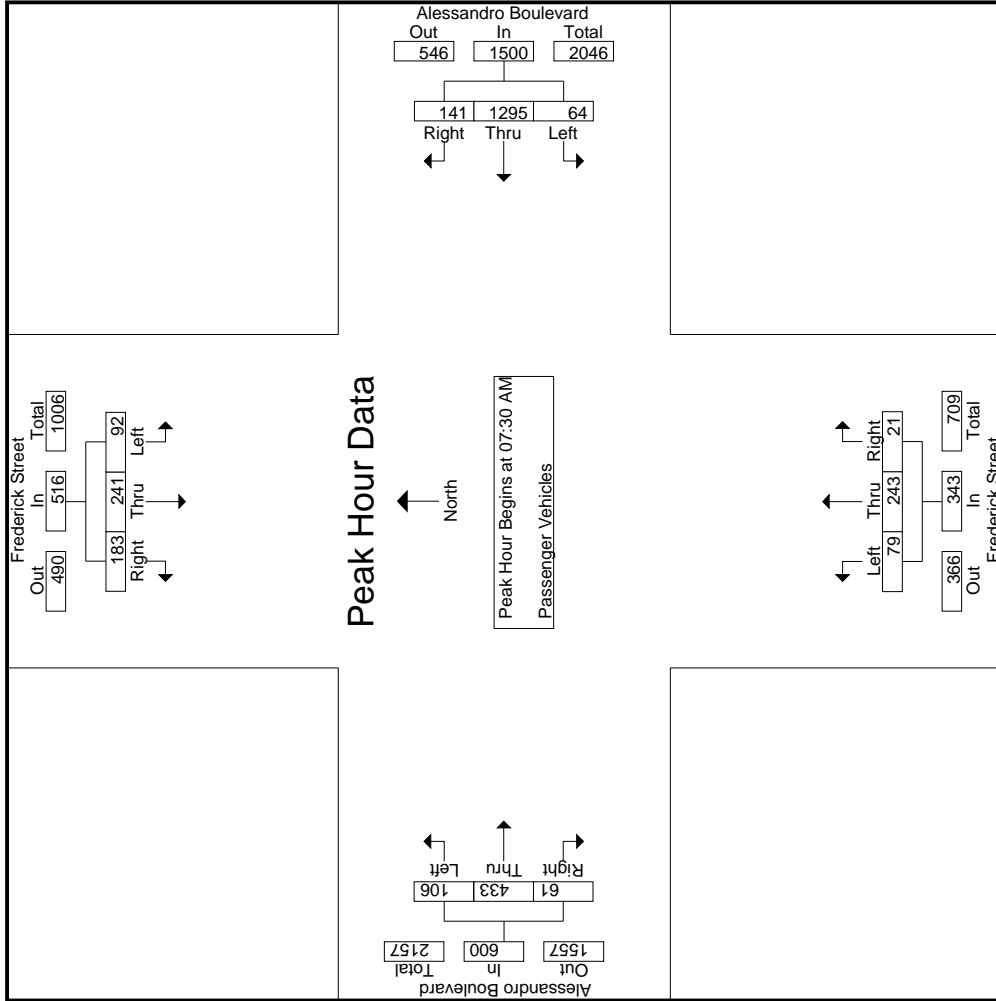
Start Time	Frederick Street Southbound						Alessandro Boulevard Westbound						Frederick Street Northbound						Alessandro Boulevard Eastbound					
	Left	Thru	Right	RTOR	App. Total	Int. Total	Left	Thru	Right	RTOR	App. Total	Int. Total	Left	Thru	Right	RTOR	App. Total	Int. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
07:30 AM	21	83	38		142		18	375	27		420		8	51	5		64		24	90	18		132	
07:45 AM	31	59	52		142		16	316	29		361		29	64	6		99		24	114	17		155	
08:00 AM	25	46	48		119		14	317	45		376		21	58	4		83		36	116	14		166	
08:15 AM	15	53	45		127		16	287	40		343		21	70	6		97		22	113	12		147	
Total	92	241	183		516		64	1295	141		1500		79	243	21		343		106	433	61		600	
% App. Total	17.8	46.7	35.5				4.3	86.3	9.4				23	70.8	6.1				17.7	72.2	10.2			
PHF	.742	.726	.880		.908		.889	.863	.783		.893		.681	.868	.875		.866		.736	.933	.847		.904	

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

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City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
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File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 2



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City of Moreno Valley
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 E/W: Alessandro Boulevard
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File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 3

Start Time	Frederick Street Southbound			Alessandro Boulevard Westbound			Frederick Street Northbound			Alessandro Boulevard Eastbound					
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1	Peak Hour for Each Approach Begins at:														
	07:30 AM			07:30 AM			07:30 AM			07:30 AM					
+0 mins.	21	83	38	18	375	27	420	8	51	5	64	24	90	18	132
+15 mins.	31	59	52	16	316	29	361	29	64	6	99	24	114	17	155
+30 mins.	25	46	48	14	317	45	376	21	58	4	83	36	116	14	166
+45 mins.	15	53	45	16	287	40	343	21	70	6	97	22	113	12	147
Total Volume	92	241	183	64	1295	141	1500	79	243	21	343	106	433	61	600
% App. Total	17.8	46.7	35.5	4.3	86.3	9.4	89.3	23	70.8	6.1	17.7	72.2	10.2	10.2	10.2
PHF	.742	.726	.880	.889	.863	.783	.893	.681	.868	.875	.866	.736	.933	.847	.904

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City of Moreno Valley
 N/S: Frederick Street
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 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Frederick Street Southbound						Alessandro Boulevard Westbound						Frederick Street Northbound						Alessandro Boulevard Eastbound									
	Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total		Exclu. Total	Inclu. Total	Int. Total	
07:00 AM	0	1	0	0	1	0	5	0	0	5	0	0	0	0	0	1	1	1	0	3	0	0	0	0	0	0	0	9
07:15 AM	1	2	1	1	4	1	1	0	0	2	0	1	0	0	1	0	1	0	0	1	1	1	0	0	1	1	8	9
07:30 AM	0	1	3	1	4	0	1	0	0	1	1	1	0	0	2	0	4	0	0	4	1	1	0	0	4	1	11	12
07:45 AM	0	1	0	0	1	0	7	0	0	7	1	2	0	0	3	1	1	0	0	2	0	0	0	0	2	0	13	13
Total	1	5	4	2	10	1	14	0	0	15	2	4	0	0	6	2	7	1	0	10	2	41	2	0	41	2	61	63
08:00 AM	0	3	1	1	4	0	7	0	0	7	0	1	0	0	1	0	5	0	0	5	1	17	0	0	17	1	17	18
08:15 AM	1	3	0	0	4	3	5	0	0	8	0	3	0	0	3	0	1	0	0	1	0	0	0	0	1	0	16	16
08:30 AM	0	2	0	0	2	0	2	0	0	2	2	0	1	0	3	1	3	1	0	5	0	5	0	0	5	0	12	12
08:45 AM	1	0	1	0	2	0	5	1	0	6	0	3	0	0	3	1	3	1	1	5	1	1	0	0	2	1	16	17
Total	2	8	2	1	12	3	19	1	0	23	0	9	1	0	10	2	12	2	1	16	2	61	2	0	61	2	102	106
Grand Total	3	13	6	3	22	4	33	1	0	38	2	13	1	0	16	4	19	3	1	26	4	102	4	0	102	4	102	106
Approch %	13.6	59.1	27.3			10.5	86.8	2.6			12.5	81.2	6.2		15.7	15.4	73.1	11.5		25.5	3.8	96.2	3.8		96.2	3.8	96.2	
Total %	2.9	12.7	5.9		21.6	3.9	32.4	1		37.3	2	12.7	1		15.7	3.9	18.6	2.9		25.5	3.8	96.2	3.8		96.2	3.8	96.2	

3.1-9

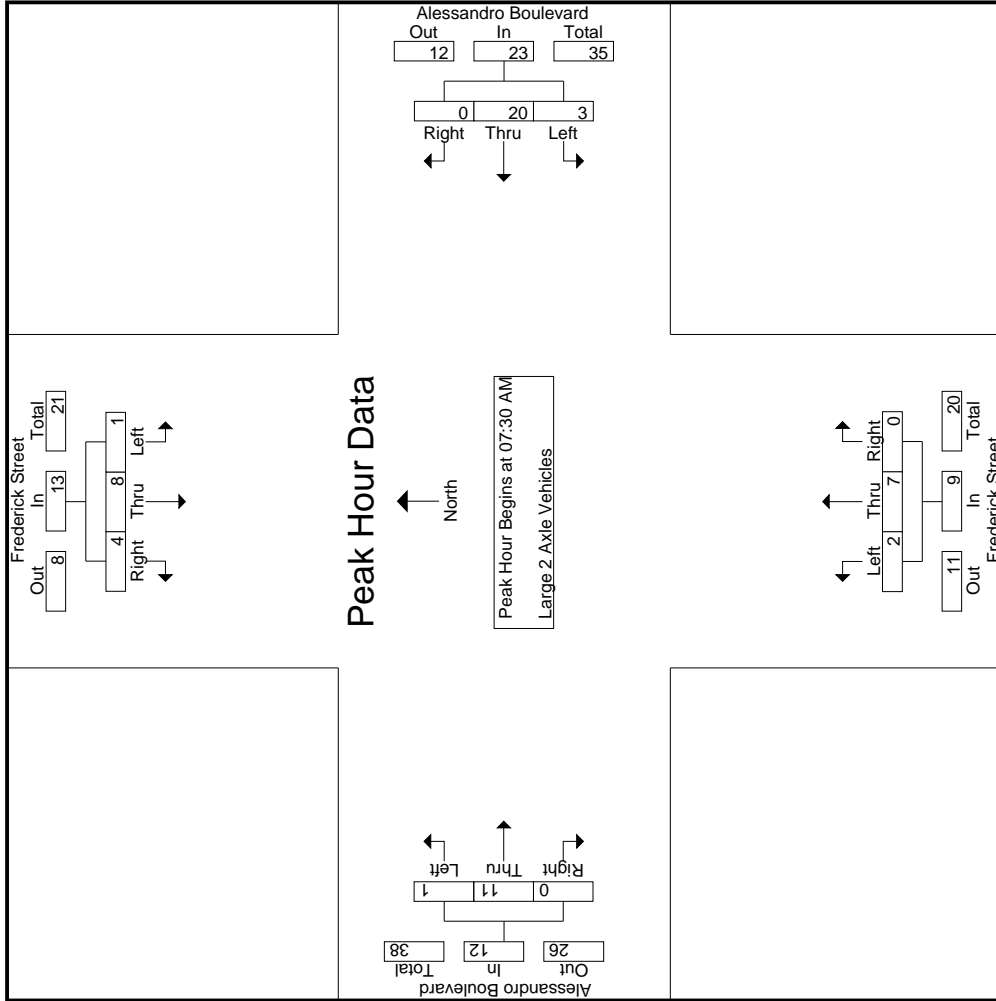
Start Time	Frederick Street Southbound						Alessandro Boulevard Westbound						Frederick Street Northbound						Alessandro Boulevard Eastbound									
	Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total		Exclu. Total	Inclu. Total	Int. Total	
07:30 AM	0	1	0	0	1	0	1	0	0	1	1	1	0	0	2	0	4	0	0	4	0	0	0	0	0	0	4	11
07:45 AM	0	1	0	0	1	0	7	0	0	7	1	2	0	0	3	1	1	0	0	2	0	0	0	0	0	0	2	13
08:00 AM	0	3	1	0	4	0	7	0	0	7	0	7	0	0	7	0	1	0	0	1	5	0	0	0	5	0	5	17
08:15 AM	1	3	0	0	4	3	5	0	0	8	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	1	16
Total Volume	1	8	1	0	10	3	20	0	0	23	2	7	0	0	9	1	11	0	0	12	0	12	0	0	12	0	57	57
% App. Total	7.7	61.5	30.8		30.8	13	87	0		22.2	77.8	0		8.3	91.7	0			0	8.3	91.7	0		0	0	600	600	
PHF	.250	.667	.333		.813	.250	.714	.000		.719	.500	.583	.000	.250	.550	.600	.000		.600	.250	.550	.000		.600	.600	.838	.838	

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

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City of Moreno Valley
 N/S: Frederick Street
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File Name : 06_MRV_Frederick_Alessandro AM
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 Start Date : 5/17/2018
 Page No : 2



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 N/S: Frederick Street
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File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 3

Start Time	Frederick Street Southbound			Alessandro Boulevard Westbound			Frederick Street Northbound			Alessandro Boulevard Eastbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1												
Peak Hour for Each Approach Begins at:												
+0 mins.	0	1	3	0	1	0	1	1	0	0	4	0
+15 mins.	0	1	0	0	7	0	1	2	0	1	1	0
+30 mins.	0	3	1	0	7	0	0	1	0	0	5	0
+45 mins.	1	3	0	3	5	0	0	3	0	0	1	0
Total Volume	1	8	4	3	20	0	2	7	0	1	11	0
% App. Total	7.7	61.5	30.8	13	87	0	22.2	77.8	0	8.3	91.7	0
PHF	.250	.667	.333	.250	.714	.000	.500	.583	.000	.250	.550	.000
			.813		.719			.750			.600	

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City of Moreno Valley
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 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Frederick Street Southbound				Alessandro Boulevard Westbound				Frederick Street Northbound				Alessandro Boulevard Eastbound						
	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	8	8
07:15 AM	0	1	0	0	1	1	0	0	0	0	0	0	1	3	0	0	0	7	7
07:30 AM	1	0	0	0	4	0	0	0	0	0	0	0	0	5	0	0	0	10	10
07:45 AM	0	0	0	0	2	0	0	0	1	0	0	0	0	2	0	0	0	5	5
Total	1	1	0	0	11	1	0	0	1	0	0	0	1	14	0	0	0	30	30
08:00 AM	0	0	1	1	1	5	0	0	0	0	0	0	1	1	0	0	1	9	10
08:15 AM	0	1	0	0	5	0	0	0	1	0	0	0	1	2	0	0	0	10	10
08:30 AM	0	1	0	0	2	0	0	0	0	0	0	0	2	2	0	0	4	7	7
08:45 AM	0	1	1	1	0	1	0	0	1	0	1	1	0	2	0	0	2	6	8
Total	0	3	2	2	13	0	0	0	14	0	1	1	4	7	0	0	3	32	35
Grand Total	1	4	2	2	1	24	1	0	26	0	2	1	5	21	0	0	3	62	65
Approch %	14.3	57.1	28.6		3.8	92.3	3.8		41.9	0	66.7	33.3	19.2	80.8	0		4.6	95.4	
Total %	1.6	6.5	3.2		11.3	38.7	1.6		41.9	0	3.2	1.6	8.1	33.9	0				

3.1-12

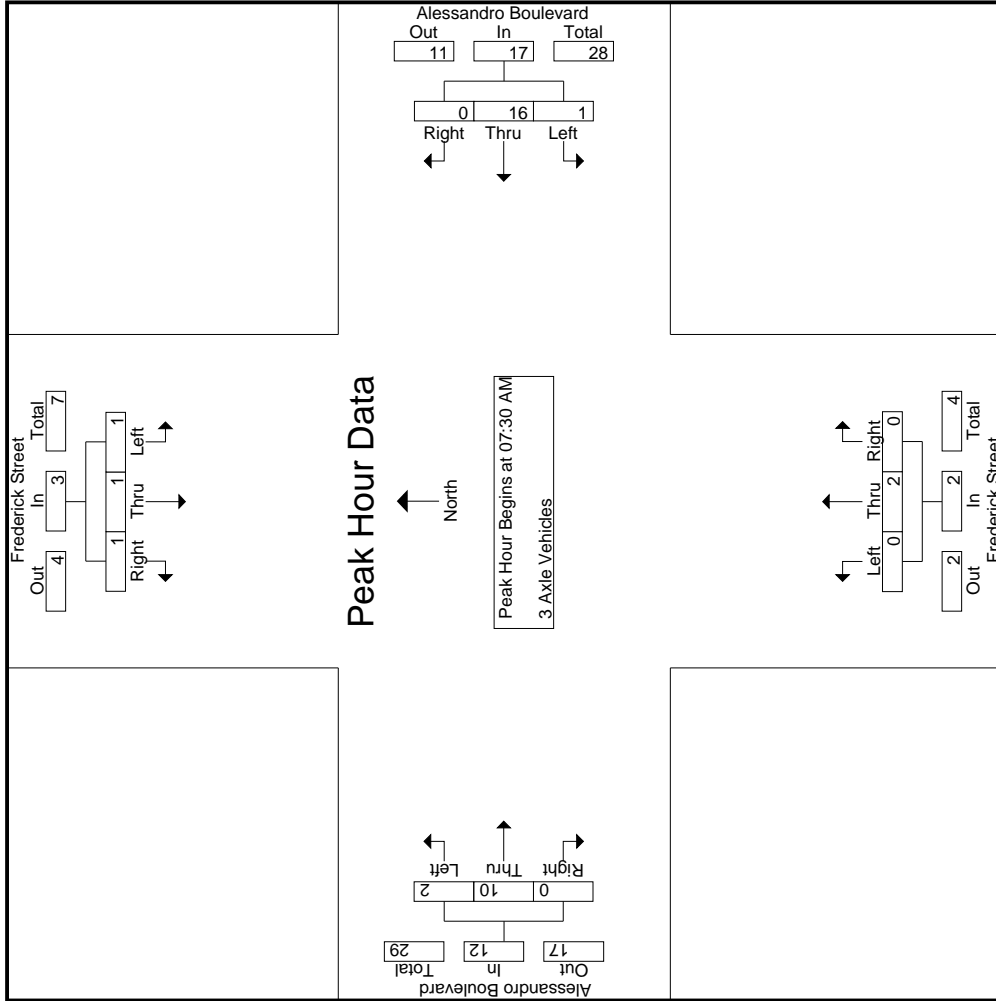
Start Time	Frederick Street Southbound				Alessandro Boulevard Westbound				Frederick Street Northbound				Alessandro Boulevard Eastbound						
	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Exclu. Total	Inclu. Total	Int. Total
07:30 AM	1	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	5	10
07:45 AM	0	0	0	0	2	0	0	0	2	0	1	0	0	2	0	0	0	2	5
08:00 AM	0	0	0	0	1	5	0	0	6	0	0	0	1	1	0	0	0	2	9
08:15 AM	0	1	1	1	0	5	0	0	2	0	1	1	1	2	0	0	0	3	10
Total Volume	1	1	1	1	17	16	0	0	17	0	2	0	2	10	0	0	0	12	34
% App. Total	33.3	33.3	33.3		5.9	94.1	0		41.9	0	100	0	16.7	83.3	0				
PHF	.250	.250	.250		.750	.800	.000		.708	.000	.500	.000	.500	.500	.000		.600	.850	

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

Counts Unlimited
 PO Box 1178
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 (951) 268-6268

City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 2



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 (951) 268-6268

City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 3

Start Time	Frederick Street Southbound			Alessandro Boulevard Westbound			Frederick Street Northbound			Alessandro Boulevard Eastbound					
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1															
Peak Hour for Each Approach Begins at:															
	07:30 AM														
+0 mins.	1	0	0	1	0	0	4	0	0	0	0	0	0	0	5
+15 mins.	0	0	0	0	0	0	2	0	0	1	0	0	0	0	2
+30 mins.	0	0	1	1	0	0	5	0	0	0	0	0	1	1	0
+45 mins.	0	1	0	0	0	0	5	0	0	1	0	0	1	2	0
Total Volume	1	1	1	1	16	0	17	0	0	2	2	0	2	10	0
% App. Total	33.3	33.3	33.3	5.9	94.1	0	0	100	0	0	16.7	83.3	0	0	0
PHF	.250	.250	.250	.250	.800	.000	.708	.000	.000	.500	.500	.000	.500	.000	.600

Counts Unlimited
 PO Box 1178
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 (951) 268-6268

City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Frederick Street Southbound					Alessandro Boulevard Westbound					Frederick Street Northbound					Alessandro Boulevard Eastbound							
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
	07:00 AM	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	2	1	1	0	4	0	7	7
07:15 AM	0	0	0	0	0	0	1	1	1	2	0	0	0	0	0	0	1	0	0	1	1	3	4
07:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	2	0	3	0	6	6
07:45 AM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	1	1	0	2	0	8	8
Total	0	0	1	0	1	0	11	1	1	12	0	1	0	0	1	2	4	4	0	10	1	24	25
08:00 AM	0	1	0	0	1	0	6	0	0	6	0	0	0	0	0	1	1	0	0	2	0	9	9
08:15 AM	0	0	0	0	0	0	1	0	0	1	2	1	0	0	3	0	2	1	0	3	0	7	7
08:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	4
08:45 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	1	0	3	0	6	6
Total	0	1	0	0	1	0	13	0	0	13	2	1	0	0	3	1	5	3	0	9	0	26	26
Grand Total	0	1	1	0	2	0	24	1	1	25	2	2	0	0	4	3	9	7	0	19	1	50	51
Approch %	0	50	50	0	0	0	96	4	0	50	50	50	0	0	8	15.8	47.4	36.8	0	38	2	98	98
Total %	0	2	2	0	4	0	48	2	0	50	4	4	0	0	8	6	18	14	0	38	2	98	98

3.1-15

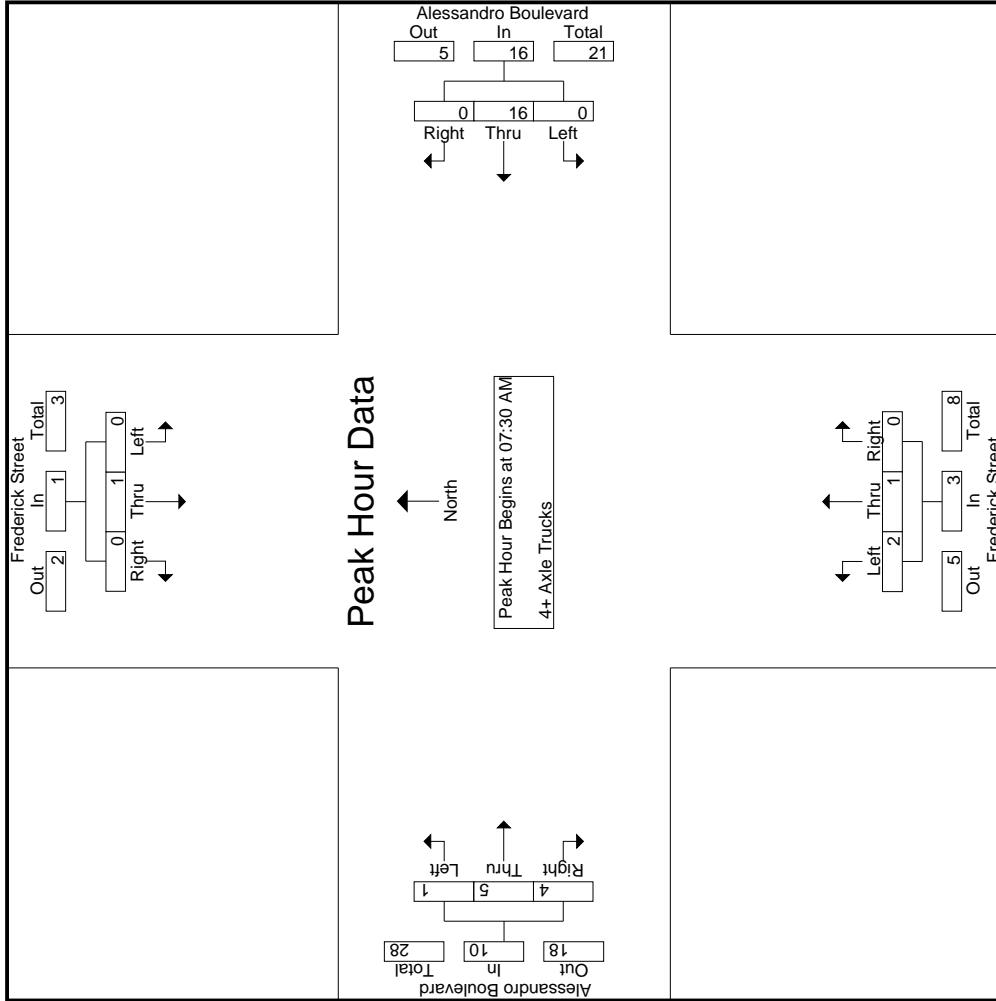
Start Time	Frederick Street Southbound					Alessandro Boulevard Westbound					Frederick Street Northbound					Alessandro Boulevard Eastbound							
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
	07:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	3
07:45 AM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	2	2
08:00 AM	0	1	0	0	1	0	6	0	0	6	0	0	0	0	0	1	1	0	0	2	0	2	2
08:15 AM	0	0	0	0	0	0	1	0	0	1	2	1	0	0	3	0	2	1	0	3	0	3	3
Total Volume	0	1	0	0	1	0	16	0	0	16	2	1	0	0	3	1	5	4	0	10	0	30	30
% App. Total	0	100	0	0	0	0	100	0	0	100	66.7	33.3	0	0	50	10	50	40	0	83.3	0	100	100
PHF	.000	.250	.000	.000	.250	.000	.667	.000	.667	.667	.250	.250	.000	.000	.250	.250	.625	.500	.833	.833	.000	.833	.833

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

Counts Unlimited
 PO Box 1178
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 (951) 268-6268

City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 2



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 (951) 268-6268

City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro AM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 3

Start Time	Frederick Street Southbound			Alessandro Boulevard Westbound			Frederick Street Northbound			Alessandro Boulevard Eastbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1												
Peak Hour for Each Approach Begins at:												
+0 mins.	0	0	0	0	3	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	6	0	0	0	0	0	1	2
+30 mins.	0	1	0	0	6	0	0	0	0	1	1	0
+45 mins.	0	0	0	0	1	0	2	1	0	0	2	1
Total Volume	0	1	0	0	16	0	2	1	0	1	5	4
% App. Total	0	100	0	0	100	0	66.7	33.3	0	10	50	40
PHF	.000	.250	.000	.000	.667	.000	.250	.250	.000	.250	.625	.500

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City of Moreno Valley
 N/S: Frederick Street
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 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Frederick Street Southbound						Alessandro Boulevard Westbound						Frederick Street Northbound						Alessandro Boulevard Eastbound							
	Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total			
	Exclu. Total	Inclu. Total	Int. Total				Exclu. Total	Inclu. Total	Int. Total				Exclu. Total	Inclu. Total	Int. Total				Exclu. Total	Inclu. Total	Int. Total					
04:00 PM	64	63	28	19	155	17	235	44	24	296	17	88	18	3	123	58	317	33	7	408	53	982	1035			
04:15 PM	73	75	33	14	181	14	190	29	12	233	21	70	21	7	112	49	265	24	1	338	34	864	898			
04:30 PM	59	81	21	16	161	20	194	52	31	266	18	73	10	6	101	50	339	27	6	416	59	944	1003			
04:45 PM	56	63	30	25	149	15	200	34	19	249	15	81	7	1	103	56	308	36	1	400	46	901	947			
Total	252	282	112	74	646	66	819	159	86	1044	71	312	56	17	439	213	1229	120	15	1562	192	3691	3883			
05:00 PM	81	96	23	14	200	14	176	45	21	235	14	67	21	7	102	47	288	25	5	360	47	897	944			
05:15 PM	51	63	28	18	142	14	175	35	26	224	10	68	6	2	84	34	309	33	3	376	49	826	875			
05:30 PM	77	102	28	23	207	14	166	42	25	222	21	66	9	4	96	47	299	35	6	381	58	906	964			
05:45 PM	58	87	17	11	162	26	165	31	23	222	13	41	10	3	64	35	344	32	4	411	41	859	900			
Total	267	348	96	66	711	68	682	153	95	903	58	242	46	16	346	163	1240	125	18	1528	195	3488	3683			
Grand Total	519	630	208	140	1357	134	1501	312	181	1947	129	554	102	33	785	376	2469	245	33	3090	387	7179	7566			
Approch %	38.2	46.4	15.3			6.9	77.1	16			16.4	70.6	13			12.2	79.9	7.9			5.1	94.9				
Total %	7.2	8.8	2.9		18.9	1.9	20.9	4.3		27.1	1.8	7.7	1.4		10.9	5.2	34.4	3.4		43						
Passenger Vehicles	516	615	206	100	1477	133	1488	311	100	2113	127	549	102	100	811	373	2437	242	100	3085	0	0	0	0	7486	
% Passenger Vehicles	99.4	97.6	99	100	98.7	99.3	99.1	99.7	100	99.3	98.4	99.1	100	100	99.1	99.2	98.7	98.8	100	98.8	0	0	0	0	98.9	
Large 2 Axle Vehicles	2	12	1	0	15	1	8	0	0	9	0	4	0	0	4	2	18	2	0	22	0	0	0	0	50	
% Large 2 Axle Vehicles	0.4	1.9	0.5	0	1	0.7	0.5	0	0	0.4	0	0.7	0	0	0.5	0.5	0.7	0.8	0	0.7	0	0	0	0	0.7	
3 Axle Vehicles	0	1	0	0	1	0	1	0	0	1	2	0	0	0	2	0	3	0	0	3	0	0	0	0	7	
% 3 Axle Vehicles	0	0.2	0	0	0.1	0	0.1	0	0	0	1.6	0	0	0	0.2	0	0.1	0	0	0.1	0	0	0	0	0.1	
4+ Axle Trucks	1	2	1	0	4	0	4	1	0	5	0	1	0	0	1	1	11	1	0	13	0	0	0	0	23	
% 4+ Axle Trucks	0.2	0.3	0.5	0	0.3	0	0.3	0.3	0	0.2	0	0.2	0	0	0.1	0.3	0.4	0.4	0	0.4	0	0	0	0	0.3	

Start Time	Frederick Street Southbound						Alessandro Boulevard Westbound						Frederick Street Northbound						Alessandro Boulevard Eastbound							
	Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total		Left	Thru	Right	RTOR	App. Total			
	Exclu. Total	Inclu. Total	Int. Total				Exclu. Total	Inclu. Total	Int. Total				Exclu. Total	Inclu. Total	Int. Total				Exclu. Total	Inclu. Total	Int. Total					
04:00 PM	64	63	28	19	155	17	235	44	24	296	17	88	18	3	123	58	317	33	7	408	53	982	1035			
04:15 PM	73	75	33	14	181	14	190	29	12	233	21	70	21	7	112	49	265	24	1	338	34	864	898			
04:30 PM	59	81	21	16	161	20	194	52	31	266	18	73	10	6	101	50	339	27	6	416	59	944	1003			
04:45 PM	56	63	30	25	149	15	200	34	19	249	15	81	7	1	103	56	308	36	1	400	46	901	947			
Total Volume	252	282	112	74	646	66	819	159	86	1044	71	312	56	17	439	213	1229	120	15	1562	192	3691	3883			
% App. Total	39	43.7	17.3			6.3	78.4	15.2			16.2	71.1	12.8			13.6	78.7	7.7			.939	.939	.940			
PHF	.863	.870	.848		.892	.825	.871	.764		.882	.845	.886	.667		.892	.918	.906	.833		.939	.939	.939	.940			

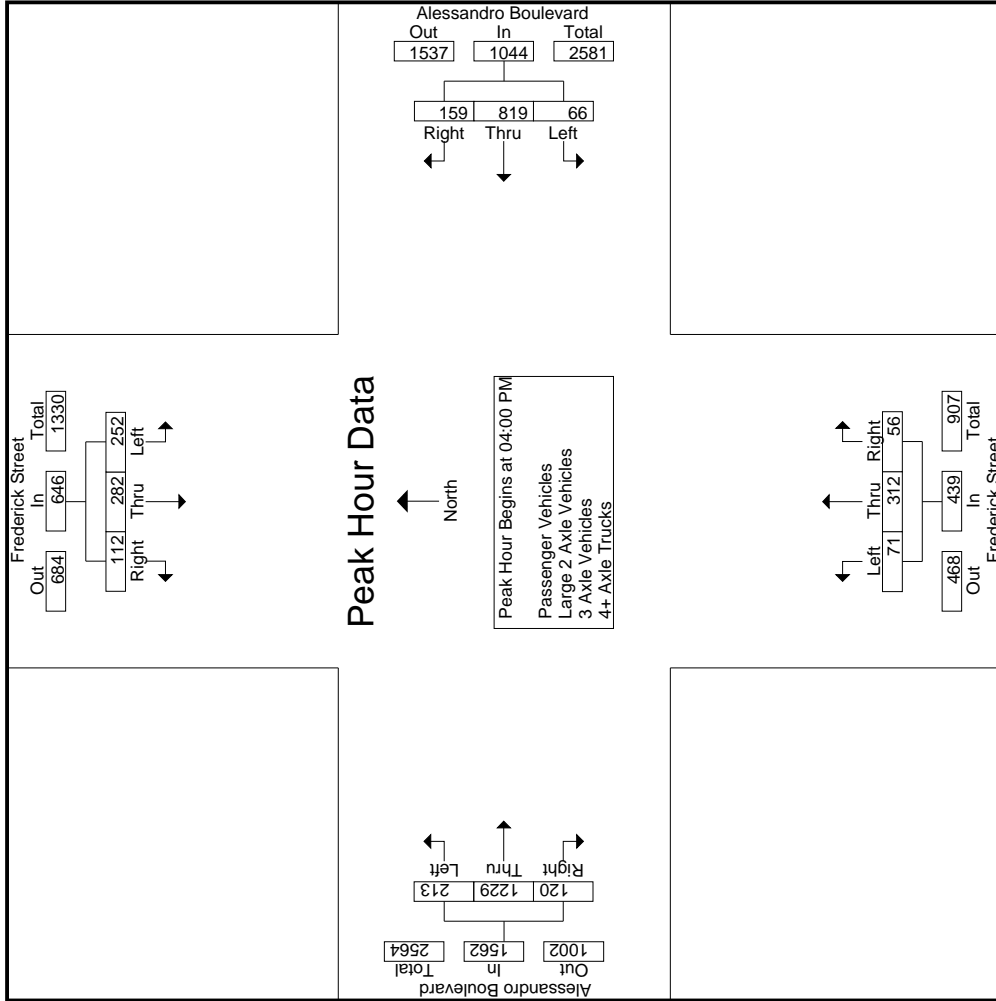
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

Counts Unlimited
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City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 2



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City of Moreno Valley
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File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 3

Start Time	Frederick Street Southbound			Alessandro Boulevard Westbound			Frederick Street Northbound			Alessandro Boulevard Eastbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1												
Peak Hour for Each Approach Begins at:												
+0 mins.	81	96	23	17	235	44	17	88	18	123	317	33
+15 mins.	51	63	28	14	190	29	21	70	21	112	265	24
+30 mins.	77	102	28	20	194	52	18	73	10	101	339	27
+45 mins.	58	87	17	15	200	34	15	81	7	103	308	36
Total Volume	267	348	96	66	819	159	71	312	56	439	1229	120
% App. Total	37.6	48.9	13.5	6.3	78.4	15.2	16.2	71.1	12.8	13.6	78.7	7.7
PHF	.824	.853	.857	.825	.871	.764	.845	.886	.667	.892	.906	.833
				04:00 PM			04:00 PM			04:00 PM		

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City of Moreno Valley
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 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Frederick Street Southbound					Alessandro Boulevard Westbound					Frederick Street Northbound					Alessandro Boulevard Eastbound							
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	63	59	27	19	149	17	234	44	24	295	17	87	18	3	122	58	314	33	7	405	53	971	1024
04:15 PM	73	73	33	14	179	14	188	29	12	231	21	70	21	7	112	48	261	24	1	333	34	855	889
04:30 PM	59	79	21	16	159	20	193	52	31	265	18	72	10	6	100	50	332	27	6	409	59	933	992
04:45 PM	55	63	30	25	148	15	200	34	19	249	15	81	7	1	103	56	302	34	1	392	46	892	938
Total	250	274	111	74	635	66	815	159	86	1040	71	310	56	17	437	212	1209	118	15	1539	192	3651	3843
05:00 PM	81	95	23	14	199	14	175	44	21	233	14	67	21	7	102	46	282	24	5	352	47	886	933
05:15 PM	51	61	27	18	139	14	173	35	26	222	9	66	6	2	81	33	307	33	3	373	49	815	864
05:30 PM	76	99	28	23	203	14	163	42	25	219	20	66	9	4	95	47	297	35	6	379	58	896	954
05:45 PM	58	86	17	11	161	25	162	31	23	218	13	40	10	3	63	35	342	32	4	409	41	851	892
Total	266	341	95	66	702	67	673	152	95	892	56	239	46	16	341	161	1228	124	18	1513	195	3448	3643
Grand Total	516	615	206	140	1337	133	1488	311	181	1932	127	549	102	33	778	373	2437	242	33	3052	387	7099	7486
Approch %	38.6	46	15.4			6.9	77	16.1		27.2	1.8	7.7	1.4		11	12.2	79.8	7.9		43	5.2	94.8	
Total %	7.3	8.7	2.9		18.8	1.9	21	4.4								5.3	34.3	3.4					

3.1-21

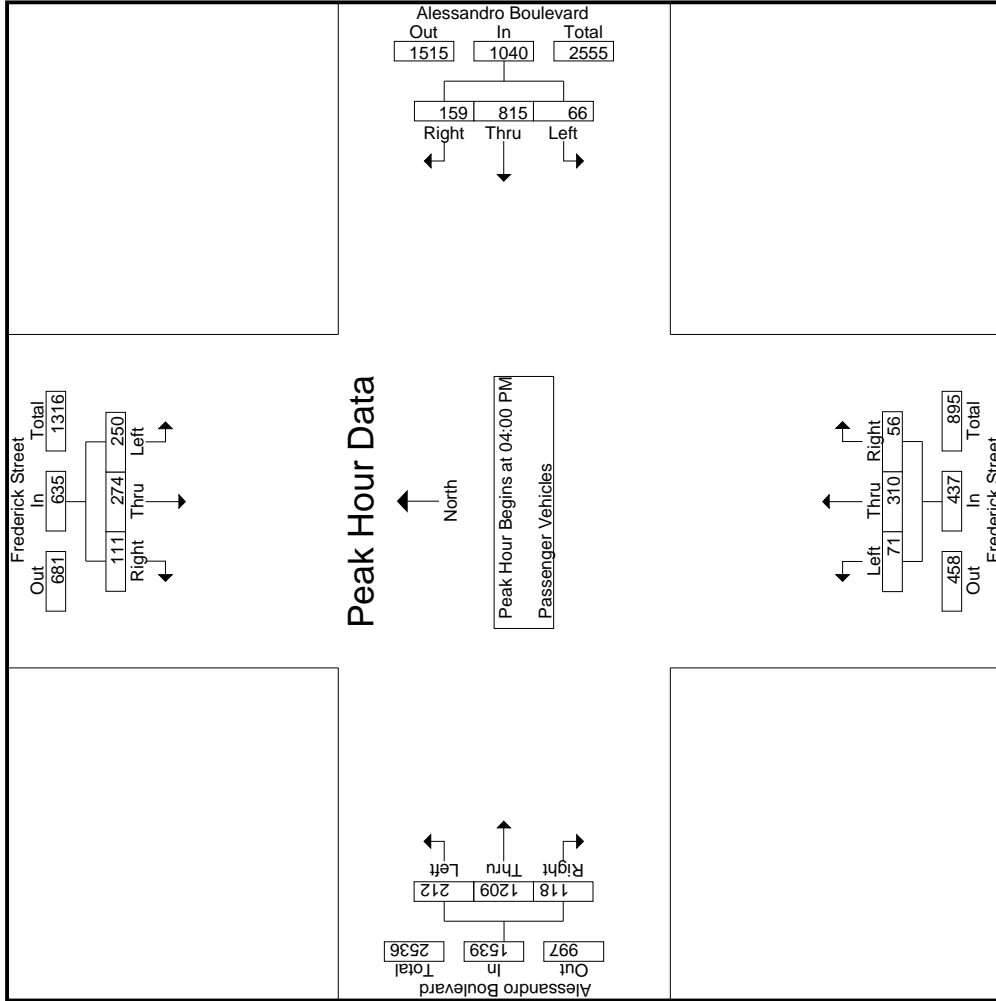
Start Time	Frederick Street Southbound					Alessandro Boulevard Westbound					Frederick Street Northbound					Alessandro Boulevard Eastbound							
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	63	59	27	19	149	17	234	44	24	295	17	87	18	3	122	58	314	33	7	405	53	971	1024
04:15 PM	73	73	33	14	179	14	188	29	12	231	21	70	21	7	112	48	261	24	1	333	34	855	889
04:30 PM	59	79	21	16	159	20	193	52	31	265	18	72	10	6	100	50	332	27	6	409	59	933	992
04:45 PM	55	63	30	25	148	15	200	34	19	249	15	81	7	1	103	56	302	34	1	392	46	892	938
Total Volume	250	274	111	74	635	66	815	159	86	1040	71	310	56	17	437	212	1209	118	15	1539	192	3651	3843
% App. Total	39.4	43.1	17.5			6.3	78.4	15.3			16.2	70.9	12.8			13.8	78.6	7.7					
PHF	.856	.867	.841		.887	.825	.871	.764		.881	.845	.891	.667		.895	.914	.910	.868					.940

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

Counts Unlimited
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City of Moreno Valley
 N/S: Frederick Street
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 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 2



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City of Moreno Valley
 N/S: Frederick Street
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 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Frederick Street Southbound						Alessandro Boulevard Westbound						Frederick Street Northbound						Alessandro Boulevard Eastbound					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total	
	04:00 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	5	5
04:15 PM	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	6	6	
04:30 PM	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	3	0	0	3	0	7	7	
04:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	2	0	6	0	7	7	
Total	1	6	0	0	7	0	3	0	0	3	0	2	0	0	2	0	11	2	0	13	0	25	25	
05:00 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	1	3	0	0	4	0	6	6	
05:15 PM	0	1	1	0	2	0	1	0	0	1	0	1	0	0	1	1	1	0	0	2	0	6	6	
05:30 PM	1	3	0	0	4	0	1	0	0	1	0	0	0	0	1	0	2	0	0	2	0	7	7	
05:45 PM	0	1	0	0	1	1	2	0	0	3	0	1	0	0	1	0	1	0	0	1	0	6	6	
Total	1	6	1	0	8	1	5	0	0	6	0	2	0	0	2	2	7	0	0	9	0	25	25	
Grand Total	2	12	1	0	15	1	8	0	0	9	0	4	0	0	4	2	18	2	0	22	0	50	50	
Approch %	13.3	80	6.7			11.1	88.9	0		18	0	100	0		9.1	81.8	9.1			44	0	100		
Total %	4	24	2		30	2	16	0		18	0	8	0		4	36	4			44	0	100		

3.1-24

Start Time	Frederick Street Southbound						Alessandro Boulevard Westbound						Frederick Street Northbound						Alessandro Boulevard Eastbound					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total	
	04:00 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	5	5
04:15 PM	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	6	6	
04:30 PM	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	3	0	0	3	0	7	7	
04:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	2	0	6	0	7	7	
Total	1	6	0	0	7	0	3	0	0	3	0	2	0	0	2	0	11	2	0	13	0	25	25	
Grand Total	2	12	1	0	15	1	8	0	0	9	0	4	0	0	4	2	18	2	0	22	0	50	50	
Approch %	13.3	80	6.7			11.1	88.9	0		18	0	100	0		9.1	81.8	9.1			44	0	100		
Total %	4	24	2		30	2	16	0		18	0	8	0		4	36	4			44	0	100		

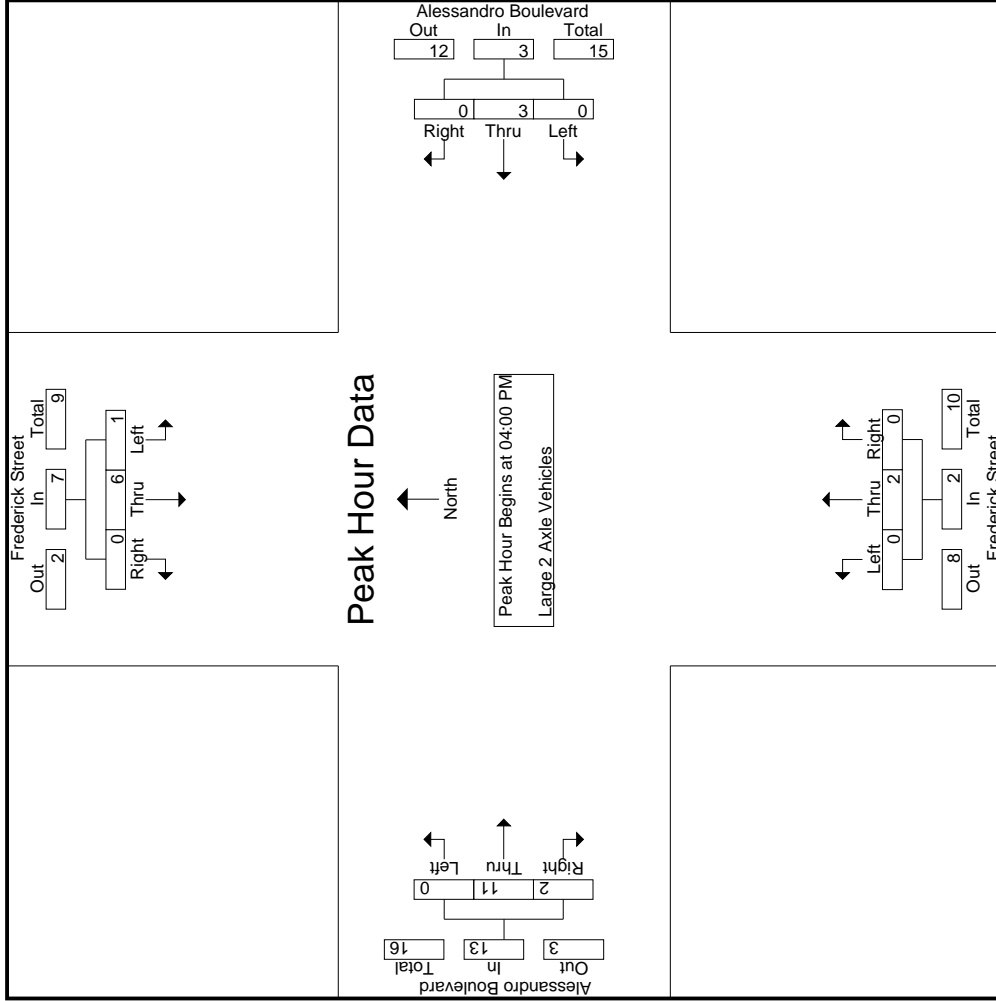
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

Start Time	Frederick Street Southbound						Alessandro Boulevard Westbound						Frederick Street Northbound						Alessandro Boulevard Eastbound					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total	
04:00 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	5	5	
04:15 PM	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	6	6	
04:30 PM	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	3	0	0	3	0	7	7	
04:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	2	0	6	0	7	7	
Total Volume	1	6	0	0	7	0	3	0	0	3	0	2	0	0	2	0	11	2	0	13	0	25	25	
% App. Total	14.3	85.7	0			0	100	0		0	0	100	0		0	84.6	15.4			13	0	25	25	
PHF	.250	.500	.000		.583	.000	.375	.000		.375	.000	.500	.000		.500	.000	.688	.250		.542	0	.893	.893	

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
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City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 2



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City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 3

Start Time	Frederick Street Southbound			Alessandro Boulevard Westbound			Frederick Street Northbound			Alessandro Boulevard Eastbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1												
Peak Hour for Each Approach Begins at:												
	04:00 PM											
+0 mins.	0	3	0	0	0	0	0	1	0	1	0	1
+15 mins.	0	1	0	0	2	0	0	0	0	0	3	0
+30 mins.	0	2	0	0	1	0	1	0	0	0	3	0
+45 mins.	1	0	0	0	0	0	0	0	0	0	4	2
Total Volume	1	6	0	0	3	0	3	2	0	11	2	13
% App. Total	14.3	85.7	0	0	100	0	100	0	0	84.6	15.4	0
PHF	.250	.500	.000	.000	.375	.000	.375	.500	.000	.688	.250	.542

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City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Frederick Street Southbound				Alessandro Boulevard Westbound				Frederick Street Northbound				Alessandro Boulevard Eastbound											
	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Exclu. Total	Inclu. Total	Int. Total	
04:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	0	1	2	0	0	0	0	1	0	0	0	0	0	0	0	4	4
Grand Total	0	1	0	0	0	1	0	0	1	2	0	0	0	0	3	0	0	0	0	0	0	0	7	7
Approch %	0	100	0	0	0	100	0	0	100	0	0	0	0	0	100	0	0	0	0	0	0	0	100	100
Total %	0	14.3	0	0	0	14.3	0	0	14.3	28.6	0	0	0	28.6	0	42.9	0	0	0	0	0	42.9	100	100

3.1-27

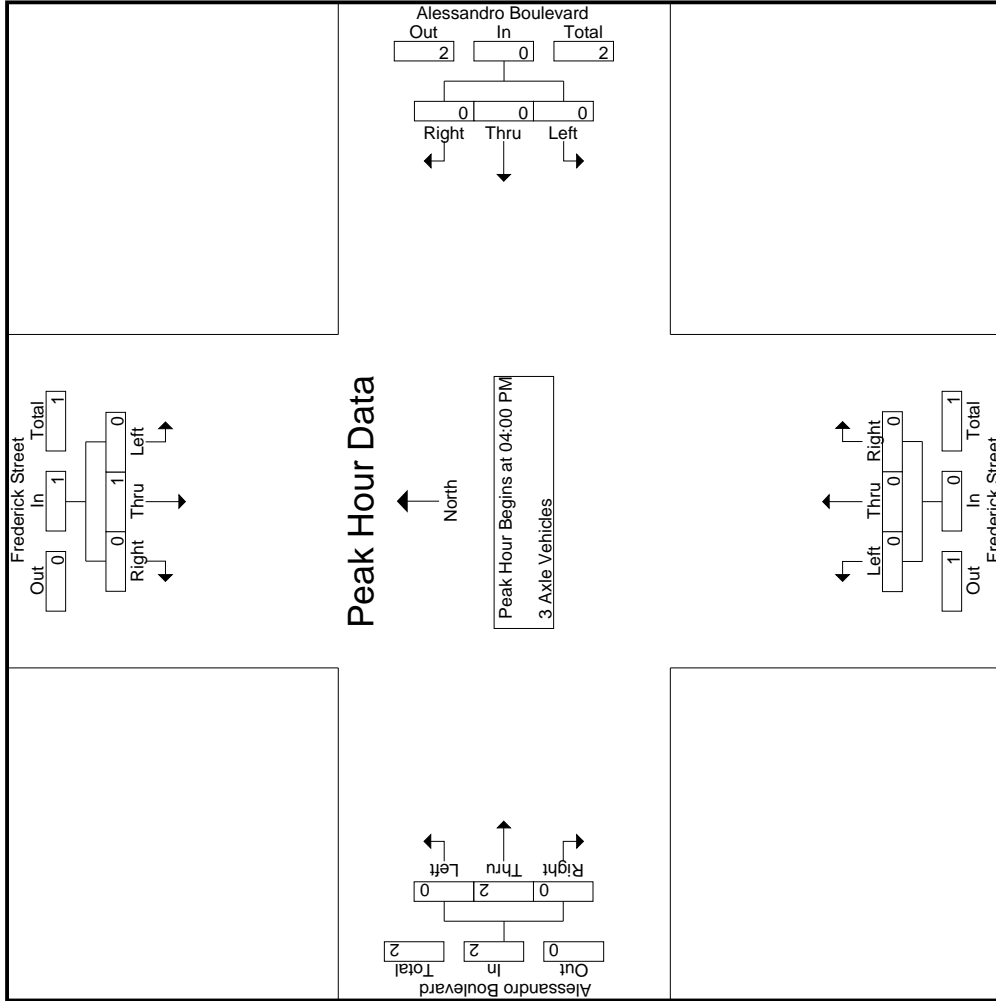
Start Time	Frederick Street Southbound				Alessandro Boulevard Westbound				Frederick Street Northbound				Alessandro Boulevard Eastbound											
	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Exclu. Total	Inclu. Total	Int. Total	
04:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
% App. Total	0	100	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	2	3
PHF	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.000	.000	.000	.000	.000	.500	.750	.750

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

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City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 2



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City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 3

Start Time	Frederick Street Southbound			Alessandro Boulevard Westbound			Frederick Street Northbound			Alessandro Boulevard Eastbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1												
Peak Hour for Each Approach Begins at:												
04:00 PM												
+0 mins.	0	1	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	1	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	0	0	0	0	0	0	0	2	0
% App. Total	0	100	0	0	0	0	0	0	0	0	100	0
PHF	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000

Counts Unlimited
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 (951) 268-6268

City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Frederick Street Southbound				Alessandro Boulevard Westbound				Frederick Street Northbound				Alessandro Boulevard Eastbound											
	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Exclu. Total	Inclu. Total	Int. Total	
04:00 PM	1	0	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	5	5
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
Total	1	1	1	0	3	0	1	0	0	0	0	0	1	7	0	0	8						12	12
05:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	2	1	0	3						4	4
05:15 PM	0	1	0	0	1	0	0	0	1	0	0	0	1	1	0	0	1						3	3
05:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0						2	2
05:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1						2	2
Total	0	1	0	0	1	0	3	1	0	4	0	1	0	4	1	0	5						11	11
Grand Total	1	2	1	0	4	0	4	1	0	5	0	1	0	1	11	1	13						23	23
Approch %	25	50	25			0	80	20			0	100	0	4.3	7.7	4.3	56.5						0	100
Total %	4.3	8.7	4.3		17.4	0	17.4	4.3		21.7	0	4.3	0	4.3	47.8	4.3	56.5						0	100

3.1-30

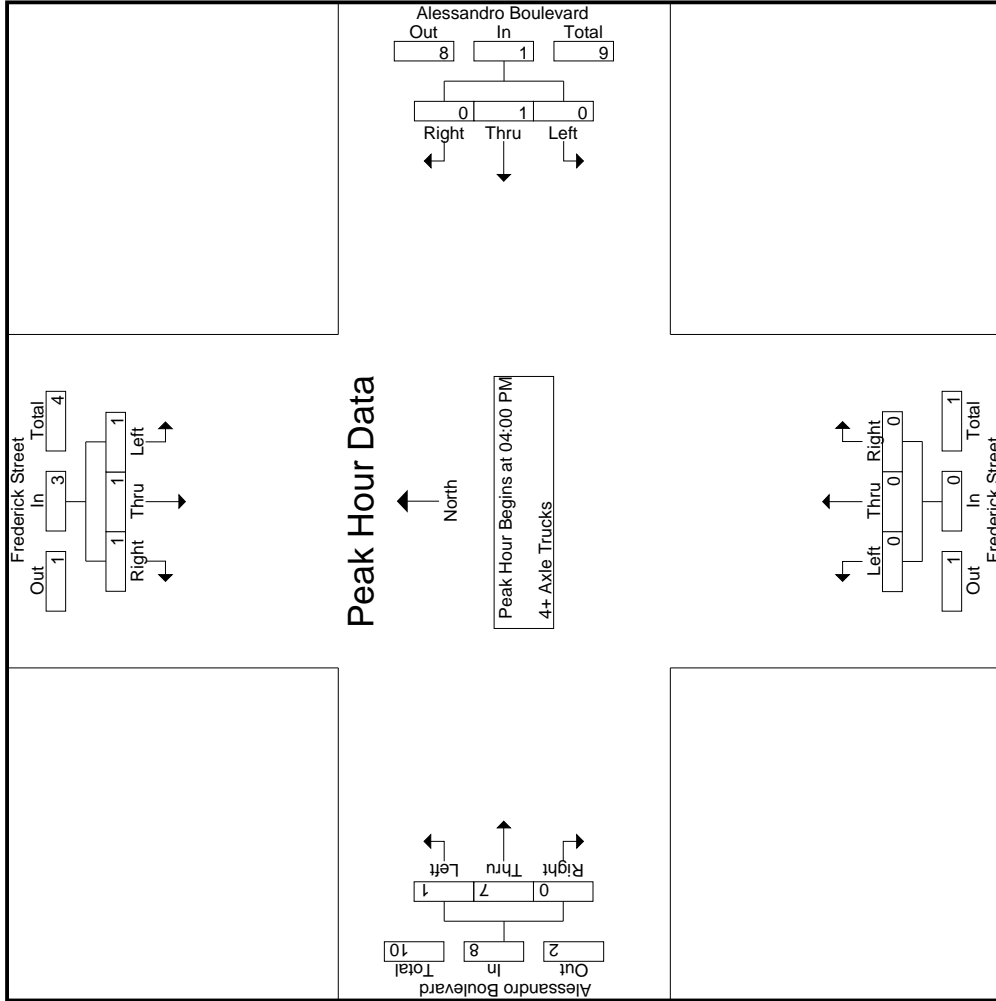
Start Time	Frederick Street Southbound				Alessandro Boulevard Westbound				Frederick Street Northbound				Alessandro Boulevard Eastbound											
	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Exclu. Total	Inclu. Total	Int. Total	
04:00 PM	1	0	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	5	5
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
Total Volume	1	1	1	0	3	0	1	0	0	1	0	0	1	7	0	0	8						12	12
% App. Total	33.3	33.3	33.3			0	100	0			0	0	12.5	87.5	0	0	0						.600	.600
PHF	.250	.250	.250		.375	.000	.250	.000		.250	.000	.000	.250	.583	.000	.667								

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

Counts Unlimited
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City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 2



Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 06_MRV_Frederick_Alessandro PM
 Site Code : 05118391
 Start Date : 5/17/2018
 Page No : 3

Start Time	Frederick Street Southbound			Alessandro Boulevard Westbound			Frederick Street Northbound			Alessandro Boulevard Eastbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1												
Peak Hour for Each Approach Begins at:												
	04:00 PM											
+0 mins.	1	0	1	0	1	0	0	0	0	0	0	2
+15 mins.	0	1	0	0	0	0	0	0	0	1	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	3	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	2	0
Total Volume	1	1	1	0	1	0	0	0	0	1	7	0
% App. Total	33.3	33.3	33.3	0	100	0	0	0	0	12.5	87.5	0
PHF	.250	.250	.250	.000	.250	.000	.250	.000	.000	.250	.583	.000

Location: City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard



Date: 5/17/2018
 Day: Thursday

PEDESTRIANS

	North Leg Frederick Street Pedestrians	East Leg Alessandro Boulevard Pedestrians	South Leg Frederick Street Pedestrians	West Leg Alessandro Boulevard Pedestrians	
7:00 AM	0	2	1	0	3
7:15 AM	1	1	0	1	3
7:30 AM	2	0	0	0	2
7:45 AM	1	0	0	0	1
8:00 AM	1	0	0	1	2
8:15 AM	6	1	0	2	9
8:30 AM	2	0	1	0	3
8:45 AM	0	1	0	3	4
TOTAL VOLUMES:	13	5	2	7	27

	North Leg Frederick Street Pedestrians	East Leg Alessandro Boulevard Pedestrians	South Leg Frederick Street Pedestrians	West Leg Alessandro Boulevard Pedestrians	
4:00 PM	0	1	1	0	2
4:15 PM	0	1	0	1	2
4:30 PM	0	1	2	1	4
4:45 PM	1	2	0	2	5
5:00 PM	3	3	0	1	7
5:15 PM	0	0	0	0	0
5:30 PM	3	0	0	3	6
5:45 PM	1	0	0	0	1
TOTAL VOLUMES:	8	8	3	8	27

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Location: City of Moreno Valley
 N/S: Frederick Street
 E/W: Alessandro Boulevard



Date: 5/17/2018
 Day: Thursday

BICYCLES

	Southbound Frederick Street			Westbound Alessandro Boulevard			Northbound Frederick Street			Eastbound Alessandro Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	1	0	0	0	0	1	1	4
8:45 AM	3	2	0	0	1	0	0	0	0	0	0	0	6
TOTAL VOLUMES:	3	3	0	0	5	1	0	1	0	0	2	1	16

	Southbound Frederick Street			Westbound Alessandro Boulevard			Northbound Frederick Street			Eastbound Alessandro Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	0	1	0	0	0	1	0	0	0	0	6	0	8

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
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City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro AM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	14	34	22	70	8	370	14	392	12	18	4	34	4	69	11	84	580
07:15 AM	23	33	21	77	14	396	26	436	18	24	2	44	9	79	12	100	657
07:30 AM	16	50	22	88	18	373	19	410	14	43	2	59	11	117	13	141	698
07:45 AM	32	50	22	104	33	350	37	420	11	58	4	73	9	123	16	148	745
Total	85	167	87	339	73	1489	96	1658	55	143	12	210	33	388	52	473	2680
08:00 AM	19	40	20	79	24	380	30	434	15	30	7	52	7	124	13	144	709
08:15 AM	24	38	11	73	23	315	30	368	18	39	7	64	15	125	6	146	651
08:30 AM	31	36	16	83	22	262	20	304	9	37	11	57	9	144	12	165	609
08:45 AM	25	25	21	71	25	281	26	332	12	30	7	49	12	129	18	159	611
Total	99	139	68	306	94	1238	106	1438	54	136	32	222	43	522	49	614	2580
Grand Total	184	306	155	645	167	2727	202	3096	109	279	44	432	76	910	101	1087	5260
Apprch %	28.5	47.4	24		5.4	88.1	6.5		25.2	64.6	10.2		7	83.7	9.3		
Total %	3.5	5.8	2.9	12.3	3.2	51.8	3.8	58.9	2.1	5.3	0.8	8.2	1.4	17.3	1.9	20.7	
Passenger Vehicles	180	296	152	628	166	2661	196	3023	101	274	43	418	72	863	96	1031	5100
% Passenger Vehicles	97.8	96.7	98.1	97.4	99.4	97.6	97	97.6	92.7	98.2	97.7	96.8	94.7	94.8	95	94.8	97
Large 2 Axle Vehicles	3	9	3	15	0	37	4	41	4	5	1	10	3	23	2	28	94
% Large 2 Axle Vehicles	1.6	2.9	1.9	2.3	0	1.4	2	1.3	3.7	1.8	2.3	2.3	3.9	2.5	2	2.6	1.8
3 Axle Vehicles	0	0	0	0	1	14	1	16	0	0	0	0	0	17	0	17	33
% 3 Axle Vehicles	0	0	0	0	0.6	0.5	0.5	0.5	0	0	0	0	0	1.9	0	1.6	0.6
4+ Axle Trucks	1	1	0	2	0	15	1	16	4	0	0	4	1	7	3	11	33
% 4+ Axle Trucks	0.5	0.3	0	0.3	0	0.6	0.5	0.5	3.7	0	0	0.9	1.3	0.8	3	1	0.6

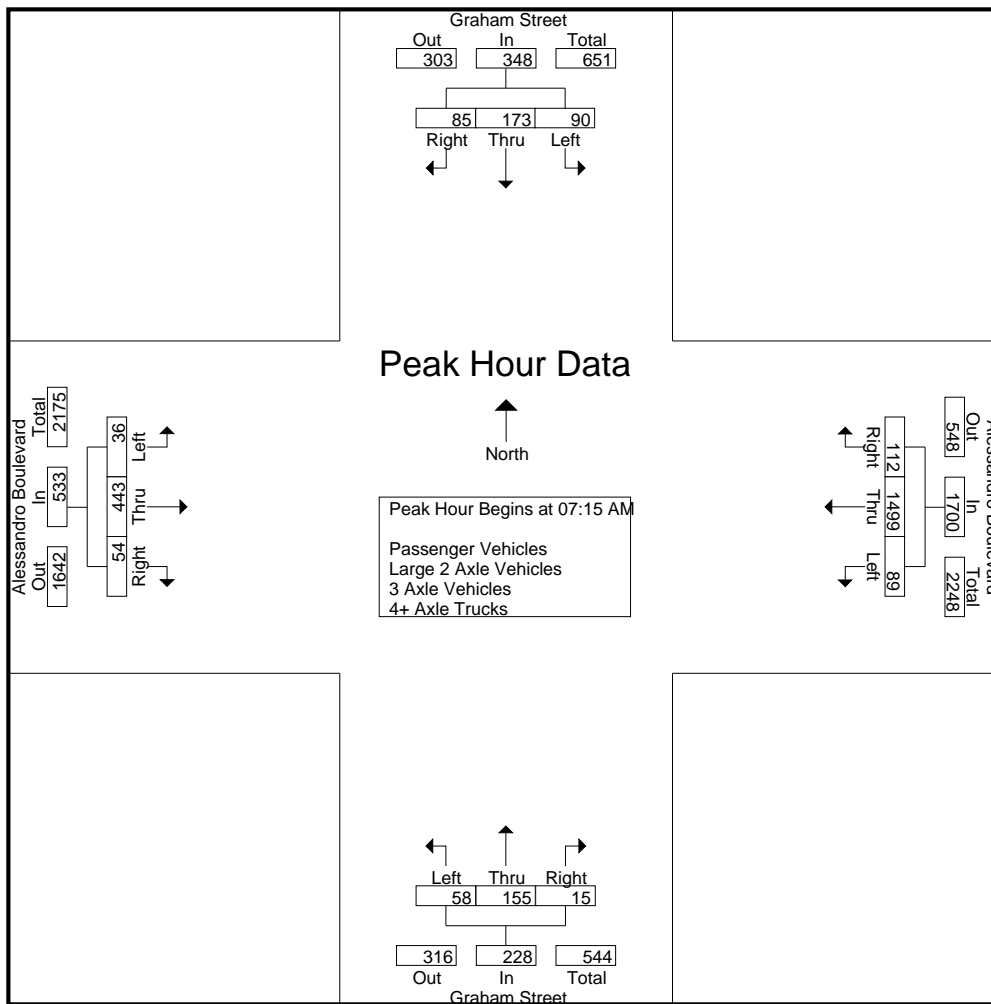
Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	23	33	21	77	14	396	26	436	18	24	2	44	9	79	12	100	657
07:30 AM	16	50	22	88	18	373	19	410	14	43	2	59	11	117	13	141	698
07:45 AM	32	50	22	104	33	350	37	420	11	58	4	73	9	123	16	148	745
08:00 AM	19	40	20	79	24	380	30	434	15	30	7	52	7	124	13	144	709
Total Volume	90	173	85	348	89	1499	112	1700	58	155	15	228	36	443	54	533	2809
% App. Total	25.9	49.7	24.4		5.2	88.2	6.6		25.4	68	6.6		6.8	83.1	10.1		
PHF	.703	.865	.966	.837	.674	.946	.757	.975	.806	.668	.536	.781	.818	.893	.844	.900	.943

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro AM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:45 AM				08:00 AM			
+0 mins.	23	33	21	77	14	396	26	436	14	43	2	59	7	124	13	144
+15 mins.	16	50	22	88	18	373	19	410	11	58	4	73	15	125	6	146
+30 mins.	32	50	22	104	33	350	37	420	15	30	7	52	9	144	12	165
+45 mins.	19	40	20	79	24	380	30	434	18	39	7	64	12	129	18	159
Total Volume	90	173	85	348	89	1499	112	1700	58	170	20	248	43	522	49	614
% App. Total	25.9	49.7	24.4		5.2	88.2	6.6		23.4	68.5	8.1		7	85	8	
PHF	.703	.865	.966	.837	.674	.946	.757	.975	.806	.733	.714	.849	.717	.906	.681	.930

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro AM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	13	30	22	65	8	362	14	384	9	18	4	31	3	61	11	75	555
07:15 AM	21	33	21	75	14	393	25	432	16	23	2	41	9	75	12	96	644
07:30 AM	15	50	22	87	18	367	18	403	14	42	2	58	10	111	13	134	682
07:45 AM	32	49	21	102	33	340	36	409	9	58	4	71	9	121	13	143	725
Total	81	162	86	329	73	1462	93	1628	48	141	12	201	31	368	49	448	2606
08:00 AM	19	38	19	76	23	365	30	418	14	30	7	51	7	119	13	139	684
08:15 AM	24	37	10	71	23	305	29	357	18	36	7	61	14	115	6	135	624
08:30 AM	31	34	16	81	22	256	20	298	9	37	11	57	8	139	11	158	594
08:45 AM	25	25	21	71	25	273	24	322	12	30	6	48	12	122	17	151	592
Total	99	134	66	299	93	1199	103	1395	53	133	31	217	41	495	47	583	2494
Grand Total	180	296	152	628	166	2661	196	3023	101	274	43	418	72	863	96	1031	5100
Apprch %	28.7	47.1	24.2		5.5	88	6.5		24.2	65.6	10.3		7	83.7	9.3		
Total %	3.5	5.8	3	12.3	3.3	52.2	3.8	59.3	2	5.4	0.8	8.2	1.4	16.9	1.9	20.2	

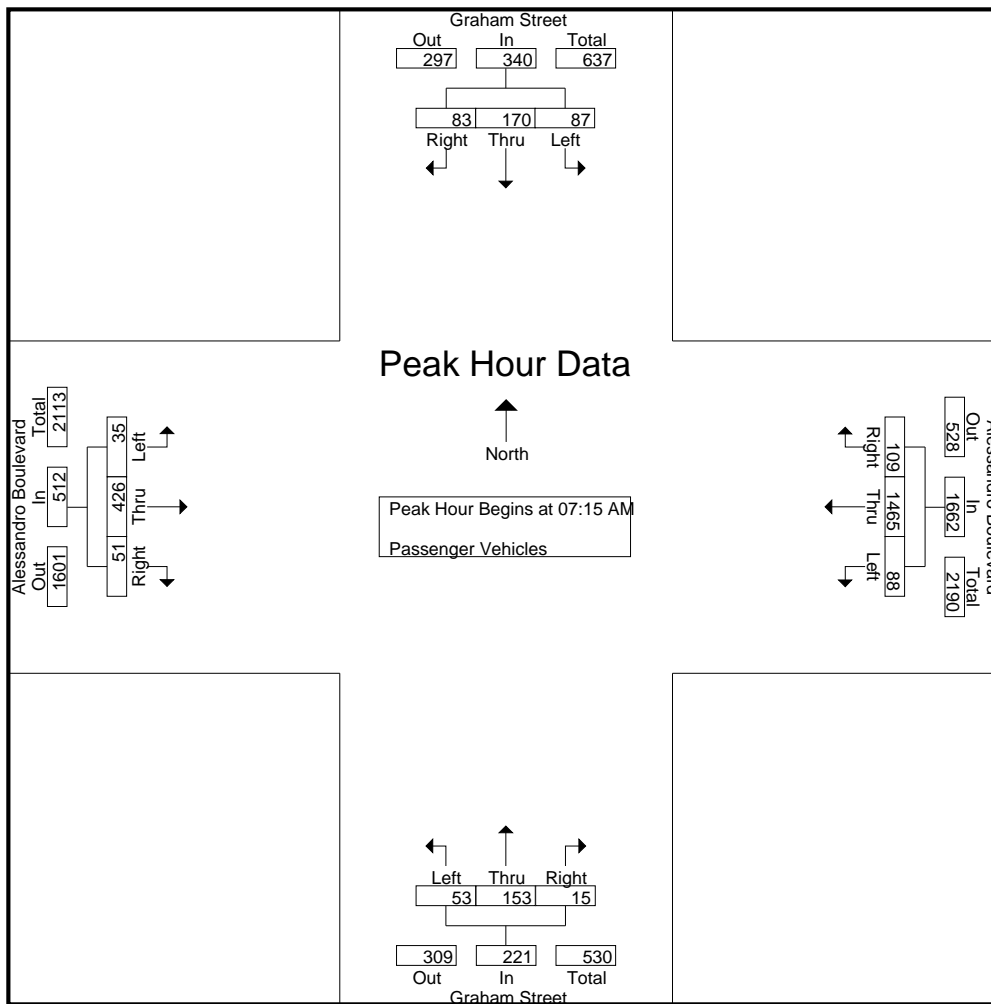
Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	21	33	21	75	14	393	25	432	16	23	2	41	9	75	12	96	644
07:30 AM	15	50	22	87	18	367	18	403	14	42	2	58	10	111	13	134	682
07:45 AM	32	49	21	102	33	340	36	409	9	58	4	71	9	121	13	143	725
08:00 AM	19	38	19	76	23	365	30	418	14	30	7	51	7	119	13	139	684
Total Volume	87	170	83	340	88	1465	109	1662	53	153	15	221	35	426	51	512	2735
% App. Total	25.6	50	24.4		5.3	88.1	6.6		24	69.2	6.8		6.8	83.2	10		
PHF	.680	.850	.943	.833	.667	.932	.757	.962	.828	.659	.536	.778	.875	.880	.981	.895	.943

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro AM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	21	33	21	75	14	393	25	432	16	23	2	41	9	75	12	96
+15 mins.	15	50	22	87	18	367	18	403	14	42	2	58	10	111	13	134
+30 mins.	32	49	21	102	33	340	36	409	9	58	4	71	9	121	13	143
+45 mins.	19	38	19	76	23	365	30	418	14	30	7	51	7	119	13	139
Total Volume	87	170	83	340	88	1465	109	1662	53	153	15	221	35	426	51	512
% App. Total	25.6	50	24.4		5.3	88.1	6.6		24	69.2	6.8		6.8	83.2	10	
PHF	.680	.850	.943	.833	.667	.932	.757	.962	.828	.659	.536	.778	.875	.880	.981	.895

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro AM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	3	0	3	0	7	0	7	1	0	0	1	1	4	0	5	16
07:15 AM	2	0	0	2	0	2	1	3	2	1	0	3	0	2	0	2	10
07:30 AM	1	0	0	1	0	4	0	4	0	1	0	1	1	1	0	2	8
07:45 AM	0	1	1	2	0	4	1	5	0	0	0	0	0	0	1	1	8
Total	3	4	1	8	0	17	2	19	3	2	0	5	2	7	1	10	42
08:00 AM	0	2	1	3	0	7	0	7	1	0	0	1	0	5	0	5	16
08:15 AM	0	1	1	2	0	5	1	6	0	3	0	3	1	5	0	6	17
08:30 AM	0	2	0	2	0	3	0	3	0	0	0	0	0	3	0	3	8
08:45 AM	0	0	0	0	0	5	1	6	0	0	1	1	0	3	1	4	11
Total	0	5	2	7	0	20	2	22	1	3	1	5	1	16	1	18	52
Grand Total	3	9	3	15	0	37	4	41	4	5	1	10	3	23	2	28	94
Apprch %	20	60	20		0	90.2	9.8		40	50	10		10.7	82.1	7.1		
Total %	3.2	9.6	3.2	16	0	39.4	4.3	43.6	4.3	5.3	1.1	10.6	3.2	24.5	2.1	29.8	

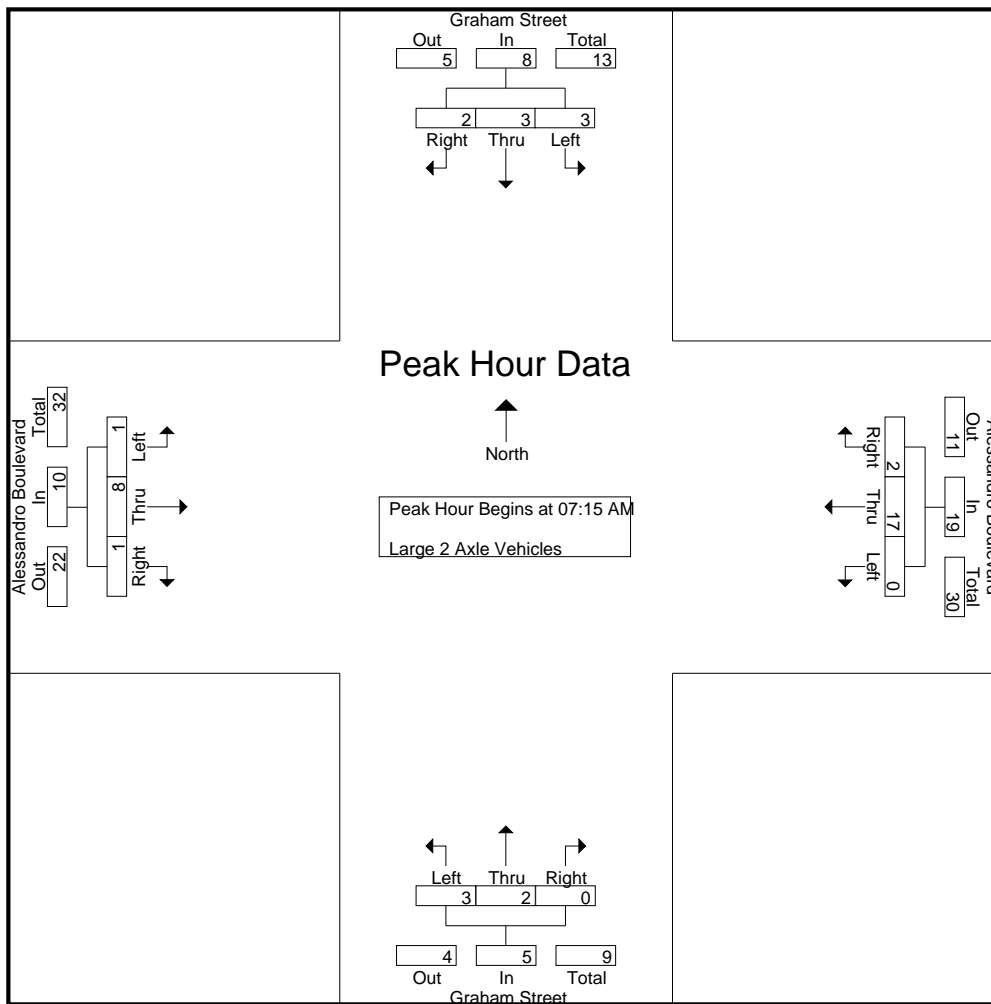
Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	0	0	2	0	2	1	3	2	1	0	3	0	2	0	2	10
07:30 AM	1	0	0	1	0	4	0	4	0	1	0	1	1	1	0	2	8
07:45 AM	0	1	1	2	0	4	1	5	0	0	0	0	0	0	1	1	8
08:00 AM	0	2	1	3	0	7	0	7	1	0	0	1	0	5	0	5	16
Total Volume	3	3	2	8	0	17	2	19	3	2	0	5	1	8	1	10	42
% App. Total	37.5	37.5	25		0	89.5	10.5		60	40	0		10	80	10		
PHF	.375	.375	.500	.667	.000	.607	.500	.679	.375	.500	.000	.417	.250	.400	.250	.500	.656

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro AM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	2	0	0	2	0	2	1	3	2	1	0	3	0	2	0	2
+15 mins.	1	0	0	1	0	4	0	4	0	1	0	1	1	1	0	2
+30 mins.	0	1	1	2	0	4	1	5	0	0	0	0	0	0	1	1
+45 mins.	0	2	1	3	0	7	0	7	1	0	0	1	0	5	0	5
Total Volume	3	3	2	8	0	17	2	19	3	2	0	5	1	8	1	10
% App. Total	37.5	37.5	25		0	89.5	10.5		60	40	0		10	80	10	
PHF	.375	.375	.500	.667	.000	.607	.500	.679	.375	.500	.000	.417	.250	.400	.250	.500

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro AM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	3	0	3	5
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	0	0	0	4	1	5	0	0	0	0	0	8	0	8	13
08:00 AM	0	0	0	0	1	4	0	5	0	0	0	0	0	0	0	0	5
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
08:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
08:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
Total	0	0	0	0	1	10	0	11	0	0	0	0	0	9	0	9	20
Grand Total	0	0	0	0	1	14	1	16	0	0	0	0	0	17	0	17	33
Apprch %	0	0	0		6.2	87.5	6.2		0	0	0		0	100	0		
Total %	0	0	0	0	3	42.4	3	48.5	0	0	0	0	0	51.5	0	51.5	

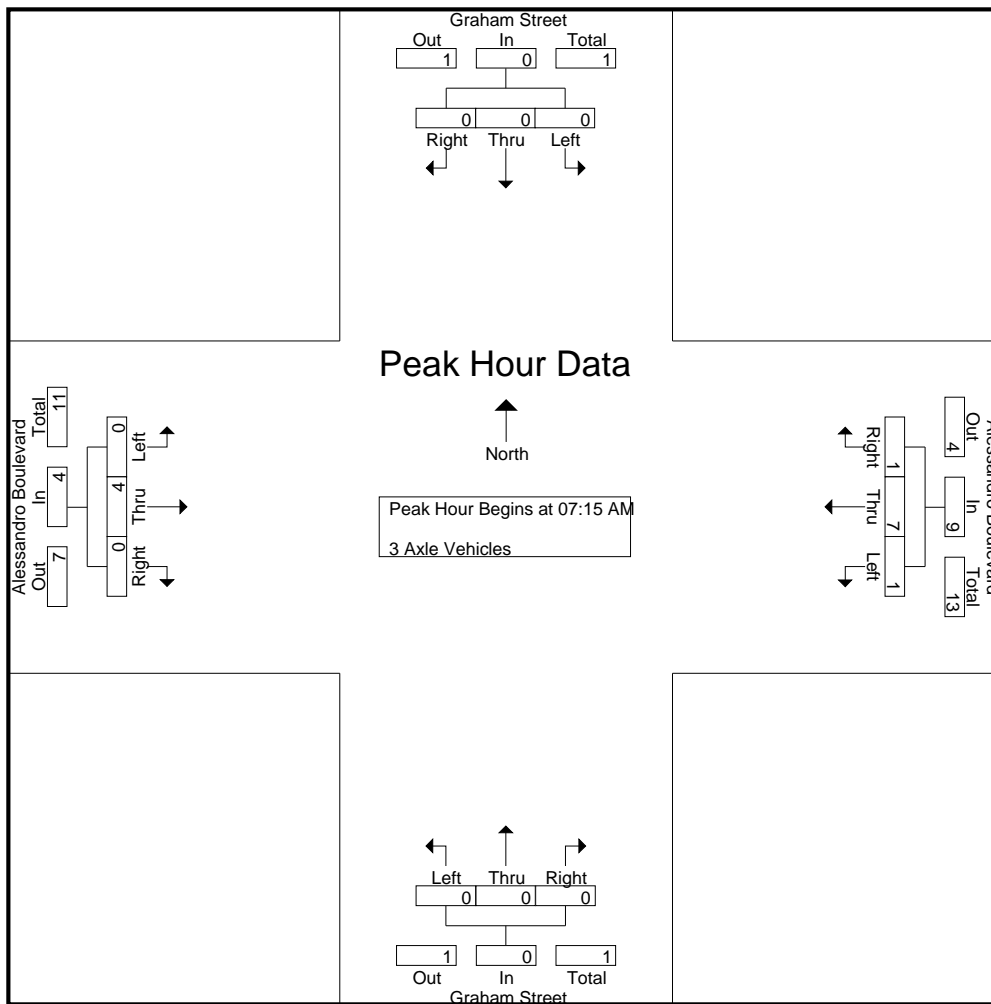
Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	3	0	3	5
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:00 AM	0	0	0	0	1	4	0	5	0	0	0	0	0	0	0	0	5
Total Volume	0	0	0	0	1	7	1	9	0	0	0	0	0	4	0	4	13
% App. Total	0	0	0		11.1	77.8	11.1		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.250	.438	.250	.450	.000	.000	.000	.000	.000	.333	.000	.333	.650

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro AM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	1	2	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	1	4	0	5	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	7	1	9	0	0	0	0	0	4	0	4
% App. Total	0	0	0	0	11.1	77.8	11.1		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.250	.438	.250	.450	.000	.000	.000	.000	.000	.333	.000	.333

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro AM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	1	0	2	0	0	0	0	2	0	0	2	0	0	0	0	4
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:45 AM	0	0	0	0	0	4	0	4	2	0	0	2	0	1	2	3	9
Total	1	1	0	2	0	6	0	6	4	0	0	4	0	5	2	7	19
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
08:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1	2	3
08:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	9	1	10	0	0	0	0	1	2	1	4	14
Grand Total	1	1	0	2	0	15	1	16	4	0	0	4	1	7	3	11	33
Apprch %	50	50	0		0	93.8	6.2		100	0	0		9.1	63.6	27.3		
Total %	3	3	0	6.1	0	45.5	3	48.5	12.1	0	0	12.1	3	21.2	9.1	33.3	

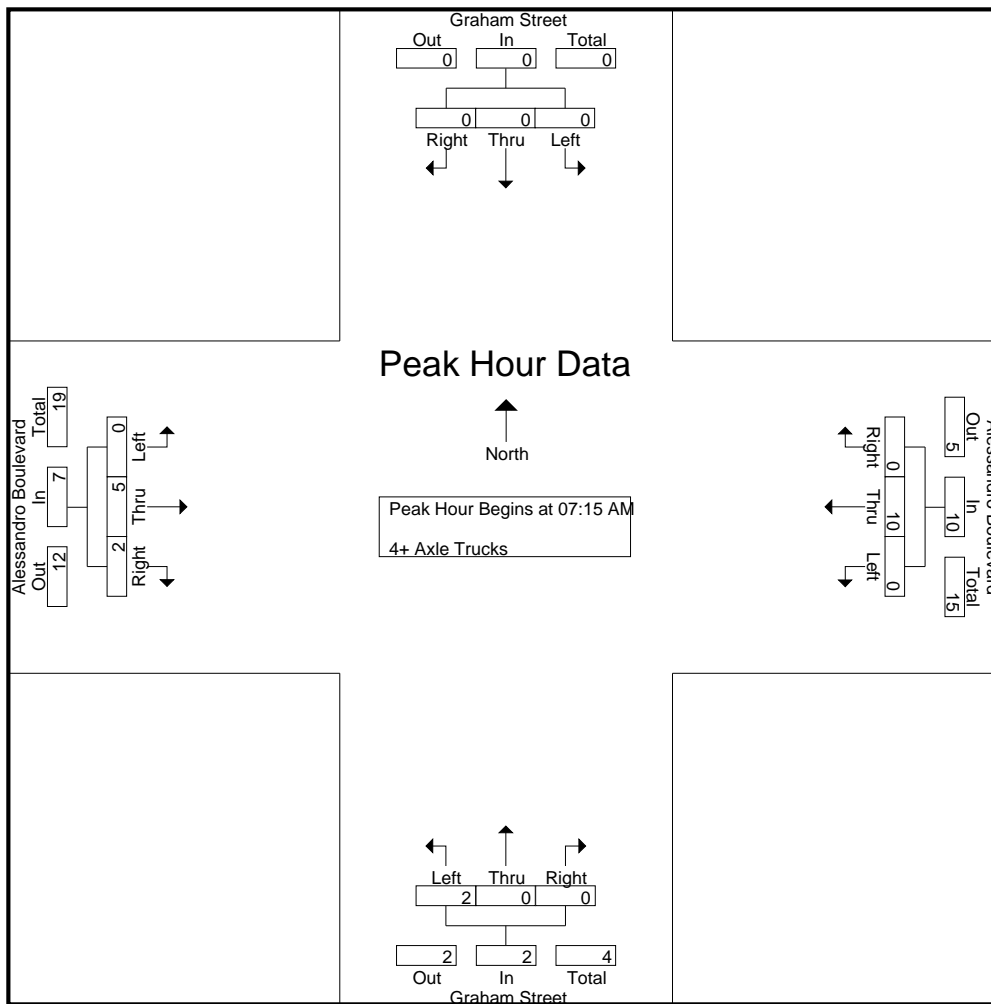
Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:45 AM	0	0	0	0	0	4	0	4	2	0	0	2	0	1	2	3	9
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
Total Volume	0	0	0	0	0	10	0	10	2	0	0	2	0	5	2	7	19
% App. Total	0	0	0		0	100	0		100	0	0		0	71.4	28.6		
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.250	.000	.000	.250	.000	.625	.250	.583	.528

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro AM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	4	0	4	2	0	0	2	0	1	2	3
+45 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	10	0	10	2	0	0	2	0	5	2	7
% App. Total	0	0	0	0	0	100	0	100	100	0	0	100	0	71.4	28.6	100
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.250	.000	.000	.250	.000	.625	.250	.583

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro PM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	39	34	17	90	39	240	44	323	24	60	21	105	21	325	36	382	900
04:15 PM	35	42	15	92	46	237	29	312	17	37	13	67	24	307	21	352	823
04:30 PM	34	32	9	75	40	243	46	329	15	36	12	63	27	334	26	387	854
04:45 PM	32	46	8	86	37	195	33	265	18	45	24	87	25	322	23	370	808
Total	140	154	49	343	162	915	152	1229	74	178	70	322	97	1288	106	1491	3385
05:00 PM	26	29	15	70	43	226	41	310	15	39	11	65	22	334	31	387	832
05:15 PM	33	35	19	87	35	186	27	248	15	53	14	82	19	325	31	375	792
05:30 PM	24	37	13	74	28	175	26	229	11	41	11	63	14	319	39	372	738
05:45 PM	29	30	14	73	21	180	27	228	8	19	10	37	18	350	27	395	733
Total	112	131	61	304	127	767	121	1015	49	152	46	247	73	1328	128	1529	3095
Grand Total	252	285	110	647	289	1682	273	2244	123	330	116	569	170	2616	234	3020	6480
Apprch %	38.9	44	17		12.9	75	12.2		21.6	58	20.4		5.6	86.6	7.7		
Total %	3.9	4.4	1.7	10	4.5	26	4.2	34.6	1.9	5.1	1.8	8.8	2.6	40.4	3.6	46.6	
Passenger Vehicles	251	282	107	640	288	1667	273	2228	121	327	115	563	170	2597	226	2993	6424
% Passenger Vehicles	99.6	98.9	97.3	98.9	99.7	99.1	100	99.3	98.4	99.1	99.1	98.9	100	99.3	96.6	99.1	99.1
Large 2 Axle Vehicles	1	3	3	7	0	11	0	11	2	3	0	5	0	16	6	22	45
% Large 2 Axle Vehicles	0.4	1.1	2.7	1.1	0	0.7	0	0.5	1.6	0.9	0	0.9	0	0.6	2.6	0.7	0.7
3 Axle Vehicles	0	0	0	0	1	2	0	3	0	0	1	1	0	1	0	1	5
% 3 Axle Vehicles	0	0	0	0	0.3	0.1	0	0.1	0	0	0.9	0.2	0	0	0	0	0.1
4+ Axle Trucks	0	0	0	0	0	2	0	2	0	0	0	0	0	2	2	4	6
% 4+ Axle Trucks	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0.1	0.9	0.1	0.1

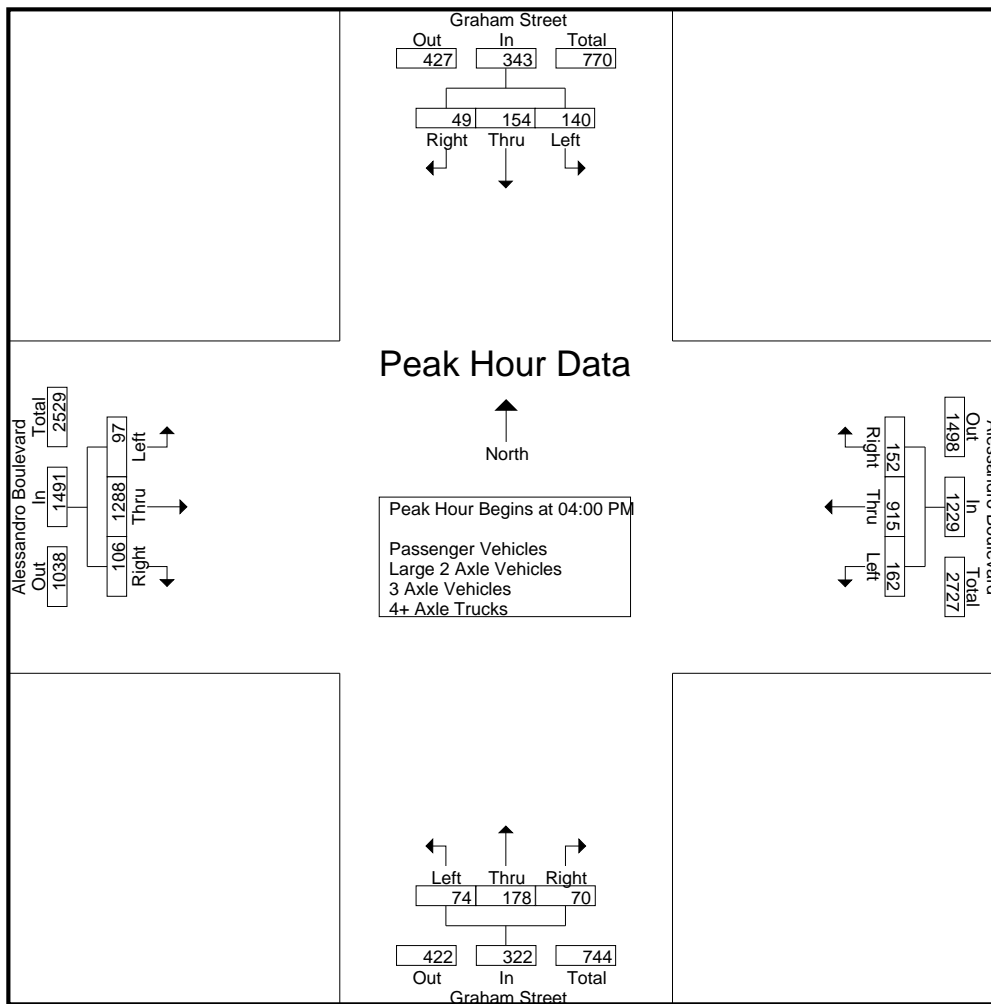
Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	39	34	17	90	39	240	44	323	24	60	21	105	21	325	36	382	900
04:15 PM	35	42	15	92	46	237	29	312	17	37	13	67	24	307	21	352	823
04:30 PM	34	32	9	75	40	243	46	329	15	36	12	63	27	334	26	387	854
04:45 PM	32	46	8	86	37	195	33	265	18	45	24	87	25	322	23	370	808
Total Volume	140	154	49	343	162	915	152	1229	74	178	70	322	97	1288	106	1491	3385
% App. Total	40.8	44.9	14.3		13.2	74.5	12.4		23	55.3	21.7		6.5	86.4	7.1		
PHF	.897	.837	.721	.932	.880	.941	.826	.934	.771	.742	.729	.767	.898	.964	.736	.963	.940

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro PM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				05:00 PM			
+0 mins.	39	34	17	90	39	240	44	323	24	60	21	105	22	334	31	387
+15 mins.	35	42	15	92	46	237	29	312	17	37	13	67	19	325	31	375
+30 mins.	34	32	9	75	40	243	46	329	15	36	12	63	14	319	39	372
+45 mins.	32	46	8	86	37	195	33	265	18	45	24	87	18	350	27	395
Total Volume	140	154	49	343	162	915	152	1229	74	178	70	322	73	1328	128	1529
% App. Total	40.8	44.9	14.3		13.2	74.5	12.4		23	55.3	21.7		4.8	86.9	8.4	
PHF	.897	.837	.721	.932	.880	.941	.826	.934	.771	.742	.729	.767	.830	.949	.821	.968

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro PM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	39	33	17	89	39	236	44	319	23	59	20	102	21	320	34	375	885
04:15 PM	34	42	13	89	45	235	29	309	17	37	13	67	24	305	19	348	813
04:30 PM	34	32	9	75	40	242	46	328	15	36	12	63	27	331	25	383	849
04:45 PM	32	45	7	84	37	194	33	264	18	45	24	87	25	321	22	368	803
Total	139	152	46	337	161	907	152	1220	73	177	69	319	97	1277	100	1474	3350
05:00 PM	26	29	15	70	43	225	41	309	15	39	11	65	22	334	30	386	830
05:15 PM	33	34	19	86	35	184	27	246	15	51	14	80	19	320	30	369	781
05:30 PM	24	37	13	74	28	173	26	227	11	41	11	63	14	319	39	372	736
05:45 PM	29	30	14	73	21	178	27	226	7	19	10	36	18	347	27	392	727
Total	112	130	61	303	127	760	121	1008	48	150	46	244	73	1320	126	1519	3074
Grand Total	251	282	107	640	288	1667	273	2228	121	327	115	563	170	2597	226	2993	6424
Apprch %	39.2	44.1	16.7		12.9	74.8	12.3		21.5	58.1	20.4		5.7	86.8	7.6		
Total %	3.9	4.4	1.7	10	4.5	25.9	4.2	34.7	1.9	5.1	1.8	8.8	2.6	40.4	3.5	46.6	

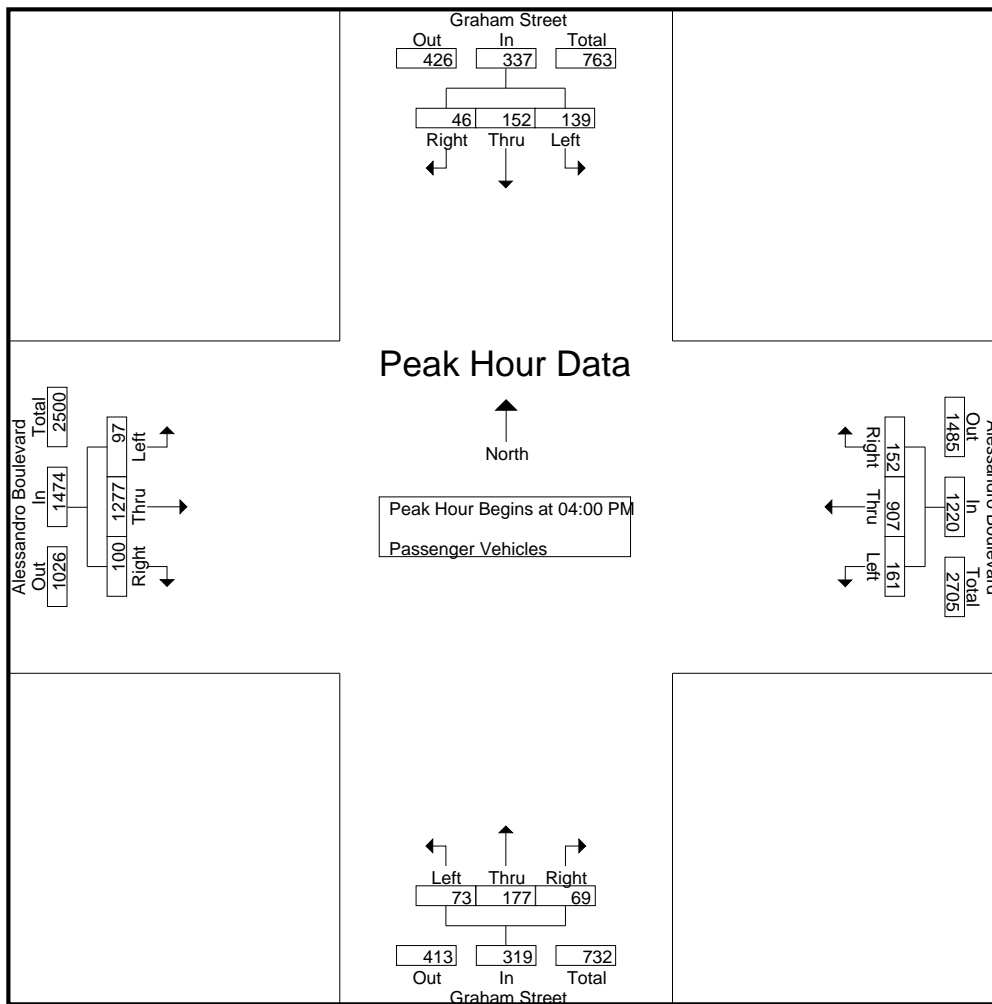
Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	39	33	17	89	39	236	44	319	23	59	20	102	21	320	34	375	885
04:15 PM	34	42	13	89	45	235	29	309	17	37	13	67	24	305	19	348	813
04:30 PM	34	32	9	75	40	242	46	328	15	36	12	63	27	331	25	383	849
04:45 PM	32	45	7	84	37	194	33	264	18	45	24	87	25	321	22	368	803
Total Volume	139	152	46	337	161	907	152	1220	73	177	69	319	97	1277	100	1474	3350
% App. Total	41.2	45.1	13.6		13.2	74.3	12.5		22.9	55.5	21.6		6.6	86.6	6.8		
PHF	.891	.844	.676	.947	.894	.937	.826	.930	.793	.750	.719	.782	.898	.965	.735	.962	.946

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro PM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	39	33	17	89	39	236	44	319	23	59	20	102	21	320	34	375
+15 mins.	34	42	13	89	45	235	29	309	17	37	13	67	24	305	19	348
+30 mins.	34	32	9	75	40	242	46	328	15	36	12	63	27	331	25	383
+45 mins.	32	45	7	84	37	194	33	264	18	45	24	87	25	321	22	368
Total Volume	139	152	46	337	161	907	152	1220	73	177	69	319	97	1277	100	1474
% App. Total	41.2	45.1	13.6		13.2	74.3	12.5		22.9	55.5	21.6		6.6	86.6	6.8	
PHF	.891	.844	.676	.947	.894	.937	.826	.930	.793	.750	.719	.782	.898	.965	.735	.962

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro PM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	1	0	1	0	3	0	3	1	1	0	2	0	4	2	6	12
04:15 PM	1	0	2	3	0	2	0	2	0	0	0	0	0	2	2	4	9
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	4
04:45 PM	0	1	1	2	0	1	0	1	0	0	0	0	0	1	1	2	5
Total	1	2	3	6	0	6	0	6	1	1	0	2	0	10	6	16	30
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	1	0	1	0	1	0	1	0	2	0	2	0	5	0	5	9
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1	4
Total	0	1	0	1	0	5	0	5	1	2	0	3	0	6	0	6	15
Grand Total	1	3	3	7	0	11	0	11	2	3	0	5	0	16	6	22	45
Apprch %	14.3	42.9	42.9		0	100	0		40	60	0		0	72.7	27.3		
Total %	2.2	6.7	6.7	15.6	0	24.4	0	24.4	4.4	6.7	0	11.1	0	35.6	13.3	48.9	

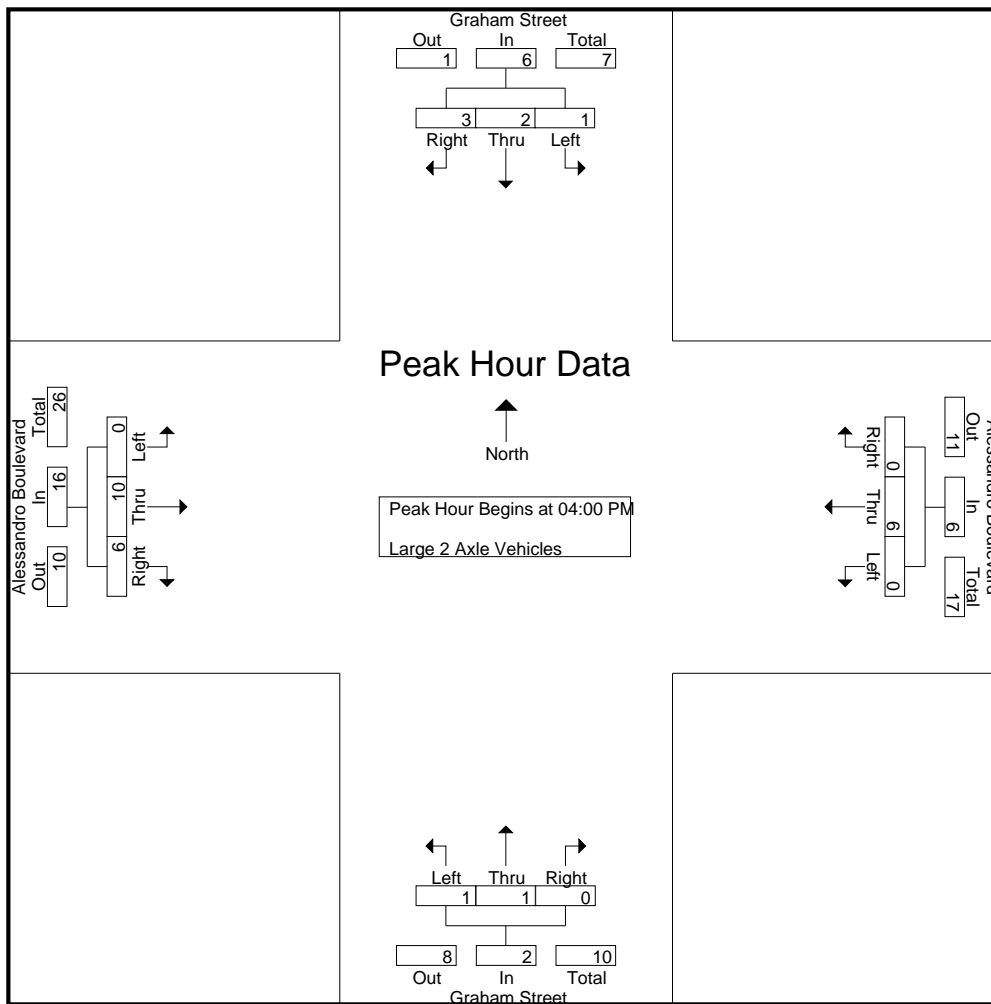
Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	1	0	1	0	3	0	3	1	1	0	2	0	4	2	6	12
04:15 PM	1	0	2	3	0	2	0	2	0	0	0	0	0	2	2	4	9
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	4
04:45 PM	0	1	1	2	0	1	0	1	0	0	0	0	0	1	1	2	5
Total Volume	1	2	3	6	0	6	0	6	1	1	0	2	0	10	6	16	30
% App. Total	16.7	33.3	50		0	100	0		50	50	0		0	62.5	37.5		
PHF	.250	.500	.375	.500	.000	.500	.000	.500	.250	.250	.000	.250	.000	.625	.750	.667	.625

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro PM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	1	0	1	0	3	0	3	1	1	0	2	0	4	2	6
+15 mins.	1	0	2	3	0	2	0	2	0	0	0	0	0	2	2	4
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4
+45 mins.	0	1	1	2	0	1	0	1	0	0	0	0	0	1	1	2
Total Volume	1	2	3	6	0	6	0	6	1	1	0	2	0	10	6	16
% App. Total	16.7	33.3	50		0	100	0		50	50	0		0	62.5	37.5	
PHF	.250	.500	.375	.500	.000	.500	.000	.500	.250	.250	.000	.250	.000	.625	.750	.667

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro PM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	2	0	0	1	1	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Grand Total	0	0	0	0	1	2	0	3	0	0	1	1	0	1	0	1	5
Apprch %	0	0	0		33.3	66.7	0		0	0	100		0	100	0		
Total %	0	0	0	0	20	40	0	60	0	0	20	20	0	20	0	20	

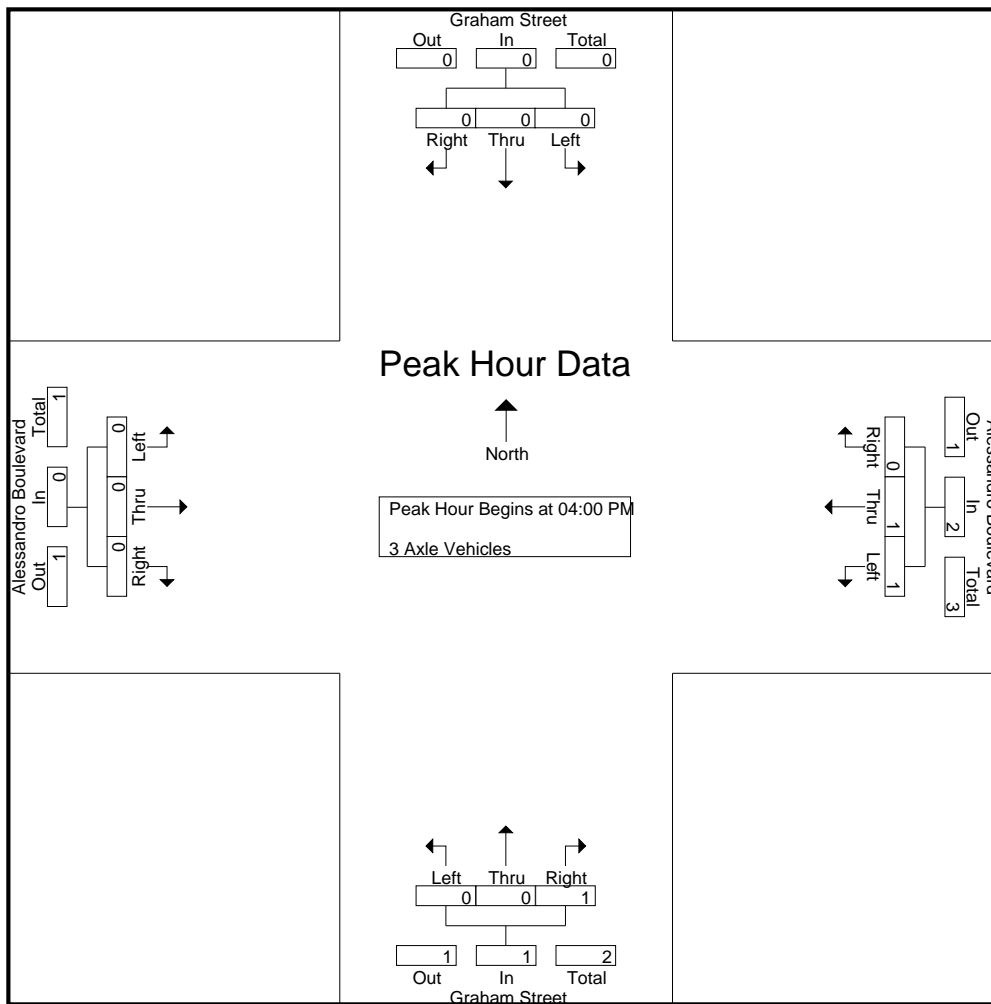
Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	0	2	0	0	1	1	0	0	0	0	3
% App. Total	0	0	0		50	50	0		0	0	100		0	0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.500	.000	.000	.250	.250	.000	.000	.000	.000	.375

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro PM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0
+15 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	0	2	0	0	1	1	0	0	0	0
% App. Total	0	0	0	0	50	50	0	0	0	0	100	0	0	0	0	0
PHF	.000	.000	.000	.000	.250	.250	.000	.500	.000	.000	.250	.250	.000	.000	.000	.000

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro PM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	2	3	4
Grand Total	0	0	0	0	0	2	0	2	0	0	0	0	0	2	2	4	6
Apprch %	0	0	0		0	100	0		0	0	0		0	50	50		
Total %	0	0	0		0	33.3	0	33.3	0	0	0		0	33.3	33.3	66.7	

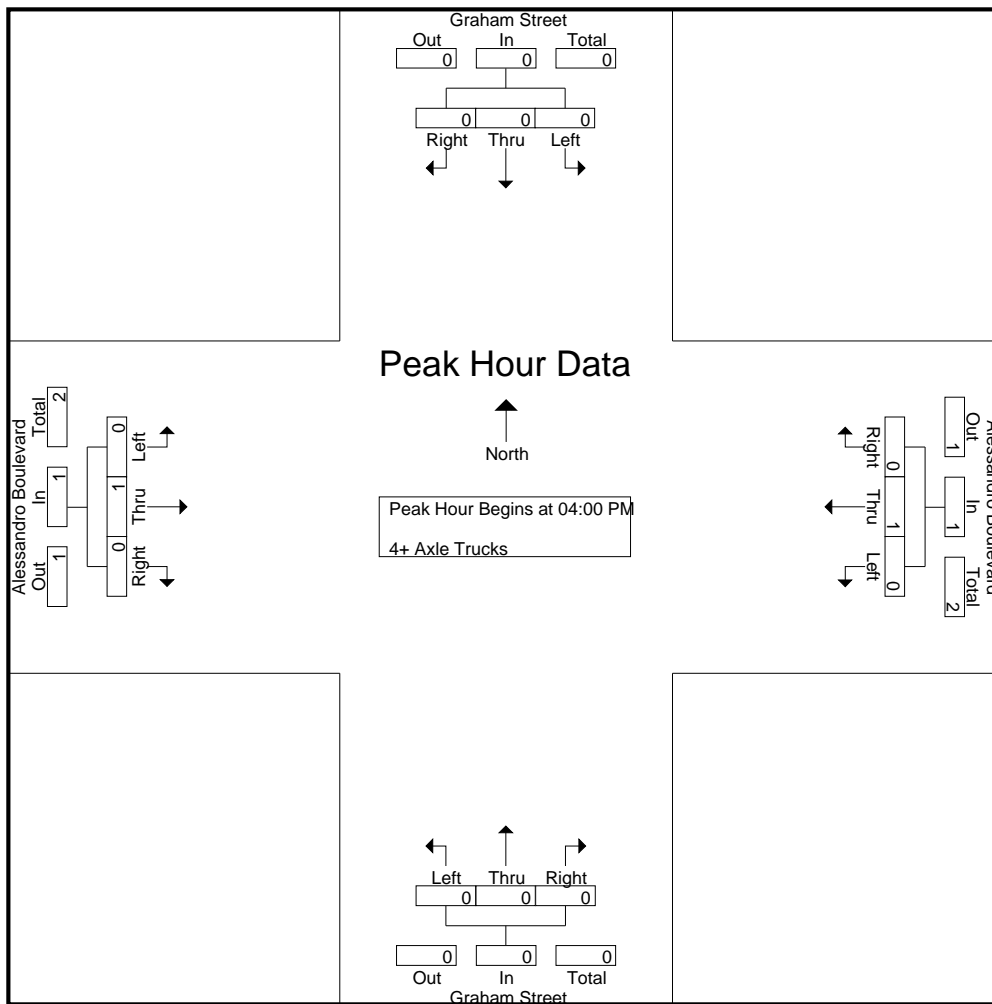
Start Time	Graham Street Southbound				Alessandro Boulevard Westbound				Graham Street Northbound				Alessandro Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.500

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of Moreno Valley
 N/S: Graham Street
 E/W: Alessandro Boulevard
 Weather: Clear

File Name : 03C_MRV_Graham_Alessandro PM
 Site Code : 05118347
 Start Date : 4/26/2018
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 3.2:

EXISTING (2020) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Timings
1: Frederick St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

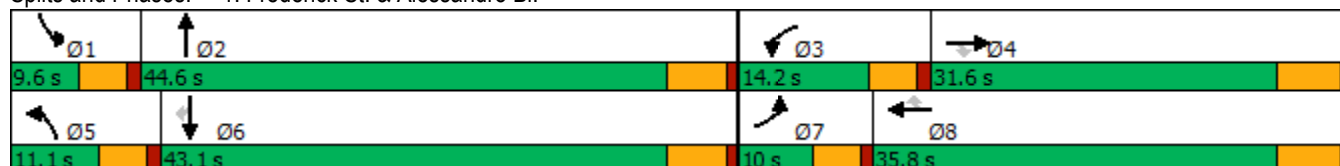


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↗	↘
Traffic Volume (vph)	119	508	76	77	1539	163	92	271	99	268	199
Future Volume (vph)	119	508	76	77	1539	163	92	271	99	268	199
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	29.8	9.6	35.8	35.8	9.6	44.4	9.6	42.4	42.4
Total Split (s)	10.0	31.6	31.6	14.2	35.8	35.8	11.1	44.6	9.6	43.1	43.1
Total Split (%)	10.0%	31.6%	31.6%	14.2%	35.8%	35.8%	11.1%	44.6%	9.6%	43.1%	43.1%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 76.1
 Natural Cycle: 100
 Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Frederick St. & Alessandro Bl.



Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

HCM 6th Signalized Intersection Summary
1: Frederick St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

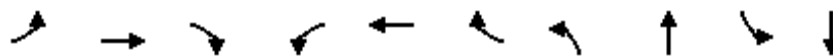


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗	↘	↘	↗	↘	↘	↗		↘	↗	↘
Traffic Volume (veh/h)	119	508	76	77	1539	163	92	271	22	99	268	199
Future Volume (veh/h)	119	508	76	77	1539	163	92	271	22	99	268	199
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	121	518	46	79	1570	134	94	277	13	101	273	144
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	143	1514	667	103	2060	627	214	570	27	219	592	263
Arrive On Green	0.08	0.42	0.42	0.06	0.40	0.40	0.06	0.16	0.16	0.06	0.16	0.16
Sat Flow, veh/h	1810	3610	1590	1810	5187	1578	3510	3509	164	3510	3610	1601
Grp Volume(v), veh/h	121	518	46	79	1570	134	94	142	148	101	273	144
Grp Sat Flow(s),veh/h/ln	1810	1805	1590	1810	1729	1578	1755	1805	1868	1755	1805	1601
Q Serve(g_s), s	4.5	6.6	1.2	2.9	17.9	3.8	1.8	4.9	4.9	1.9	4.7	5.6
Cycle Q Clear(g_c), s	4.5	6.6	1.2	2.9	17.9	3.8	1.8	4.9	4.9	1.9	4.7	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	143	1514	667	103	2060	627	214	293	304	219	592	263
V/C Ratio(X)	0.85	0.34	0.07	0.77	0.76	0.21	0.44	0.48	0.49	0.46	0.46	0.55
Avail Cap(c_a), veh/h	143	1514	667	254	2279	693	334	1036	1072	257	1993	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	13.4	11.9	31.8	17.8	13.6	30.9	26.0	26.0	30.9	25.8	26.2
Incr Delay (d2), s/veh	33.3	0.1	0.0	4.5	1.4	0.2	0.5	1.2	1.2	0.6	0.6	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	2.3	0.4	1.3	6.2	1.2	0.7	2.0	2.1	0.8	1.9	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.3	13.6	11.9	36.2	19.2	13.7	31.5	27.2	27.2	31.5	26.4	28.0
LnGrp LOS	E	B	B	D	B	B	C	C	C	C	C	C
Approach Vol, veh/h		685			1783			384			518	
Approach Delay, s/veh		22.4			19.6			28.3			27.8	
Approach LOS		C			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	16.5	8.5	34.4	8.8	16.6	10.0	32.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	5.0	39.2	9.6	25.8	6.5	37.7	5.4	30.0				
Max Q Clear Time (g_c+I1), s	3.9	6.9	4.9	8.6	3.8	7.6	6.5	19.9				
Green Ext Time (p_c), s	0.0	1.6	0.0	3.0	0.0	2.2	0.0	7.0				
Intersection Summary												
HCM 6th Ctrl Delay				22.4								
HCM 6th LOS				C								

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Timings
5: Graham St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

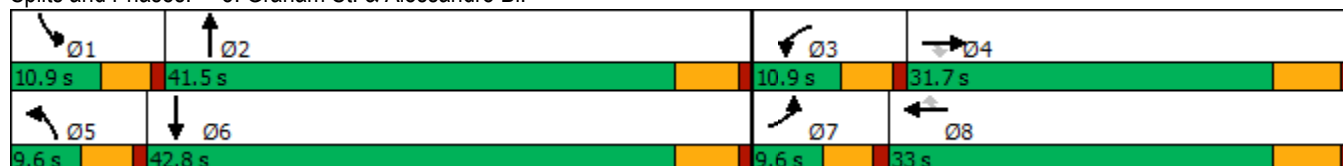


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑	↗	↘	↑↑↑	↗	↘	↑↑	↘	↑↑
Traffic Volume (vph)	41	524	65	94	1624	119	66	162	95	182
Future Volume (vph)	41	524	65	94	1624	119	66	162	95	182
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	29.8	9.6	30.8	30.8	9.6	40.4	9.6	42.4
Total Split (s)	9.6	31.7	31.7	10.9	33.0	33.0	9.6	41.5	10.9	42.8
Total Split (%)	10.1%	33.4%	33.4%	11.5%	34.7%	34.7%	10.1%	43.7%	11.5%	45.1%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 95
 Actuated Cycle Length: 70.2
 Natural Cycle: 95
 Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Graham St. & Alessandro Bl.



Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

HCM 6th Signalized Intersection Summary
5: Graham St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑↑	↗	↘	↑↑		↘	↑↑	
Traffic Volume (veh/h)	41	524	65	94	1624	119	66	162	16	95	182	89
Future Volume (veh/h)	41	524	65	94	1624	119	66	162	16	95	182	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	44	557	69	100	1728	127	70	172	17	101	194	95
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	77	1365	609	129	2111	655	101	523	51	130	412	193
Arrive On Green	0.04	0.38	0.38	0.07	0.41	0.41	0.06	0.16	0.16	0.07	0.17	0.17
Sat Flow, veh/h	1810	3610	1610	1810	5187	1610	1810	3322	325	1810	2374	1112
Grp Volume(v), veh/h	44	557	69	100	1728	127	70	93	96	101	145	144
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1729	1610	1810	1805	1842	1810	1805	1680
Q Serve(g_s), s	1.5	7.2	1.8	3.5	18.8	3.2	2.4	2.9	3.0	3.5	4.6	4.9
Cycle Q Clear(g_c), s	1.5	7.2	1.8	3.5	18.8	3.2	2.4	2.9	3.0	3.5	4.6	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		0.66
Lane Grp Cap(c), veh/h	77	1365	609	129	2111	655	101	284	290	130	313	292
V/C Ratio(X)	0.57	0.41	0.11	0.78	0.82	0.19	0.69	0.33	0.33	0.78	0.46	0.49
Avail Cap(c_a), veh/h	142	1472	657	180	2222	690	142	1026	1047	180	1063	990
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	14.5	12.8	29.0	16.8	12.1	29.4	23.8	23.8	29.0	23.6	23.7
Incr Delay (d2), s/veh	2.5	0.2	0.1	8.3	2.4	0.1	3.2	0.7	0.7	8.6	1.1	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.5	0.5	1.7	6.4	1.0	1.1	1.2	1.2	1.7	1.9	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.3	14.7	12.9	37.3	19.2	12.3	32.6	24.4	24.5	37.6	24.7	25.0
LnGrp LOS	C	B	B	D	B	B	C	C	C	D	C	C
Approach Vol, veh/h		670			1955			259			390	
Approach Delay, s/veh		15.7			19.7			26.6			28.1	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	15.4	9.1	29.8	8.1	16.4	7.3	31.6				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	6.3	36.1	6.3	25.9	5.0	37.4	5.0	27.2				
Max Q Clear Time (g_c+I1), s	5.5	5.0	5.5	9.2	4.4	6.9	3.5	20.8				
Green Ext Time (p_c), s	0.0	1.0	0.0	3.3	0.0	1.6	0.0	5.0				
Intersection Summary												
HCM 6th Ctrl Delay				20.4								
HCM 6th LOS				C								

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Timings
1: Frederick St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

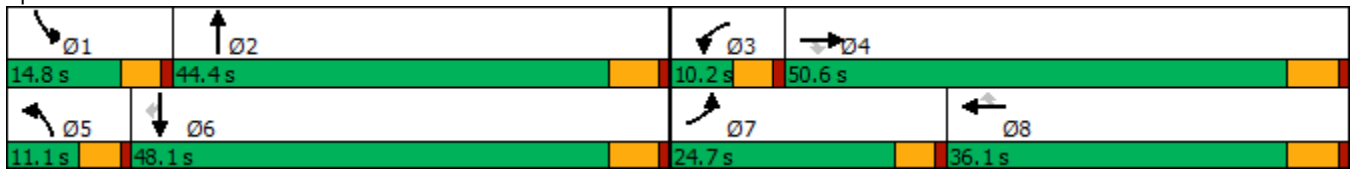


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↗	↘
Traffic Volume (vph)	224	1303	126	69	860	165	74	326	265	300	119
Future Volume (vph)	224	1303	126	69	860	165	74	326	265	300	119
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	29.8	9.6	35.8	35.8	9.6	44.4	9.6	42.4	42.4
Total Split (s)	24.7	50.6	50.6	10.2	36.1	36.1	11.1	44.4	14.8	48.1	48.1
Total Split (%)	20.6%	42.2%	42.2%	8.5%	30.1%	30.1%	9.3%	37.0%	12.3%	40.1%	40.1%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 100.7
 Natural Cycle: 120
 Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Frederick St. & Alessandro Bl.



Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

HCM 6th Signalized Intersection Summary
1: Frederick St. & Alessandro Bl.

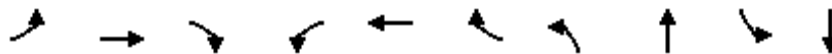
Alessandro Warehouse (JN 13276)
09/22/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	1303	126	69	860	165	74	326	58	265	300	119
Future Volume (veh/h)	224	1303	126	69	860	165	74	326	58	265	300	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	238	1386	118	73	915	85	79	347	44	282	319	48
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	275	1606	715	94	1789	548	167	571	72	355	834	370
Arrive On Green	0.15	0.44	0.44	0.05	0.34	0.34	0.05	0.18	0.18	0.10	0.23	0.23
Sat Flow, veh/h	1810	3610	1607	1810	5187	1588	3510	3217	404	3510	3610	1602
Grp Volume(v), veh/h	238	1386	118	73	915	85	79	193	198	282	319	48
Grp Sat Flow(s),veh/h/ln	1810	1805	1607	1810	1729	1588	1755	1805	1817	1755	1805	1602
Q Serve(g_s), s	11.7	31.4	4.0	3.6	12.7	3.4	2.0	9.0	9.1	7.1	6.8	2.2
Cycle Q Clear(g_c), s	11.7	31.4	4.0	3.6	12.7	3.4	2.0	9.0	9.1	7.1	6.8	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	275	1606	715	94	1789	548	167	320	322	355	834	370
V/C Ratio(X)	0.87	0.86	0.17	0.77	0.51	0.16	0.47	0.60	0.61	0.79	0.38	0.13
Avail Cap(c_a), veh/h	400	1780	792	112	1789	548	251	775	780	394	1696	753
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.6	22.7	15.1	42.5	23.7	20.6	42.2	34.4	34.5	39.9	29.5	27.7
Incr Delay (d2), s/veh	9.3	4.3	0.1	20.0	0.2	0.1	0.8	1.8	1.9	8.5	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	12.7	1.3	2.1	4.9	1.2	0.9	3.9	4.0	3.4	2.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.9	27.0	15.2	62.6	23.9	20.7	42.9	36.3	36.4	48.4	29.8	27.9
LnGrp LOS	D	C	B	E	C	C	D	D	D	D	C	C
Approach Vol, veh/h		1742			1073			470			649	
Approach Delay, s/veh		28.9			26.3			37.4			37.7	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.8	21.5	9.3	46.2	8.9	26.4	18.4	37.2				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	10.2	39.0	5.6	44.8	6.5	42.7	20.1	30.3				
Max Q Clear Time (g_c+I1), s	9.1	11.1	5.6	33.4	4.0	8.8	13.7	14.7				
Green Ext Time (p_c), s	0.1	2.2	0.0	7.0	0.0	2.2	0.2	5.5				
Intersection Summary												
HCM 6th Ctrl Delay				30.7								
HCM 6th LOS				C								

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Timings
5: Graham St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

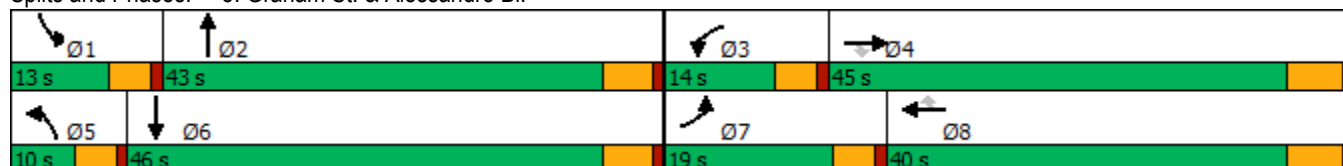


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑	↗	↘	↑↑↑	↗	↘	↑↑	↘	↑↑
Traffic Volume (vph)	104	1405	116	170	964	158	78	186	146	161
Future Volume (vph)	104	1405	116	170	964	158	78	186	146	161
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	29.8	9.6	30.8	30.8	9.6	40.4	9.6	42.4
Total Split (s)	19.0	45.0	45.0	14.0	40.0	40.0	10.0	43.0	13.0	46.0
Total Split (%)	16.5%	39.1%	39.1%	12.2%	34.8%	34.8%	8.7%	37.4%	11.3%	40.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 115
 Actuated Cycle Length: 93.1
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Graham St. & Alessandro Bl.



HCM 6th Signalized Intersection Summary
5: Graham St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗↗	↘	↘	↗↗↗	↘	↘	↗↗		↘	↗↗	
Traffic Volume (veh/h)	104	1405	116	170	964	158	78	186	74	146	161	53
Future Volume (veh/h)	104	1405	116	170	964	158	78	186	74	146	161	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	111	1495	123	181	1026	168	83	198	79	155	171	56
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	142	1601	714	195	2455	762	107	300	116	175	418	133
Arrive On Green	0.08	0.44	0.44	0.11	0.47	0.47	0.06	0.12	0.12	0.10	0.16	0.16
Sat Flow, veh/h	1810	3610	1610	1810	5187	1610	1810	2547	982	1810	2696	855
Grp Volume(v), veh/h	111	1495	123	181	1026	168	83	138	139	155	113	114
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1729	1610	1810	1805	1723	1810	1805	1746
Q Serve(g_s), s	5.2	34.2	4.0	8.6	11.3	5.3	3.9	6.4	6.7	7.4	4.9	5.2
Cycle Q Clear(g_c), s	5.2	34.2	4.0	8.6	11.3	5.3	3.9	6.4	6.7	7.4	4.9	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.57	1.00		0.49
Lane Grp Cap(c), veh/h	142	1601	714	195	2455	762	107	212	203	175	280	271
V/C Ratio(X)	0.78	0.93	0.17	0.93	0.42	0.22	0.78	0.65	0.68	0.89	0.40	0.42
Avail Cap(c_a), veh/h	299	1626	725	195	2455	762	112	780	744	175	842	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	23.0	14.6	38.5	15.1	13.5	40.4	36.7	36.8	38.9	33.1	33.2
Incr Delay (d2), s/veh	3.6	10.3	0.1	43.3	0.1	0.1	24.5	3.3	4.0	37.2	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	14.9	1.3	6.0	3.9	1.7	2.4	2.9	2.9	4.9	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.0	33.3	14.7	81.8	15.2	13.6	64.9	40.0	40.9	76.0	34.1	34.3
LnGrp LOS	D	C	B	F	B	B	E	D	D	E	C	C
Approach Vol, veh/h		1729			1375			360			382	
Approach Delay, s/veh		32.6			23.8			46.1			51.2	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	15.6	14.0	44.4	9.7	18.9	11.4	47.0				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	37.6	9.4	39.2	5.4	40.6	14.4	34.2				
Max Q Clear Time (g_c+I1), s	9.4	8.7	10.6	36.2	5.9	7.2	7.2	13.3				
Green Ext Time (p_c), s	0.0	1.5	0.0	2.4	0.0	1.2	0.1	7.3				
Intersection Summary												
HCM 6th Ctrl Delay				32.6								
HCM 6th LOS				C								

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 5.1:**EAP (2022) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS**

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Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Timings
1: Frederick St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

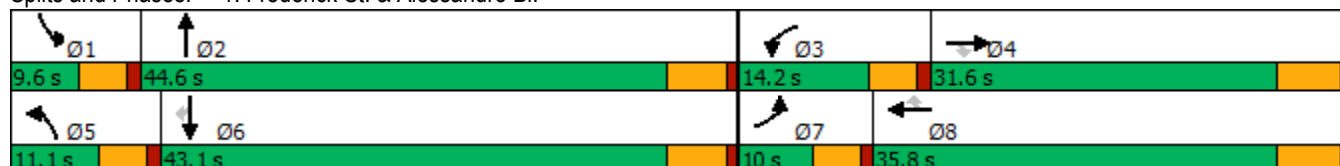


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↙	↑↑	↘	↙	↑↑↑	↘	↙↘	↑↑	↙↘	↑↑	↘
Traffic Volume (vph)	124	556	79	88	1603	170	95	282	103	279	207
Future Volume (vph)	124	556	79	88	1603	170	95	282	103	279	207
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	29.8	9.6	35.8	35.8	9.6	44.4	9.6	42.4	42.4
Total Split (s)	10.0	31.6	31.6	14.2	35.8	35.8	11.1	44.6	9.6	43.1	43.1
Total Split (%)	10.0%	31.6%	31.6%	14.2%	35.8%	35.8%	11.1%	44.6%	9.6%	43.1%	43.1%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 76.2
 Natural Cycle: 100
 Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Frederick St. & Alessandro Bl.



Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

HCM 6th Signalized Intersection Summary
1: Frederick St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗	↘	↘	↗	↘	↘	↗	↘	↘	↗	↘
Traffic Volume (veh/h)	124	556	79	88	1603	170	95	282	35	103	279	207
Future Volume (veh/h)	124	556	79	88	1603	170	95	282	35	103	279	207
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	127	567	49	90	1636	141	97	288	27	105	285	152
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	141	1499	660	117	2084	634	214	542	50	220	593	263
Arrive On Green	0.08	0.42	0.42	0.06	0.40	0.40	0.06	0.16	0.16	0.06	0.16	0.16
Sat Flow, veh/h	1810	3610	1590	1810	5187	1578	3510	3334	310	3510	3610	1601
Grp Volume(v), veh/h	127	567	49	90	1636	141	97	155	160	105	285	152
Grp Sat Flow(s),veh/h/ln	1810	1805	1590	1810	1729	1578	1755	1805	1839	1755	1805	1601
Q Serve(g_s), s	4.8	7.5	1.3	3.4	19.1	4.1	1.8	5.4	5.5	2.0	5.0	6.1
Cycle Q Clear(g_c), s	4.8	7.5	1.3	3.4	19.1	4.1	1.8	5.4	5.5	2.0	5.0	6.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	141	1499	660	117	2084	634	214	293	299	220	593	263
V/C Ratio(X)	0.90	0.38	0.07	0.77	0.79	0.22	0.45	0.53	0.54	0.48	0.48	0.58
Avail Cap(c_a), veh/h	141	1499	660	251	2250	685	330	1023	1042	254	1968	873
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	14.0	12.2	31.8	18.1	13.6	31.3	26.5	26.6	31.3	26.2	26.7
Incr Delay (d2), s/veh	45.9	0.2	0.0	4.0	1.8	0.2	0.6	1.5	1.5	0.6	0.6	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	2.6	0.4	1.5	6.6	1.3	0.7	2.3	2.4	0.8	2.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.5	14.2	12.2	35.9	19.9	13.8	31.9	28.0	28.1	31.9	26.8	28.7
LnGrp LOS	E	B	B	D	B	B	C	C	C	C	C	C
Approach Vol, veh/h		743			1867			412			542	
Approach Delay, s/veh		24.9			20.2			28.9			28.3	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	16.6	9.1	34.5	8.8	16.8	10.0	33.6				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	5.0	39.2	9.6	25.8	6.5	37.7	5.4	30.0				
Max Q Clear Time (g_c+I1), s	4.0	7.5	5.4	9.5	3.8	8.1	6.8	21.1				
Green Ext Time (p_c), s	0.0	1.7	0.0	3.2	0.0	2.3	0.0	6.5				
Intersection Summary												
HCM 6th Ctrl Delay				23.4								
HCM 6th LOS				C								

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

HCM 6th TWSC
2: Driveway 1 & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	687	14	0	1861	0	3
Future Vol, veh/h	687	14	0	1861	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	747	15	0	2023	0	3

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	381
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	531
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	531
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	531	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-
HCM Control Delay (s)	11.8	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

HCM 6th TWSC
3: Driveway 2 & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	666	23	0	1861	0	7
Future Vol, veh/h	666	23	0	1861	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	724	25	0	2023	0	8

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	375
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	536
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	536
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	536	-	-	-
HCM Lane V/C Ratio	0.014	-	-	-
HCM Control Delay (s)	11.8	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

HCM 6th TWSC
4: Driveway 3 & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	665	9	0	1861	0	3
Future Vol, veh/h	665	9	0	1861	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	723	10	0	2023	0	3

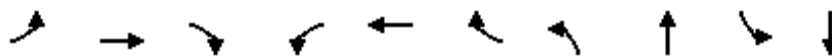
Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	-	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	542	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-
HCM Control Delay (s)	11.7	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Timings
5: Graham St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

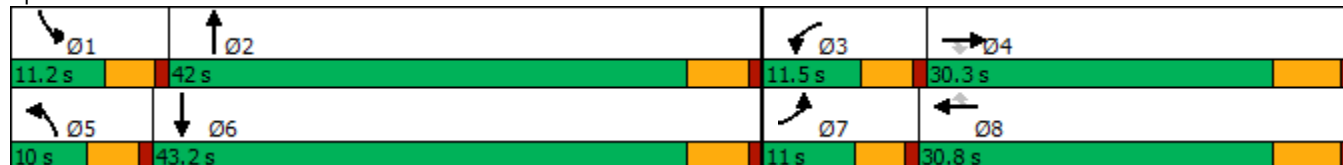


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑	↗	↘	↑↑↑	↗	↘	↑↑	↘	↑↑
Traffic Volume (vph)	46	547	75	97	1696	123	69	169	99	189
Future Volume (vph)	46	547	75	97	1696	123	69	169	99	189
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	29.8	9.6	30.8	30.8	9.6	40.4	9.6	42.4
Total Split (s)	11.0	30.3	30.3	11.5	30.8	30.8	10.0	42.0	11.2	43.2
Total Split (%)	11.6%	31.9%	31.9%	12.1%	32.4%	32.4%	10.5%	44.2%	11.8%	45.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 95
 Actuated Cycle Length: 69.2
 Natural Cycle: 105
 Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Graham St. & Alessandro Bl.



Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

HCM 6th Signalized Intersection Summary
5: Graham St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗↗	↗	↘	↗↗↗	↗	↘	↗↗		↘	↗↗	
Traffic Volume (veh/h)	46	547	75	97	1696	123	69	169	16	99	189	95
Future Volume (veh/h)	46	547	75	97	1696	123	69	169	16	99	189	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	49	582	80	103	1804	131	73	180	17	105	201	101
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	83	1321	589	133	2041	634	104	533	50	135	418	202
Arrive On Green	0.05	0.37	0.37	0.07	0.39	0.39	0.06	0.16	0.16	0.07	0.18	0.18
Sat Flow, veh/h	1810	3610	1610	1810	5187	1610	1810	3337	312	1810	2360	1140
Grp Volume(v), veh/h	49	582	80	103	1804	131	73	97	100	105	152	150
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1729	1610	1810	1805	1844	1810	1805	1695
Q Serve(g_s), s	1.7	7.6	2.1	3.5	20.2	3.4	2.5	3.0	3.0	3.6	4.7	5.0
Cycle Q Clear(g_c), s	1.7	7.6	2.1	3.5	20.2	3.4	2.5	3.0	3.0	3.6	4.7	5.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		0.67
Lane Grp Cap(c), veh/h	83	1321	589	133	2041	634	104	289	295	135	320	300
V/C Ratio(X)	0.59	0.44	0.14	0.78	0.88	0.21	0.70	0.33	0.34	0.78	0.47	0.50
Avail Cap(c_a), veh/h	185	1414	631	200	2073	644	156	1056	1079	191	1091	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	15.0	13.2	28.5	17.6	12.5	29.0	23.3	23.3	28.4	23.1	23.2
Incr Delay (d2), s/veh	2.5	0.2	0.1	4.9	4.9	0.2	3.2	0.7	0.7	7.4	1.1	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.6	0.6	1.5	7.4	1.0	1.1	1.2	1.3	1.7	1.9	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.8	15.2	13.3	33.4	22.5	12.7	32.2	24.0	24.0	35.8	24.2	24.5
LnGrp LOS	C	B	B	C	C	B	C	C	C	D	C	C
Approach Vol, veh/h		711			2038			270			407	
Approach Delay, s/veh		16.2			22.5			26.2			27.3	
Approach LOS		B			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	15.4	9.2	28.7	8.2	16.5	7.5	30.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	6.6	36.6	6.9	24.5	5.4	37.8	6.4	25.0				
Max Q Clear Time (g_c+I1), s	5.6	5.0	5.5	9.6	4.5	7.0	3.7	22.2				
Green Ext Time (p_c), s	0.0	1.0	0.0	3.3	0.0	1.7	0.0	2.4				
Intersection Summary												
HCM 6th Ctrl Delay				22.0								
HCM 6th LOS				C								

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Timings
1: Frederick St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

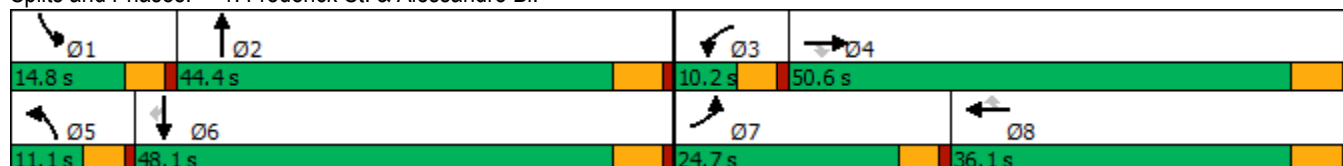


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↗	↘
Traffic Volume (vph)	233	1365	131	74	903	172	77	339	275	312	123
Future Volume (vph)	233	1365	131	74	903	172	77	339	275	312	123
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	29.8	9.6	35.8	35.8	9.6	44.4	9.6	42.4	42.4
Total Split (s)	24.7	50.6	50.6	10.2	36.1	36.1	11.1	44.4	14.8	48.1	48.1
Total Split (%)	20.6%	42.2%	42.2%	8.5%	30.1%	30.1%	9.3%	37.0%	12.3%	40.1%	40.1%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 101.2
 Natural Cycle: 120
 Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Frederick St. & Alessandro Bl.



Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

HCM 6th Signalized Intersection Summary
1: Frederick St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	1365	131	74	903	172	77	339	66	275	312	123
Future Volume (veh/h)	233	1365	131	74	903	172	77	339	66	275	312	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	248	1452	123	79	961	92	82	361	52	293	332	52
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	283	1612	717	102	1796	550	163	573	82	361	858	381
Arrive On Green	0.16	0.45	0.45	0.06	0.35	0.35	0.05	0.18	0.18	0.10	0.24	0.24
Sat Flow, veh/h	1810	3610	1607	1810	5187	1588	3510	3161	451	3510	3610	1602
Grp Volume(v), veh/h	248	1452	123	79	961	92	82	205	208	293	332	52
Grp Sat Flow(s),veh/h/ln	1810	1805	1607	1810	1729	1588	1755	1805	1807	1755	1805	1602
Q Serve(g_s), s	12.8	35.6	4.4	4.1	14.2	3.8	2.2	10.0	10.2	7.8	7.4	2.4
Cycle Q Clear(g_c), s	12.8	35.6	4.4	4.1	14.2	3.8	2.2	10.0	10.2	7.8	7.4	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	283	1612	717	102	1796	550	163	327	327	361	858	381
V/C Ratio(X)	0.88	0.90	0.17	0.78	0.54	0.17	0.50	0.63	0.64	0.81	0.39	0.14
Avail Cap(c_a), veh/h	380	1691	753	106	1796	550	239	736	737	374	1612	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	24.5	15.9	44.5	25.1	21.7	44.5	36.2	36.2	42.0	30.6	28.7
Incr Delay (d2), s/veh	13.1	6.8	0.1	26.1	0.3	0.1	0.9	2.0	2.1	11.4	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	15.1	1.5	2.5	5.5	1.4	0.9	4.4	4.5	3.8	3.1	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.5	31.3	16.0	70.6	25.4	21.8	45.4	38.1	38.3	53.3	30.9	28.9
LnGrp LOS	D	C	B	E	C	C	D	D	D	D	C	C
Approach Vol, veh/h		1823			1132			495			677	
Approach Delay, s/veh		33.2			28.3			39.4			40.4	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.4	22.7	10.0	48.5	9.0	28.1	19.6	38.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	10.2	39.0	5.6	44.8	6.5	42.7	20.1	30.3				
Max Q Clear Time (g_c+I1), s	9.8	12.2	6.1	37.6	4.2	9.4	14.8	16.2				
Green Ext Time (p_c), s	0.0	2.3	0.0	5.1	0.0	2.3	0.2	5.5				
Intersection Summary												
HCM 6th Ctrl Delay				33.8								
HCM 6th LOS				C								

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

HCM 6th TWSC
2: Driveway 1 & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1704	4	0	1150	0	9
Future Vol, veh/h	1704	4	0	1150	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1852	4	0	1250	0	10

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	928
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	235
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	235
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	21
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	235	-	-	-
HCM Lane V/C Ratio	0.042	-	-	-
HCM Control Delay (s)	21	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

HCM 6th TWSC
3: Driveway 2 & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

Intersection

Int Delay, s/veh 0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1704	9	0	1150	0	24
Future Vol, veh/h	1704	9	0	1150	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1852	10	0	1250	0	26

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	- - - 931
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - - 7.1
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - - 3.9
Pot Cap-1 Maneuver	-	- 0	- 0 234
Stage 1	-	- 0	- 0 -
Stage 2	-	- 0	- 0 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	- - - 234
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	22.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	234	-	-	-
HCM Lane V/C Ratio	0.111	-	-	-
HCM Control Delay (s)	22.3	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

HCM 6th TWSC
4: Driveway 3 & Alessandro Bl.

Alessandro Warehouse (JN 13276)
09/22/2020

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1725	3	0	1150	0	15
Future Vol, veh/h	1725	3	0	1150	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1875	3	0	1250	0	16

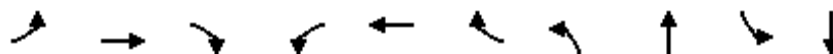
Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	939
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	231
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	231
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	21.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	231	-	-	-
HCM Lane V/C Ratio	0.071	-	-	-
HCM Control Delay (s)	21.8	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Timings
5: Graham St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
01/07/2021

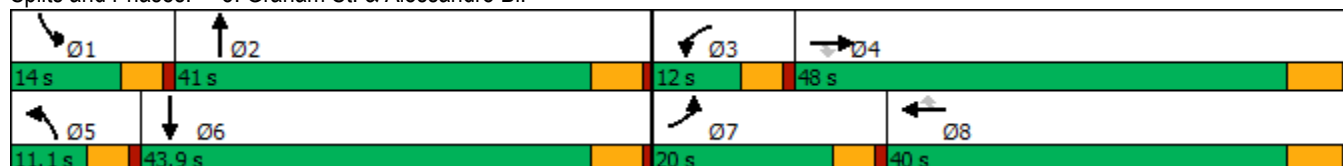


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↘	↗↗	↘	↘	↗↗↗	↘	↘	↗↗	↘	↗↗
Traffic Volume (vph)	118	1468	153	176	1005	165	81	193	152	168
Future Volume (vph)	118	1468	153	176	1005	165	81	193	152	168
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	29.8	9.6	30.8	30.8	9.6	40.4	9.6	42.4
Total Split (s)	20.0	48.0	48.0	12.0	40.0	40.0	11.1	41.0	14.0	43.9
Total Split (%)	17.4%	41.7%	41.7%	10.4%	34.8%	34.8%	9.7%	35.7%	12.2%	38.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 115
 Actuated Cycle Length: 95.3
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Graham St. & Alessandro Bl.



Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

HCM 6th Signalized Intersection Summary
5: Graham St. & Alessandro Bl.

Alessandro Warehouse (JN 13276)
01/07/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗↗	↘	↘	↗↗↗	↘	↘	↗↗		↘	↗↗	
Traffic Volume (veh/h)	118	1468	153	176	1005	165	81	193	77	152	168	56
Future Volume (veh/h)	118	1468	153	176	1005	165	81	193	77	152	168	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	126	1562	163	187	1069	176	86	205	82	162	179	60
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	159	1794	731	153	2339	726	111	307	119	194	447	145
Arrive On Green	0.09	0.45	0.45	0.08	0.45	0.45	0.06	0.12	0.12	0.11	0.17	0.17
Sat Flow, veh/h	1810	3952	1610	1810	5187	1610	1810	2544	984	1810	2679	870
Grp Volume(v), veh/h	126	1562	163	187	1069	176	86	143	144	162	119	120
Grp Sat Flow(s),veh/h/ln	1810	1976	1610	1810	1729	1610	1810	1805	1723	1810	1805	1743
Q Serve(g_s), s	6.0	31.2	5.4	7.4	12.5	5.9	4.1	6.6	7.0	7.7	5.1	5.4
Cycle Q Clear(g_c), s	6.0	31.2	5.4	7.4	12.5	5.9	4.1	6.6	7.0	7.7	5.1	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.57	1.00		0.50
Lane Grp Cap(c), veh/h	159	1794	731	153	2339	726	111	218	208	194	301	291
V/C Ratio(X)	0.79	0.87	0.22	1.22	0.46	0.24	0.78	0.66	0.69	0.83	0.39	0.41
Avail Cap(c_a), veh/h	319	1907	777	153	2339	726	134	735	701	194	795	767
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	21.6	14.5	40.0	16.6	14.8	40.5	36.7	36.9	38.3	32.5	32.6
Incr Delay (d2), s/veh	3.4	4.5	0.2	144.4	0.1	0.2	16.5	3.4	4.1	24.2	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	13.6	1.8	9.3	4.4	2.0	2.3	3.0	3.1	4.6	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.5	26.0	14.7	184.4	16.7	15.0	56.9	40.1	41.0	62.4	33.3	33.5
LnGrp LOS	D	C	B	F	B	B	E	D	D	E	C	C
Approach Vol, veh/h		1851			1432			373			401	
Approach Delay, s/veh		26.2			38.4			44.3			45.1	
Approach LOS		C			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	15.9	12.0	45.5	9.9	20.0	12.3	45.2				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	9.4	35.6	7.4	42.2	6.5	38.5	15.4	34.2				
Max Q Clear Time (g_c+1), s	9.7	9.0	9.4	33.2	6.1	7.4	8.0	14.5				
Green Ext Time (p_c), s	0.0	1.6	0.0	6.5	0.0	1.3	0.1	7.5				

Intersection Summary												
HCM 6th Ctrl Delay			34.0									
HCM 6th LOS			C									

Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

APPENDIX 5.2:**EAP (2022) CONDITIONS QUEUING ANALYSIS WORKSHEETS**

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Attachment: Appendix K1-Traffic Analysis (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Queuing and Blocking Report
EAP (2022) - AM Peak Hour

01/07/2021

Intersection: 5: Graham St. & Alessandro Bl.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	T	R	L	T	TR
Maximum Queue (ft)	94	190	197	63	289	440	381	340	54	106	109	51
Average Queue (ft)	34	100	116	29	88	250	229	192	29	47	52	17
95th Queue (ft)	75	178	196	55	214	374	346	307	52	94	94	41
Link Distance (ft)		649	649	649		1270	1270	1270	1270		663	663
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	150				210					185		
Storage Blk Time (%)		2				17						
Queuing Penalty (veh)		1				16						

Intersection: 5: Graham St. & Alessandro Bl.

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	134	117	104
Average Queue (ft)	59	49	42
95th Queue (ft)	111	92	86
Link Distance (ft)		739	739
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	180		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
EAP (2022) - PM Peak Hour

01/07/2021

Intersection: 5: Graham St. & Alessandro Bl.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	T	R	L	T	TR
Maximum Queue (ft)	235	596	607	72	290	1101	1058	710	62	126	146	138
Average Queue (ft)	125	368	376	34	285	743	689	215	34	56	67	51
95th Queue (ft)	247	579	586	63	317	1239	1205	616	58	105	121	108
Link Distance (ft)		649	649	649		1270	1270	1270	1270		659	659
Upstream Blk Time (%)		0	0			5	0					
Queuing Penalty (veh)		1	1			0	0					
Storage Bay Dist (ft)	150				210					185		
Storage Blk Time (%)	0	35			95	0					0	
Queuing Penalty (veh)	3	41			320	0					0	

Intersection: 5: Graham St. & Alessandro Bl.

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	224	180	115
Average Queue (ft)	108	68	42
95th Queue (ft)	192	138	88
Link Distance (ft)		739	739
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	180		
Storage Blk Time (%)	4	0	
Queuing Penalty (veh)	3	0	



June 15, 2021

Ms. Deirdre McCollister
MIG, Inc.
1500 Iowa Avenue, Suite 110
Riverside, California 92507

SUBJECT: ALESSANDRO WAREHOUSE VEHICLE MILES TRAVELLED (VMT) ANALYSIS

Dear Ms. Deirdre McCollister:

The following Vehicle Miles Travelled (VMT) Analysis has been prepared for the proposed Alessandro Warehouse (**Project**), which is located south of Alessandro Boulevard on either side of Chagall Court in the City of Moreno Valley.

PROJECT OVERVIEW

The Project is proposed to consist of up to 396,488 square feet (sf) of warehouse use. Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, 2017. (1) The proposed Project is anticipated to generate a total of 742 vehicle trip-ends per day (expressed in actual vehicles). (2) The site is currently designated as Commercial in the City's General Plan, which would require a land use and zoning change to Light Industrial use.

BACKGROUND

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which requires all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This statewide mandate went into effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (**Technical Advisory**). (3) Based on OPR's Technical Advisory, the City of Moreno Valley has prepared their Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment (**City Guidelines**). (4) This analysis has been prepared based on the City Guidelines.

PROJECT SCREENING

Consistent with City Guidelines, projects that meet certain screening criteria based on their location and project type may be presumed to result in a less than significant transportation impact. Consistent with

Ms. Deirdre McCollister
 MIG, Inc.
 June 15, 2021
 Page 2 of 9

the screening criteria recommended in City Guidelines, the City of Moreno Valley will utilize the following project screening thresholds that may be applicable to the Project:

- Transit Priority Area (TPA) Screening
- Low VMT Area Screening
- Project Type Screening

A land use project need only meet one of the above screening criteria to result in a less than significant impact.

TPA SCREENING

Consistent with guidance identified in the City Guidelines, projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing “major transit stop”¹ or an existing stop along a “high-quality transit corridor”²) may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project:

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

The Project is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor.

The TPA screening threshold is not met.

LOW VMT AREA SCREENING

The City Guidelines also states that, “residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area.”³

¹ Pub. Resources Code, § 21064.3 (“Major transit stop’ means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.”).

² Pub. Resources Code, § 21155 (“For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.”).

³ City Guidelines; page 23.

Ms. Deirdre McCollister
 MIG, Inc.
 June 15, 2021
 Page 3 of 9

Based on the Screening Tool results provided in Attachment A, the Project is located within a low VMT generating zone. The Project resides within TAZ 3712 and was shown to generate 10.64 VMT per worker whereas the City's impact threshold is 11.01 VMT per worker. As stated previously, the site is currently designated as Commercial in the City's General Plan, which would require a land use/zoning change to Light Industrial use. After further research into the TAZ, the socioeconomic area for TAZ 3712 consists primarily of retail employment and not industrial use.

The Low VMT Area screening threshold is not met.

PROJECT TYPE SCREENING

The City Guidelines identify that local serving retail with buildings less than 50,000 square feet or other local serving essential services (e.g., day care centers, public schools, medical/dental office buildings, etc.) are presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, small projects anticipated to generate low traffic volumes and by association low greenhouse gas (GHG) emissions are also assumed to cause a less than significant impact. The City's small project threshold of 285,700 square feet of high cube transload and short-term storage warehouse land use would be exceeded by the proposed Project's total building square footage.

The Project Type screening threshold is not met.

PROJECT GENERATED VMT

Projects that do not meet one or more of the above described VMT screening criteria should prepare a project level VMT analysis. RIVTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment. RIVTAM is a travel forecasting model that represents a sub-area (Riverside County) of the Southern California Association of Governments (SCAG) regional traffic model. RIVTAM was designed to provide a greater level of detail and sensitivity in the Riverside County area as compared to the regional SCAG model. City Guidelines identifies RIVTAM as the appropriate tool for conducting VMT modeling for land use projects within the County of Riverside.

Project generated VMT has been calculated using the most current version of RIVTAM. Adjustments in socio-economic data (SED) (i.e., employment) for the Project have been made to a separate TAZ within the model to reflect the Project's industrial warehouse land use. A separate TAZ has been utilized to isolate vehicle trips to/from the Project. Table 1 summarizes the employment factors and employment estimates for the Project. As shown, the Project is estimated to generate 385 employees.

Ms. Deirdre McCollister
MIG, Inc.
June 15, 2021
Page 4 of 9

TABLE 1: EMPLOYMENT DENSITY FACTORS

	Project
Building Square Footage	396,488
Employment Density Factor ⁴	1 employee/1,030 SF
Employment	385

Adjustments to employment for the Project's TAZ were made to both the base year model (2012) and the cumulative year model (2040). The base year model and cumulative year model were both run inclusive of the Project's employment. Project-generated home-based work VMT was then calculated following the VMT calculation procedures identified in Exhibit C of the City Guidelines and includes home-based work trips that are both internal and external to the RIVTAM model boundaries. The home-based work VMT value is then normalized by dividing by the number of Project employees. Finally, the base year and cumulative VMT results were interpolated to derive the existing VMT. As shown in Table 2, the existing (2020) Project generated VMT per employee is 12.35.

TABLE 2: PROJECT VMT PER EMPLOYEE

	Base Year (2012)	Cumulative (2040)	Existing (2020)
Home-based Work VMT	4,754	5,234	4,891
Employment	385	385	385
VMT per Employee	12.35	13.59	12.71

Western Riverside Council of Governments (WRCOG) publishes VMT data for each of its member agencies as derived from the RIVTAM model for both the base year (2012) model and the cumulative year (2040) model. Urban Crossroads has obtained these published results and similar to the project generated VMT calculation used linear interpolation to determine the City's existing (2020) VMT per employee.

The adopted City Guidelines state that the City of Moreno Valley has selected a threshold based on the existing VMT performance in the City. More specifically, the City Guidelines state that a project would have a significant VMT impact if, in the Existing Plus Project scenario, its net VMT per capita (for residential projects) or per employee (for office and industrial projects) exceeds the per capita VMT for Moreno Valley. For all other uses, a net increase in VMT would be considered a significant impact.⁵

Table 3 illustrates a comparison between the baseline (2020) project generated VMT per employee to the existing (2020) City of Moreno Valley VMT per employee. As shown, project generated VMT per employee would be 11.69 percent above the existing City of Moreno Valley VMT per employee. As such, the Project's impact based on project generated VMT is potentially significant.

⁴ Employee Density Factor was obtained from the County of Riverside General Plan Appendix E-2: Socioeconomic Build-Out Assumptions and Methodology (see Table E-5, Commercial Employment Factors, Page 3).

⁵ City Guidelines; page 26.

Ms. Deirdre McCollister
MIG, Inc.
June 15, 2021
Page 5 of 9

TABLE 3: PROJECT VMT PER EMPLOYEE COMPARISON

	Existing (2020) City of Moreno Valley	Baseline (2020) Project
VMT per employee	11.38	12.71
Percent Change	+11.69%	
Potential Impact?	Yes	

PROJECT'S CUMULATIVE IMPACT ON VMT

The General Plan land use designations and zoning for the Project site are Commercial. The proposed Project results in jobs within the total number of jobs projected by the current Southern California Association of Governments (SCAG) Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). However, the proposed Project is not consistent with the underlying employment assumptions upon which the current RTP/SCS was based. The adopted City Guidelines state that "if it is not consistent with the RTP/SCS, then it would have a significant VMT impact if for office and industrial projects its net VMT per employee exceeds the average VMT per employee for Moreno Valley in the RTP/SCS horizon year." ⁶

As presented in Table 4, the cumulative VMT per employee within the City of Moreno Valley does increase under the plus project condition. As such, the Project's contribution to cumulative impacts for VMT is considered potentially significant.

TABLE 4: CUMULATIVE VMT PER EMPLOYEE

	Moreno Valley	Project
VMT		5,234
Employee		385
VMT per Employee	12.31 ⁷	13.59
Change in VMT	+1.28	
Percent Change	+10.40%	
Potential Impact?	Yes	

POTENTIAL VMT REDUCTION MEASURES

Transportation demand management (TDM) strategies have been evaluated for reducing VMT impacts determined to be potentially significant. The effectiveness of TDM strategies to reduce VMT has been

⁶ City Guidelines; page 26.

⁷ Obtained from WRCOG

Ms. Deirdre McCollister
 MIG, Inc.
 June 15, 2021
 Page 6 of 9

determined based on the SB 743 Implementation TDM Strategy Assessment (November 11, 2019 Fehr & Peers) (**WRCOG Report**) prepared for WRCOG and the Quantifying Greenhouse Gas Mitigation Measures (CAPCOA, 2010). The WRCOG Report indicates that of the 50 transportation measures presented by CAPCOA, only 41 are applicable at a building and site level. The remaining 9 measures are functions of, or depend on, site location and/or actions by local and regional agencies or funders.

The WRCOG Report goes on to provide a review of the 41 transportation measures identified by CAPCOA and determines that for areas within the WRCOG region only 7 of those measures may be effective at an individual project level. Evaluation of potentially applicable TDM strategies in the context of the proposed Project is summarized below.

- ***Measure 1: Increase Diversity of Land Uses (LUT-3).*** Having different types of land uses near one another can decrease VMT since trips between land use types are shorter and may be accommodated by non-auto modes of transportation. For example, when residential areas are in the same neighborhood as retail and office buildings, a resident does not need to travel outside of the neighborhood to meet his/her trip needs.

Remarks: The Project consists of the development of warehouse use with a combined building area of approximately 396,488 sf. In order for the above measure to apply, at least three of the following will be located within ¼ mile of the Project: Residential Development, Retail Development, Park, Open Space, or Office (or institutional uses). There is residential, retail, and office/institutional developments located off-site within ¼ mile of the Project. As noted by CAPCOA (Quantifying Greenhouse Gas Mitigation Measures, p. 162), the diversity of uses within close proximity of the Project can result in a VMT reduction between 9.0 and 30.0%. As the proposed Project does not include a mix of land uses within the development site, but is instead located within a sphere of influence to high density residential, retail, and office/institutional uses (i.e., walking distance), this particular TDM measure may be evaluated further as a means of providing a reduction in Project VMT. It should be noted that RIVTAM is a sub-regional travel demand model and is not designed to accurately capture all potential project-level interactions with local land uses and alternative transportation modes (i.e., walking and biking). Based on a review of the land uses within ¼ mile of the Project (walking distance), there is single family and multi-family residential, local serving retail, and other employment uses. As noted by CAPCOA, the proximity of these complementary land uses helps to further reduce VMT. Based on the calculations conducted for the ¼-mile area around the Project site (see Attachment B), the VMT reduction is estimated to be 37% or up to a maximum of 30%. As such, the diverse mix of land uses has the potential to reduce VMT by as much as 30%.

- ***Measure 2: Provide Pedestrian Network Improvements (SDT-1).*** Providing a pedestrian access network to link areas of the Project site encourages people to walk instead of drive assuming that desirable destinations are within walking distance of the Project. This mode shift results in people driving less and a reduction in VMT.

Remarks: Limited pedestrian access exists along the Project's frontage. The Project's implementation of this measure through the construction of on-site connections to the existing sidewalks off-site could provide for a nominal reduction in Project VMT. As noted by CAPCOA (Quantifying Greenhouse Gas Mitigation Measures, p. 187), the provision of sidewalks on-site that connect to off-site pedestrian walkways linking to other complementary land uses within a suburban center context can result in a VMT reduction between 0 and 2.0%. Given the complementary land uses within walking distance of the Project site, this particular TDM measure may be evaluated further as a means of providing a reduction in Project VMT. As the Project is to

Ms. Deirdre McCollister
 MIG, Inc.
 June 15, 2021
 Page 7 of 9

provide pedestrian accommodations along the Project's frontage, the improvement is estimated to provide a 1% VMT reduction. Supporting calculations are provided in Attachment B.

- Measure 3: Provide Traffic Calming Measure (SDT-2). Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. This mode shift will result in a decrease in VMT. Traffic calming features may include: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others.

Remarks: There is limited opportunity for the Project to implement meaningful enhanced traffic calming measures in the area that would encourage a shift in travel mode to walking or biking. This measure is therefore not evaluated further as means of providing a reduction in Project VMT.

- Measure 4: Implement Car-Sharing Program (TRT-9). Implementing a car-sharing program would allow individuals to have on-demand access to a shared fleet of vehicles on an as-needed basis. User costs are typically determined through mileage or hourly rates, with deposits and/or annual membership fees.

Remarks: This particular TDM measure would be solely dependent on a future building tenant and may be considered as infeasible due to lack of available service providers in the area. For these reasons, the measure is not evaluated further as means of providing a reduction in Project VMT.

- Measure 5: Implement Transit Access Improvements (TST-2). This measure improves access to transit facilities through sidewalk/crosswalk safety enhancements and bus shelter improvements.

Remarks: The Riverside Transit Agency (RTA), a public transit agency serving various jurisdictions within Riverside County currently provides service in the area. RTA Routes 11 and 20 directly serves the study area with existing nearby bus stops located east of the intersection of Fredrick Street at Alessandro Boulevard and another located just east of the Graham Street at Alessandro Boulevard intersection. Although providing improved pedestrian access to these existing bus stops will help to increase usage by future Project employees, CAPCOA does not identify specific VMT reduction percentages based on this measure alone. As such, no additional VMT reduction amount is taken.

- Measure 6: Encourage Telecommuting and Alternative Work Schedule (TRT-6). Encouraging telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take the form of staggered starting times, flexible schedules, or compressed work weeks.

Remarks: The effectiveness of this measure is dependent on the ultimate building tenant(s) which are unknown currently. As such, this measure is therefore not evaluated further as means of providing a reduction in Project VMT.

- Measure 7: Provide Ride-Sharing Programs (TRT-3). This strategy focuses on encouraging carpooling and vanpooling but its ultimate implementation is limited as Measure 6 above.

Remarks: The effectiveness of this measure is dependent on the ultimate building tenant(s) which are unknown currently. As such, this measure is therefore not evaluated further as means of providing a reduction in Project VMT.

In total, the combined VMT reduction may be 31% between Mitigation Measures 1 and 2. As noted by CAPCOA, the maximum cross-category reduction for any combination of land use, neighborhood enhancements, parking and transit strategies for projects located within a suburban center context is

Ms. Deirdre McCollister
 MIG, Inc.
 June 15, 2021
 Page 8 of 9

15.0%.⁸ The suburban center serves the population of the suburb with office, retail and housing which is denser than the surrounding suburb. Table 5 provides justification for the suburban center classification:

TABLE 5: SUBURBAN CENTER CLASSIFICATION

Characteristic	Justification
Ratio or relationship between jobs and housing	The area includes multiple land uses which serves the population with office, retail, and housing. The suburban setting has a characteristic of having a poor job-to-housing ratio whereas the suburban center is classified as having a balanced ratio. CAPCOA defines a balanced job-to-population ratio as a ratio ranging from 0.9 to 1.2. In the RivTAM base model, it is estimated that the housing within 1 to 1 ½ miles is 3,893, the population within 1 to 1 ½ miles is 15,740, and the employment within 1 to 1 ½ miles is 14,426. The resulting job-to-housing ratio is 0.92. This would suggest that the ratio between jobs and housing are balanced and the location setting is a suburban center. Suburban settings have a poor job-to-housing ratio.
Transit availability	The City of Moreno Valley and nearby jurisdiction of City of Riverside operate in a typical grid street pattern. A commuter rail station exists within two miles to the west (i.e., Moreno Valley/March Field Metrolink Station) and the existing RTA Route 20 includes a direct route/bus stops from the study area to the Metrolink Station. The bus stop is located along Alessandro Boulevard 400 feet west of the Project frontage. Suburban settings have no immediate access to commuter rail stations.

Therefore, for the purposes of this evaluation, the VMT reduction strategies described previously (i.e., Measures 1 and 2) would combine for a maximum VMT reduction of 15.0%.

CONCLUSION

Project generated VMT per employee was found to exceed citywide baseline VMT per employee threshold by 11.69% and citywide cumulative VMT per employee threshold by 10.40%. With implementation of the aforementioned TDM measures (Measures 1 and 2), a maximum reduction in VMT of 15.0% could be achieved, which would reduce the Project's impact to less than significant.

If you have any questions, please contact me directly at aevatt@urbanxroads.com.

Respectfully submitted,

URBAN CROSSROADS, INC.



Aric Evatt, PTP
 President



Robert Vu, PE
 Transportation Engineer

⁸ Quantifying Greenhouse Gas Mitigation Measures (CAPCOA, 2010); Page 58

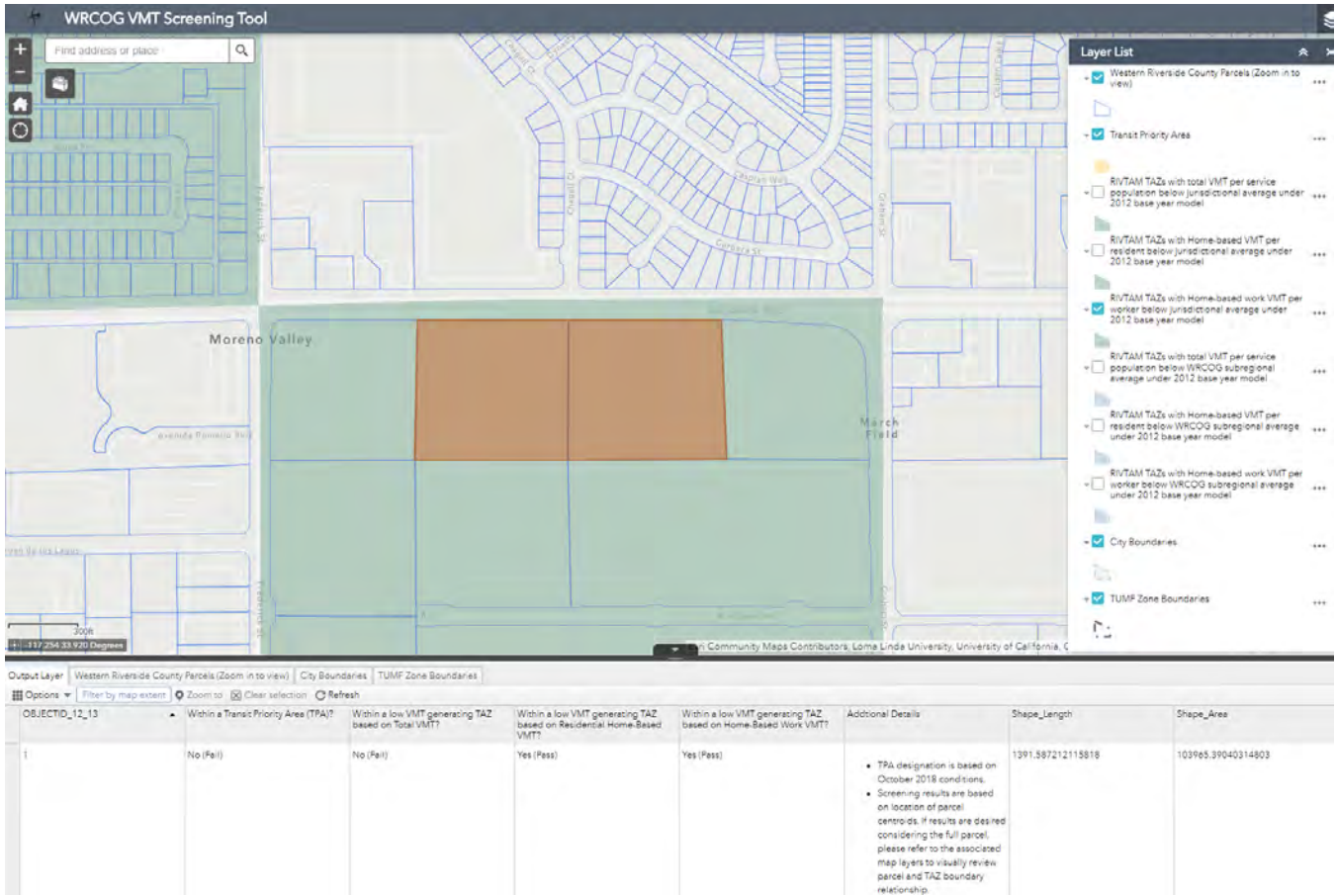
Ms. Deirdre McCollister
MIG, Inc.
June 15, 2021
Page 9 of 9

REFERENCES

1. **Institute of Transportation Engineers.** *Trip Generation Manual*. 10th Edition. 2017.
2. **Urban Crossroads, Inc.** *Alessandro Warehouse*. City of Moreno Valley : s.n., September 2020.
3. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA*. State of California : s.n., December 2018.
4. **City of Moreno Valley.** *Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment*. City of Moreno Valley : s.n., June 2020.

ATTACHMENT A
MAP-BASED VMT SCREENING RESULTS

Attachment: Appendix K2-Vehicle Miles Traveled (VMT) Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)



APN:297170002; TAZ:3,712

Within a Transit Priority Area (TPA)?
No (Fail)

Within a low VMT generating TAZ based on Total VMT?
No (Fail)
Jurisdictional average 2012 daily total VMT per service population = 24.49
Project TAZ 2012 daily total VMT per service population = 94.73

Within a low VMT generating TAZ based on Residential Home-Based VMT?
Yes (Pass)
Jurisdictional average 2012 daily residential home-based VMT per capita = 12.79
Project TAZ 2012 daily residential home-based VMT per capita = 0.00

Within a low VMT generating TAZ based on Home-Based Work VMT?
Yes (Pass)
Jurisdictional average 2012 daily home-based work VMT per worker = 11.01
Project TAZ 2012 daily home-based work VMT per worker = 10.54

Notes:

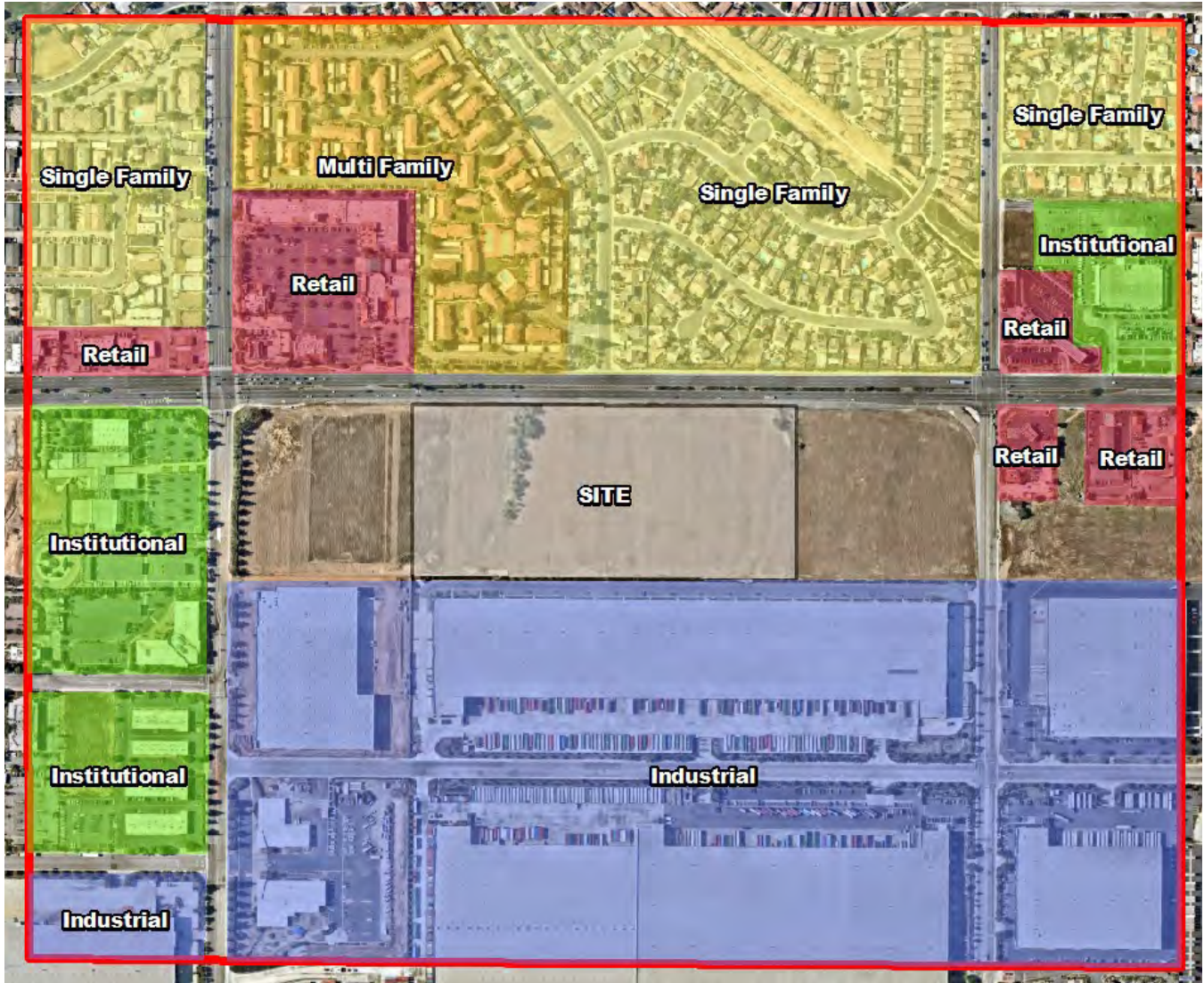
- TPA designation is based on October 2018 conditions.
- Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.
- If VMT screening is desired for current baseline conditions, contact WRCOG for 2012 and 2040 VMT data. Interpolated VMT results can be obtained using the complete data set.
- VMT results do not account for full length of trips that occur beyond the SCAG region.

**ATTACHMENT B
VMT REDUCTION MEASURES**

Attachment: Appendix K2-Vehicle Miles Traveled (VMT) Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Mitigation Method 1: Increase Diversity of Land Uses (LUT-3) Calculations

EXHIBIT A: LAND USE AREA MAP



Land Use	Area	Ratio
Single Family Residential	2,866,522	0.26
Multifamily Residential	876,712	0.08
Commercial	772,444	0.07
Industrial	5,269,701	0.48
Institutional/Office	1,141,629	0.10
Park	0	0
Total	10,927,007	1.00

Attachment: Appendix K2-Vehicle Miles Traveled (VMT) Assessment (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Mitigation Method:

$$\% \text{ VMT Reduction} = \text{Land Use} * B \text{ [not to exceed 30\%]}$$

Where

Land Use = Percentage increase in land use index versus single use development
 = (land use index – 0.15)/0.15 (see Appendix C for detail)

$$\text{Land use index} = -a / \ln(6)$$

(from [2])

$$a = \sum_{i=1}^6 a_i \times \ln(a_i)$$

a_i = building floor area of land use i / total square feet of area considered

○

residential

○

○

○

○

○

○

a_1 = single family

a_2 = multifamily residential

a_3 = commercial

a_4 = industrial

a_5 = institutional

a_6 = park

if land use is not present and a_i is equal to 0, set a_i equal to 0.01

B

with respect to land use index (0.09 from [1])

= elasticity of VMT

not to exceed 500%

increase

Mitigation Method 1 Calculation for the Project (based Exhibit A: Land Use Area Map):

a_1 = single family residential = 0.26

a_2 = multifamily residential = 0.08

a_3 = commercial = 0.07

a_4 = industrial = 0.48

a_5 = institutional/office = 0.10

a_6 = park = 0.01

Land Use Index = $-\left[0.26 \cdot \ln(0.26) + 0.08 \cdot \ln(0.08) + 0.07 \cdot \ln(0.07) + 0.48 \cdot \ln(0.48) + 0.10 \cdot \ln(0.10) + 0.01 \cdot \ln(0.01)\right] / \ln(6) = 0.76$

Low Range % VMT Reduction = $(0.76 - 0.15) / 0.15 * 0.09 = 37\%$

Mitigation Method 2: Provide Pedestrian Network Improvements (SDT-1) Mitigation Method Calculation for the Project:

Mitigation Method:

Estimated VMT Reduction	Extent of Pedestrian Accommodations	Context
2%	Within Project Site and Connecting Off-Site	Urban/Suburban
1%	Within Project Site	Urban/Suburban
< 1%	Within Project Site and Connecting Off-Site	Rural

The proposed Project is responsible for constructing Alessandro Boulevard at its ultimate half-section width. The site-adjacent improvement includes constructing pedestrian facilities along the Project's frontage. As such, the VMT reduction is estimated to be 1%.

**CITY OF MORENO VALLEY
PLANNING COMMISSION
NOTICE OF PUBLIC HEARING AND**

ENVIRONMENTAL NOTICE OF AVAILABILITY TO ADOPT A MITIGATED NEGATIVE DECLARATION

NOTICE IS HEREBY GIVEN that a Public Hearing will be held by the Planning Commission of the City of Moreno Valley on the date and time set forth below:

Project: General Plan Amendment PEN20-0118;
Change of Zone PEN20-0119;
Tentative Parcel Map 37944 PEN20-0120; and
Plot Plans PEN20-0121 and PEN20-0124

Applicant: CDRE Holdings 17 LLC

Property Owner: Moreno Valley Centerpointe LLC

APN: 297-170-002 and 297-170-003

Location: Alessandro Boulevard east of Frederick Street, west of Graham Street

Proposal: Applicant is requesting approval of the following entitlements for the Compass Danbe Centerpointe project: 1) a General Plan Amendment (GPA) amending the City's General Plan from Commercial to Business Park, 2); a Change of Zone from Community Commercial District (CC) to Light Industrial District (LI); 3) a Plot Plan for an approximately 290,726 square foot light industrial building; and 4) a Plot Plan for an approximately 98,877 square foot light industrial warehouse building located on a 17.67-acre site.

Council District: 1

Environmental Determination: The project has been evaluated against the criteria set forth in the California Environmental Quality Act (CEQA) and CEQA Guidelines and staff has determined that a Mitigated Negative Declaration is the appropriate environmental document for the proposed project.

The Draft Initial Study/Mitigated Negative Declaration is being circulated for public review by responsible and trustee agencies and other interested parties for a review period commencing July 26, 2021, through August 25, 2021. The documents can be obtained in electronic format via email by request. The final document may be inspected by appointment at the Community Development Department at 14177 Frederick Street, Moreno Valley, California by calling (951) 413-3206 during normal business hours (7:30 a.m. to 5:30 p.m., Monday through Thursday, 7:30a.m. to 4:30p.m. Friday).

PUBLIC TESTIMONY: All interested parties will be provided an opportunity to submit oral testimony during the Public Hearing and/or provide written testimony during or prior to the Public Hearing. The application file and related environmental documents may be inspected at the Community Development Department at 14177 Frederick Street, Moreno Valley, California by calling (951) 413-3206 during normal business hours (7:30 a.m. to 5:30 p.m., Monday through Thursday, and 7:30 a.m. to 4:30 p.m., Friday).

PLEASE NOTE: The Planning Commission may consider and approve changes to the proposed items under consideration during the Public Hearing.

GOVERNMENT CODE § 65009 NOTICE: If you challenge any of the proposed actions taken by the Planning Commission in court, you may be limited to raising only those issues you or someone else raised during the Public Hearing described in this notice, or in written correspondence delivered to the Planning Division of the City of Moreno Valley during or prior to the Public Hearing.

ACCESSIBILITY: Upon request and in compliance with the Americans with Disabilities Act of 1990, any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to James Verdugo, ADA Coordinator, at (951) 413-3350 at least 48 hours before the meeting. The 48-hour notification will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

Date and Time: August 26, 2021 at 7:00 p.m.
Location: City Hall Council Chamber
14177 Frederick Street, Moreno Valley, CA 92553
Planner: Julia Descoteaux, Associate Planner
Contact: (951) 413-3209 or juliad@moval.org

Attachment: Exhibit B to Resolution No. 2021-24 Initial Study MND (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Mitigation Monitoring and Report Program (MMRP)

Compass Danbe Centerpointe Project Moreno Valley, California

Lead Agency

City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92552

Applicant

CDRE Holdings 17, LLC
523 Main Street
El Segundo, CA 90245

CEQA Consultant

T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602

Lead Agency Discretionary Permits

General Plan Amendment (PEN20-0118)
Change of Zone (PEN20-0119)
Tentative Parcel Map No. 37944 (PEN20-0120)
Plot Plan (PEN20-0121 & PEN20-0124)

July 2021

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
Biological Resources					
<p>Thresholds a & d: There is potential for the Project to impact special-status wildlife species, including protected nesting and migratory birds.</p>	<p>MM BR-1: Within 30 days prior to grading, a qualified biologist shall conduct a survey of suitable habitat on site and make a determination regarding the presence or absence of the burrowing owl. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Moreno Valley prior to the issuance of a grading permit and subject to the following provisions:</p> <p>a) In the event that the pre-construction survey identifies no burrowing owls on the property a grading permit may be issued without restriction.</p> <p>b) In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive</p>	Project Biologist	City of Moreno Valley Planning Division and Building and Safety Division	Within 30 days prior to initiating vegetation clearing or ground disturbance	Less than significant with mitigation incorporated

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.</p> <p>c) In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that Objectives 1-4 have been met. A grading permit shall be issued, either:</p> <p>i) Upon approval and implementation of a property-specific Determination of Biologically Superior Preservation (DBESP) report for the burrowing owl by the CDFW; or</p>				

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>ii) A determination by the biologist that the site is part of an area supporting less than 35 acres of suitable Habitat, and upon passive or active relocation of the species following accepted CDFW protocols. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.</p> <p>MM BR-2: All vegetation clearing and ground disturbance shall be prohibited during the bird nesting season (February 1 through September 15), unless a nesting bird survey is completed in accordance with the following requirements:</p> <p>a) A bird nesting survey of the Project Site, including suitable habitat within a 100-foot radius, shall be conducted by a qualified biologist</p>	<p>Project Biologist</p>	<p>City of Moreno Valley Planning Division and Building and Safety Division</p>	<p>Within 5 days prior to initiating vegetation clearing or ground disturbance that occurs between February 1 and September 15</p>	

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>within five (5) days prior to initiating vegetation clearing or ground disturbance at the respective property. A copy of the nesting bird survey results report shall be provided to the City of Moreno Valley.</p> <p>b) If the survey does not identify the presence of any active nests, then construction activities can proceed without restriction.</p> <p>c) If the survey identifies the presence of active nests, then the qualified biologist shall provide the City with a copy of maps showing the location of all nests and a species-appropriate buffer zone around each nest sufficient to protect the nest from substantial adverse direct and/or indirect impacts. The size and location of all buffer zones, if required, shall be subject to review and approval by the City but shall be no less than a 100-foot radius around the nest for non-raptor species and no more than a 500-foot radius around the nest for raptor species and any endangered, threatened, or candidate species.</p> <p>i) The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing. No construction vehicles</p>				

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>shall be permitted within restricted areas (i.e., bird protection zones), unless directly related to the management or protection of the legally protected species, until after the nest becomes inactive (or the nest has failed), the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by the activities.</p> <p>ii) In the event that a nest is abandoned despite efforts to minimize disturbance and, if the nestlings are still alive, the Project Applicant/Developer shall contact the California Department of Fish and Wildlife (CDFW) and, subject to CDFW approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s).</p>				
<p>Thresholds b and c: The Project site contains wetland habitat that meets the definition of riparian/riverine habitat and sensitive natural community; these on-site habitats would be removed by the Project.</p>	<p>MM BR-3: Prior to the issuance of grading permits, the Project Applicant shall obtain all applicable permits for impacts to jurisdictional features, which may include a 1602 Streambed Alteration Agreement from CDFW and a 401 Certification issued by the RWQCB pursuant to the California Water Code Section 13260. In addition, the Project Applicant shall purchase a minimum of 0.81-acre of re-establishment credits (a 1:1 mitigation-to-impact</p>	<p>Project Applicant</p>	<p>City of Moreno Valley Planning Division and Building and Safety Division</p>	<p>Prior to issuance of grading permits.</p>	<p>Less than significant with mitigation incorporated</p>

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	ratio for impacts to wetland meadow habitat) and 0.82-acre of rehabilitation credits (a 2:1 mitigation-to-impact ratio for impacts to black willow riparian woodland and disturbed wetland-cattail habitats). Habitat mitigation credits can be purchased either at an approved Habitat Mitigation Bank (e.g., Riverpark Mitigation Bank) or via an In-Lieu Fee Program (e.g., Riverside-Corona Resource Conservation District and the Southwest Resource Management Association Santa Ana River Watershed In-Lieu Fee Program). Approval to purchase the mitigation credits must be granted in advance by the resource agencies. The Project Applicant shall provide evidence to the City of Moreno Valley that the applicable permits have been obtained and that the required habitat mitigation credits have been purchased prior to issuance of grading permits.				
Threshold f: The Project would result in the removal of MSCHP riparian habitat and suitable habitat for the burrowing owl from the Project site.	See MMs BR-1 through BR-3	See MMs BR-1 through BR-3	See MMs BR-1 through BR-3	See MMs BR-1 through BR-3	Less than significant with mitigation incorporated
Geology and Soils					
Threshold f: There is potential for Project-related grading activities	MM GEO-1: Prior to the issuance of a grading permit, the Project Applicant shall provide evidence to	Project Applicant; Project	City of Moreno Valley Planning Division	Prior to the issuance of a grading permit	Less than significant with

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
<p>to uncover and impact paleontological resources.</p>	<p>the City of Moreno Valley that a qualified paleontologist has been retained by the Project Applicant to conduct monitoring of excavation activities and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.</p> <p>MM GEO-2: The paleontological monitor shall conduct full-time monitoring during grading and excavation operations in undisturbed, very old alluvial fan sediments at depths exceeding five feet below the existing ground surface and shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontological monitor shall be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have a low potential to contain or yield fossil resources.</p>	<p>Construction Contractor; Project Paleontologist</p> <p>Project Applicant; Project Construction Contractor; Project Paleontologist</p>	<p>City of Moreno Valley Planning Division</p>	<p>Concurrent with grading activities</p>	<p>mitigation incorporated</p>

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>MM GEO-3: Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the Western Science Museum in Hemet, California, is required for significant discoveries.</p> <p>MM GEO-4: A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the City of Moreno Valley prior to building final.</p>	<p>Project Applicant; Project Construction Contractor; Project Paleontologist</p> <p>Project Applicant; Project Construction Contractor; Project Paleontologist</p>	<p>City of Moreno Valley Planning Division</p> <p>City of Moreno Valley Planning Division</p>	<p>Prior to grading permit final inspection</p> <p>Prior to building final</p>	
Tribal Cultural Resources					
<p>Threshold b: There is potential for significant tribal cultural resources to be unearthed during Project construction activities.</p>	<p>MM TCR-1: Prior to the issuance of a grading permit, the Developer shall retain a professional archaeologist to conduct monitoring of all mass grading and trenching activities. The Project Archaeologist shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during</p>	<p>Project Developer; Project Archaeologist</p>	<p>City of Moreno Valley Planning Division and Building and Safety Division</p>	<p>Prior to the issuance of a grading permit</p>	<p>Less than significant with mitigation incorporated</p>

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>Project construction. The Project Archaeologist, in consultation with the Consulting Tribe(s), the contractor, and the City, shall develop a Cultural Resources Management Plan (CRMP) in consultation pursuant to the definition in AB52 to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the project site. A consulting tribe is defined as a tribe that initiated the AB 52 tribal consultation process for the Project, has not opted out of the AB52 consultation process, and has completed AB 52 consultation with the City as provided for in Cal Pub Res Code Section 21080.3.2(b)(1) of AB52. Details in the Plan shall include:</p> <p>a) Project grading and development scheduling;</p> <p>b. The Project archeologist and the Consulting Tribes(s) as defined in MM TCR-1 shall attend the pre-grading meeting with the City, the construction manager and any contractors and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during</p>				

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project archaeologist and Consulting Tribe(s) shall make themselves available to provide the training on an as-needed basis;</p> <p>c. The protocols and stipulations that the contractor, City, Consulting Tribe(s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.</p> <p>MM TCR-2: Prior to the issuance of a grading permit, the Developer shall secure agreements with the Pechanga Band of Luiseño Indians and Soboba Band of Luiseño Indians for tribal monitoring. The Developer is also required to provide a minimum of 30 days advance notice</p>	<p>Project Developer; Project Archaeologist</p>	<p>City of Moreno Valley Planning Division and Building and Safety Division</p>	<p>Prior to the issuance of a grading permit</p>	

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>to the tribes of all mass grading and trenching activities. The Native American Tribal Representatives shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed. If the Native American Tribal Representatives suspect that an archaeological resource may have been unearthed, the Project Archaeologist or the Tribal Representatives shall immediately redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. In consultation with the Native American Tribal Representatives, the Project Archaeologist shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2.</p> <p>MM TCR-3: In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:</p> <p>a) One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to</p>	<p>Project Developer; Project Archaeologist</p>	<p>City of Moreno Valley Planning Division and Building and Safety Division</p>	<p>In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries)</p>	

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>the City of Moreno Valley Planning Division:</p> <p>i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place they were found with no development affecting the integrity of the resources.</p> <p>ii. Onsite reburial of the discovered items as detailed in the treatment plan required pursuant to MM TCR-1. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments as defined in MM TCR-1.</p> <p>MM TCR-4: The City shall verify that the following note is included on the Grading Plan:</p> <p>“If any suspected archaeological resources are discovered during ground –disturbing activities and the Project Archaeologist or Native American Tribal Representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and</p>	<p>Project Developer; Project Archaeologist</p>	<p>City of Moreno Valley Planning Division and Building and Safety Division</p>	<p>Prior to the issuance of a grading permit</p>	

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>necessary findings as to origin. If the County Coroner determines that the remains are potentially Native American, the California Native American Heritage Commission shall be notified within 24 hours of the published finding to be given a reasonable opportunity to identify the "most likely descendant". The "most likely descendant" shall then make recommendations, and engage in consultations concerning the treatment of the remains (California Public Resources Code 5097.98).</p>		<p>Building and Safety Division</p>		

RESOLUTION NUMBER 2021-25

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL APPROVE GENERAL PLAN AMENDMENT PEN20-0118 TO AMEND THE GENERAL PLAN LAND USE MAP, CHANGING THE LAND USE DESIGNATION FROM COMMERCIAL TO BUSINESS PARK FOR THE PROPERTY LOCATED ON THE SOUTH SIDE OF ALESSANDRO BOULEVARD BETWEEN FREDERICK STREET AND GRAHAM STREET (APN'S 297-170-002 AND 003) AND THE NECESSARY AND CORRESPONDING AMENDMENTS TO THE CITY'S ZONING ATLAS

WHEREAS, the City of Moreno Valley ("City") is a general law city and a municipal corporation of the State of California, and has the authority to approve amendments to the City's General Plan and the City's Zoning Atlas and;

WHEREAS, CDRE Holdings LLC., ("Developer") has filed an application for the approval of General Plan Amendment PEN20-0118 ("Application") to amend the Moreno Valley General Plan from Commercial to Business Park for the project located on the south side of Alessandro Boulevard between Frederick Street and Graham Street, (APN's 297-170-002 and 003) ("Site"), which shall also require any necessary and corresponding amendment to the City's Zoning Atlas to reflect the proposed changes in the zoning classification and/or redistricting associated with the General Plan Amendment; and

WHEREAS, pursuant to the provisions of Section 9.02.200 (Public Hearing and Notification Procedures) of the Moreno Valley Municipal Code and Government Code section 65905, a public hearing was scheduled for August 26, 2021, and notice thereof was duly published and posted, and mailed to all property owners of record within 600 feet of the Site; and

WHEREAS, on August 26, 2021, the public hearing to consider the Application was duly conducted by the Planning Commission at which time all interested persons were provided with an opportunity to testify and to present evidence; and

WHEREAS, on August 26, 2021, in accordance with the provisions of the California Environmental Quality Act (CEQA) and CEQA Guidelines, the Planning Commission considered and recommended that the City Council approve Resolution 2021-24 recommending that the City Council adopt a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Compass Danbe Centerpointe Project located on the south side of Alessandro Boulevard between Frederick Street and Graham Street (APN's 297-170-002 and, 003).

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals and Exhibits

That the foregoing Recitals and attached exhibits are true and correct and are hereby incorporated by this reference.

Section 2. Notice

That pursuant to Government Code section 66020(d)(1), notice is hereby given that the proposed Project is subject to certain fees, dedications, reservations and other exactions as provided herein.

Section 3. Evidence

That the Planning Commission has considered all of the evidence submitted into the administrative record for the General Plan Amendment, including, but not limited to, the following:

- (a) Moreno Valley General Plan and all relevant provisions contained therein;
- (b) Title 9 (Planning and Zoning) of the Moreno Valley Municipal Code and all relevant provisions referenced therein;
- (c) The Moreno Valley General Plan amendment changing the land use designation from Commercial to Business Park and all relevant provisions contained therein as shown on Exhibit A;
- (d) Application for the approval of a General Plan Amendment PEN20-0118 and all documents, records and references contained therein;
- (e) Staff Report prepared for the Planning Commission's consideration and all documents, records and references related thereto, and Staff's presentation at the public hearing;
- (f) Testimony and/or comments from Applicant and its representatives during the public hearing; and
- (g) Testimony, comments and correspondence from all persons that were provided in written format or correspondence, at, or prior to, the public hearing.

Section 4. Findings

That based on the foregoing Recitals and the Evidence contained in the Administrative Record as set forth above, the Planning Commission makes the following findings:

- (a) The proposed General Plan amendment is consistent with the existing goals, objectives, policies and programs of the General Plan; and
- (b) The proposed General Plan amendment will not adversely affect the public health, safety or general welfare.

Section 5. Approval

That based on the foregoing Recitals, Evidence contained in the Administrative Record and Findings, as set forth herein, the Planning Commission hereby recommends that the City Council approve General Plan Amendment PEN20-0118 as depicted in the exhibit attached hereto as Exhibit A, and any necessary and corresponding amendment to the City’s Zoning Atlas to reflect the proposed changes in the zoning classification and/or redistricting associated with the General Plan Amendment.

Section 6. Repeal of Conflicting Provisions

That all the provisions as heretofore adopted by the Planning Commission that are in conflict with the provisions of this Resolution are hereby repealed.

Section 7. Severability

That the Planning Commission declares that, should any provision, section, paragraph, sentence or word of this Resolution be rendered or declared invalid by any final court action in a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of this Resolution as hereby adopted shall remain in full force and effect.

Section 8. Effective Date

That this Resolution shall take effect immediately upon the date of adoption.

Section 9. Certification

That the Secretary of the Planning Commission shall certify to the passage of this Resolution.

PASSED AND ADOPTED THIS ___ day of _____, 2021

CITY OF MORENO VALLEY
PLANNING COMMISSION

Patricia Korzec, Chairperson

ATTEST:

Patty Nevins,
Planning Official

APPROVED AS TO FORM:

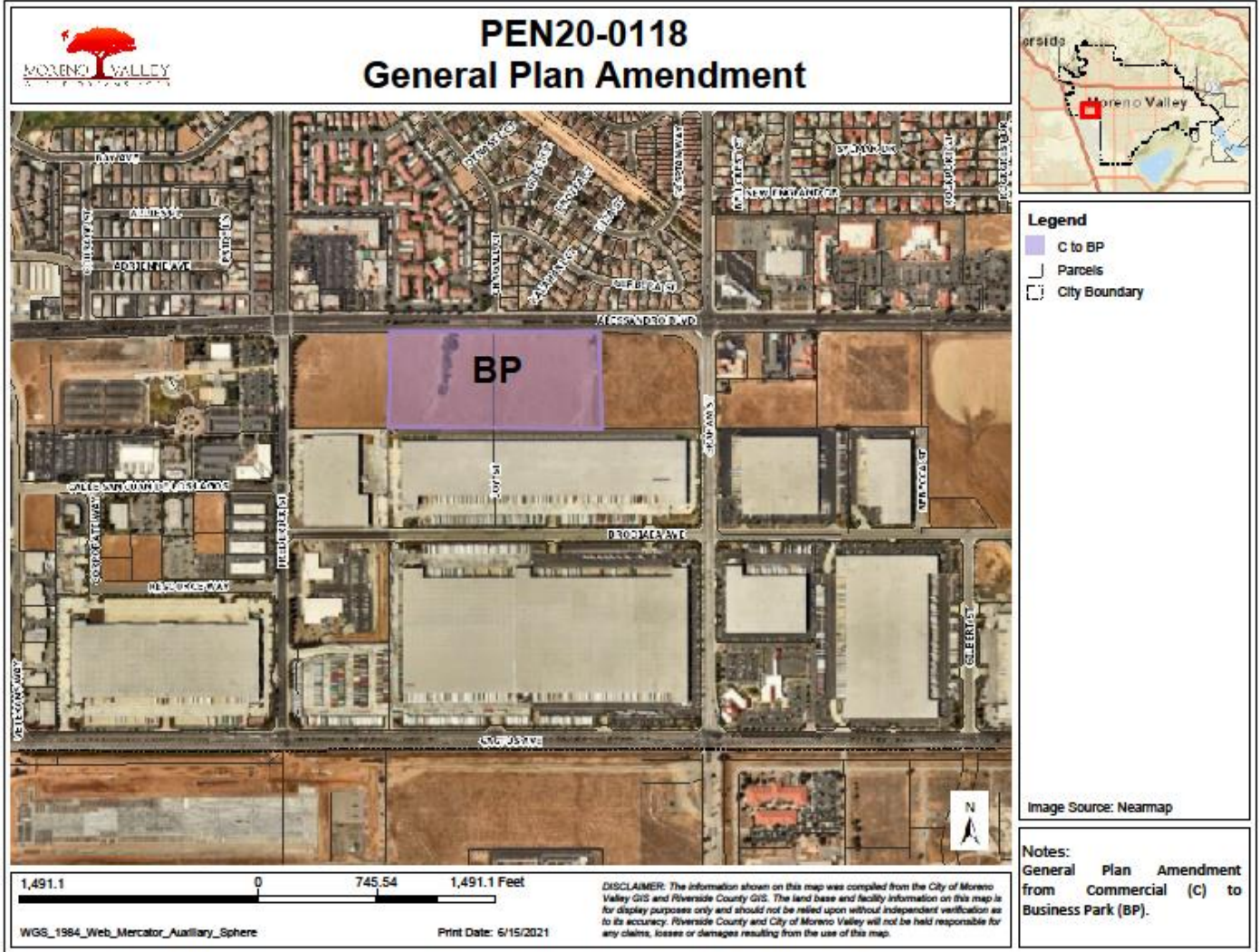
Steven B. Quintanilla,
Interim City Attorney

Exhibits:

Exhibit A: General Plan Amendment Land Use Designation Map

Exhibit A

General Plan Amendment Land Use Designation Map



Attachment: Resolution No. 2021-25 General Plan Amendment [Revision 1] (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

RESOLUTION NUMBER 2021-26

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL APPROVE CHANGE OF ZONE PEN20-0119 TO AMEND THE CITY ZONING ATLAS FROM COMMUNITY COMMERCIAL DISTRICT (CC) TO LIGHT INDUSTRIAL DISTRICT (LI), FOR THE PROPERTY LOCATED ON THE SOUTH SIDE OF ALESSANDRO BOULEVARD BETWEEN FREDERICK STREET AND GRAHAM STREET (APN'S 297-170-002 AND 003)

WHEREAS, the City of Moreno Valley ("City") is a general law city and a municipal corporation of the State of California, and the lead agency for the preparation and consideration of environmental documents for local projects that are subject to requirements of the California Environmental Quality Act (CEQA) and CEQA Guidelines; and

WHEREAS, CDRE Holdings LLC., ("Developer") has filed an application for the approval of Change of Zone PEN20-0119 ("Application") a request to amend the City's Zoning Atlas from Community Commercial District (CC) to Light Industrial District (LI) for the property located on the south side of Alessandro Boulevard between Frederick Street and Graham Street (APN's 297-170-002 and 003) ("Site"); and

WHEREAS, pursuant to the provisions of Section 9.02.200 (Public Hearing and Notification Procedures) of the Moreno Valley Municipal Code and Government Code section 65905, a public hearing was scheduled for August 26, 2021, and notice thereof was duly published and posted, and mailed to all property owners of record within 600 feet of the Site; and

WHEREAS, on August 26, 2021, the public hearing to consider the Application was duly conducted by the Planning Commission at which time all interested persons were provided with an opportunity to testify and to present evidence; and

WHEREAS, on August 26, 2021, in accordance with the provisions of the California Environmental Quality Act (CEQA) and CEQA Guidelines, the Planning Commission considered and recommended that the City Council approve Resolution 2021-24 recommending that the City Council adopt a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Compass Danbe Centerpointe Project located on the south side of Alessandro Boulevard between Frederick Street and Graham Street (APN's 297-170-002 and 003).

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals and Exhibits

That the foregoing Recitals and attached exhibits are true and correct and are hereby incorporated by this reference.

Section 2. Notice

That pursuant to Government Code section 66020(d)(1), notice is hereby given that the proposed project is subject to certain fees, dedications, reservations and other exactions as provided herein.

Section 3. Evidence

That the Planning Commission has considered all of the evidence submitted into the administrative record for the General Plan Amendment, including, but not limited to, the following:

- (a) Moreno Valley General Plan and all other relevant provisions contained therein;
- (b) Title 9 (Planning and Zoning) of the Moreno Valley Municipal Code and all other relevant provisions referenced therein;
- (c) The Change of Zone to amend the City's Zoning Atlas from Community Commercial District (CC) to Light Industrial District (LI) and all other relevant provisions contained therein as shown on Exhibit A;
- (d) Application for the approval of a Change of Zone PEN20-0119 and all documents, records and references contained therein;
- (e) Staff Report prepared for the Planning Commission's consideration and all documents, records and references related thereto, and Staff's presentation at the public hearing;
- (f) Testimony and/or comments from Applicant and its representatives during the public hearing; and
- (g) Testimony and/or comments from all persons that was provided in written format or correspondence, at, or prior to, the public hearing.

Section 4. Findings

That based on the foregoing Recitals and the Evidence contained in the Administrative Record as set forth above, the Planning Commission hereby finds as follows:

- (a) The proposed Change of Zone is consistent with the existing goals, objectives, policies and programs of the General Plan;
- (b) The proposed Change of Zone will not adversely affect the public health, safety or general welfare; and
- (c) The proposed Change of Zone is consistent with the purposes and intent of Title 9.

Section 5. Approval

That based on the foregoing Recitals, Evidence in the Administrative Record and Findings, the Planning Commission hereby recommends that the City Council approve Change of Zone PEN20-0119 attached hereto as Exhibit A.

Section 6. Repeal of Conflicting Provisions

That all the provisions as heretofore adopted by the Planning Commission that are in conflict with the provisions of this Resolution are hereby repealed.

Section 7. Severability

That the Planning Commission declares that, should any provision, section, paragraph, sentence or word of this Resolution be rendered or declared invalid by any final court action in a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of this Resolution as hereby adopted shall remain in full force and effect.

Section 8. Effective Date

That this Resolution shall take effect immediately upon the date of adoption.

Section 9. Certification

That the Secretary of the Planning Commission shall certify to the passage of this Resolution.

PASSED AND ADOPTED THIS ___ day of _____, 2021

CITY OF MORENO VALLEY
PLANNING COMMISSION

Patricia Korzec, Chairperson

ATTEST:

Patty Nevins,
Planning Official

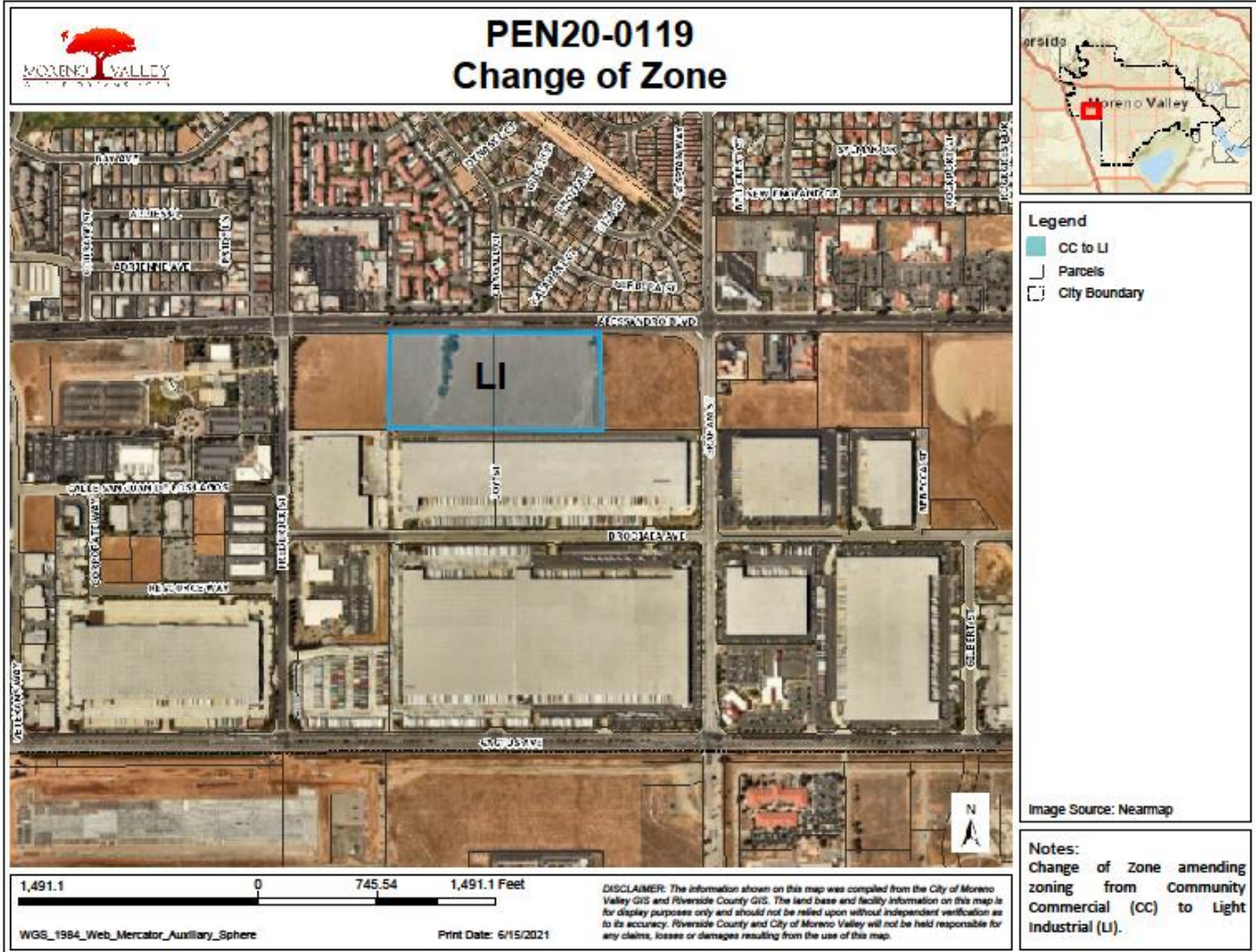
APPROVED AS TO FORM:

Steven B. Quintanilla,
Interim City Attorney

Exhibits:
Exhibit A: Proposed Zoning Map

Attachment: Resolution No. 2021-26 Change of Zone [Revision 1] (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Exhibit A Proposed Zoning Map



Attachment: Resolution No. 2021-26 Change of Zone [Revision 1] (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

RESOLUTION NUMBER 2021-27

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL APPROVE TENTATIVE PARCEL MAP 37944 FOR THE COMPASS DANBE CENTERPOINTE PROJECT LOCATED ON THE SOUTH SIDE OF ALESSANDRO BOULEVARD BETWEEN FREDERICK STREET AND GRAHAM STREET (APN'S 297-170-002 AND 003)

WHEREAS, the City of Moreno Valley ("City") is a general law city and a municipal corporation of the State of California, and the lead agency for the preparation and consideration of environmental documents for local projects that are subject to requirements of the California Environmental Quality Act (CEQA) and CEQA Guidelines; and

WHEREAS, CDRE Holdings LLC., ("Developer") has filed an application for the approval of Tentative Parcel Map 37944 PEN20-0122 ("Application") for the Compass Danbe Centerpointe Project, ("Project") located on the south side of Alessandro Boulevard between Frederick Street and Graham Street (APN's 297-170-002 and 003) ("Site"); and

WHEREAS, the Application has been evaluated in accordance with Chapter 9.14 (Land Divisions) of the Municipal Code with consideration given to the City's General Plan, Zoning Ordinance, and other applicable laws and regulations; and

WHEREAS, Chapter 9.14 of the Municipal Code imposes conditions of approval upon projects for which a Tentative Parcel Map is required, which conditions may be imposed by the Planning Commission to address on-site improvements, off-site improvements, the manner in which the site is used and any other conditions as may be deemed necessary to protect the public health, safety and welfare and ensure that the proposed Project will be developed in accordance with the purpose and intent of Title 9 ("Planning and Zoning") of the Municipal Code; and

WHEREAS, Staff has presented for the Planning Commission's consideration Conditions of Approval to be imposed upon Tentative Parcel Map 37944 PEN20-0122 (TPM), which conditions have been deemed necessary to protect the public health, safety and welfare and ensure that the proposed Project will be developed in accordance with the purpose and intent of Title 9 ("Planning and Zoning") of the Municipal Code; and

WHEREAS, pursuant to the provisions of Section 9.02.200 (Public Hearing and Notification Procedures) of the Municipal Code and Government Code section 65905, a public hearing was scheduled for August 26, 2021 and notice thereof was duly published and posted, and mailed to all property owners of record within 600 feet of the Site; and

WHEREAS, on August 26, 2021, the public hearing to consider the Application was duly conducted by the Planning Commission at which time all interested persons were provided with an opportunity to testify and to present evidence; and

WHEREAS, consistent with the requirements of Chapter 9.14 (Land Divisions) of the Municipal Code, at the public hearing the Planning Commission considered Conditions of Approval to be imposed upon Tentative Parcel Map 37944 PEN20-0122 , which conditions were prepared by Planning Division staff who deemed said conditions to be necessary to protect the public health, safety and welfare and to ensure the proposed Project will be developed in accordance with the purpose and intent of Title 9 (“Planning and Zoning”) of the Municipal Code; and

WHEREAS, at the public hearing, the Planning Commission considered whether each of the requisite findings specified in Section 9.14.070 of the Municipal Code and set forth herein could be made with respect to the proposed Project as conditioned by Conditions of Approval; and

WHEREAS, on August 26, 2021, in accordance with the provisions of the California Environmental Quality Act (CEQA) and CEQA Guidelines, the Planning Commission considered and recommended that the City Council approve Resolution 2021-24 recommending that the City Council adopt a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Compass Danbe Centerpointe Project located on the south side of Alessandro Boulevard between Frederick Street and Graham Street (APN’s 297-170-002 and 003).

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals and Exhibits

That the foregoing Recitals and attached Exhibits are true and correct and are hereby incorporated by this reference.

Section 2. Notice

That pursuant to Government Code section 66020(d)(1), notice is hereby given that the proposed project is subject to certain fees, dedications, reservations and other exactions as provided herein.

Section 3. Evidence

That the Planning Commission has considered all of the evidence submitted into the administrative record for the proposed Tentative Parcel Map 37944 PEN20-0122, including, but not limited to, the following:

- (a) Moreno Valley General Plan and all other relevant provisions contained therein;
- (b) Title 9 (Planning and Zoning) of the Moreno Valley Municipal Code and all other relevant provisions referenced therein;
- (c) Application for the approval of Tentative Parcel Map 37944 PEN20-0122 and all documents, records and references contained therein;

- (d) Conditions of Approval for Tentative Parcel Map 37944 PEN20-0122, attached hereto as Exhibit A;
- (e) Staff Report prepared for the Planning Commission's consideration and all documents, records and references related thereto, and Staff's presentation at the public hearing;
- (f) Testimony and/or comments from Applicant and its representatives during the public hearing; and
- (g) Testimony and/or comments from all persons that was provided in written format or correspondence, at, or prior to, the public hearing.

Section 4. Findings

That based on the foregoing Recitals and the Evidence contained in the Administrative Record as set forth above, the Planning Commission makes the following findings in approving Tentative Parcel Map 37944 PEN20-0122.

- (a) That the proposed map is consistent with applicable general and specific plans and the zoning ordinance;
- (b) That the design or improvement of the proposed subdivision is consistent with applicable general and specific plans;
- (c) That the site is physically suitable for the type of development;
- (d) That the site of the proposed land division is physically suitable for the proposed density of the development;
- (e) That the design of the subdivision or the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat;
- (f) That the design of the subdivision or type of improvements is not likely to cause serious public health problems;
- (g) That the design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision;
- (h) That the proposed land division is not subject the Williamson Act pursuant to the California Land Conservation Act of 1965.
- (i) That the proposed land division and the associated design and improvements are not consistent with applicable ordinances of the city.
- (j) That the design of the land division provides, to the extent feasible, for future passive or natural heating and cooling opportunities in the subdivision.
- (k) That the effect of the proposed land division on the housing needs of the region were considered and balanced against the public service needs of the residents of Moreno Valley and available fiscal and environmental resources.

Section 5. Approval

That based on the foregoing Recitals, Evidence contained in the Administrative Record and Findings set forth above, the Planning Commission hereby recommends that the City Council approve Tentative Parcel Map 37944 PEN20-0122 subject to the

Conditions of Approval for Tentative Parcel Map 37944 PEN20-0122 attached hereto as Exhibit A.

Section 6. Repeal of Conflicting Provisions

That all the provisions as heretofore adopted by the Planning Commission that are in conflict with the provisions of this Resolution are hereby repealed.

Section 7. Severability

That the Planning Commission declares that, should any provision, section, paragraph, sentence or word of this Resolution be rendered or declared invalid by any final court action in a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of this Resolution as hereby adopted shall remain in full force and effect.

Section 8. Effective Date

That this Resolution shall take effect immediately upon the date of adoption.

Section 9. Certification

That the Secretary of the Planning Commission shall certify to the passage of this Resolution.

PASSED AND ADOPTED THIS ___ day of _____, 2021

CITY OF MORENO VALLEY
PLANNING COMMISSION

Patricia Korzec, Chairperson

ATTEST:

Patty Nevins,
Planning Official

APPROVED AS TO FORM:

Steven B. Quintanilla,

Attachment: Resolution No. 2021-27 Tentative Parcel Map [Revision 2] (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

Interim City Attorney

Exhibits:

Exhibit A: Conditions of Approval PEN20-0122

Exhibit A

CONDITIONS OF APPROVAL PEN20-0122

Attachment: Resolution No. 2021-27 Tentative Parcel Map [Revision 2] (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 1

CITY OF MORENO VALLEY CONDITIONS OF APPROVAL
(PEN20-0120, PEN20-0121 & PEN20-0124)

EFFECTIVE DATE:

EXPIRATION DATE:

COMMUNITY DEVELOPMENT DEPARTMENT**Planning Division**

1. A change or modification to the land use or the approved site plans may require a separate approval. Prior to any change or modification, the property owner shall contact the City of Moreno Valley Community Development Department to determine if a separate approval is required.
2. Any expansion to this use or exterior alterations will require the submittal of a separate application(s) and shall be reviewed and approved under separate permit(s). (MC 9.02.080)
3. The developer, or the developer's successor-in-interest, shall be responsible for maintaining any undeveloped portion of the site in a manner that provides for the control of weeds, erosion and dust. (MC 9.02.030)
4. The site shall be developed in accordance with the approved plans on file in the Community Development Department - Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. Prior to any use of the project site or business activity being commenced thereon, all Conditions of Approval shall be completed to the satisfaction of the Planning Official. (MC 9.14.020)
5. Any signs indicated on the submitted plans are not included with this approval. Any signs, whether permanent (e.g. wall, monument) or temporary (e.g. banner, flag), require separate application and approval by the Planning Division. No signs are permitted in the public right of way. (MC 9.12)

Special Conditions

6. All site plans, grading plans, landscape and irrigation plans, lighting plans and street improvement plans shall be coordinated for consistency with this approval.
7. This approval shall comply with all applicable requirements of the City of Moreno Valley Municipal Code.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 2

8. Prior to building final, the developer/owner or developer's/owner's successor-in-interest shall pay all applicable impact fees, including but not limited to Transportation Uniform Mitigation fees (TUMF), and the City's adopted Development Impact Fees. (Ord)
9. Prior to the issuance of grading permits, final erosion control landscape and irrigation plans for all cut or fill slopes over 3 feet in height shall be submitted to and approved by the Planning Division. The plans shall be designed in accordance with the slope erosion plan as required by the City Engineer. Man-made slopes greater than 10 feet in height shall be "land formed" to conform to the natural terrain and shall be landscaped and stabilized to minimize visual scarring. (GP Objective 1.5, MC 9.08.080, DG)
10. Prior to recordation of the final map, final median enhancement/landscape/irrigation plans shall be submitted to and approved by the Planning Division, and Public Works Department - Special Districts Division for review and approval by each division. (GP - Circulation Master Plan)
11. All landscaped areas in perpetuity shall be maintained in a healthy and thriving condition, free from weeds, trash and debris. (MC 9.02.030)
12. This tentative map and plot plans shall expire three years after the approval date of this tentative map unless extended as provided by the City of Moreno Valley Municipal Code; otherwise it shall become null and void and of no effect whatsoever in the event the applicant or any successor in interest fails to properly file a final map before the date of expiration. (MC 9.02.230, 9.14.050, 080)
13. Prior to the issuance of grading permits, mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein.
14. Prior to any site disturbance and/or grading plan submittal, and or final map recordation, a mitigation monitoring fee, as provided by City ordinance, shall be paid by the applicant/owner. No City permit or approval shall be issued until such fee is paid. (CEQA)
15. Prior to issuance of a building permit, the developer/property owner or developer's successor-in-interest shall pay all applicable impact fees due at permit issuance, including but not limited to Multi-species Habitat Conservation Plan (MSHCP) mitigation fees. (Ord.)
16. Within thirty (30) days prior to any grading or other land disturbance, a pre-construction survey for Burrowing Owls shall be conducted pursuant to the established guidelines of Multiple Species Habitat Conservation Plan. The pre-construction survey shall be submitted to the Planning Division prior to any

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 3

disturbance of the site and/or grading permit issuance.

17. Prior to the issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the following: The name and address of the development and the developer's name and address to include a 24-hour emergency phone number.
18. Prior to approval of any grading permits, plans for any security gate system shall be submitted to and approved by to the Planning Division.
19. Prior to issuance of grading permits, the developer shall pay the applicable Stephen's' Kangaroo Rat (SKR) Habitat Conservation Plan mitigation fee.
20. Prior to the issuance of any grading permits and prior to any physical disturbance of any natural drainage course, or any wetland determined to contain riparian vegetation, the applicant shall obtain a stream bed alteration agreement or permit, or a written waiver of the requirement for such an agreement or permit, from both the California Department of Fish and Game and the U.S. Army Corps of Engineers. Written verification of such a permit or waiver shall be provided to both the Planning Division and the Public Works Department - Land Development Division. (CEQA, State and Federal codes)
21. Prior to recordation of the final subdivision map, the following documents shall be submitted to and approved by the Planning Division which shall demonstrate that the project will be developed and maintained in accordance with the intent and purpose of the approval:
 - a. The document to convey title
 - b. Deed restrictions, easements, or Covenants, Conditions and Restrictions to be recorded

The approved documents shall be recorded at the same time that the subdivision map is recorded. The documents shall contain provisions for general maintenance of the site, joint access to proposed parcels, open space use restrictions, conservation easements, parking, feeder trails, water quality basins, lighting, landscaping and common area use items such as general building maintenance. The approved documents shall also contain a provision, which provides that they may not be terminated and/or substantially amended without the consent of the City and the developer's successor-in-interest. (MC 9.14.090)

In addition, the following deed restrictions and disclosures shall be included within the document and grant deed of the properties:

- a. The developer shall promote the use of native plants and trees and drought

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 4

tolerant species.

b. All lots designated for open space and or detention basins, shall be included as an easement to, and maintained by a Homeowners Association (HOA) or other private maintenance entity. All reverse frontage landscape areas shall also be maintained by the onsite HOA. Language to this effect shall be included and reviewed within the required Covenant Conditions and Restrictions (CC&Rs) prior to the approval of the final map.

c. Maintenance of any and all common facilities.

22. Applicant/Developer shall defend, indemnify and hold harmless City, city council, commissions, boards, subcommittees and City's elected and appointed officials, commissioners, board members, officers, agents, consultants and employees ("City Parties") from and against any and all liabilities, demands, claims, actions or proceedings and costs and expenses incidental thereto (including costs of defense, settlement and reasonable attorneys' fees), which any or all of them may suffer, incur, be responsible for or pay out as a result of or in connection with any challenge to the legality, validity or adequacy of any of the following items: (i) any agreements by and among City and Developer including without limitation any Development Agreement, (ii) any and all permits, licenses and entitlements approved by City; (iii) any environmental determination made by City in connection with the Project Site or Project; and (iv) any proceedings or other actions undertaken by City in connection with the adoption or approval of any of the above.
23. The project shall be designed and constructed to meet LEED Silver Equivalent with evidence provided to the City. A change or modification shall require separate approval.
24. The site has been approved for a Tentative Parcel Map 37944 to subdivide the lots into two parcels and two light industrial warehouse buildings. Building 1 will be approximately 290,726 square feet and Building 2 will be approximately 98,877 square feet with associated on-site and off-site improvements designed per the approved plans.
25. This approval includes the Tentative Parcel Map 37944 and two Plot Plans for the construction of two light industrial buildings to be completed as one project. All improvements both on-site and off-site shall be completed prior to building shell final of any one building. If the construction of one building is postponed, the parcel/pad area shall be maintained with landscaping and screening as approved by the Community Development Director.
26. Should the applicant/property owner elect to not construct one of the buildings, the building pad shall be precise graded and hydroseeded to prevent dust and erosion.
27. Prior to the start of any construction, temporary security fencing shall be erected. The fencing shall be a minimum of six (6) feet high with locking, gated access and

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 5

shall remain through the duration of construction. Security shall remain in place until the project is completed or the above conditions no longer exist. (Security fencing is required if there is: construction, unsecured structures, unenclosed storage of materials and/or equipment, and/or the condition of the site constitutes a public hazard).

Prior to Building Permit

28. Prior to issuance of any building permits, final landscaping and irrigation plans shall be submitted for review and approved by the Planning Division. The plans shall be prepared in accordance with the City's Landscape Requirements to include a drought tolerant palette. (9.17)
29. Prior to issuance of any building permit, all Conditions of Approval, Mitigation Measures and Airport Land Use Commission Conditions of Approval shall be printed on the building plans.
30. Prior to the issuance of grading permits, decorative (e.g. colored/scored concrete or as approve by the Planning Official) pedestrian pathways across circulation aisles/paths shall be provided throughout the development to connect dwellings with open spaces and/or recreational uses or commercial/industrial buildings with open space and/or parking. and/or the public right-of-way. The pathways shall be shown on the precise grading plan. (GP Objective 46.8, DG)
31. Prior to issuance of building permits, the Planning Division shall review and approve the location and method of enclosure or screening of transformer cabinets, commercial gas meters and back flow preventers as shown on the final working drawings. Location and screening shall comply with the following criteria: transformer cabinets and commercial gas meters shall not be located within required setbacks and shall be screened from public view either by architectural treatment or landscaping; multiple electrical meters shall be fully enclosed and incorporated into the overall architectural design of the building(s); back-flow preventers shall be screened by landscaping. (GP Objective 43.30)
32. Prior to issuance of any grading permit, all Conditions of Approval, Mitigation Measures and Airport Land Use Commission Conditions of Approval shall be printed on the grading plans.
33. Prior to approval of any grading permits, plans for any security gate system shall be submitted to and approved by to the Planning Division.
34. Prior to issuance of grading permits, the developer shall submit fence/wall plans to be included in the Building and Safety submittal for review and approval consistent with the approved plans, the Landscape Requirements and the Municipal Code.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 6

35. Prior to the issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the following:
 - a. The name (if applicable) and address of the development.
 - b. The developer's name, address, and a 24-hour emergency telephone number.
36. Photometric Plans shall be submitted to the Building and Safety Division for review and approval as part of the lighting and electrical building plan submittal.
37. Prior to the issuance of grading permits, the site plan and grading plans shall show decorative hardscape (e.g. colored concrete, stamped concrete, pavers or as approved by the Planning Official) consistent and compatible with the design, color and materials of the proposed development for all driveway ingress/egress locations of the project.

Prior to Building Final or Occupancy

38. Prior to building final, all required landscaping and irrigation shall be installed per plan, certified by the Landscape Architect and inspected by the Planning Division. (MC 9.03.040, MC 9.17).
39. Prior to building final, all required and proposed fences and walls shall be constructed according to the approved plans on file in the Planning Division. (MC 9.080.070).

Building Division

40. The proposed non-residential project shall comply with the latest Federal Law, Americans with Disabilities Act, and State Law, California Code of Regulations, Title 24, Chapter 11B for accessibility standards for the disabled including access to the site, exits, bathrooms, work spaces, etc.
41. Building plans submitted shall be signed and sealed by a California licensed design professional as required by the State Business and Professions Code.
42. All new structures shall be designed in conformance to the latest design standards adopted by the State of California in the California Building Code, (CBC) Part 2, Title 24, California Code of Regulations including requirements for allowable area, occupancy separations, fire suppression systems, accessibility, etc.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 7

43. Prior to submittal, all new development, including residential second units, are required to obtain a valid property address prior to permit application. Addresses can be obtained by contacting the Building Safety Division at 951.413.3350.
44. Contact the Building Safety Division for permit application submittal requirements.
45. All new buildings 10,000 square feet and over, shall include building commissioning in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (OPR). All requirements in The 2016 California Green Building Standards Code, sections 5.410.2 - 5.410.2.6 must be met.
46. Any construction within the city shall only be as follows: Monday through Friday seven a.m. to seven p.m.(except for holidays which occur on weekdays), eight a.m. to four p.m.; weekends and holidays (as observed by the city and described in the Moreno Valley Municipal Code Chapter 2.55), unless written approval is first obtained from the Building Official or City Engineer.
47. The proposed development shall be subject to the payment of required development fees as required by the City's current Fee Ordinance at the time a building application is submitted or prior to the issuance of permits as determined by the City.
48. The proposed project will be subject to approval by the Eastern Municipal Water District and all applicable fees and charges shall be paid prior to permit issuance. Contact the water district at 951.928.3777 for specific details.
49. The proposed project's occupancy shall be classified by the Building Official and must comply with exiting, occupancy separation(s) and minimum plumbing fixture requirements. Minimum plumbing fixtures shall be provided per the 2016 California Plumbing Code, Table 422.1. The occupant load and occupancy classification shall be determined in accordance with the California Building Code.
50. Prior to permit issuance, every applicant shall submit a properly completed Waste Management Plan (WMP), as a portion of the building or demolition permit process. (MC 8.80.030)

ECONOMIC DEVELOPMENT DEPARTMENT (EDD)

51. New Moreno Valley businesses may work with the Economic Development Department to coordinate job recruitment fairs.
52. New Moreno Valley businesses may adopt a "First Source" approach to employee recruitment that gives notice of job openings to Moreno Valley residents for one

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 8

week in advance of public recruitment.

53. New Moreno Valley businesses are encouraged to hire local residents.
54. New Moreno Valley businesses are encouraged to provide a job fair flyer and/or web announcement to the City in advance of job recruitments, so that the City can assist in publicizing these events.
55. New Moreno Valley businesses may utilize the workforce recruitment services provided by the Moreno Valley Business & Employment Resource Center ("BERC").

The BERC offers free assistance to Moreno Valley businesses recruiting and training potential employees. Complimentary services include:

- Job Announcements
- Applicant testing / pre-screening
- Interviewing
- Job Fair support
- Training space

FIRE DEPARTMENT**Fire Prevention Bureau**

56. All Fire Department access roads or driveways shall not exceed 12 percent grade. (CFC 503.2.7 and MVMC 8.36.060[G])
57. The Fire Department emergency vehicular access road shall be (all weather surface) capable of sustaining an imposed load of 80,000 lbs. GVW, based on street standards approved by the Public Works Director and the Fire Prevention Bureau. The approved fire access road shall be in place during the time of construction. Temporary fire access roads shall be approved by the Fire Prevention Bureau. (CFC 501.4, and MV City Standard Engineering Plan 108d)
58. The angle of approach and departure for any means of Fire Department access shall not exceed 1 ft drop in 20 ft (0.3 m drop in 6 m), and the design limitations of the fire apparatus of the Fire Department shall be subject to approval by the AHJ. (CFC 503 and MVMC 8.36.060)
59. Prior to construction, all locations where structures are to be built shall have an approved Fire Department access based on street standards approved by the Public Works Director and the Fire Prevention Bureau. (CFC 501.4)
60. Prior to issuance of Building Permits, the applicant/developer shall provide the Fire

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 9

- Prevention Bureau with an approved site plan for Fire Lanes and signage. (CFC 501.3)
61. Prior to issuance of Certificate of Occupancy or Building Final, "Blue Reflective Markers" shall be installed to identify fire hydrant locations in accordance with City specifications. (CFC 509.1 and MVLT 440A-0 through MVLT 440C-0)
 62. Prior to issuance of building permits, plans specifying the required structural materials for building construction in high fire hazard severity zones shall be submitted to the Fire Prevention Bureau for approval. (CFC, 4905)
 63. Prior to issuance of Certificate of Occupancy or Building Final, all commercial buildings shall display street numbers in a prominent location on the street side and rear access locations. The numerals shall be a minimum of twelve inches in height. (CFC 505.1, MVMC 8.36.060[I])
 64. Existing fire hydrants on public streets are allowed to be considered available. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads. (CFC 507, 501.3) a - After the local water company signs the plans, the originals shall be presented to the Fire Prevention Bureau for signatures. The required water system, including fire hydrants, shall be installed, made serviceable, and be accepted by the Moreno Valley Fire Department prior to beginning construction. They shall be maintained accessible.
 65. Final fire and life safety conditions will be addressed when the Fire Prevention Bureau reviews building plans. These conditions will be based on occupancy, use, California Building Code (CBC), California Fire Code (CFC), and related codes, which are in effect at the time of building plan submittal.
 66. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall install a fire alarm system monitored by an approved Underwriters Laboratory listed central station based on a requirement for monitoring the sprinkler system, occupancy or use. Fire alarm panel shall be accessible from exterior of building in an approved location. Plans shall be submitted to the Fire Prevention Bureau for approval prior to installation. (CFC Chapter 9 and MVMC 8.36.100)
 67. The Fire Code Official is authorized to enforce the fire safety during construction requirements of Chapter 33. (CFC Chapter 33 & CBC Chapter 33)
 68. Fire lanes and fire apparatus access roads shall have an unobstructed width of not less than twenty-four (24) feet and an unobstructed vertical clearance of not less than the thirteen (13) feet six (6) inches. (CFC 503.2.1 and MVMC 8.36.060[E])

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 10

69. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall install a fire sprinkler system based on square footage and type of construction, occupancy or use. Fire sprinkler plans shall be submitted to the Fire Prevention Bureau for approval prior to installation. (CFC Chapter 9, MVMC 8.36.100[D])
70. Prior to issuance of the building permit for development, independent paved access to the nearest paved road, maintained by the City shall be designed and constructed by the developer within the public right of way in accordance with City Standards. (MVMC 8.36.060, CFC 501.4)
71. Prior to issuance of a Certificate of Occupancy or Building Final, a "Knox Box Rapid Entry System" shall be provided. The Knox-Box shall be installed in an accessible location approved by the Fire Code Official. All exterior security emergency access gates shall be electronically operated and be provided with Knox key switches for access by emergency personnel. (CFC 506.1)
72. The minimum number of fire hydrants required, as well as the location and spacing of fire hydrants, shall comply with the C.F.C., MVMC, and NFPA 24. Fire hydrants shall be located no closer than 40 feet to a building. A fire hydrant shall be located within 50 feet of the fire department connection for buildings protected with a fire sprinkler system. The size and number of outlets required for the approved fire hydrants are (6" x 4" x 2 ½" x 2 ½") (CFC 507.5.1, 507.5.7, Appendix C, NFPA 24-7.2.3, MVMC 912.2.1)
73. During phased construction, dead end roadways and streets which have not been completed shall have a turn-around capable of accommodating fire apparatus. (CFC 503.1 and 503.2.5)
74. If construction is phased, each phase shall provide an approved emergency vehicular access way for fire protection prior to any building construction. (CFC 501.4)
75. Plans for private water mains supplying fire sprinkler systems and/or private fire hydrants shall be submitted to the Fire Prevention Bureau for approval. (CFC 105 and CFC 3312.1)
76. The Fire Prevention Bureau is required to set a minimum fire flow for the remodel or construction of all commercial buildings per CFC Appendix B and Table B105.1. The applicant/developer shall provide documentation to show there exists a water system capable of delivering said waterflow for 2 hour(s) duration at 20-PSI residual operating pressure. The required fire flow may be adjusted during the approval process to reflect changes in design, construction type, or automatic fire protection measures as approved by the Fire Prevention Bureau. Specific requirements for

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 11

the project will be determined at time of submittal. (CFC 507.3, Appendix B)

77. Prior to construction, all traffic calming designs/devices must be approved by the Fire Marshal and City Engineer.
78. Prior to issuance of Building Permits, the applicant/developer shall furnish one copy of the water system plans to the Fire Prevention Bureau for review. Plans shall:
 - a. Be signed by a registered civil engineer or a certified fire protection engineer;
 - b. Contain a Fire Prevention Bureau approval signature block; and
 - c. Conform to hydrant type, location, spacing of new and existing hydrants and minimum fire flow required as determined by the Fire Prevention Bureau. The required water system, including fire hydrants, shall be installed, made serviceable, and be accepted by the Moreno Valley Fire Department prior to beginning construction. They shall be maintained accessible.

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT**Moreno Valley Utility**

79. This project requires the installation of electric distribution facilities. A non-exclusive easement shall be provided to Moreno Valley Utility and shall include the rights of ingress and egress for the purpose of operation, maintenance, facility repair, and meter reading.
80. This project requires the installation of electric distribution facilities. The developer shall submit a detailed engineering plan showing design, location and schematics for the utility system to be approved by the City Engineer. In accordance with Government Code Section 66462, the Developer shall execute an agreement with the City providing for the installation, construction, improvement and dedication of the utility system following recordation of final map and/or concurrent with trenching operations and other improvements so long as said agreement incorporates the approved engineering plan and provides financial security to guarantee completion and dedication of the utility system.

The Developer shall coordinate and receive approval from the City Engineer to install, construct, improve, and dedicate to the City all utility infrastructure including but not limited to, conduit, equipment, vaults, ducts, wires (including fiber optic cable), switches, conductors, transformers, and “bring-up” facilities including electrical capacity to serve the identified development and other adjoining, abutting, or benefiting projects as determined by Moreno Valley Utility – collectively referred to as “utility system”, to and through the development, along with any appurtenant real property easements, as determined by the City Engineer necessary for the distribution and/or delivery of any and all “utility services” to and within the project.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 12

For purposes of this condition, “utility services” shall mean electric, cable television, telecommunication (including video, voice, and data) and other similar services designated by the City Engineer. “Utility services” shall not include sewer, water, and natural gas services, which are addressed by other conditions of approval.

The City, or the City’s designee, shall utilize dedicated utility facilities to ensure safe, reliable, sustainable and cost effective delivery of utility services and maintain the integrity of streets and other public infrastructure. Developer shall, at developer’s sole expense, install or cause the installation of such interconnection facilities as may be necessary to connect the electrical distribution infrastructure within the project to the Moreno Valley Utility owned and controlled electric distribution system.

81. Existing Moreno Valley Utility electrical infrastructure shall be preserved in place. The developer will be responsible, at developer’s expense, for any and all costs associated with the relocation of any of Moreno Valley Utility’s underground electrical distribution facilities, as determined by Moreno Valley Utility, which may be in conflict with any developer planned construction on the project site.
82. This project is subject to a Reimbursement Agreement. The Developer is responsible for a proportionate share of costs associated with electrical distribution infrastructure previously installed that directly benefits the project.

PUBLIC WORKS DEPARTMENT**Land Development**

83. Aggregate slurry, as defined in Section 203-5 of Standard Specifications for Public Works Construction, shall be required prior to 90% security reduction or the end of the one-year warranty period of the public streets as approved by the City Engineer. If slurry is required, a slurry mix design shall be submitted for review and approved by the City Engineer. The latex additive shall be Ultra Pave 70 (for anionic) or Ultra Pave 65 K (for cationic) or an approved equal per the geotechnical report. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of two to two-and-one-half (2 to 2½) parts to one-hundred (100) parts of emulsion by volume. Any existing striping shall be removed prior to slurry application and replaced per City standards.
84. The developer shall comply with all applicable City ordinances and resolutions including the City’s Municipal Code (MC) and if subdividing land, the Government Code (GC) of the State of California, specifically Sections 66410 through 66499.58, said sections also referred to as the Subdivision Map Act (SMA). [MC 9.14.010]
85. The final approved conditions of approval (COAs) issued and any applicable

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 13

Mitigation Measures by the Planning Division shall be photographically or electronically placed on mylar sheets and included in the Grading and Street Improvement plans.

86. The developer shall monitor, supervise and control all construction related activities, so as to prevent these activities from causing a public nuisance, including but not limited to, insuring strict adherence to the following:
- (a) Removal of dirt, debris, or other construction material deposited on any public street no later than the end of each working day.
 - (b) Observance of working hours as stipulated on permits issued by the Land Development Division.
 - (c) The construction site shall accommodate the parking of all motor vehicles used by persons working at or providing deliveries to the site.
 - (d) All dust control measures per South Coast Air Quality Management District (SCAQMD) requirements during the grading operations.
- Violation of any condition, restriction or prohibition set forth in these conditions shall subject the owner, applicant, developer or contractor(s) to remedy as noted in City Municipal Code 8.14.090. In addition, the City Engineer or Building Official may suspend all construction related activities for violation of any condition, restriction or prohibition set forth in these conditions until such time as it has been determined that all operations and activities are in conformance with these conditions.
87. Drainage facilities (e.g., catch basins, water quality basins, etc.) with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided.
88. In the event right-of-way or offsite easements are required to construct offsite improvements necessary for the orderly development of the surrounding area to meet the public health and safety needs, the developer shall make a good faith effort to acquire the needed right-of-way in accordance with the Land Development Division's administrative policy. If unsuccessful, the Developer shall enter into an agreement with the City to acquire the necessary right-of-way or offsite easements and complete the improvements at such time the City acquires the right-of-way or offsite easements which will permit the improvements to be made. The developer shall be responsible for all costs associated with the right-of-way or easement acquisition. [GC 66462.5]
89. If improvements associated with this project are not initiated within two (2) years of the date of approval of the Public Improvement Agreement (PIA), the City Engineer may require that the engineer's estimate for improvements associated with the project be modified to reflect current City construction costs in effect at the time of request for an extension of time for the PIA or issuance of a permit. [MC 9.14.210(B)(C)]

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 14

90. The developer shall protect downstream properties from damage caused by alteration of drainage patterns (i.e. concentration or diversion of flow, etc). Protection shall be provided by constructing adequate drainage facilities, including, but not limited to, modifying existing facilities or by securing a drainage easement. [MC 9.14.110]
91. Public drainage easements, when required, shall be a minimum of 25 feet wide and shall be shown on the map and plan, and noted as follows: "Drainage Easement – no structures, obstructions, or encroachments by land fills are allowed." In addition, the grade within the easement area shall not exceed a 3:1 (H:V) slope, unless approved by the City Engineer.
92. The maintenance responsibility of the proposed storm drain line shall be clearly identified. Unless otherwise noted on improvement plans, storm drain lines within private property will be privately maintained and those within public streets will be publicly maintained.
93. This project shall submit civil engineering design plans, reports and/or documents (prepared by a registered/licensed civil engineer) for review and approval by the City Engineer per the current submittal requirements, prior to the indicated threshold or as required by the City Engineer. The submittal consists of, but is not limited to, the following:
- a. Parcel Map (recordation prior to building permit issuance);
 - b. Rough grading w/ erosion control plan (prior to grading permit issuance);
 - c. Precise grading w/ erosion control plan (prior to building permit issuance);
 - d. Street improvement plan w/ Signing & Striping (prior to parcel map approval);
 - e. RCFC&WCD storm drain plans (prior to parcel map approval);
 - f. Cooperative Agreement between the City, RCFC&WCD and the developer (prior to RCFC&WCD storm drain plan approval);
 - g. Final drainage study (prior to rough grading plan and storm drain plan approval);
 - h. Final WQMP (prior to grading plan approval);
 - i. As-Built revision for all plans (prior to Occupancy release)
94. Water quality best management practices (BMPs) designed to meet Water Quality Management Plan (WQMP) requirements for single-family residential development shall not be used as a construction BMP. Water quality BMPs shall be maintained for the entire duration of the project construction and be used to treat runoff from those developed portions of the project. Water quality BMPs shall be protected from upstream construction related runoff by having proper best management practices in place and maintained. Water quality BMPs shall be graded per the approved design plans and once landscaping and irrigation has been installed, it and its maintenance shall be turned over to an established Homeowner's

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 15

Association (HOA). The Homeowner's Association shall enter into an agreement with the City for basin maintenance.

95. When any proposed private storm drain system connects to a public storm drain system, a storm drain manhole shall be placed at the right-of-way or property line to mark the beginning of the publicly maintained portion of the storm drain system.

Prior to Grading Plan Approval

96. Resolution of all drainage issues shall be as approved by the City Engineer.
97. A final detailed drainage study (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer. The study shall include, but not be limited to: existing and proposed hydrologic conditions as well as hydraulic calculations for all drainage control devices and storm drain lines. The study shall analyze 1, 3, 6 and 24-hour duration events for the 2, 5, 10 and 100-year storm events [MC 9.14.110(A.1)]. A digital (pdf) copy of the approved drainage study shall be submitted to the Land Development Division.
98. Emergency overflow areas shall be shown at all applicable drainage improvement locations in the event that the drainage improvement fails or exceeds full capacity. This may include, but not be limited to, secondary storm drains, riser inlets, concrete spillways, or redundancy in pump systems.
99. A final project-specific Water Quality Management Plan (WQMP) shall be submitted for review and approved by the City Engineer, which:
- a. Addresses Site Design Best Management Practices (BMPs) such as minimizing impervious areas, maximizing permeability, minimizes directly connected impervious areas to the City's street and storm drain systems, and conserves natural areas;
 - b. Incorporates Source Control BMPs and provides a detailed description of their implementation;
 - c. Describes the long-term operation and maintenance requirements for BMPs requiring maintenance; and
 - d. Describes the mechanism for funding the long-term operation and maintenance of the BMPs.
- A copy of the final WQMP template can be obtained on the City's Website or by contacting the Land Development Division. A digital (pdf) copy of the approved final project-specific Water Quality Management Plan (WQMP) shall be submitted to the Land Development Division.
100. The final project-specific Water Quality Management Plan (WQMP) shall be consistent with the approved P-WQMP, as well as in full conformance with the document: "Water Quality Management Plan - A Guidance Document for the Santa Ana Region of Riverside County" dated October 22, 2012. The F-WQMP shall be

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 16

submitted and approved prior to application for and issuance of grading permits. At a minimum, the F-WQMP shall include the following: Site Design BMPs; Source Control BMPs, Treatment Control BMPs, Operation and Maintenance requirements for BMPs and sources of funding for BMP implementation.

a. The Applicant has proposed to incorporate the use of two (2) modular wetland systems along the southerly project boundary and three (3) bio-retention swales along the northerly project boundary . Final design and sizing details of all BMPs must be provided in the first submittal of the F-WQMP. The Applicant acknowledges that more area than currently shown on the plans may be required to treat site runoff as required by the WQMP guidance document.

b. The Applicant shall substantiate the applicable Hydrologic Condition of Concerns (HCOC) in Section F of the F-WQMP. <The HCOC designates that the project will be required to provide HCOC mitigation..

c. All proposed LID BMP's shall be designed in accordance with the RCFC&WCD's Design Handbook for Low Impact Development Best Management Practices, dated September 2011.

d. The proposed LID BMP's as identified in the project-specific P-WQMP shall be incorporated into the Final WQMP.

e. The NPDES notes per City Standard Drawing No. MVFE-350-0 shall be included in the grading plans.

f. Post-construction treatment control BMPs, once placed into operation for post-construction water quality control, shall not be used to treat runoff from construction sites or unstabilized areas of the site.

g. Prior to precise grading plan approval, the grading plan shall show any proposed trash enclosure to include a cover (roof) and sufficient size for dual bin (1 for trash and 1 for recyclables). The architecture shall be approved by the Planning Division and any structural approvals shall be made by the Building and Safety Division.

101. The developer shall ensure compliance with the City Grading ordinance, these Conditions of Approval and the following criteria:

a. The project street and lot grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage area and outlet points. Unless otherwise approved by the City Engineer, lot lines shall be located at the top of slopes.

b. Any grading that creates cut or fill slopes adjacent to the street shall provide erosion control, sight distance control, and slope easements as approved by the City Engineer.

c. All improvement plans are substantially complete and appropriate clearance letters are provided to the City.

d. A soils/geotechnical report (addressing the soil's stability and geological conditions of the site) shall be submitted to the Land Development Division for review. A digital (pdf) copy of the soils/geotechnical report shall be submitted to the Land Development Division.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 17

102. Grading plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.
103. The developer shall select Low Impact Development (LID) Best Management Practices (BMPs) designed per the latest version of the Water Quality Management Plan (WQMP) - a guidance document for the Santa Ana region of Riverside County.
104. The developer shall pay all remaining plan check fees.
105. The proposed private storm drain Line "E" on Parcel 2 shall connect to the existing public storm drain lateral crossing Alessandro Boulevard and connect to storm drain Line "E" located on APN 297-170-089. Storm drain manholes shall be placed at the point of connections (at right of way or property line) to mark the separation of the publicly maintained storm drain and privately maintained storm drain.
106. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared in conformance with the State's current Construction Activities Storm Water General Permit. A copy of the current SWPPP shall be kept at the project site and be available for review upon request.
107. For projects that will result in discharges of storm water associated with construction with a soil disturbance of one or more acres of land, the developer shall submit a Notice of Intent (NOI) and obtain a Waste Discharger's Identification number (WDID#) from the State Water Quality Control Board (SWQCB) which shall be noted on the grading plans.

Prior to Grading Permit

108. A receipt showing payment of the Area Drainage Plan (ADP) fee to Riverside County Flood Control and Water Conservation District shall be submitted. [MC 9.14.100(O)]
109. For non-subdivision projects, a copy of the Covenants, Conditions and Restrictions (CC&Rs) shall be submitted for review by the City Engineer. The CC&Rs shall include, but not be limited to, access easements, reciprocal access, private and/or public utility easements as may be relevant to the project.
110. If the developer chooses to construct the project in phases, a Construction Phasing Plan for the construction of on-site public or private improvements shall be submitted for review and approved by the City Engineer.
111. Prior to the payment of the Development Impact Fee (DIF), the developer may enter

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 18

into a DIF Improvement Credit Agreement to secure credit for the construction of applicable improvements. If the developer fails to complete this agreement prior to the timing specified above, credits may not be given. The developer shall pay current DIF fees adopted by the City Council. [Ord. 695 § 1.1 (part), 2005] [MC 3.38.030, 040, 050]

112. A digital (pdf) copy of all approved grading plans shall be submitted to the Land Development Division.
113. Security, in the form of a cash deposit (preferable), bond or letter of credit shall be submitted as a guarantee of the implementation and maintenance of erosion control measures. At least twenty-five (25) percent of the required security shall be in the form of a cash deposit with the City. [MC 8.21.160(H)]
114. Security, in the form of a cash deposit (preferable), bond or letter of credit shall be submitted as a guarantee of the completion of the grading operations for the project. [MC 8.21.070]
115. The developer shall pay all applicable inspection fees.
116. Prior to the payment of the Transportation Uniform Mitigation Fee (TUMF), the developer may enter into a TUMF Improvement Credit Agreement to secure credit for the construction of applicable improvements. If the developer fails to complete this agreement by the timing specified above, credits may not be given. The developer shall pay current TUMF fees adopted by the City Council. [Ord. 835 § 2.1, 2012] [MC 3.44.060]

Prior to Map Approval

117. A copy of the Covenants, Conditions and Restrictions (CC&R's) shall be submitted for review and approved by the City Engineer. The CC&R's shall include, but not be limited to, access easements, reciprocal access, private and/or public utility easements as may be relevant to the project. Alternatively, access easements, reciprocal access, private and/or public utility easements may be submitted for review and approval by separate instruments that will be recorded once approved.
118. The developer shall enter into a Cooperative Agreement with the City and Riverside County Flood Control and Water Conservation District establishing the terms and conditions covering the inspection, operation and maintenance of Master Drainage Plan facilities required to be constructed as part of the project.
119. After recordation, a digital (pdf) copy of the recorded map shall be submitted to the Land Development Division.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 19

120. Resolution of all drainage issues shall be as approved by the City Engineer.
121. A parcel map (prepared by a registered civil engineer and/or licensed surveyor) shall be submitted for review and approved by the City Engineer per the current submittal requirements.
122. The developer shall guarantee the completion of all related improvements required for this project by executing a Public Improvement Agreement (PIA) with the City and posting the required security. [MC 9.14.220]
123. All public improvement plans required for this project shall be approved by the City Engineer in order to execute the Public Improvement Agreement (PIA).
124. The developer shall comply with the requirements of the City Engineer based on recommendations of the Riverside County Flood Control District regarding the construction of County Master Plan Facilities.
125. All street dedications shall be free of all encumbrances, irrevocably offered to the public and shall continue in force until the City accepts or abandons such offers, unless otherwise approved by the City Engineer.

Prior to Improvement Plan Approval

126. The developer is required to bring any existing access ramps adjacent to and fronting the project to current ADA (Americans with Disabilities Act) requirements. However, when work is required in an intersection that involves or impacts existing access ramps, all access ramps in that intersection shall be retrofitted to comply with current ADA requirements, unless otherwise approved by the City Engineer.
127. The developer shall submit clearances from all applicable agencies, and pay all applicable plan check fees.
128. The street improvement plans shall comply with current City policies, plans and applicable City standards (i.e. MVSI-160 series, etc.) throughout this project.
129. The design plan and profile shall be based upon a centerline, extending beyond the project boundaries a minimum distance of 300 feet at a grade and alignment approved by the City Engineer.
130. Drainage facilities (i.e. catch basins, etc.) with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided.
131. The hydrology study shall be designed to accept and properly convey all off-site drainage flowing onto or through the site. In the event that the City Engineer permits

CONDITIONS OF APPROVAL

(PEN20-0120)

Page 20

the use of streets for drainage purposes, the provisions of current City standards shall apply. Should the quantities exceed the street capacity or the use of streets be prohibited for drainage purposes, as in the case where one travel lane in each direction shall not be used for drainage conveyance for emergency vehicle access on streets classified as minor arterials and greater, the developer shall provide adequate facilities as approved by the City Engineer. [MC 9.14.110 A.2]

132. All public improvement plans (prepared by a licensed/registered civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.
133. Any missing or deficient existing improvements along the project frontage within Alessandro Boulevard shall be constructed or secured for construction. The City Engineer may require the ultimate structural section for pavement to half-street width plus 18 feet or provide core test results confirming that the existing pavement section is per current City Standards; additional signing & striping to accommodate increased traffic imposed by the development, removal and replacement of improvements due to wear or damage from construction activity, or additional transitional improvements for the orderly development of public infrastructure..
134. Storm drain improvement plans for Sunnymead Broadiaaea Avenue Storm Drain Line "A" Extension, from Alessandro Boulevard to the existing Line "A" located on APN 297-170-089, shall be submitted for review and approval by the City and RCFC&WCD. This storm drain has been identified as a future RCFC&WCD maintained facility as shown on Drawing No. 4-888, Sheet 8A (Preliminary Alignment Study) and referenced as Stage 3 of that certain Cooperative Agreement recorded on July 12, 2016 as Document No. 2016-0289060. This project will be required to satisfy all RCFC&WCD requirements for the acceptance and maintenance by RCFC&WCD including, but not limited to, the following:
- a. Enter into a Cooperative Agreement between the City, RCFC&WCD, and the developer;
 - b. Provide storm drain improvement plans of Stage 3 storm drain;
 - c. Provide security for the construction of storm drain improvements; and
 - d. Upon commencement of Stage 3 storm drain improvements and to the satisfaction of the City and RCFC&WCD, inspect, clean, repair, and maintain the existing portion of Line "A" (also referred to as Stage 2) from the current inlet at the northerly property line of APN 297-170-089 to the point of connection located within Broadiaaea Avenue.

In the event that Stage 3 does not meet the requirements and satisfaction of RCFC&WCD to assume maintenance responsibility, the storm drain shall be privately owned and maintained by the property owner.

CONDITIONS OF APPROVAL

(PEN20-0120)

Page 21

135. For non-subdivision projects, all street dedications shall be free of encumbrances, irrevocably offered to the public and shall continue in force until the City accepts or abandons such offers, unless otherwise approved by the City Engineer.
136. The plans shall indicate any restrictions on trench repair pavement cuts to reflect the City's moratorium on disturbing newly-constructed pavement less than three (3) years old and recently slurry sealed streets less than one (1) year old. Pavement cuts may be allowed for emergency repairs or as specifically approved in writing by the City Engineer. Special requirements shall be imposed for repaving, limits to be determined by the City Engineer.
137. All dry and wet utilities shall be shown on the plans and any crossings shall be potholed to determine actual location and elevation. Any conflicts shall be identified and addressed on the plans. The pothole survey data shall be submitted to Land Development with the public improvement plans for reference purposes only. The developer is responsible to coordinate with all affected utility companies and bear all costs of any utility relocation.
138. Alessandro Boulevard, Major Divided Arterial, City Standard MVSI-101A (134-foot RW / 110-foot CC) shall be constructed to half-width plus an additional 18 feet north of the centerline, along the entire project's north frontage. At a minimum, the existing street shall receive a 1.5" grind and overlay (PG 64-16 ARHM-GG-C). Pavement core samples will be required to determine the extent of pavement rehabilitation of the existing pavement which may include the removal and replacement of the entire structural section. All 4-foot right-of-way dedications at the driveway approaches, per City Standard MVSI-112C-0, shall be shown on the parcel map. Improvements shall consist of, but not be limited to, pavement, base, curb, gutter, sidewalk, driveway approaches, removal and replacement of existing storm drain and catch basins, any necessary offsite improvement transition/joins to existing, streetlights, relocation of any power poles with electrical lines of 115,000 volts or greater to meet an 18 inch minimum distance from the face of curb to the face of pole, undergrounding of any power poles with overhead utility lines or electrical lines less than 115,000 volts, and dry and wet utilities.

Prior to Encroachment Permit

139. A digital (pdf) copy of all approved improvement plans shall be submitted to the Land Development Division.
140. All applicable inspection fees shall be paid.
141. For non-subdivision projects, execution of a Public Improvement Agreement (PIA) and/or security (in the form of a cash deposit or other approved means) may be required as determined by the City Engineer. [MC 9.14.220]

CONDITIONS OF APPROVAL

(PEN20-0120)

Page 22

142. The plans shall indicate any restrictions on trench repair pavement cuts to reflect the City's moratorium on disturbing newly-constructed pavement less than three (3) years old and recently slurry sealed streets less than one (1) year old. Pavement cuts may be allowed for emergency repairs or as specifically approved in writing by the City Engineer. Special requirements shall be imposed for repaving, limits to be determined by the City Engineer.
143. Any work performed within public right-of-way requires an encroachment permit.

Prior to Occupancy

144. All outstanding fees shall be paid.
145. All required as-built plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.
146. The final/precise grade certification shall be submitted for review and approved by the City Engineer.
147. For commercial, industrial and multi-family projects, in compliance with Proposition 218, the developer shall agree to approve the City of Moreno Valley NPDES Regulatory Rate Schedule that is in place at the time of certificate of occupancy issuance. Under the current permit for storm water activities required as part of the National Pollutant Discharge Elimination System (NPDES) as mandated by the Federal Clean Water Act, this project is subject to the following requirements:
- a. Select one of the following options to meet the financial responsibility to provide storm water utilities services for the required continuous operation, maintenance, monitoring system evaluations and enhancements, remediation and/or replacement, all in accordance with Resolution No. 2002-46.
 - i. Participate in the mail ballot proceeding in compliance with Proposition 218, for the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule and pay all associated costs with the ballot process; or
 - ii. Establish an endowment to cover future City costs as specified in the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule.
 - b. Notify the Special Districts Division of the intent to request building permits 90 days prior to their issuance and the financial option selected. The financial option selected shall be in place prior to the issuance of certificate of occupancy. [California Government Code & Municipal Code]
148. The developer shall complete all public improvements in conformance with current

CONDITIONS OF APPROVAL

(PEN20-0120)

Page 23

City standards, except as noted in the Special Conditions, including but not limited to the following:

a. Street improvements including, but not limited to: pavement, base, curb and/or gutter, cross gutters, spandrel, sidewalks, drive approaches, pedestrian ramps, street lights (<MVU: SL-2 / SCE: LS-2>), signing, striping, under sidewalk drains, landscaping and irrigation, medians, pavement tapers/transitions and traffic control devices as appropriate.

b. Storm drain facilities including, but not limited to: storm drain pipe, storm drain laterals, open channels, catch basins and local depressions.

c. City-owned utilities.

d. Sewer and water systems including, but not limited to: sanitary sewer, potable water and recycled water.

e. Under grounding of all existing and proposed utilities adjacent to and on-site. [MC 9.14.130]

f. Relocation of overhead electrical utility lines including, but not limited to: electrical, cable and telephone.

149. All punch list work for off-site and on-site improvements shall be completed.
150. For commercial, industrial and multi-family projects, a Stormwater Treatment Device and Control Measure Access and Maintenance Covenant", "Maintenance Agreement for Water Quality Improvements located in the public right-of-way" and a "Declaration of Restrictive Covenants (encroachment on City easement)" shall be recorded to provide public notice of the maintenance requirements to be implemented per the approved final project-specific WQMP. A boilerplate copy of the covenants and agreements can be obtained by contacting the Land Development Division.
151. The applicant shall ensure the following, pursuant to Section XII. I. of the 2010 NPDES Permit:
- a. Field verification that structural Site Design, Source Control and Treatment Control BMPs are designed, constructed and functional in accordance with the approved Final Water Quality Management Plan (WQMP).
- b. Certification of best management practices (BMPs) from a state licensed civil engineer. An original WQMP BMP Certification shall be submitted for review and approved by the City Engineer.
152. The Developer shall comply with the following water quality related items:
- a. Notify the Land Development Division prior to construction and installation of all structural BMPs so that an inspection can be performed.
- b. Demonstrate that all structural BMPs described in the approved final project-specific WQMP have been constructed and installed in conformance with the approved plans and specifications;
- c. Demonstrate that Developer is prepared to implement all non-structural BMPs

CONDITIONS OF APPROVAL

(PEN20-0120)

Page 24

described in the approved final project-specific WQMP; and

d. Demonstrate that an adequate number of copies of the approved final project-specific WQMP are available for future owners/occupants.

e. Clean and repair the water quality BMP's, including re-grading to approved civil drawing if necessary.

f. Obtain approval and complete installation of the irrigation and landscaping.

Special Districts Division

153. This project is located within the boundary of Community Facilities District No. 4–Maintenance (CFD No. 4-M) and is subject to hydrology study determination based upon the final tentative parcel map. The project is conditioned to provide a funding source which will be used for maintenance of stormwater and detention basin improvements. The Developer shall satisfy the condition with one of the financing options outlined below.

a. In compliance with Proposition 218, the property owner shall agree to approve the special election for annexation into CFD No. 4-M and pay all associated costs with the special election process and formation costs, if any; or

b. Establish an endowment fund which shall be used to cover future maintenance costs for storm water and detention basin improvements benefiting this project.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financing option when submitting the application for building permit issuance. The option for participating in a special election requires 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the first issuance of certificate of occupancy for this project.

154. MAJOR INFRASTRUCTURE FINANCING DISTRICT. This project has been identified to potentially be included in the formation of a special financing district for the construction and maintenance of major infrastructure improvements which may include but are not limited to thoroughfares, bridges, and certain flood control improvements. The property owner(s) shall participate in such district and pay any special tax, assessment, or fee levied upon the project property for such district. At the time of the public hearing to consider formation of or annexation into the district, the qualified elector(s) will not protest the formation or annexation, but will retain the right to object to any eventual tax/assessment/fee that is not equitable should the financial burden of the tax/assessment/fee not be reasonably proportionate to the

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 25

benefit the affected property obtains from the improvements to be installed and/or maintained. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting an application for the first building permit to determine whether the development will be subjected to this condition. If subject to the condition, the special election requires a minimum 90-day process in compliance with the provisions of Article 13C of the California Constitution.

155. The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services District Zone A (Parks & Community Services) and Zone C (Arterial Street Lighting). All assessable parcels therein shall be subject to annual parcel taxes for Zone A and Zone C for operations and capital improvements.
156. This project is conditioned to provide a funding source for the operation and maintenance of public improvements and/or services associated with new development in that territory. The Developer shall satisfy this condition with one of the options below.

a. Participate in a special election for maintenance/services and pay all associated costs of the election process and formation, if any. Financing may be structured through a Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover the future maintenance and/or service costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option prior to City Council action authorizing recordation of the final map for the development. A minimum of 90 days is needed to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution for conducting a special election.

The financial option selected shall be in place prior to the issuance of the first building permit for the project.

157. This project is conditioned to provide a funding source for the following special financing program(s):

a. Landscape Maintenance Services for parkway, open space, and/or median landscaping on Alessandro Blvd.

The Developer's responsibility is to provide a funding source for the capital

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 26

improvements and the continued maintenance of the landscaped area. The Developer shall satisfy this condition with one of the options below.

i. Participate in a special election (mail ballot proceeding) and pay all associated costs of the special election and formation, if any. Financing may be structured through a Community Services District zone, Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

ii. Establish a Property Owner's Association (POA) or Home Owner's Association (HOA) which will be responsible for any and all operation and maintenance costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option prior to City Council action authorizing recordation of the final map for the development. The option for participating in a special election requires approximately 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution for conducting a special election.

The financial option selected shall be in place prior to the issuance of the first building permit for this project.

158. Commercial (R) If Land Development, a Division of the Public Works Department, requires this project to supply a funding source necessary to provide for, but not limited to, stormwater utilities services for the continuous operation, remediation and/or replacement, maintenance, monitoring, systems evaluation and enhancements of on-site facilities and performing annual inspections of the affected areas to ensure compliance with state mandated stormwater regulations, a funding source needs to be established. The Developer must notify the Special Districts Division at 951.413.3480 or specialdistricts@moval.org of its selected financial option for the National Pollution Discharge Elimination System (NPDES) program (see Land Development's related condition) 90 days prior to City Council action authorizing recordation of the final map for the development and participate in a special election process. This allows adequate time to be in compliance with the provisions of Article 13D of the California Constitution. (California Health and Safety Code Sections 5473 through 5473.8 (Ord. 708 Section 3.1, 2006) & City of Moreno Valley Municipal Code Title 3, Section 3.50.050.)
159. This project has been identified to be included in the formation of a Community Facilities District for Public Safety services including but not limited to Police, Fire Protection, Paramedic Services, Park Rangers, and Animal Control services. The property owner(s) shall not protest the formation; however, they retain the right to

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 27

object to the rate and method of maximum special tax. In compliance with Proposition 218, the property owner shall agree to approve the mail ballot proceeding (special election) for either formation of the CFD or annexation into an existing district that may already be established. The Developer must notify the Special Districts Division at 951.413.3480 or specialdistricts@moval.org of its intent to record the final map for the development 90 days prior to City Council action authorizing recordation of the map. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution. (California Government Code Section 53313 et. seq.)

160. The existing parkway/median along the frontage of the project shall be brought to current City Standards. Improvements may include but are not limited to: plant material, irrigation, and hardscape.
161. The ongoing maintenance of any landscaping required to be installed behind the curb shall be the responsibility of the property owner.
162. Any damage to existing landscape areas maintained by the City of Moreno Valley due to project construction shall be repaired/replaced by the Developer, or Developer's successors in interest, at no cost to the City of Moreno Valley.
163. **PARKS MAINTENANCE FUNDING.** Prior to applying for the 1st Building Permit, the qualified elector (e.g. property owner) must initiate the process (i.e. pay the annexation fee or fund an endowment) to provide an ongoing funding source for the continued maintenance, enhancement, and or retrofit of parks, open spaces, linear parks, and/or trails systems, and programs.
- This condition must be fully satisfied prior to issuance of the 1st Certificate of Occupancy. This condition will be satisfied with the successful annexation/formation (i.e. special election process) into a special financing district and payment of all costs associated with the special election process. Annexation into a special financing district requires an annual payment of the annual special tax, assessment, or fee levied against the property tax bill, or other lawful means, of the parcels of the project for such district. At the time of the public hearing to consider annexation into or formation of the district, the qualified elector(s) will not protest the annexation or formation, but will retain the right to object to any eventual tax/assessment/fee that is not equitable should the financial burden of the tax/assessment/fee not be reasonably proportionate to the benefit the affected property receives from the improvements to be installed and/or maintained or services provided. The special election requires a minimum 90-day process in compliance with the provisions of Article 13C of the California Constitution, Proposition 218, or other applicable legislation, and consistent with the scheduling for City Council meetings.
- Alternatively, the condition can be satisfied by the Developer funding an endowment in an amount sufficient to yield an annual revenue stream that meets the annual obligation. The Developer must contact Special Districts Administration at

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 28

951.413.3470 or at SAdmin@moval.org to satisfy this condition.

Transportation Engineering Division

164. Conditions of approval may be modified or added if a phasing plan is submitted for this development.
165. All proposed on-site traffic signing and striping should be accordance with the latest California Manual on Uniform Traffic Control Devices (CAMUTCD).
166. Sight distance at the proposed roadways and driveways shall conform to City of Moreno Valley Standard No. MVSI-164A,B,C-0 at the time of preparation of final grading, landscape, and street improvement plans.
167. Communication conduit along Alessandro Boulevard shall be required per City Standard No. MVSI-186-0. Any improvements undertaken by this project shall be consistent with the City standards for this facility.
168. Alessandro Boulevard is designated as a 6-Lane Divided Arterial (134' RW/110'CC) per City Standard Plan No. MVSI-101A and shall be improved to its ultimate half-width plus 23' with median and necessary transition improvements. The existing eastbound left turn pocket at the intersection of Graham Street and Alessandro Boulevard shall be modified to provide 250 feet of vehicle storage. A Class II Bikeway shall be provided along project frontage.
169. Prior to issuance of an encroachment permit, construction traffic control plans shall be prepared by a qualified, registered Civil or Traffic engineer and submitted for plan approval.
170. Prior to final approval of any landscaping or monument sign plans, the project plans shall demonstrate that sight distance at the project driveways conforms to City Standard Plan No. MVSI-164A, B, C-0.
171. Prior to the final approval of the street improvement plans, a signing and striping plan shall be prepared per City of Moreno Valley Standard Plans - Section 4 for Alessandro Boulevard.
172. Prior to issuance of a Building Final or Certificate of Occupancy, all approved signing and striping shall be installed per current City Standards
173. All project driveways shall conform to Section 9.11.080, and Table 9.11.080-14 of the City's Development Code – Design Guidelines and City of Moreno Valley Standard Plans No. MVSI-112C-0 for commercial driveway approaches. Access at all driveways shall be right-in and right-out access only.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 29

174. Prior to final approval of the street improvement plans, a median modification plan shall be required to modify the existing raised, landscaped median on Alessandro Boulevard, west of Graham Street. The median shall be designed per current City Standards to extend the eastbound left-turn storage length to 250 feet at the Alessandro Boulevard/Graham Street intersection.
175. During construction activity, developer is responsible for regularly scheduled street sweeping per approved street sweeping schedule. Failure to provide regularly scheduled street sweeping during construction activity at the approved times shall result in re-inspection fees (amounts to be determined by City Engineer) and/or project suspension until street sweeping is provided.

RESOLUTION NUMBER 2021-28

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL APPROVE PLOT PLANS PEN20-0121 AND PEN20-0124 FOR THE COMPASS DANBE CENTERPOINTE PROJECT LOCATED ON THE SOUTH SIDE OF ALESSANDRO BOULEVARD BETWEEN FREDERICK STREET AND GRAHAM STREET (APN'S 297-170-002 AND 003)

WHEREAS, the City of Moreno Valley ("City") is a general law city and a municipal corporation of the State of California, and

WHEREAS, CDRE Holdings LLC., ("Developer") has filed an application for the approval of the Compass Danbe Centerpointe Project, which includes the approval of Plot Plans PEN20-0121 and PEN20-0124 ("Applications") for the development of two light industrial buildings approximately 290,726 and 98,877 square feet in size with associated public improvements ("Project") located on the south side of Alessandro Boulevard between Frederick Street and Graham Street (APN's 297-170-002 and 003) ("Project Site"); and

WHEREAS, Section 9.02.070 (Plot Plan) of the Moreno Valley Municipal Code acknowledges that the purpose of plot plans is to provide a mechanism by which all new construction of industrial, commercial or multiple-family residential can be reviewed when not subject to other discretionary review processes which have review authority over project design; and

WHEREAS, the Application has been evaluated in accordance with Section 9.02.070 (Plot Plan) of the Municipal Code with consideration given to the City's General Plan, Zoning Ordinance, and other applicable laws and regulations; and

WHEREAS, Section 9.02.070 of the Municipal Code imposes conditions of approval upon projects for which a Plot Plan is required, which conditions may be imposed by the City to address on-site improvements, off-site improvements, the manner in which the site is used and any other conditions as may be deemed necessary to protect the public health, safety and welfare and ensure that the proposed Project will be developed in accordance with the purpose and intent of Title 9 (Planning and Zoning) of the Municipal Code; and

WHEREAS, Staff has presented for the Planning Commission's consideration Conditions of Approval to be imposed upon Plot Plans PEN20-0121 and PEN20-0124, which conditions have been deemed necessary to protect the public health, safety and welfare and ensure that the proposed Project will be developed in accordance with the purpose and intent of Title 9 (Planning and Zoning) of the Municipal Code; and

WHEREAS, pursuant to the provisions of Section 9.02.200 (Public Hearing and Notification Procedures) of the Municipal Code and Government Code section 65905, a public hearing was scheduled for August 26, 2021 and notice thereof was duly published

and posted, and mailed to all property owners of record within 600 feet of the Project Site; and

WHEREAS, on August 26, 2021, the public hearing to consider the Applications was duly conducted by the Planning Commission at which time all interested persons were provided with an opportunity to testify and to present evidence; and

WHEREAS, consistent with the requirements of Section 9.02.070 (Plot Plan) of the Municipal Code, at the public hearing the Planning Commission considered Conditions of Approval to be imposed upon Plot Plans PEN20-0121 and PEN20-0124, which conditions were prepared by Planning Division staff who deemed said conditions to be necessary to protect the public health, safety and welfare and to ensure the proposed Project will be developed in accordance with the purpose and intent of Title 9 (Planning and Zoning) of the Municipal Code; and

WHEREAS, at the public hearing, the Planning Commission considered whether each of the requisite findings specified in Section 9.02.070 of the Municipal Code and set forth herein could be made with respect to the proposed Project as conditioned by Conditions of Approval; and

WHEREAS, on August 26, 2021, in accordance with the provisions of the California Environmental Quality Act (CEQA) and CEQA Guidelines, the Planning Commission considered and recommended that the City Council approve Resolution 2021-24 recommending that the City Council adopt a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Compass Danbe Centerpointe Project located on the south side of Alessandro Boulevard between Frederick Street and Graham Street (APN's 297-170-002 and 003).

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals and Exhibits

That the foregoing Recitals and attached Exhibits are true and correct and are hereby incorporated by this reference.

Section 2. Notice

That pursuant to Government Code section 66020(d)(1), notice is hereby given that the proposed project is subject to certain fees, dedications, reservations and other exactions as provided herein.

Section 3. Evidence

That the Planning Commission has considered all of the evidence submitted into the administrative record for the proposed Plot Plans, including, but not limited to, the following:

- (a) Moreno Valley General Plan and all other relevant provisions contained therein;
- (b) Title 9 (Planning and Zoning) of the Moreno Valley Municipal Code and all other relevant provisions referenced therein;
- (c) Application for the approval of Plot Plans PEN20-0121 and PEN20-0124 and all documents, records and references contained therein;
- (d) Conditions of Approval for Plot Plans PEN20-0121 and PEN20-0124, attached hereto as Exhibit A;
- (e) Staff Report prepared for the Planning Commission's consideration and all documents, records and references related thereto, and Staff's presentation at the public hearing;
- (f) Testimony and/or comments from Applicant and its representatives during the public hearing; and
- (g) Testimony and/or comments from all persons that was provided in written format or correspondence, at, or prior to, the public hearing.

Section 4. Findings

That based on the foregoing Recitals and the Evidence contained in the Administrative Record as set forth above, the Planning Commission makes the following findings in approving Plot Plans PEN20-0121 and PEN20-0124

- (a) The proposed project is consistent with the goals, objectives, policies and programs of the general plan;
- (b) The proposed project complies with all applicable zoning and other regulations;
- (c) The proposed project will not be detrimental to the public health, safety or welfare or materially injurious to properties or improvements in the vicinity;
- (d) The location, design and operation of the proposed project will be compatible with existing and planned land uses in the vicinity.

Section 5. Approval

That based on the foregoing Recitals, Evidence contained in the Administrative Record and Findings set forth above, the Planning Commission hereby recommends that the City Council approve Plot Plans PEN20-0121 and PEN20-0124 subject to the Conditions of Approval for Plot Plans PEN20-0121 and PEN20-0124 attached hereto as Exhibit A.

Section 6. Repeal of Conflicting Provisions

That all the provisions as heretofore adopted by the Planning Commission that are in conflict with the provisions of this Resolution are hereby repealed.

Section 7. Severability

That the Planning Commission declares that, should any provision, section, paragraph, sentence or word of this Resolution be rendered or declared invalid by any

final court action in a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of this Resolution as hereby adopted shall remain in full force and effect.

Section 8. Effective Date

That this Resolution shall take effect immediately upon the date of adoption.

Section 9. Certification

That the Secretary of the Planning Commission shall certify to the passage of this Resolution.

PASSED AND ADOPTED THIS ___ day of _____, 2021

CITY OF MORENO VALLEY
PLANNING COMMISSION

Patricia Korzec, Chairperson

ATTEST:

Patty Nevins,
Planning Official

APPROVED AS TO FORM:

Steven B. Quintanilla,
Interim City Attorney

Exhibits:
Exhibit A: Conditions of Approval PEN20-0121 and PEN20-0124

Attachment: Resolution No. 2021-28 Plot Plans [Revision 1] (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

Exhibit A

CONDITIONS OF APPROVAL PEN20-0121 and PEN20-0124

Attachment: Resolution No. 2021-28 Plot Plans [Revision 1] (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 1

**CITY OF MORENO VALLEY CONDITIONS OF APPROVAL
(PEN20-0120, PEN20-0121 & PEN20-0124)**

EFFECTIVE DATE:

EXPIRATION DATE:

COMMUNITY DEVELOPMENT DEPARTMENTPlanning Division

1. A change or modification to the land use or the approved site plans may require a separate approval. Prior to any change or modification, the property owner shall contact the City of Moreno Valley Community Development Department to determine if a separate approval is required.
2. Any expansion to this use or exterior alterations will require the submittal of a separate application(s) and shall be reviewed and approved under separate permit(s). (MC 9.02.080)
3. The developer, or the developer's successor-in-interest, shall be responsible for maintaining any undeveloped portion of the site in a manner that provides for the control of weeds, erosion and dust. (MC 9.02.030)
4. The site shall be developed in accordance with the approved plans on file in the Community Development Department - Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. Prior to any use of the project site or business activity being commenced thereon, all Conditions of Approval shall be completed to the satisfaction of the Planning Official. (MC 9.14.020)
5. Any signs indicated on the submitted plans are not included with this approval. Any signs, whether permanent (e.g. wall, monument) or temporary (e.g. banner, flag), require separate application and approval by the Planning Division. No signs are permitted in the public right of way. (MC 9.12)

Special Conditions

6. All site plans, grading plans, landscape and irrigation plans, lighting plans and street improvement plans shall be coordinated for consistency with this approval.
7. This approval shall comply with all applicable requirements of the City of Moreno Valley Municipal Code.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 2

8. Prior to building final, the developer/owner or developer's/owner's successor-in-interest shall pay all applicable impact fees, including but not limited to Transportation Uniform Mitigation fees (TUMF), and the City's adopted Development Impact Fees. (Ord)
9. Prior to the issuance of grading permits, final erosion control landscape and irrigation plans for all cut or fill slopes over 3 feet in height shall be submitted to and approved by the Planning Division. The plans shall be designed in accordance with the slope erosion plan as required by the City Engineer. Man-made slopes greater than 10 feet in height shall be "land formed" to conform to the natural terrain and shall be landscaped and stabilized to minimize visual scarring. (GP Objective 1.5, MC 9.08.080, DG)
10. Prior to recordation of the final map, final median enhancement/landscape/irrigation plans shall be submitted to and approved by the Planning Division, and Public Works Department - Special Districts Division for review and approval by each division. (GP - Circulation Master Plan)
11. All landscaped areas in perpetuity shall be maintained in a healthy and thriving condition, free from weeds, trash and debris. (MC 9.02.030)
12. This tentative map and plot plans shall expire three years after the approval date of this tentative map unless extended as provided by the City of Moreno Valley Municipal Code; otherwise it shall become null and void and of no effect whatsoever in the event the applicant or any successor in interest fails to properly file a final map before the date of expiration. (MC 9.02.230, 9.14.050, 080)
13. Prior to the issuance of grading permits, mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein.
14. Prior to any site disturbance and/or grading plan submittal, and or final map recordation, a mitigation monitoring fee, as provided by City ordinance, shall be paid by the applicant/owner. No City permit or approval shall be issued until such fee is paid. (CEQA)
15. Prior to issuance of a building permit, the developer/property owner or developer's successor-in-interest shall pay all applicable impact fees due at permit issuance, including but not limited to Multi-species Habitat Conservation Plan (MSHCP) mitigation fees. (Ord.)
16. Within thirty (30) days prior to any grading or other land disturbance, a pre-construction survey for Burrowing Owls shall be conducted pursuant to the established guidelines of Multiple Species Habitat Conservation Plan. The pre-construction survey shall be submitted to the Planning Division prior to any

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 3

disturbance of the site and/or grading permit issuance.

17. Prior to the issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the following: The name and address of the development and the developer's name and address to include a 24-hour emergency phone number.
18. Prior to approval of any grading permits, plans for any security gate system shall be submitted to and approved by to the Planning Division.
19. Prior to issuance of grading permits, the developer shall pay the applicable Stephen's' Kangaroo Rat (SKR) Habitat Conservation Plan mitigation fee.
20. Prior to the issuance of any grading permits and prior to any physical disturbance of any natural drainage course, or any wetland determined to contain riparian vegetation, the applicant shall obtain a stream bed alteration agreement or permit, or a written waiver of the requirement for such an agreement or permit, from both the California Department of Fish and Game and the U.S. Army Corps of Engineers. Written verification of such a permit or waiver shall be provided to both the Planning Division and the Public Works Department - Land Development Division. (CEQA, State and Federal codes)
21. Prior to recordation of the final subdivision map, the following documents shall be submitted to and approved by the Planning Division which shall demonstrate that the project will be developed and maintained in accordance with the intent and purpose of the approval:
 - a. The document to convey title
 - b. Deed restrictions, easements, or Covenants, Conditions and Restrictions to be recorded

The approved documents shall be recorded at the same time that the subdivision map is recorded. The documents shall contain provisions for general maintenance of the site, joint access to proposed parcels, open space use restrictions, conservation easements, parking, feeder trails, water quality basins, lighting, landscaping and common area use items such as general building maintenance. The approved documents shall also contain a provision, which provides that they may not be terminated and/or substantially amended without the consent of the City and the developer's successor-in-interest. (MC 9.14.090)

In addition, the following deed restrictions and disclosures shall be included within the document and grant deed of the properties:

- a. The developer shall promote the use of native plants and trees and drought

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 4

tolerant species.

b. All lots designated for open space and or detention basins, shall be included as an easement to, and maintained by a Homeowners Association (HOA) or other private maintenance entity. All reverse frontage landscape areas shall also be maintained by the onsite HOA. Language to this effect shall be included and reviewed within the required Covenant Conditions and Restrictions (CC&Rs) prior to the approval of the final map.

c. Maintenance of any and all common facilities.

22. Applicant/Developer shall defend, indemnify and hold harmless City, city council, commissions, boards, subcommittees and City's elected and appointed officials, commissioners, board members, officers, agents, consultants and employees ("City Parties") from and against any and all liabilities, demands, claims, actions or proceedings and costs and expenses incidental thereto (including costs of defense, settlement and reasonable attorneys' fees), which any or all of them may suffer, incur, be responsible for or pay out as a result of or in connection with any challenge to the legality, validity or adequacy of any of the following items: (i) any agreements by and among City and Developer including without limitation any Development Agreement, (ii) any and all permits, licenses and entitlements approved by City; (iii) any environmental determination made by City in connection with the Project Site or Project; and (iv) any proceedings or other actions undertaken by City in connection with the adoption or approval of any of the above.
23. The project shall be designed and constructed to meet LEED Silver Equivalent with evidence provided to the City. A change or modification shall require separate approval.
24. The site has been approved for a Tentative Parcel Map 37944 to subdivide the lots into two parcels and two light industrial warehouse buildings. Building 1 will be approximately 290,726 square feet and Building 2 will be approximately 98,877 square feet with associated on-site and off-site improvements designed per the approved plans.
25. This approval includes the Tentative Parcel Map 37944 and two Plot Plans for the construction of two light industrial buildings to be completed as one project. All improvements both on-site and off-site shall be completed prior to building shell final of any one building. If the construction of one building is postponed, the parcel/pad area shall be maintained with landscaping and screening as approved by the Community Development Director.
26. Should the applicant/property owner elect to not construct one of the buildings, the building pad shall be precise graded and hydroseeded to prevent dust and erosion.
27. Prior to the start of any construction, temporary security fencing shall be erected. The fencing shall be a minimum of six (6) feet high with locking, gated access and

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 5

shall remain through the duration of construction. Security shall remain in place until the project is completed or the above conditions no longer exist. (Security fencing is required if there is: construction, unsecured structures, unenclosed storage of materials and/or equipment, and/or the condition of the site constitutes a public hazard).

Prior to Building Permit

28. Prior to issuance of any building permits, final landscaping and irrigation plans shall be submitted for review and approved by the Planning Division. The plans shall be prepared in accordance with the City's Landscape Requirements to include a drought tolerant palette. (9.17)
29. Prior to issuance of any building permit, all Conditions of Approval, Mitigation Measures and Airport Land Use Commission Conditions of Approval shall be printed on the building plans.
30. Prior to the issuance of grading permits, decorative (e.g. colored/scored concrete or as approve by the Planning Official) pedestrian pathways across circulation aisles/paths shall be provided throughout the development to connect dwellings with open spaces and/or recreational uses or commercial/industrial buildings with open space and/or parking. and/or the public right-of-way. The pathways shall be shown on the precise grading plan. (GP Objective 46.8, DG)
31. Prior to issuance of building permits, the Planning Division shall review and approve the location and method of enclosure or screening of transformer cabinets, commercial gas meters and back flow preventers as shown on the final working drawings. Location and screening shall comply with the following criteria: transformer cabinets and commercial gas meters shall not be located within required setbacks and shall be screened from public view either by architectural treatment or landscaping; multiple electrical meters shall be fully enclosed and incorporated into the overall architectural design of the building(s); back-flow preventers shall be screened by landscaping. (GP Objective 43.30)
32. Prior to issuance of any grading permit, all Conditions of Approval, Mitigation Measures and Airport Land Use Commission Conditions of Approval shall be printed on the grading plans.
33. Prior to approval of any grading permits, plans for any security gate system shall be submitted to and approved by to the Planning Division.
34. Prior to issuance of grading permits, the developer shall submit fence/wall plans to be included in the Building and Safety submittal for review and approval consistent with the approved plans, the Landscape Requirements and the Municipal Code.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 6

35. Prior to the issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the following:
 - a. The name (if applicable) and address of the development.
 - b. The developer's name, address, and a 24-hour emergency telephone number.
36. Photometric Plans shall be submitted to the Building and Safety Division for review and approval as part of the lighting and electrical building plan submittal.
37. Prior to the issuance of grading permits, the site plan and grading plans shall show decorative hardscape (e.g. colored concrete, stamped concrete, pavers or as approved by the Planning Official) consistent and compatible with the design, color and materials of the proposed development for all driveway ingress/egress locations of the project.

Prior to Building Final or Occupancy

38. Prior to building final, all required landscaping and irrigation shall be installed per plan, certified by the Landscape Architect and inspected by the Planning Division. (MC 9.03.040, MC 9.17).
39. Prior to building final, all required and proposed fences and walls shall be constructed according to the approved plans on file in the Planning Division. (MC 9.080.070).

Building Division

40. The proposed non-residential project shall comply with the latest Federal Law, Americans with Disabilities Act, and State Law, California Code of Regulations, Title 24, Chapter 11B for accessibility standards for the disabled including access to the site, exits, bathrooms, work spaces, etc.
41. Building plans submitted shall be signed and sealed by a California licensed design professional as required by the State Business and Professions Code.
42. All new structures shall be designed in conformance to the latest design standards adopted by the State of California in the California Building Code, (CBC) Part 2, Title 24, California Code of Regulations including requirements for allowable area, occupancy separations, fire suppression systems, accessibility, etc.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 7

43. Prior to submittal, all new development, including residential second units, are required to obtain a valid property address prior to permit application. Addresses can be obtained by contacting the Building Safety Division at 951.413.3350.
44. Contact the Building Safety Division for permit application submittal requirements.
45. All new buildings 10,000 square feet and over, shall include building commissioning in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (OPR). All requirements in The 2016 California Green Building Standards Code, sections 5.410.2 - 5.410.2.6 must be met.
46. Any construction within the city shall only be as follows: Monday through Friday seven a.m. to seven p.m.(except for holidays which occur on weekdays), eight a.m. to four p.m.; weekends and holidays (as observed by the city and described in the Moreno Valley Municipal Code Chapter 2.55), unless written approval is first obtained from the Building Official or City Engineer.
47. The proposed development shall be subject to the payment of required development fees as required by the City's current Fee Ordinance at the time a building application is submitted or prior to the issuance of permits as determined by the City.
48. The proposed project will be subject to approval by the Eastern Municipal Water District and all applicable fees and charges shall be paid prior to permit issuance. Contact the water district at 951.928.3777 for specific details.
49. The proposed project's occupancy shall be classified by the Building Official and must comply with exiting, occupancy separation(s) and minimum plumbing fixture requirements. Minimum plumbing fixtures shall be provided per the 2016 California Plumbing Code, Table 422.1. The occupant load and occupancy classification shall be determined in accordance with the California Building Code.
50. Prior to permit issuance, every applicant shall submit a properly completed Waste Management Plan (WMP), as a portion of the building or demolition permit process. (MC 8.80.030)

ECONOMIC DEVELOPMENT DEPARTMENT (EDD)

51. New Moreno Valley businesses may work with the Economic Development Department to coordinate job recruitment fairs.
52. New Moreno Valley businesses may adopt a "First Source" approach to employee recruitment that gives notice of job openings to Moreno Valley residents for one

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 8

week in advance of public recruitment.

53. New Moreno Valley businesses are encouraged to hire local residents.
54. New Moreno Valley businesses are encouraged to provide a job fair flyer and/or web announcement to the City in advance of job recruitments, so that the City can assist in publicizing these events.
55. New Moreno Valley businesses may utilize the workforce recruitment services provided by the Moreno Valley Business & Employment Resource Center ("BERC").

The BERC offers free assistance to Moreno Valley businesses recruiting and training potential employees. Complimentary services include:

- Job Announcements
- Applicant testing / pre-screening
- Interviewing
- Job Fair support
- Training space

FIRE DEPARTMENT**Fire Prevention Bureau**

56. All Fire Department access roads or driveways shall not exceed 12 percent grade. (CFC 503.2.7 and MVMC 8.36.060[G])
57. The Fire Department emergency vehicular access road shall be (all weather surface) capable of sustaining an imposed load of 80,000 lbs. GVW, based on street standards approved by the Public Works Director and the Fire Prevention Bureau. The approved fire access road shall be in place during the time of construction. Temporary fire access roads shall be approved by the Fire Prevention Bureau. (CFC 501.4, and MV City Standard Engineering Plan 108d)
58. The angle of approach and departure for any means of Fire Department access shall not exceed 1 ft drop in 20 ft (0.3 m drop in 6 m), and the design limitations of the fire apparatus of the Fire Department shall be subject to approval by the AHJ. (CFC 503 and MVMC 8.36.060)
59. Prior to construction, all locations where structures are to be built shall have an approved Fire Department access based on street standards approved by the Public Works Director and the Fire Prevention Bureau. (CFC 501.4)
60. Prior to issuance of Building Permits, the applicant/developer shall provide the Fire

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 9

- Prevention Bureau with an approved site plan for Fire Lanes and signage. (CFC 501.3)
61. Prior to issuance of Certificate of Occupancy or Building Final, "Blue Reflective Markers" shall be installed to identify fire hydrant locations in accordance with City specifications. (CFC 509.1 and MVLT 440A-0 through MVLT 440C-0)
 62. Prior to issuance of building permits, plans specifying the required structural materials for building construction in high fire hazard severity zones shall be submitted to the Fire Prevention Bureau for approval. (CFC, 4905)
 63. Prior to issuance of Certificate of Occupancy or Building Final, all commercial buildings shall display street numbers in a prominent location on the street side and rear access locations. The numerals shall be a minimum of twelve inches in height. (CFC 505.1, MVMC 8.36.060[I])
 64. Existing fire hydrants on public streets are allowed to be considered available. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads. (CFC 507, 501.3) a - After the local water company signs the plans, the originals shall be presented to the Fire Prevention Bureau for signatures. The required water system, including fire hydrants, shall be installed, made serviceable, and be accepted by the Moreno Valley Fire Department prior to beginning construction. They shall be maintained accessible.
 65. Final fire and life safety conditions will be addressed when the Fire Prevention Bureau reviews building plans. These conditions will be based on occupancy, use, California Building Code (CBC), California Fire Code (CFC), and related codes, which are in effect at the time of building plan submittal.
 66. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall install a fire alarm system monitored by an approved Underwriters Laboratory listed central station based on a requirement for monitoring the sprinkler system, occupancy or use. Fire alarm panel shall be accessible from exterior of building in an approved location. Plans shall be submitted to the Fire Prevention Bureau for approval prior to installation. (CFC Chapter 9 and MVMC 8.36.100)
 67. The Fire Code Official is authorized to enforce the fire safety during construction requirements of Chapter 33. (CFC Chapter 33 & CBC Chapter 33)
 68. Fire lanes and fire apparatus access roads shall have an unobstructed width of not less than twenty-four (24) feet and an unobstructed vertical clearance of not less than the thirteen (13) feet six (6) inches. (CFC 503.2.1 and MVMC 8.36.060[E])

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 10

69. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall install a fire sprinkler system based on square footage and type of construction, occupancy or use. Fire sprinkler plans shall be submitted to the Fire Prevention Bureau for approval prior to installation. (CFC Chapter 9, MVMC 8.36.100[D])
70. Prior to issuance of the building permit for development, independent paved access to the nearest paved road, maintained by the City shall be designed and constructed by the developer within the public right of way in accordance with City Standards. (MVMC 8.36.060, CFC 501.4)
71. Prior to issuance of a Certificate of Occupancy or Building Final, a "Knox Box Rapid Entry System" shall be provided. The Knox-Box shall be installed in an accessible location approved by the Fire Code Official. All exterior security emergency access gates shall be electronically operated and be provided with Knox key switches for access by emergency personnel. (CFC 506.1)
72. The minimum number of fire hydrants required, as well as the location and spacing of fire hydrants, shall comply with the C.F.C., MVMC, and NFPA 24. Fire hydrants shall be located no closer than 40 feet to a building. A fire hydrant shall be located within 50 feet of the fire department connection for buildings protected with a fire sprinkler system. The size and number of outlets required for the approved fire hydrants are (6" x 4" x 2 ½" x 2 ½") (CFC 507.5.1, 507.5.7, Appendix C, NFPA 24-7.2.3, MVMC 912.2.1)
73. During phased construction, dead end roadways and streets which have not been completed shall have a turn-around capable of accommodating fire apparatus. (CFC 503.1 and 503.2.5)
74. If construction is phased, each phase shall provide an approved emergency vehicular access way for fire protection prior to any building construction. (CFC 501.4)
75. Plans for private water mains supplying fire sprinkler systems and/or private fire hydrants shall be submitted to the Fire Prevention Bureau for approval. (CFC 105 and CFC 3312.1)
76. The Fire Prevention Bureau is required to set a minimum fire flow for the remodel or construction of all commercial buildings per CFC Appendix B and Table B105.1. The applicant/developer shall provide documentation to show there exists a water system capable of delivering said waterflow for 2 hour(s) duration at 20-PSI residual operating pressure. The required fire flow may be adjusted during the approval process to reflect changes in design, construction type, or automatic fire protection measures as approved by the Fire Prevention Bureau. Specific requirements for

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 11

the project will be determined at time of submittal. (CFC 507.3, Appendix B)

77. Prior to construction, all traffic calming designs/devices must be approved by the Fire Marshal and City Engineer.
78. Prior to issuance of Building Permits, the applicant/developer shall furnish one copy of the water system plans to the Fire Prevention Bureau for review. Plans shall:
 - a. Be signed by a registered civil engineer or a certified fire protection engineer;
 - b. Contain a Fire Prevention Bureau approval signature block; and
 - c. Conform to hydrant type, location, spacing of new and existing hydrants and minimum fire flow required as determined by the Fire Prevention Bureau. The required water system, including fire hydrants, shall be installed, made serviceable, and be accepted by the Moreno Valley Fire Department prior to beginning construction. They shall be maintained accessible.

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT**Moreno Valley Utility**

79. This project requires the installation of electric distribution facilities. A non-exclusive easement shall be provided to Moreno Valley Utility and shall include the rights of ingress and egress for the purpose of operation, maintenance, facility repair, and meter reading.
80. This project requires the installation of electric distribution facilities. The developer shall submit a detailed engineering plan showing design, location and schematics for the utility system to be approved by the City Engineer. In accordance with Government Code Section 66462, the Developer shall execute an agreement with the City providing for the installation, construction, improvement and dedication of the utility system following recordation of final map and/or concurrent with trenching operations and other improvements so long as said agreement incorporates the approved engineering plan and provides financial security to guarantee completion and dedication of the utility system.

The Developer shall coordinate and receive approval from the City Engineer to install, construct, improve, and dedicate to the City all utility infrastructure including but not limited to, conduit, equipment, vaults, ducts, wires (including fiber optic cable), switches, conductors, transformers, and “bring-up” facilities including electrical capacity to serve the identified development and other adjoining, abutting, or benefiting projects as determined by Moreno Valley Utility – collectively referred to as “utility system”, to and through the development, along with any appurtenant real property easements, as determined by the City Engineer necessary for the distribution and/or delivery of any and all “utility services” to and within the project.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 12

For purposes of this condition, “utility services” shall mean electric, cable television, telecommunication (including video, voice, and data) and other similar services designated by the City Engineer. “Utility services” shall not include sewer, water, and natural gas services, which are addressed by other conditions of approval.

The City, or the City’s designee, shall utilize dedicated utility facilities to ensure safe, reliable, sustainable and cost effective delivery of utility services and maintain the integrity of streets and other public infrastructure. Developer shall, at developer’s sole expense, install or cause the installation of such interconnection facilities as may be necessary to connect the electrical distribution infrastructure within the project to the Moreno Valley Utility owned and controlled electric distribution system.

81. Existing Moreno Valley Utility electrical infrastructure shall be preserved in place. The developer will be responsible, at developer’s expense, for any and all costs associated with the relocation of any of Moreno Valley Utility’s underground electrical distribution facilities, as determined by Moreno Valley Utility, which may be in conflict with any developer planned construction on the project site.
82. This project is subject to a Reimbursement Agreement. The Developer is responsible for a proportionate share of costs associated with electrical distribution infrastructure previously installed that directly benefits the project.

PUBLIC WORKS DEPARTMENT**Land Development**

83. Aggregate slurry, as defined in Section 203-5 of Standard Specifications for Public Works Construction, shall be required prior to 90% security reduction or the end of the one-year warranty period of the public streets as approved by the City Engineer. If slurry is required, a slurry mix design shall be submitted for review and approved by the City Engineer. The latex additive shall be Ultra Pave 70 (for anionic) or Ultra Pave 65 K (for cationic) or an approved equal per the geotechnical report. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of two to two-and-one-half (2 to 2½) parts to one-hundred (100) parts of emulsion by volume. Any existing striping shall be removed prior to slurry application and replaced per City standards.
84. The developer shall comply with all applicable City ordinances and resolutions including the City’s Municipal Code (MC) and if subdividing land, the Government Code (GC) of the State of California, specifically Sections 66410 through 66499.58, said sections also referred to as the Subdivision Map Act (SMA). [MC 9.14.010]
85. The final approved conditions of approval (COAs) issued and any applicable

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 13

Mitigation Measures by the Planning Division shall be photographically or electronically placed on mylar sheets and included in the Grading and Street Improvement plans.

86. The developer shall monitor, supervise and control all construction related activities, so as to prevent these activities from causing a public nuisance, including but not limited to, insuring strict adherence to the following:
- (a) Removal of dirt, debris, or other construction material deposited on any public street no later than the end of each working day.
 - (b) Observance of working hours as stipulated on permits issued by the Land Development Division.
 - (c) The construction site shall accommodate the parking of all motor vehicles used by persons working at or providing deliveries to the site.
 - (d) All dust control measures per South Coast Air Quality Management District (SCAQMD) requirements during the grading operations.
- Violation of any condition, restriction or prohibition set forth in these conditions shall subject the owner, applicant, developer or contractor(s) to remedy as noted in City Municipal Code 8.14.090. In addition, the City Engineer or Building Official may suspend all construction related activities for violation of any condition, restriction or prohibition set forth in these conditions until such time as it has been determined that all operations and activities are in conformance with these conditions.
87. Drainage facilities (e.g., catch basins, water quality basins, etc.) with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided.
88. In the event right-of-way or offsite easements are required to construct offsite improvements necessary for the orderly development of the surrounding area to meet the public health and safety needs, the developer shall make a good faith effort to acquire the needed right-of-way in accordance with the Land Development Division's administrative policy. If unsuccessful, the Developer shall enter into an agreement with the City to acquire the necessary right-of-way or offsite easements and complete the improvements at such time the City acquires the right-of-way or offsite easements which will permit the improvements to be made. The developer shall be responsible for all costs associated with the right-of-way or easement acquisition. [GC 66462.5]
89. If improvements associated with this project are not initiated within two (2) years of the date of approval of the Public Improvement Agreement (PIA), the City Engineer may require that the engineer's estimate for improvements associated with the project be modified to reflect current City construction costs in effect at the time of request for an extension of time for the PIA or issuance of a permit. [MC 9.14.210(B)(C)]

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 14

90. The developer shall protect downstream properties from damage caused by alteration of drainage patterns (i.e. concentration or diversion of flow, etc). Protection shall be provided by constructing adequate drainage facilities, including, but not limited to, modifying existing facilities or by securing a drainage easement. [MC 9.14.110]
91. Public drainage easements, when required, shall be a minimum of 25 feet wide and shall be shown on the map and plan, and noted as follows: "Drainage Easement – no structures, obstructions, or encroachments by land fills are allowed." In addition, the grade within the easement area shall not exceed a 3:1 (H:V) slope, unless approved by the City Engineer.
92. The maintenance responsibility of the proposed storm drain line shall be clearly identified. Unless otherwise noted on improvement plans, storm drain lines within private property will be privately maintained and those within public streets will be publicly maintained.
93. This project shall submit civil engineering design plans, reports and/or documents (prepared by a registered/licensed civil engineer) for review and approval by the City Engineer per the current submittal requirements, prior to the indicated threshold or as required by the City Engineer. The submittal consists of, but is not limited to, the following:
 - a. Parcel Map (recordation prior to building permit issuance);
 - b. Rough grading w/ erosion control plan (prior to grading permit issuance);
 - c. Precise grading w/ erosion control plan (prior to building permit issuance);
 - d. Street improvement plan w/ Signing & Striping (prior to parcel map approval);
 - e. RCFC&WCD storm drain plans (prior to parcel map approval);
 - f. Cooperative Agreement between the City, RCFC&WCD and the developer (prior to RCFC&WCD storm drain plan approval);
 - g. Final drainage study (prior to rough grading plan and storm drain plan approval);
 - h. Final WQMP (prior to grading plan approval);
 - i. As-Built revision for all plans (prior to Occupancy release)
94. Water quality best management practices (BMPs) designed to meet Water Quality Management Plan (WQMP) requirements for single-family residential development shall not be used as a construction BMP. Water quality BMPs shall be maintained for the entire duration of the project construction and be used to treat runoff from those developed portions of the project. Water quality BMPs shall be protected from upstream construction related runoff by having proper best management practices in place and maintained. Water quality BMPs shall be graded per the approved design plans and once landscaping and irrigation has been installed, it and its maintenance shall be turned over to an established Homeowner's

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 15

Association (HOA). The Homeowner's Association shall enter into an agreement with the City for basin maintenance.

95. When any proposed private storm drain system connects to a public storm drain system, a storm drain manhole shall be placed at the right-of-way or property line to mark the beginning of the publicly maintained portion of the storm drain system.

Prior to Grading Plan Approval

96. Resolution of all drainage issues shall be as approved by the City Engineer.
97. A final detailed drainage study (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer. The study shall include, but not be limited to: existing and proposed hydrologic conditions as well as hydraulic calculations for all drainage control devices and storm drain lines. The study shall analyze 1, 3, 6 and 24-hour duration events for the 2, 5, 10 and 100-year storm events [MC 9.14.110(A.1)]. A digital (pdf) copy of the approved drainage study shall be submitted to the Land Development Division.
98. Emergency overflow areas shall be shown at all applicable drainage improvement locations in the event that the drainage improvement fails or exceeds full capacity. This may include, but not be limited to, secondary storm drains, riser inlets, concrete spillways, or redundancy in pump systems.
99. A final project-specific Water Quality Management Plan (WQMP) shall be submitted for review and approved by the City Engineer, which:
- Addresses Site Design Best Management Practices (BMPs) such as minimizing impervious areas, maximizing permeability, minimizes directly connected impervious areas to the City's street and storm drain systems, and conserves natural areas;
 - Incorporates Source Control BMPs and provides a detailed description of their implementation;
 - Describes the long-term operation and maintenance requirements for BMPs requiring maintenance; and
 - Describes the mechanism for funding the long-term operation and maintenance of the BMPs.
- A copy of the final WQMP template can be obtained on the City's Website or by contacting the Land Development Division. A digital (pdf) copy of the approved final project-specific Water Quality Management Plan (WQMP) shall be submitted to the Land Development Division.
100. The final project-specific Water Quality Management Plan (WQMP) shall be consistent with the approved P-WQMP, as well as in full conformance with the document: "Water Quality Management Plan - A Guidance Document for the Santa Ana Region of Riverside County" dated October 22, 2012. The F-WQMP shall be

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 16

submitted and approved prior to application for and issuance of grading permits. At a minimum, the F-WQMP shall include the following: Site Design BMPs; Source Control BMPs, Treatment Control BMPs, Operation and Maintenance requirements for BMPs and sources of funding for BMP implementation.

a. The Applicant has proposed to incorporate the use of two (2) modular wetland systems along the southerly project boundary and three (3) bio-retention swales along the northerly project boundary . Final design and sizing details of all BMPs must be provided in the first submittal of the F-WQMP. The Applicant acknowledges that more area than currently shown on the plans may be required to treat site runoff as required by the WQMP guidance document.

b. The Applicant shall substantiate the applicable Hydrologic Condition of Concerns (HCOC) in Section F of the F-WQMP. <The HCOC designates that the project will be required to provide HCOC mitigation..

c. All proposed LID BMP's shall be designed in accordance with the RCFC&WCD's Design Handbook for Low Impact Development Best Management Practices, dated September 2011.

d. The proposed LID BMP's as identified in the project-specific P-WQMP shall be incorporated into the Final WQMP.

e. The NPDES notes per City Standard Drawing No. MVFE-350-0 shall be included in the grading plans.

f. Post-construction treatment control BMPs, once placed into operation for post-construction water quality control, shall not be used to treat runoff from construction sites or unstabilized areas of the site.

g. Prior to precise grading plan approval, the grading plan shall show any proposed trash enclosure to include a cover (roof) and sufficient size for dual bin (1 for trash and 1 for recyclables). The architecture shall be approved by the Planning Division and any structural approvals shall be made by the Building and Safety Division.

101. The developer shall ensure compliance with the City Grading ordinance, these Conditions of Approval and the following criteria:

a. The project street and lot grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage area and outlet points. Unless otherwise approved by the City Engineer, lot lines shall be located at the top of slopes.

b. Any grading that creates cut or fill slopes adjacent to the street shall provide erosion control, sight distance control, and slope easements as approved by the City Engineer.

c. All improvement plans are substantially complete and appropriate clearance letters are provided to the City.

d. A soils/geotechnical report (addressing the soil's stability and geological conditions of the site) shall be submitted to the Land Development Division for review. A digital (pdf) copy of the soils/geotechnical report shall be submitted to the Land Development Division.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 17

102. Grading plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.
103. The developer shall select Low Impact Development (LID) Best Management Practices (BMPs) designed per the latest version of the Water Quality Management Plan (WQMP) - a guidance document for the Santa Ana region of Riverside County.
104. The developer shall pay all remaining plan check fees.
105. The proposed private storm drain Line "E" on Parcel 2 shall connect to the existing public storm drain lateral crossing Alessandro Boulevard and connect to storm drain Line "E" located on APN 297-170-089. Storm drain manholes shall be placed at the point of connections (at right of way or property line) to mark the separation of the publicly maintained storm drain and privately maintained storm drain.
106. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared in conformance with the State's current Construction Activities Storm Water General Permit. A copy of the current SWPPP shall be kept at the project site and be available for review upon request.
107. For projects that will result in discharges of storm water associated with construction with a soil disturbance of one or more acres of land, the developer shall submit a Notice of Intent (NOI) and obtain a Waste Discharger's Identification number (WDID#) from the State Water Quality Control Board (SWQCB) which shall be noted on the grading plans.

Prior to Grading Permit

108. A receipt showing payment of the Area Drainage Plan (ADP) fee to Riverside County Flood Control and Water Conservation District shall be submitted. [MC 9.14.100(O)]
109. For non-subdivision projects, a copy of the Covenants, Conditions and Restrictions (CC&Rs) shall be submitted for review by the City Engineer. The CC&Rs shall include, but not be limited to, access easements, reciprocal access, private and/or public utility easements as may be relevant to the project.
110. If the developer chooses to construct the project in phases, a Construction Phasing Plan for the construction of on-site public or private improvements shall be submitted for review and approved by the City Engineer.
111. Prior to the payment of the Development Impact Fee (DIF), the developer may enter

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 18

into a DIF Improvement Credit Agreement to secure credit for the construction of applicable improvements. If the developer fails to complete this agreement prior to the timing specified above, credits may not be given. The developer shall pay current DIF fees adopted by the City Council. [Ord. 695 § 1.1 (part), 2005] [MC 3.38.030, 040, 050]

112. A digital (pdf) copy of all approved grading plans shall be submitted to the Land Development Division.
113. Security, in the form of a cash deposit (preferable), bond or letter of credit shall be submitted as a guarantee of the implementation and maintenance of erosion control measures. At least twenty-five (25) percent of the required security shall be in the form of a cash deposit with the City. [MC 8.21.160(H)]
114. Security, in the form of a cash deposit (preferable), bond or letter of credit shall be submitted as a guarantee of the completion of the grading operations for the project. [MC 8.21.070]
115. The developer shall pay all applicable inspection fees.
116. Prior to the payment of the Transportation Uniform Mitigation Fee (TUMF), the developer may enter into a TUMF Improvement Credit Agreement to secure credit for the construction of applicable improvements. If the developer fails to complete this agreement by the timing specified above, credits may not be given. The developer shall pay current TUMF fees adopted by the City Council. [Ord. 835 § 2.1, 2012] [MC 3.44.060]

Prior to Map Approval

117. A copy of the Covenants, Conditions and Restrictions (CC&R's) shall be submitted for review and approved by the City Engineer. The CC&R's shall include, but not be limited to, access easements, reciprocal access, private and/or public utility easements as may be relevant to the project. Alternatively, access easements, reciprocal access, private and/or public utility easements may be submitted for review and approval by separate instruments that will be recorded once approved.
118. The developer shall enter into a Cooperative Agreement with the City and Riverside County Flood Control and Water Conservation District establishing the terms and conditions covering the inspection, operation and maintenance of Master Drainage Plan facilities required to be constructed as part of the project.
119. After recordation, a digital (pdf) copy of the recorded map shall be submitted to the Land Development Division.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 19

120. Resolution of all drainage issues shall be as approved by the City Engineer.
121. A parcel map (prepared by a registered civil engineer and/or licensed surveyor) shall be submitted for review and approved by the City Engineer per the current submittal requirements.
122. The developer shall guarantee the completion of all related improvements required for this project by executing a Public Improvement Agreement (PIA) with the City and posting the required security. [MC 9.14.220]
123. All public improvement plans required for this project shall be approved by the City Engineer in order to execute the Public Improvement Agreement (PIA).
124. The developer shall comply with the requirements of the City Engineer based on recommendations of the Riverside County Flood Control District regarding the construction of County Master Plan Facilities.
125. All street dedications shall be free of all encumbrances, irrevocably offered to the public and shall continue in force until the City accepts or abandons such offers, unless otherwise approved by the City Engineer.

Prior to Improvement Plan Approval

126. The developer is required to bring any existing access ramps adjacent to and fronting the project to current ADA (Americans with Disabilities Act) requirements. However, when work is required in an intersection that involves or impacts existing access ramps, all access ramps in that intersection shall be retrofitted to comply with current ADA requirements, unless otherwise approved by the City Engineer.
127. The developer shall submit clearances from all applicable agencies, and pay all applicable plan check fees.
128. The street improvement plans shall comply with current City policies, plans and applicable City standards (i.e. MVSI-160 series, etc.) throughout this project.
129. The design plan and profile shall be based upon a centerline, extending beyond the project boundaries a minimum distance of 300 feet at a grade and alignment approved by the City Engineer.
130. Drainage facilities (i.e. catch basins, etc.) with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided.
131. The hydrology study shall be designed to accept and properly convey all off-site drainage flowing onto or through the site. In the event that the City Engineer permits

CONDITIONS OF APPROVAL

(PEN20-0120)

Page 20

the use of streets for drainage purposes, the provisions of current City standards shall apply. Should the quantities exceed the street capacity or the use of streets be prohibited for drainage purposes, as in the case where one travel lane in each direction shall not be used for drainage conveyance for emergency vehicle access on streets classified as minor arterials and greater, the developer shall provide adequate facilities as approved by the City Engineer. [MC 9.14.110 A.2]

132. All public improvement plans (prepared by a licensed/registered civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.
133. Any missing or deficient existing improvements along the project frontage within Alessandro Boulevard shall be constructed or secured for construction. The City Engineer may require the ultimate structural section for pavement to half-street width plus 18 feet or provide core test results confirming that the existing pavement section is per current City Standards; additional signing & striping to accommodate increased traffic imposed by the development, removal and replacement of improvements due to wear or damage from construction activity, or additional transitional improvements for the orderly development of public infrastructure..
134. Storm drain improvement plans for Sunnymead Broadiaaea Avenue Storm Drain Line "A" Extension, from Alessandro Boulevard to the existing Line "A" located on APN 297-170-089, shall be submitted for review and approval by the City and RCFC&WCD. This storm drain has been identified as a future RCFC&WCD maintained facility as shown on Drawing No. 4-888, Sheet 8A (Preliminary Alignment Study) and referenced as Stage 3 of that certain Cooperative Agreement recorded on July 12, 2016 as Document No. 2016-0289060. This project will be required to satisfy all RCFC&WCD requirements for the acceptance and maintenance by RCFC&WCD including, but not limited to, the following:
- a. Enter into a Cooperative Agreement between the City, RCFC&WCD, and the developer;
 - b. Provide storm drain improvement plans of Stage 3 storm drain;
 - c. Provide security for the construction of storm drain improvements; and
 - d. Upon commencement of Stage 3 storm drain improvements and to the satisfaction of the City and RCFC&WCD, inspect, clean, repair, and maintain the existing portion of Line "A" (also referred to as Stage 2) from the current inlet at the northerly property line of APN 297-170-089 to the point of connection located within Broadiaaea Avenue.

In the event that Stage 3 does not meet the requirements and satisfaction of RCFC&WCD to assume maintenance responsibility, the storm drain shall be privately owned and maintained by the property owner.

CONDITIONS OF APPROVAL

(PEN20-0120)

Page 21

135. For non-subdivision projects, all street dedications shall be free of encumbrances, irrevocably offered to the public and shall continue in force until the City accepts or abandons such offers, unless otherwise approved by the City Engineer.
136. The plans shall indicate any restrictions on trench repair pavement cuts to reflect the City's moratorium on disturbing newly-constructed pavement less than three (3) years old and recently slurry sealed streets less than one (1) year old. Pavement cuts may be allowed for emergency repairs or as specifically approved in writing by the City Engineer. Special requirements shall be imposed for repaving, limits to be determined by the City Engineer.
137. All dry and wet utilities shall be shown on the plans and any crossings shall be potholed to determine actual location and elevation. Any conflicts shall be identified and addressed on the plans. The pothole survey data shall be submitted to Land Development with the public improvement plans for reference purposes only. The developer is responsible to coordinate with all affected utility companies and bear all costs of any utility relocation.
138. Alessandro Boulevard, Major Divided Arterial, City Standard MVSI-101A (134-foot RW / 110-foot CC) shall be constructed to half-width plus an additional 18 feet north of the centerline, along the entire project's north frontage. At a minimum, the existing street shall receive a 1.5" grind and overlay (PG 64-16 ARHM-GG-C). Pavement core samples will be required to determine the extent of pavement rehabilitation of the existing pavement which may include the removal and replacement of the entire structural section. All 4-foot right-of-way dedications at the driveway approaches, per City Standard MVSI-112C-0, shall be shown on the parcel map. Improvements shall consist of, but not be limited to, pavement, base, curb, gutter, sidewalk, driveway approaches, removal and replacement of existing storm drain and catch basins, any necessary offsite improvement transition/joins to existing, streetlights, relocation of any power poles with electrical lines of 115,000 volts or greater to meet an 18 inch minimum distance from the face of curb to the face of pole, undergrounding of any power poles with overhead utility lines or electrical lines less than 115,000 volts, and dry and wet utilities.

Prior to Encroachment Permit

139. A digital (pdf) copy of all approved improvement plans shall be submitted to the Land Development Division.
140. All applicable inspection fees shall be paid.
141. For non-subdivision projects, execution of a Public Improvement Agreement (PIA) and/or security (in the form of a cash deposit or other approved means) may be required as determined by the City Engineer. [MC 9.14.220]

CONDITIONS OF APPROVAL

(PEN20-0120)

Page 22

142. The plans shall indicate any restrictions on trench repair pavement cuts to reflect the City's moratorium on disturbing newly-constructed pavement less than three (3) years old and recently slurry sealed streets less than one (1) year old. Pavement cuts may be allowed for emergency repairs or as specifically approved in writing by the City Engineer. Special requirements shall be imposed for repaving, limits to be determined by the City Engineer.
143. Any work performed within public right-of-way requires an encroachment permit.

Prior to Occupancy

144. All outstanding fees shall be paid.
145. All required as-built plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.
146. The final/precise grade certification shall be submitted for review and approved by the City Engineer.
147. For commercial, industrial and multi-family projects, in compliance with Proposition 218, the developer shall agree to approve the City of Moreno Valley NPDES Regulatory Rate Schedule that is in place at the time of certificate of occupancy issuance. Under the current permit for storm water activities required as part of the National Pollutant Discharge Elimination System (NPDES) as mandated by the Federal Clean Water Act, this project is subject to the following requirements:
- a. Select one of the following options to meet the financial responsibility to provide storm water utilities services for the required continuous operation, maintenance, monitoring system evaluations and enhancements, remediation and/or replacement, all in accordance with Resolution No. 2002-46.
 - i. Participate in the mail ballot proceeding in compliance with Proposition 218, for the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule and pay all associated costs with the ballot process; or
 - ii. Establish an endowment to cover future City costs as specified in the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule.
 - b. Notify the Special Districts Division of the intent to request building permits 90 days prior to their issuance and the financial option selected. The financial option selected shall be in place prior to the issuance of certificate of occupancy. [California Government Code & Municipal Code]
148. The developer shall complete all public improvements in conformance with current

CONDITIONS OF APPROVAL

(PEN20-0120)

Page 23

City standards, except as noted in the Special Conditions, including but not limited to the following:

a. Street improvements including, but not limited to: pavement, base, curb and/or gutter, cross gutters, spandrel, sidewalks, drive approaches, pedestrian ramps, street lights (<MVU: SL-2 / SCE: LS-2>), signing, striping, under sidewalk drains, landscaping and irrigation, medians, pavement tapers/transitions and traffic control devices as appropriate.

b. Storm drain facilities including, but not limited to: storm drain pipe, storm drain laterals, open channels, catch basins and local depressions.

c. City-owned utilities.

d. Sewer and water systems including, but not limited to: sanitary sewer, potable water and recycled water.

e. Under grounding of all existing and proposed utilities adjacent to and on-site. [MC 9.14.130]

f. Relocation of overhead electrical utility lines including, but not limited to: electrical, cable and telephone.

149. All punch list work for off-site and on-site improvements shall be completed.
150. For commercial, industrial and multi-family projects, a Stormwater Treatment Device and Control Measure Access and Maintenance Covenant", "Maintenance Agreement for Water Quality Improvements located in the public right-of-way" and a "Declaration of Restrictive Covenants (encroachment on City easement)" shall be recorded to provide public notice of the maintenance requirements to be implemented per the approved final project-specific WQMP. A boilerplate copy of the covenants and agreements can be obtained by contacting the Land Development Division.
151. The applicant shall ensure the following, pursuant to Section XII. I. of the 2010 NPDES Permit:
- a. Field verification that structural Site Design, Source Control and Treatment Control BMPs are designed, constructed and functional in accordance with the approved Final Water Quality Management Plan (WQMP).
- b. Certification of best management practices (BMPs) from a state licensed civil engineer. An original WQMP BMP Certification shall be submitted for review and approved by the City Engineer.
152. The Developer shall comply with the following water quality related items:
- a. Notify the Land Development Division prior to construction and installation of all structural BMPs so that an inspection can be performed.
- b. Demonstrate that all structural BMPs described in the approved final project-specific WQMP have been constructed and installed in conformance with the approved plans and specifications;
- c. Demonstrate that Developer is prepared to implement all non-structural BMPs

CONDITIONS OF APPROVAL

(PEN20-0120)

Page 24

described in the approved final project-specific WQMP; and

d. Demonstrate that an adequate number of copies of the approved final project-specific WQMP are available for future owners/occupants.

e. Clean and repair the water quality BMP's, including re-grading to approved civil drawing if necessary.

f. Obtain approval and complete installation of the irrigation and landscaping.

Special Districts Division

153. This project is located within the boundary of Community Facilities District No. 4–Maintenance (CFD No. 4-M) and is subject to hydrology study determination based upon the final tentative parcel map. The project is conditioned to provide a funding source which will be used for maintenance of stormwater and detention basin improvements. The Developer shall satisfy the condition with one of the financing options outlined below.

a. In compliance with Proposition 218, the property owner shall agree to approve the special election for annexation into CFD No. 4-M and pay all associated costs with the special election process and formation costs, if any; or

b. Establish an endowment fund which shall be used to cover future maintenance costs for storm water and detention basin improvements benefiting this project.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financing option when submitting the application for building permit issuance. The option for participating in a special election requires 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the first issuance of certificate of occupancy for this project.

154. MAJOR INFRASTRUCTURE FINANCING DISTRICT. This project has been identified to potentially be included in the formation of a special financing district for the construction and maintenance of major infrastructure improvements which may include but are not limited to thoroughfares, bridges, and certain flood control improvements. The property owner(s) shall participate in such district and pay any special tax, assessment, or fee levied upon the project property for such district. At the time of the public hearing to consider formation of or annexation into the district, the qualified elector(s) will not protest the formation or annexation, but will retain the right to object to any eventual tax/assessment/fee that is not equitable should the financial burden of the tax/assessment/fee not be reasonably proportionate to the

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 25

benefit the affected property obtains from the improvements to be installed and/or maintained. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting an application for the first building permit to determine whether the development will be subjected to this condition. If subject to the condition, the special election requires a minimum 90-day process in compliance with the provisions of Article 13C of the California Constitution.

155. The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services District Zone A (Parks & Community Services) and Zone C (Arterial Street Lighting). All assessable parcels therein shall be subject to annual parcel taxes for Zone A and Zone C for operations and capital improvements.
156. This project is conditioned to provide a funding source for the operation and maintenance of public improvements and/or services associated with new development in that territory. The Developer shall satisfy this condition with one of the options below.

a. Participate in a special election for maintenance/services and pay all associated costs of the election process and formation, if any. Financing may be structured through a Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover the future maintenance and/or service costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option prior to City Council action authorizing recordation of the final map for the development. A minimum of 90 days is needed to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution for conducting a special election.

The financial option selected shall be in place prior to the issuance of the first building permit for the project.

157. This project is conditioned to provide a funding source for the following special financing program(s):
- a. Landscape Maintenance Services for parkway, open space, and/or median landscaping on Alessandro Blvd.

The Developer's responsibility is to provide a funding source for the capital

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 26

improvements and the continued maintenance of the landscaped area. The Developer shall satisfy this condition with one of the options below.

i. Participate in a special election (mail ballot proceeding) and pay all associated costs of the special election and formation, if any. Financing may be structured through a Community Services District zone, Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

ii. Establish a Property Owner's Association (POA) or Home Owner's Association (HOA) which will be responsible for any and all operation and maintenance costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option prior to City Council action authorizing recordation of the final map for the development. The option for participating in a special election requires approximately 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution for conducting a special election.

The financial option selected shall be in place prior to the issuance of the first building permit for this project.

158. Commercial (R) If Land Development, a Division of the Public Works Department, requires this project to supply a funding source necessary to provide for, but not limited to, stormwater utilities services for the continuous operation, remediation and/or replacement, maintenance, monitoring, systems evaluation and enhancements of on-site facilities and performing annual inspections of the affected areas to ensure compliance with state mandated stormwater regulations, a funding source needs to be established. The Developer must notify the Special Districts Division at 951.413.3480 or specialdistricts@moval.org of its selected financial option for the National Pollution Discharge Elimination System (NPDES) program (see Land Development's related condition) 90 days prior to City Council action authorizing recordation of the final map for the development and participate in a special election process. This allows adequate time to be in compliance with the provisions of Article 13D of the California Constitution. (California Health and Safety Code Sections 5473 through 5473.8 (Ord. 708 Section 3.1, 2006) & City of Moreno Valley Municipal Code Title 3, Section 3.50.050.)
159. This project has been identified to be included in the formation of a Community Facilities District for Public Safety services including but not limited to Police, Fire Protection, Paramedic Services, Park Rangers, and Animal Control services. The property owner(s) shall not protest the formation; however, they retain the right to

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 27

object to the rate and method of maximum special tax. In compliance with Proposition 218, the property owner shall agree to approve the mail ballot proceeding (special election) for either formation of the CFD or annexation into an existing district that may already be established. The Developer must notify the Special Districts Division at 951.413.3480 or specialdistricts@moval.org of its intent to record the final map for the development 90 days prior to City Council action authorizing recordation of the map. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution. (California Government Code Section 53313 et. seq.)

160. The existing parkway/median along the frontage of the project shall be brought to current City Standards. Improvements may include but are not limited to: plant material, irrigation, and hardscape.
161. The ongoing maintenance of any landscaping required to be installed behind the curb shall be the responsibility of the property owner.
162. Any damage to existing landscape areas maintained by the City of Moreno Valley due to project construction shall be repaired/replaced by the Developer, or Developer's successors in interest, at no cost to the City of Moreno Valley.
163. **PARKS MAINTENANCE FUNDING.** Prior to applying for the 1st Building Permit, the qualified elector (e.g. property owner) must initiate the process (i.e. pay the annexation fee or fund an endowment) to provide an ongoing funding source for the continued maintenance, enhancement, and or retrofit of parks, open spaces, linear parks, and/or trails systems, and programs.
- This condition must be fully satisfied prior to issuance of the 1st Certificate of Occupancy. This condition will be satisfied with the successful annexation/formation (i.e. special election process) into a special financing district and payment of all costs associated with the special election process. Annexation into a special financing district requires an annual payment of the annual special tax, assessment, or fee levied against the property tax bill, or other lawful means, of the parcels of the project for such district. At the time of the public hearing to consider annexation into or formation of the district, the qualified elector(s) will not protest the annexation or formation, but will retain the right to object to any eventual tax/assessment/fee that is not equitable should the financial burden of the tax/assessment/fee not be reasonably proportionate to the benefit the affected property receives from the improvements to be installed and/or maintained or services provided. The special election requires a minimum 90-day process in compliance with the provisions of Article 13C of the California Constitution, Proposition 218, or other applicable legislation, and consistent with the scheduling for City Council meetings.
- Alternatively, the condition can be satisfied by the Developer funding an endowment in an amount sufficient to yield an annual revenue stream that meets the annual obligation. The Developer must contact Special Districts Administration at

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 28

951.413.3470 or at SAdmin@moval.org to satisfy this condition.

Transportation Engineering Division

164. Conditions of approval may be modified or added if a phasing plan is submitted for this development.
165. All proposed on-site traffic signing and striping should be accordance with the latest California Manual on Uniform Traffic Control Devices (CAMUTCD).
166. Sight distance at the proposed roadways and driveways shall conform to City of Moreno Valley Standard No. MVSI-164A,B,C-0 at the time of preparation of final grading, landscape, and street improvement plans.
167. Communication conduit along Alessandro Boulevard shall be required per City Standard No. MVSI-186-0. Any improvements undertaken by this project shall be consistent with the City standards for this facility.
168. Alessandro Boulevard is designated as a 6-Lane Divided Arterial (134' RW/110'CC) per City Standard Plan No. MVSI-101A and shall be improved to its ultimate half-width plus 23' with median and necessary transition improvements. The existing eastbound left turn pocket at the intersection of Graham Street and Alessandro Boulevard shall be modified to provide 250 feet of vehicle storage. A Class II Bikeway shall be provided along project frontage.
169. Prior to issuance of an encroachment permit, construction traffic control plans shall be prepared by a qualified, registered Civil or Traffic engineer and submitted for plan approval.
170. Prior to final approval of any landscaping or monument sign plans, the project plans shall demonstrate that sight distance at the project driveways conforms to City Standard Plan No. MVSI-164A, B, C-0.
171. Prior to the final approval of the street improvement plans, a signing and striping plan shall be prepared per City of Moreno Valley Standard Plans - Section 4 for Alessandro Boulevard.
172. Prior to issuance of a Building Final or Certificate of Occupancy, all approved signing and striping shall be installed per current City Standards
173. All project driveways shall conform to Section 9.11.080, and Table 9.11.080-14 of the City's Development Code – Design Guidelines and City of Moreno Valley Standard Plans No. MVSI-112C-0 for commercial driveway approaches. Access at all driveways shall be right-in and right-out access only.

CONDITIONS OF APPROVAL

(PEN20-0120, PEN20-0121 & PEN20-0124)

Page 29

174. Prior to final approval of the street improvement plans, a median modification plan shall be required to modify the existing raised, landscaped median on Alessandro Boulevard, west of Graham Street. The median shall be designed per current City Standards to extend the eastbound left-turn storage length to 250 feet at the Alessandro Boulevard/Graham Street intersection.
175. During construction activity, developer is responsible for regularly scheduled street sweeping per approved street sweeping schedule. Failure to provide regularly scheduled street sweeping during construction activity at the approved times shall result in re-inspection fees (amounts to be determined by City Engineer) and/or project suspension until street sweeping is provided.

IN THE CITY OF MORENO VALLEY

TENTATIVE PARCEL MAP NO. 37944

BEING A PORTION OF LOTS 2 AND 3, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA

OCTOBER 2020

LEGAL DESCRIPTION

PARCEL 1:
LOT 2, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA, EXCEPTING THEREFROM THAT PORTION OF ALESSANDRO BOULEVARD AS CONVEYED TO THE COUNTY OF RIVERSIDE BY DOCUMENT RECORDED NOVEMBER 28, 1972 AS INSTRUMENT NO. 157190, OFFICIAL RECORDS.

PARCEL 2:
LOT 3, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA, EXCEPTING THEREFROM THAT PORTION DESCRIBED IN THE DEED TO THE COUNTY OF RIVERSIDE DOCUMENT RECORDED MAY 30, 1972 AS INSTRUMENT NO. 69766, OFFICIAL RECORDS.

EASEMENTS

1. THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "TEMPORARY DECLARATION OF EASEMENT FOR ACCEPTANCE OF DRAINAGE WATERS" RECORDED JANUARY 22, 2009 AS INSTRUMENT NO. 2009-0029343 OF OFFICIAL RECORDS, PER THE PROVISIONS OF THE EASEMENT DOCUMENT, SAID EASEMENT WILL BE ABANDONED UPON THE DEVELOPMENT OF THE PROPERTY.

2. AN OFFER OF DEDICATION FOR FLOOD CONTROL AND DRAINAGE AND INCIDENTAL PURPOSES, IN FAVOR OF RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, RECORDED DECEMBER 23, 2009 AS INSTRUMENT NO. 2009-0657601 OF OFFICIAL RECORDS, (TO BE ABANDONED).

3. MATTERS IN A DOCUMENT ENTITLED "DRAINAGE EASEMENT AGREEMENT", EXECUTED BY AND BETWEEN WILMA PACIFIC INC. AND THE CENTENNIAL GROUP INC., RECORDED DECEMBER 02, 1997 AS INSTRUMENT NO. 341821 OF OFFICIAL RECORDS, INCLUDING BUT NOT LIMITED TO COVENANTS, CONDITIONS, RESTRICTIONS, EASEMENTS, ASSESSMENTS, LIENS AND CHARGES.

LEGEND

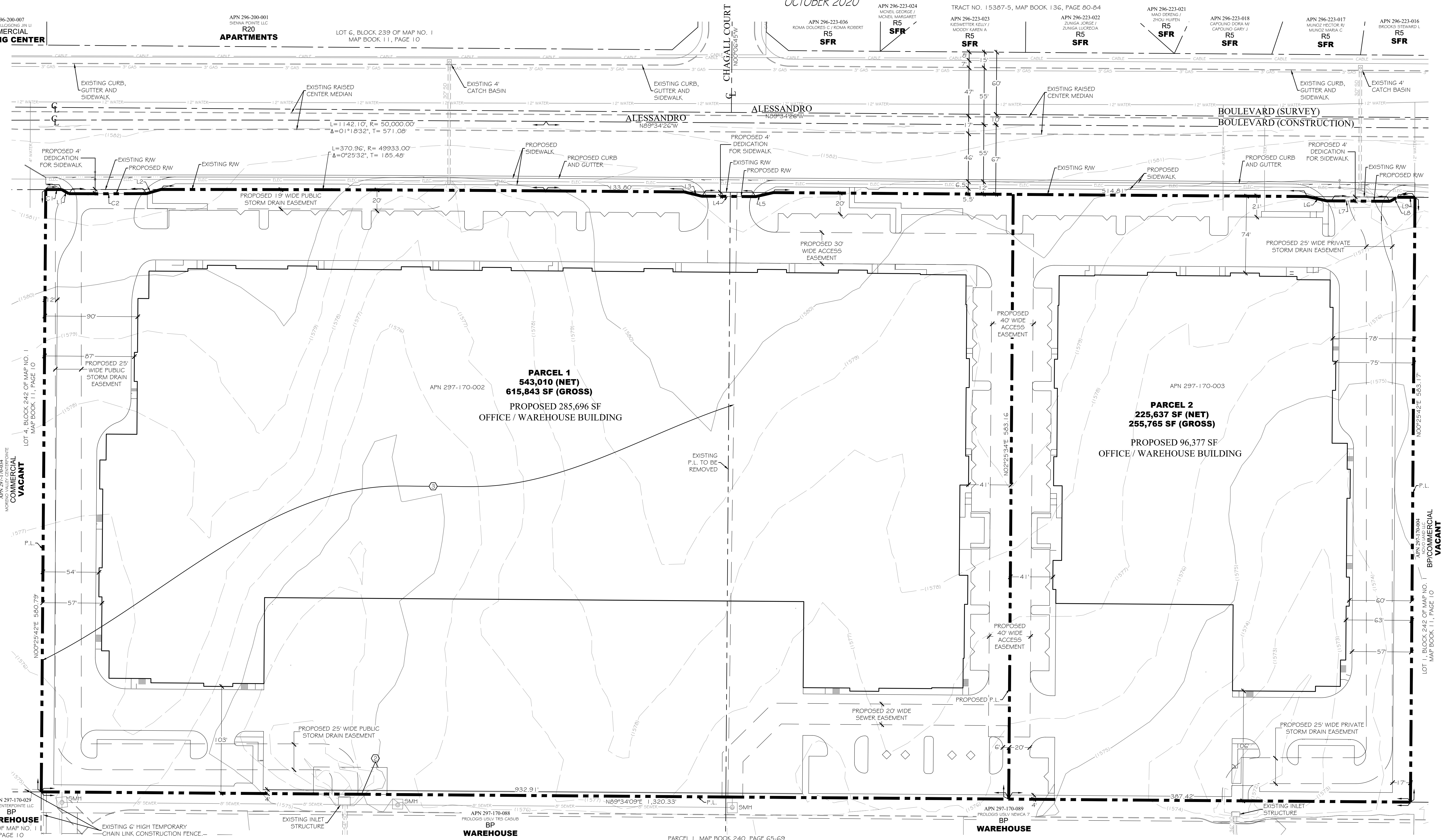
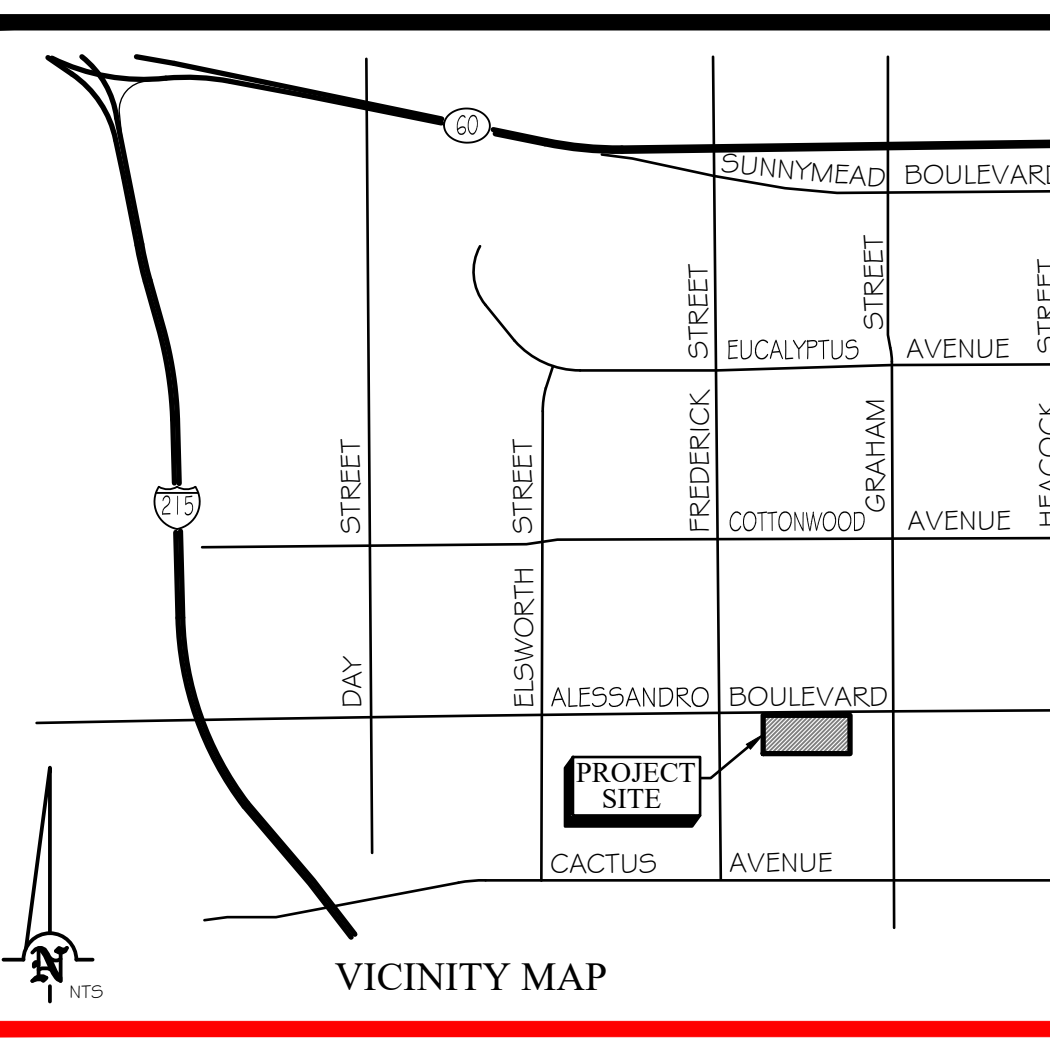
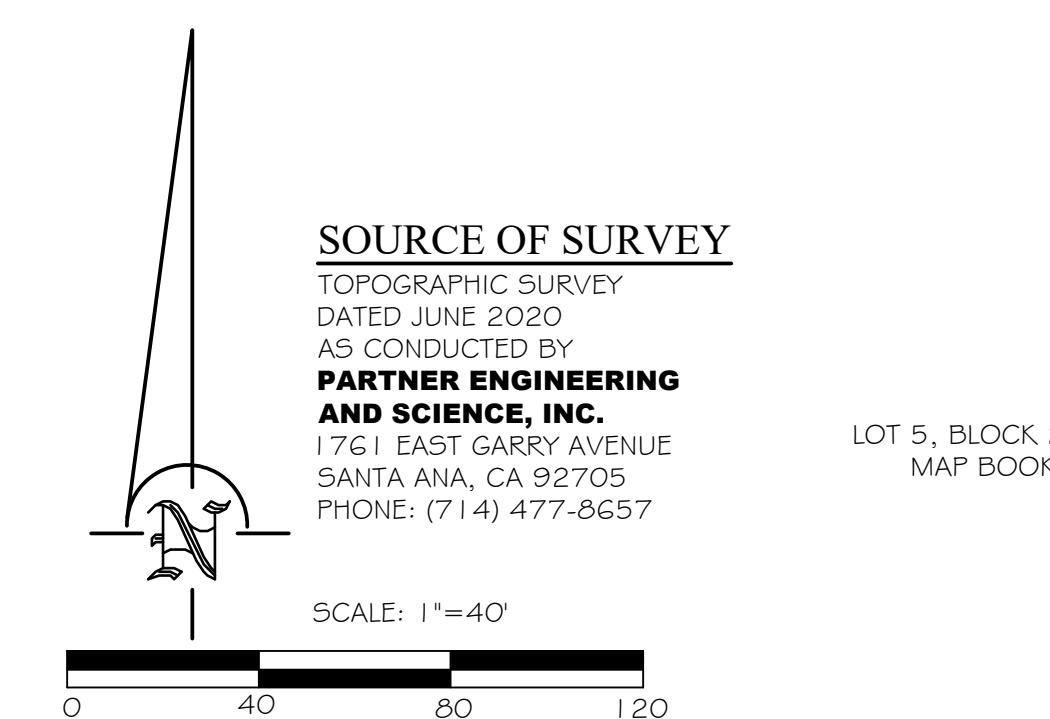
AC ASPHALT CONCRETE
 BP BUSINESS PARK/LIGHT INDUSTRIAL
 PL PROPERTY LINE
 RW RIGHT-OF-WAY
 SMH SEWER MANHOLE
 --- EXISTING CURB & GUTTER
 - - - PROPOSED CURB FACE
 - - - CENTERLINE
 - - - EXISTING PL
 - - - PROPERTY LINES
 - - - EXISTING UTILITY LINE
 - - - PROPOSED BUILDING FOOTPRINT

CURVE DATA

Curve	Δ	R	T	L
C1	00°01'04"	49933.00'	7.71'	15.41'
C2	00°05'12"	49929.00'	37.73'	75.46'

LINE DATA

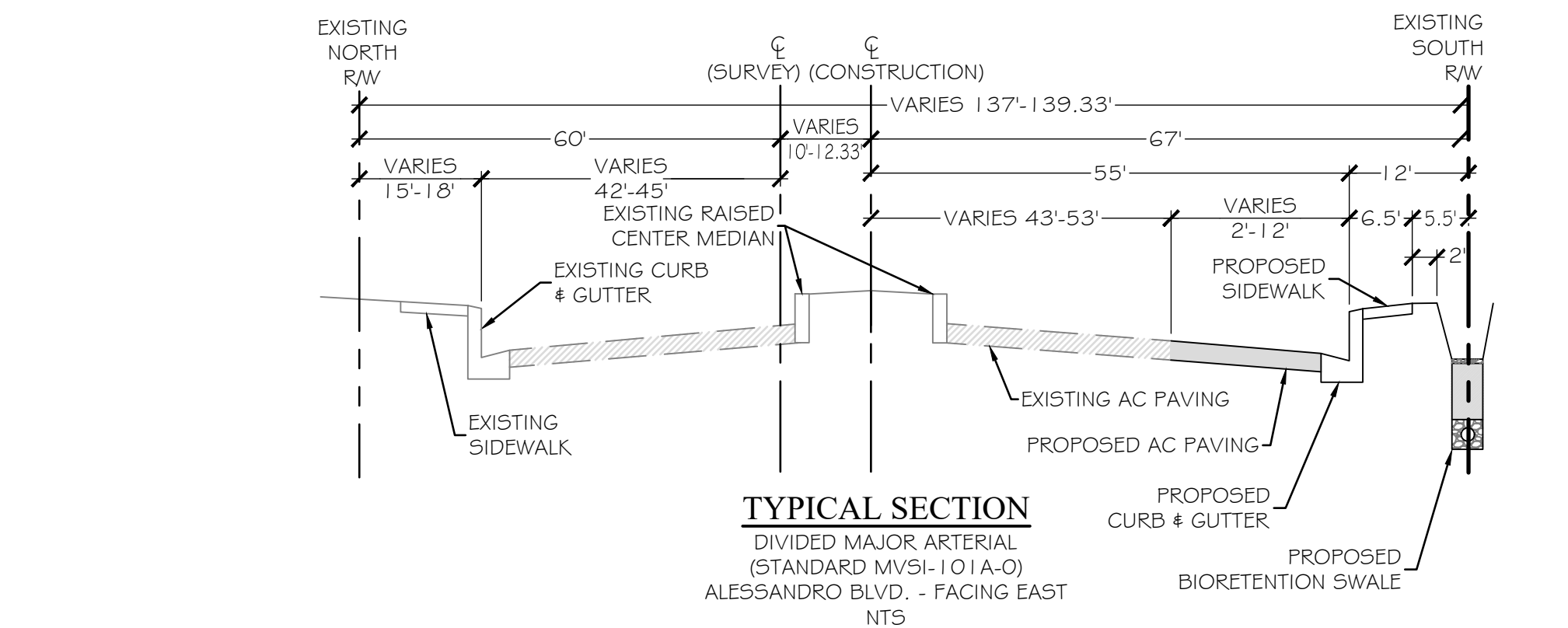
Line	Bearing	Distance
L1	N59°38'55"W	7.89'
L2	N77°40'24"E	18.74'
L3	N76°15'09"W	17.36'
L4	N89°34'26"W	52.05'
L5	N77°06'18"E	17.36'
L6	N77°32'35"E	19.19'
L7	N89°34'26"W	61.12'
L8	N69°43'25"E	8.11'
L9	N89°34'26"W	16.97'



PROJECT NOTES

- ASSESSOR'S PARCEL NUMBER: 297-170-003 & 003
- EXISTING GROSS AREA: 871,609 SF = 20.01 AC
- EXISTING NET AREA: 769,571 SF = 17.67 AC
- PROPOSED DEDICATION: 924 SF = 0.02 AC
- PROPOSED NET AREA: 768,647 SF = 17.65 AC
- EXISTING ZONE DESIGNATION: COMMERCIAL
- PROPOSED ZONE DESIGNATION: LIGHT INDUSTRIAL
- EXISTING LAND USE: VACANT
- PROPOSED LAND USE: WAREHOUSE / OFFICE
- PROJECT SITE IS LOCATED WITHIN ZONE X (AREA OF MINIMAL FLOOD HAZARD PER FIRM MAP NO. 06065C0745G DATED AUGUST 28, 2008)
- NO CONTIGUOUS OWNERSHIP

SOILS ENGINEER
 REPORT DATED JANUARY 31, 2020
 PROJECT NO. 21631-20
 AS CONDUCTED BY
NORCAL ENGINEERING
 10641 HUMBOLT STREET
 LOS ALAMITOS, CA 90720
 PHONE: (562) 799-9469
 FAX: (562) 799-9459



UTILITIES

ELECTRIC:
 SOUTHERN CALIFORNIA EDISON COMPANY
 26100 MENIFEE ROAD
 ROMOLAND, CA 92505
 (951) 928-8334

WATER:
 EASTERN MUNICIPAL WATER DISTRICT
 2270 TRUMBULL ROAD
 PERRIS, CA 92570
 (951) 928-3777

SEWER:
 EASTERN MUNICIPAL WATER DISTRICT
 2270 TRUMBULL ROAD
 PERRIS, CA 92570
 (951) 928-3777

GAS:
 SOUTHERN CALIFORNIA GAS COMPANY
 1981 WEST LUGONIA AVENUE
 REDLANDS, CA 92373
 (909) 335-7837

TELECOMMUNICATIONS:
 CHARTER COMMUNICATIONS
 7337 CENTRAL AVE.
 RIVERSIDE, CA 92504
 (951) 406-1666

FRONTIER COMMUNICATIONS
 9 S. 4TH STREET
 REDLANDS, CA 92373
 (909) 748-6676

AT&T
 3939 E. CORONADO ST.
 2ND FLOOR
 ANAHEIM, CA 92807
 (714) 507-3526

BENCHMARK
 TOP OF CONCRETE STORM DRAINAGE BASIN 288.58'
 N89°21'35"W FROM THE SOUTHWEST CORNER OF THE PROPERTY.
 ELEVATION = 1574.20'

BASIS OF BEARING
 BASIS OF BEARINGS IS THE CENTERLINE OF BRODIEA AVENUE, KNOWN AS N89°34'09"W, AS DESCRIBED IN PARCEL MAP NO. 36463, BOOK 238 PAGE 43, OF OFFICIAL RECORDS IN RIVERSIDE COUNTY, DATED DECEMBER 19, 2014.

PROPERTY OWNER:
MORENO VALLEY CENTERPOINTE
 CO CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

PREPARED FOR/APPLICANT:
CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

PEN20-0120

TENTATIVE PARCEL MAP NO. 37944
 APN 297-170-002 & 003
 COMPASS DANIE CENTERPOINTE
 PROPOSED INDUSTRIAL WAREHOUSE FACILITY
 SOUTH SIDE OF ALESSANDRO BOULEVARD
 CITY OF MORENO VALLEY

thatcher engineering & associates, inc.
 1461 10th street, suite 105, redlands, ca 92373

- land planning
- civil engineering
- landscape architecture

phone: 909.748.7777
 fax: 909.748.7776

PATRICK C. FLANAGAN, JR.
 No. 96246
 Exp. 9/30/22
 CIVIL
 STATE OF CALIFORNIA

Patrick C. Flanagan, Jr., R.C.E. 06046 Exp. Sep 30, 2022
 Job Number: 162012 Date Prepared: 6/15/21 Drawn By: RL Reference Number: 162012TPM
TPM-1

LEGAL DESCRIPTION

PARCEL 1: LOT 2, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN BOOK 11 PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA...

PARCEL 2: LOT 3, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN BOOK 11 PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA...

EASEMENTS

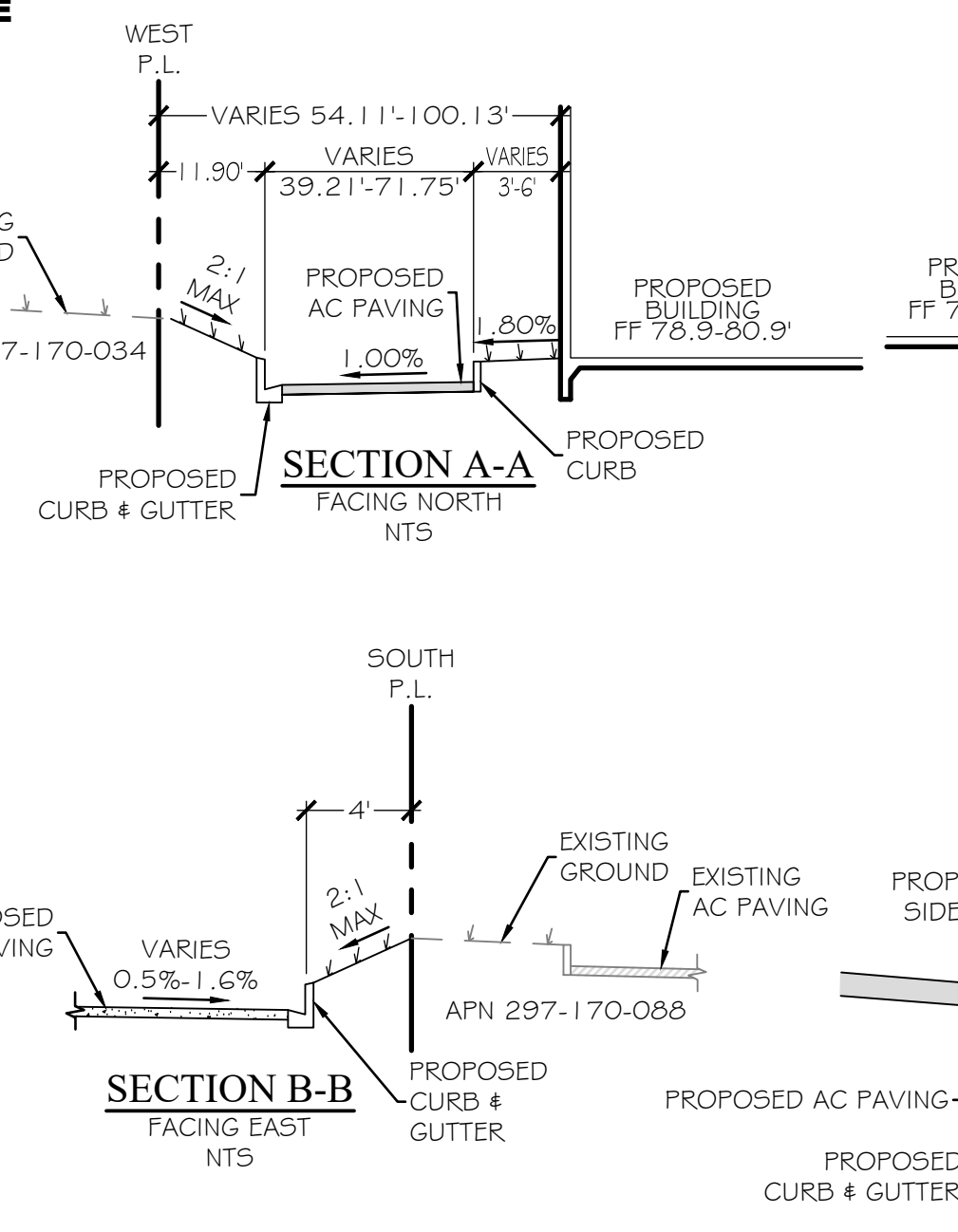
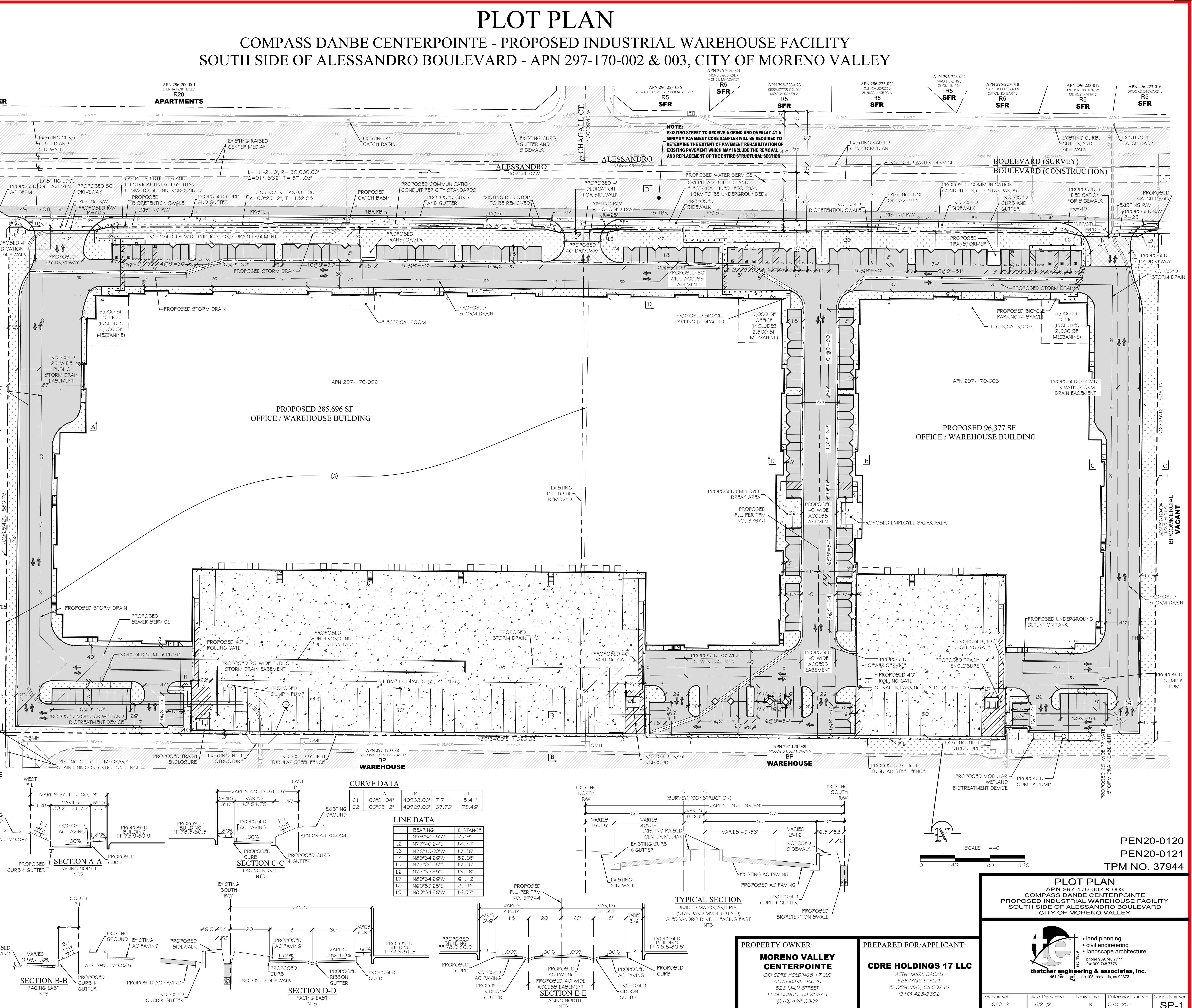
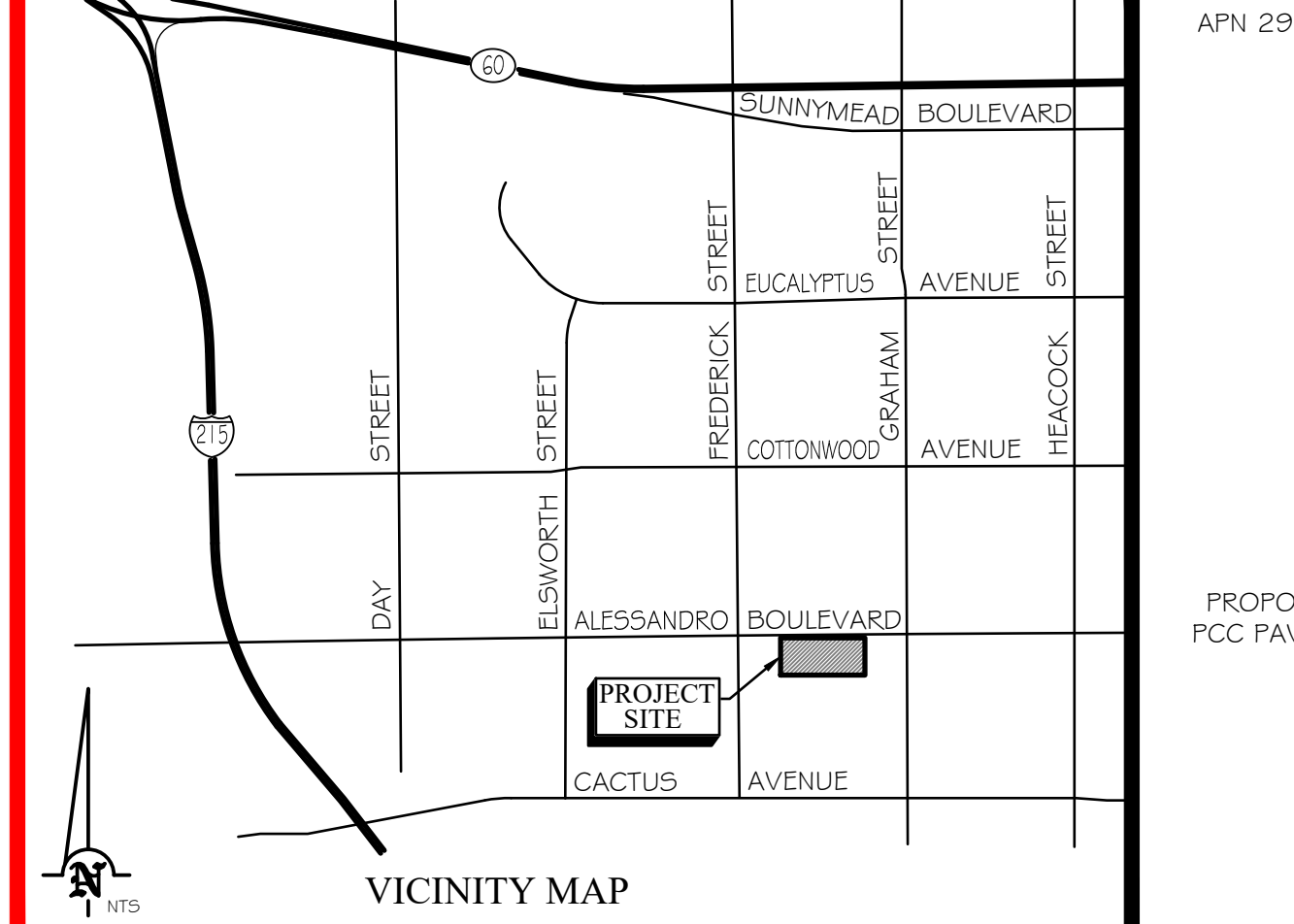
- 1. THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "TEMPORARY DECLARATION OF EASEMENT FOR ACCEPTANCE OF DRAINAGE WATER..."

HATCH LEGEND: BP PROPOSED AC PAVING, ET BUSINESS PARKLIGHT INDUSTRIAL, FB PROPOSED FIRE HYDRANT FLOWLINE, etc.

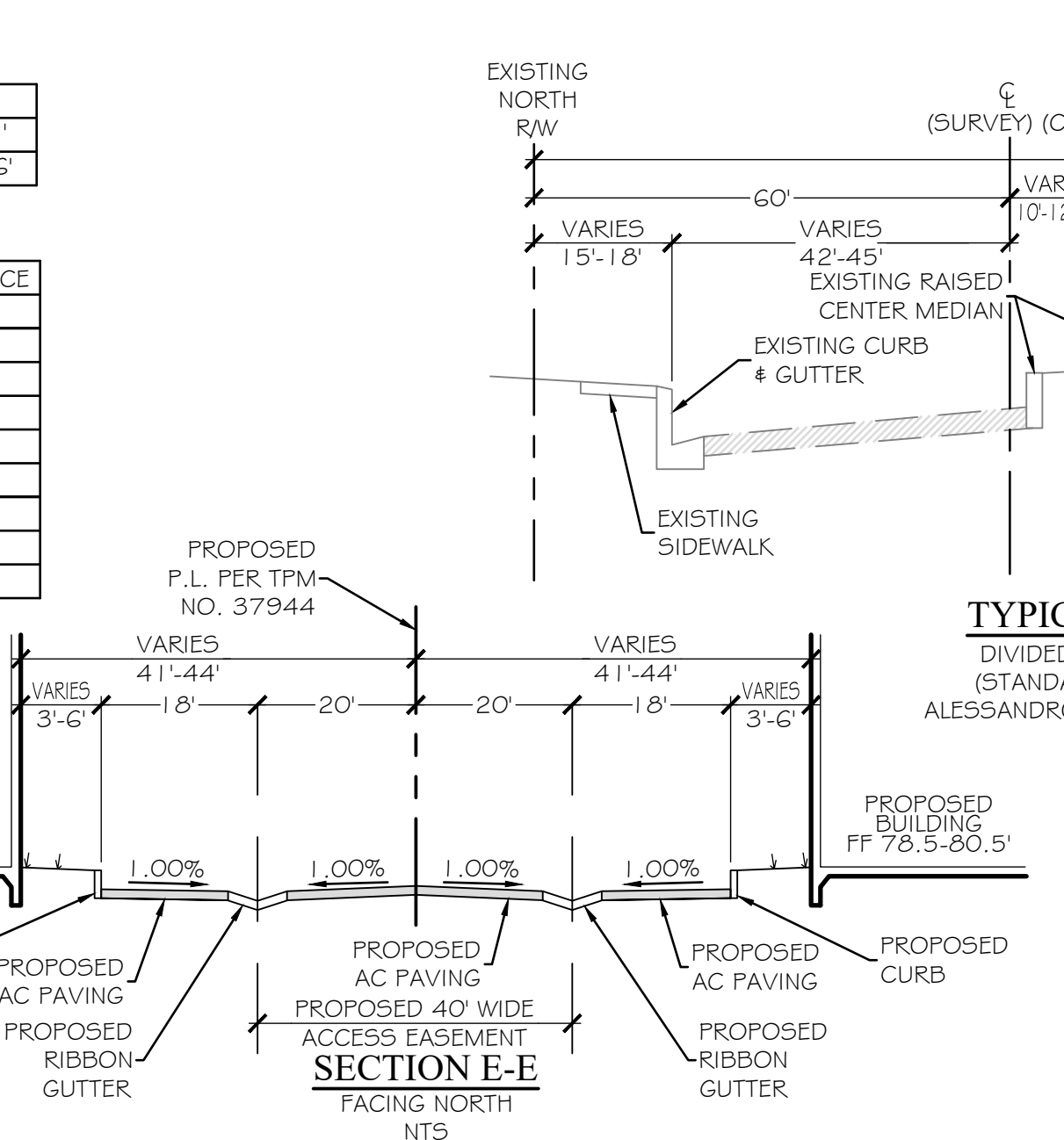
PROJECT NOTES

- 1. ASSESSOR'S PARCEL NUMBER: 297-170-002 & 003. EXISTING GROSS AREA: 871,609 SF = 20.01 AC. EXISTING NET AREA: 769,571 SF = 17.67 AC.

SOILS ENGINEER: REPORT DATED JANUARY 31, 2020. PROJECT NO. 21-631-20. AS CONDUCTED BY NORCAL ENGINEERING.



CURVE DATA table with columns C1, C2, Δ, R, T, L. LINE DATA table with columns LI, BEARING, DISTANCE.



PROPERTY OWNER: MORENO VALLEY CENTERPOINTE. PREPARED FOR/APPLICANT: CDRE HOLDINGS 17 LLC. Includes title block with job number, date, and sheet number.



COMPASS DANBE CENTERPOINTE
 MORENO VALLEY, CA

PROJECT
 4TH PLANNING SUBMITTAL

Attachment: Project Plans (4465 : PEN20-0118-0119, PEN20-0122 and PEN 20-0124 Compass Danbe)

COMPASS DANBE CENTERPOINTE

ALESSANDRO BLVD.
 MORENO VALLEY, CA

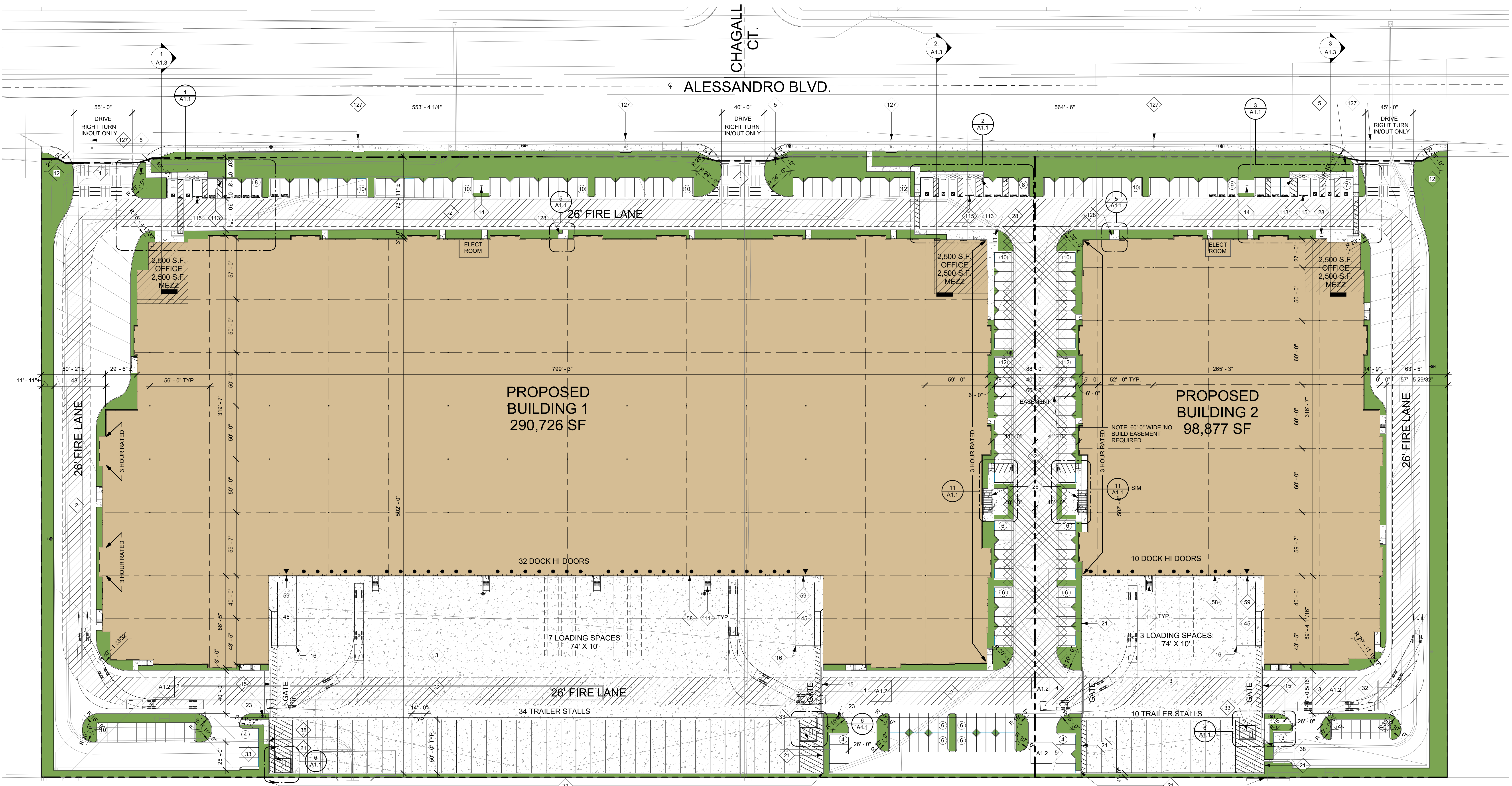


HERDMAN
 ARCHITECTURE + DESIGN

A19-2062
 06.16.2021

COVER SHEET

A0.1



1 PROPOSED SITE PLAN
1" = 40'-0"

KEYNOTES
1 NEW DRIVE CURB PER CITY OR COUNTY STANDARDS. REFER TO LANDSCAPE DRAWINGS FOR ENHANCED PAVING DESIGN IF APPLICABLE. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFO.
2 ASPHALT PAVING, TYP. REFER TO SOILS REPORT @ CIVIL DRAWINGS FOR ADDITIONAL DESIGN CRITERIA.
3 CONCRETE PAVING, REFER TO CIVIL DRAWINGS FOR SECTION AND DRAINAGE. G.C. TO COORDINATE WITH SOILS REPORT. REFER TO STRUCTURAL DRAWINGS FOR CONCRETE DESIGN AT TRUCK APRONS IF APPLICABLE.
5 ADA SITE ENTRY SIGN PER CODE, TYP.
11 EXTERIOR CONCRETE STAIR W/CONCRETE WALLS, WALLS & RAILINGS PAINTED PER EXTERIOR COLOR SCHEDULE. REFER TO CIVIL AND STRUCTURAL DRAWINGS.
12 LANDSCAPE AREA - SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
14 PROPOSED TRANSFORMER LOCATION. PROVIDE BOLLARDS PER UTILITY COMPANY REQUIREMENTS. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
15 SLIDING METAL GATE, ELECTRONICALLY OR MANUALLY OPERATED. PROVIDE CONDUIT TO GUARD SHACK AND OFFICE AREA FOR GATE CONTROL @ INTERCOM. PROVIDE KNOX PAD PER FIRE DEPT. STD.
16 PROTECTIVE METAL BOLLARDS, CONCRETE FILLED, PAINTED, TYP.
21 METAL TUBE STEEL FENCE, 8' HIGH
23 NEW FIRE HYDRANT, SEE FIRE PROTECTION DRAWINGS.
26 EMPLOYEE OUTDOOR BREAK AREA.
28 SECURE BICYCLE RACK.
32 ON-SITE RETENTION WATER TREATMENT BASIN. REFER TO CIVIL DRAWINGS & LANDSCAPE DRAWINGS.
33 CONCRETE TRASH ENCLOSURE PER CITY REQUIREMENTS.
34 PROVIDE AN EXIT SWING GATE 3'-0" WIDE X 7'-0" FROM THE ENCLOSED YARD. PROVIDE KNOX PAD PER FIRE DEPT. STANDARDS.
45 CONCRETE TRUCK RAMP WITH 42" HIGH CONC. TILT UP GUARD WALLS PAINTED TO MATCH BUILDING. SEE ELEVATIONS.
58 DOCK-HI LOADING DOOR, 8'X10', WITH VISION GLAZING PRE FINISHED BY MANUFACTURER PER COLOR SCHEDULE.
59 DRIVE THRU LOADING DOOR 12'X14' WITH VISION GLAZING, PRE FINISHED BY MANUFACTURER PER COLOR SCHEDULE.
113 EV CHARGERS - CONDUIT FOR FUTURE ONLY.
115 EV CHARGING STALL FOR ADA ACCESS.
127 EXISTING STREET LIGHT, SEE CIVIL DRAWINGS.
128 EXTERIOR AREA FOR ASSISTED RESCUE PER CBC 1009.6.3 AND 1009.7 - REFER TO ENLARGED SITE PLAN DETAILS.

SITE LEGEND	DEVELOPER/OWNER	HERDMAN'S REP/ARCHITECT
LANDSCAPE AREA	CDRE HOLDINGS 17, LLC. 523 MAIN STREET EL SEGUNDO, CA 90245	HERDMAN ARCHITECTURE & DESIGN, INC. 16201 SCIENTIFIC WAY IRVINE, CA 92618 CONTACT: BRIDGET HERDMAN PHONE: 714.389.2800 EMAIL: BRIDGET@HERDMAN-AD.COM
CONCRETE PAVING	CONTACT: MARK BACHLI PHONE: 310.428.3302 EMAIL: MBACHLI@DANBE.COM	
PROPOSED BUILDING		
PATH OF TRAVEL		
PROPERTY LINE		
DOCK HIGH DOOR		
DRIVE THRU DOOR		
STANDARD PARKING STALL PER CITY REQUIREMENT		
TYP. ACCESSIBLE PARKING STALL WITH 5' ACCESS AISLE PER CBC 2019 11B 502.2		
NOTE: ALL PARKING TO BE DOUBLE STRIPED		
SCOPE OF WORK	UTILITY PROVIDERS	
TWO NEW SPECULATIVE CONCRETE TILT-UP BUILDING FOR WAREHOUSE & OFFICE USE. INCLUDES SITE IMPROVEMENTS AS SHOWN. CONSTRUCTION TYPE: III-B	WATER - CITY OF MORENO VALLEY SEWER - CITY OF MORENO VALLEY ELECTRIC - SO CAL EDISON	

SHEET INDEX	VICINITY MAP
<p>A0.1 COVER SHEET</p> <p>A1 SITE PLAN</p> <p>A1.1 SITE DETAILS</p> <p>A2 FLOOR PLAN - B1</p> <p>A2.1 FLOOR PLAN - B2</p> <p>A3 ENLARGED FLOOR PLANS</p> <p>A3.1 ROOF PLAN - B2</p> <p>A4 EXTERIOR ELEVATIONS - B1</p> <p>A4.1 EXTERIOR ELEVATIONS - B1</p> <p>A4.2 EXTERIOR ELEVATIONS - B2</p> <p>CG-1 CONCEPTUAL GRADING PLAN</p> <p>CLP-1 CONCEPTUAL LANDSCAPE PLAN</p>	
SITE PLAN GENERAL NOTES	
<p>1. SITE PLAN SHALL MEET ALL ENGINEERING & NPDES REQUIREMENTS.</p> <p>2. GENERAL CONTRACTOR TO REVIEW SOILS REPORT PREPARED BY [DATE], AND ANY SUBSEQUENT AMENDMENTS. G.C. TO CONFIRM COMPLIANCE.</p> <p>3. REFER TO CIVIL DRAWINGS FOR ADDITIONAL UTILITY INFORMATION INCLUDING POINTS OF CONNECTION TO OFFSITE UTILITIES AND BUILDING POINTS OF CONNECTION.</p> <p>4. GENERAL CONTRACTOR TO COORDINATE ALL POINTS OF CONNECTION BETWEEN OFFSITES, CIVIL, M.E.P., & FP DRAWINGS.</p> <p>5. GRADES SURROUNDING BUILDING TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING.</p> <p>6. REFER TO CIVIL DRAWINGS FOR FINISH GRADE ELEVATIONS AND PERCENTAGE SLOPES.</p> <p>7. GENERAL CONTRACTOR TO CONFIRM AND COMPLY WITH ALL BUILDING, FIRE, AND ENGINEERING DEPARTMENT REGULATIONS DURING CONSTRUCTION INCLUDING ANY TEMPORARY FACILITIES REQUIRED.</p> <p>8. ALL PAVED AND LANDSCAPED AREAS TO BE BOUND BY 6" MIN. CONCRETE CURB TYPICAL UNLESS SPECIFICALLY NOTED OTHERWISE.</p> <p>9. ALL ADA PATHS OF TRAVEL NOTED ON PLANS TO MEET THE FOLLOWING MINIMUM REQUIREMENTS. NO ABRUPT CHANGES IN ELEVATION ALLOWABLE ALONG THE PATH OF TRAVEL. THE SLOPE AND CROSS-SLOPE SHALL NOT</p>	<p>EXCEED 5% AND 2% RESPECTIVELY UNLESS AN ADA COMPLIANT RAMP OR CURB RAMP IS DESIGNED BY THE CIVIL ENGINEER. IF A WALK CROSSES OR ADJACENT A VEHICLE WAY, AND THE WALKING SURFACES ARE NOT SEPARATED BY CURBS, RAILING OR OTHER ELEMENTS BETWEEN THE PEDESTRIAN AREAS AND VEHICULAR AREAS, THE BOUNDARY BETWEEN THE AREAS SHALL BE DEFINED BY A 4" DEEP DETECTABLE WARNING WHICH IS 36" WIDE COMPLYING WITH CBC SECTION 11B-705.1.2.5</p> <p>10. ALL SPECIFICATIONS ON DRAWINGS ARE MINIMUM REQUIREMENTS ONLY. GENERAL CONTRACTOR TO NOTIFY ARCHITECT IN WRITING OF ANY CONFLICTS IN DRAWINGS AND SPECIFICATIONS VIA "RFI".</p> <p>11. GENERAL CONTRACTOR TO REFER TO ARCHITECTURAL DETAIL SHEETS FOR TYPICAL MINIMUM SITE IMPROVEMENT STANDARDS.</p> <p>12. CONCRETE MOW STRIP PER ARCHITECTURAL DETAILS TO BE PROVIDED AT ALL PERIMETER LOCATIONS WHERE ADJACENT TO LANDSCAPING.</p> <p>13. CONCRETE SPLASH BLOCK PER ARCHITECTURAL DETAILS TO BE PROVIDED AT ALL ROOF DRAIN/DRAINOUT SPOUT TERMINATIONS AT NON-CONCRETE AREAS.</p> <p>14. BRASS LAMB'S TONGUE TO BE PROVIDED AT ALL ROOF DRAIN OVERFLOWS THAT DAYLIGHT AT FACE OF BUILDING WALL.</p> <p>15. GATES, FENCES, AND WALLS MAY BE SUBJECT TO DEFERRED SUBMITTAL REQUIREMENTS. GENERAL CONTRACTOR TO CONFIRM WITH CITY AND MUST SUBMIT SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL.</p>

PROJECT INFORMATION
<p>PROJECT INFORMATION</p> <p>PROPOSED SITE AREA: 748,661 SF</p> <p>PROPOSED BUILDING AREA: 389,603 SF</p> <p>FAR: 50.7%</p> <p>MAX FAR: NONE</p> <p>ZONE: LI</p> <p>STREET FRONT BLDG. SETBACK: 20 FT</p> <p>SIDE BLDG. SETBACK: 30 FT</p> <p>STREET FRONT & SIDE LANDSCAPE SETBACK: 10 FT</p> <p>INTERIOR SETBACK: 3 FT</p> <p>TOTAL PARKING REQUIRED: 195</p> <p>TOTAL PARKING PROVIDED: 217</p> <p>NO LANDSCAPE REQUIREMENT: NONE</p> <p>LANDSCAPE PROVIDED: 5.9%</p> <p>TOTAL TRAILERS: 10</p>
<p>LEGAL DESCRIPTION</p> <p>THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:</p> <p>PARCEL 1: LOT 2, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP "CM" FILE IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA.</p> <p>EXCEPTING THEREFROM THAT PORTION OF DESCRIBED AS CONVEYED TO THE COUNTY OF RIVERSIDE BY OFFICIAL RECORDED NOVEMBER 28, 1972 AS INSTRUMENT NO. 157190, BY DOCUMENT RECORDS.</p> <p>PARCEL 2: LOT 3, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP "CM" FILE IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA.</p> <p>EXCEPTING THEREFROM THAT PORTION DESCRIBED IN THE DEED TO THE COUNTY OF RIVERSIDE DOCUMENT RECORDED MAY 30, 1972 AS INSTRUMENT NO. 69766, OFFICIAL RECORDS.</p> <p>APN 297-170-003-7 AND 297-170-002-6</p>

ALLOWABLE AREA JUSTIFICATION
<p>BUILDING 1 & 2:</p> <p>UNLIMITED AREA PER CBC TABLE 506.2 AND SECTION 507.4 - THE AREA OF A GROUP S-1 BUILDING NO MORE THAN ONE STORY ABOVE GRADE PLANE OF TYPE III-B CONSTRUCTION, WHERE THE BUILDING IS PROVIDED WITH AN AUTOMATIC SPRINKLER SYSTEM THROUGHOUT IN ACCORDANCE WITH SECTION 903.3.1.1 AND SURROUNDED AND ADJOINED BY PUBLIC WAYS OR YARDS NOT LESS THAN 60 FEET IN WIDTH.</p> <p>CBC 507.2.1 - REDUCED OPEN SPACE. THE PUBLIC WAYS OR YARDS OF 60 FEET IN WIDTH REQUIRED IN SECTION 507.4 SHALL BE PERMITTED TO BE REDUCED TO NOT LESS THAN 40 FEET IN WIDTH PROVIDED ALL OF THE FOLLOWING REQUIREMENTS ARE MET:</p> <ol style="list-style-type: none"> THE REDUCED WIDTH SHALL NOT BE ALLOWED FOR MORE THAN 75% OF THE PERIMETER OF THE BUILDING. THE EXTERIOR WALLS FACING THE REDUCED WIDTH SHALL HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 3 HOURS. OPENINGS IN THE EXTERIOR WALLS FACING THE REDUCED WIDTH SHALL HAVE OPENINGS PROTECTIVES WITH A FIRE PROTECTION RATING OF NOT LESS THAN 3 HOURS.

PROJECT INFORMATION	BUILDING 1	BUILDING 2
<p>PROJECT INFORMATION</p> <p>PROPOSED SITE AREA: 748,661 SF</p> <p>PROPOSED BUILDING AREA: 389,603 SF</p> <p>FAR: 50.7%</p> <p>MAX FAR: NONE</p> <p>ZONE: LI</p> <p>STREET FRONT BLDG. SETBACK: 20 FT</p> <p>SIDE BLDG. SETBACK: 30 FT</p> <p>STREET FRONT & SIDE LANDSCAPE SETBACK: 10 FT</p> <p>INTERIOR SETBACK: 3 FT</p> <p>TOTAL PARKING REQUIRED: 195</p> <p>TOTAL PARKING PROVIDED: 217</p> <p>NO LANDSCAPE REQUIREMENT: NONE</p> <p>LANDSCAPE PROVIDED: 5.9%</p> <p>TOTAL TRAILERS: 10</p>	<p>BUILDING 1</p> <p>FAR: 53.5%</p> <p>LANDSCAPE: 8.0%</p> <p>46,697 SF</p> <p>290,726 SF</p> <p>285,726 SF</p> <p>5,000 SF</p> <p>5,000 SF</p> <p>5,000 SF</p> <p>PARKING REQUIRED (9x18): 131</p> <p>WAREHOUSE @ 12000 SFT 20K: 20</p> <p>WAREHOUSE @ 12000 20K 40K: 30</p> <p>WAREHOUSE @ 14000 40K + OFFICE @ 12,500: 40</p> <p>PARKING PROVIDED: 144</p> <p>STANDARD: 126</p> <p>ADA: 4</p> <p>ADA: 1</p> <p>EV STD ADA: 1</p> <p>EV STD ADA: 1</p> <p>EVCS: 3</p> <p>EVCS: 6</p> <p>BIKE PARKING REQUIRED: 7.2 STALLS</p> <p>BIKE PARKING PROVIDED: 8.0 STALLS (4 RACKS)</p> <p>TRAILER PARKING REQUIRED (20 X 75) 1 PER DOCK DOOR: 32</p> <p>TRAILER PARKING PROVIDED: 34</p> <p>LOADING REQUIREMENT (10 X 75) 70K TO 120K + PLUS ADDITIONAL 1 EVERY 50K: 7</p>	<p>BUILDING 2</p> <p>FAR: 43.8%</p> <p>LANDSCAPE: 12.9%</p> <p>29,069 SF</p> <p>98,877 SF</p> <p>98,377 SF</p> <p>5,000 SF</p> <p>2,500 SF</p> <p>2,500 SF</p> <p>PARKING REQUIRED (9x18): 64</p> <p>WAREHOUSE @ 12000 SFT 20K: 20</p> <p>WAREHOUSE @ 12000 20K 40K: 30</p> <p>WAREHOUSE @ 14000 40K + OFFICE @ 12,500: 14</p> <p>PARKING PROVIDED: 73</p> <p>STANDARD: 63</p> <p>ADA: 2</p> <p>ADA: 1</p> <p>EV STD ADA: 1</p> <p>EV STD ADA: 1</p> <p>EVCS: 3</p> <p>EVCS: 6</p> <p>BIKE PARKING REQUIRED: 3.7 STALLS</p> <p>BIKE PARKING PROVIDED: 4.0 STALLS (2 RACKS)</p> <p>TRAILER PARKING REQUIRED (20 X 75) 1 PER DOCK DOOR: 10</p> <p>TRAILER PARKING PROVIDED: 10</p> <p>LOADING REQUIREMENT (10 X 75) 70K TO 120K + PLUS ADDITIONAL 1 EVERY 50K: 3</p>

COMPASS DANBE CENTERPOINTE
MORENO VALLEY, CA

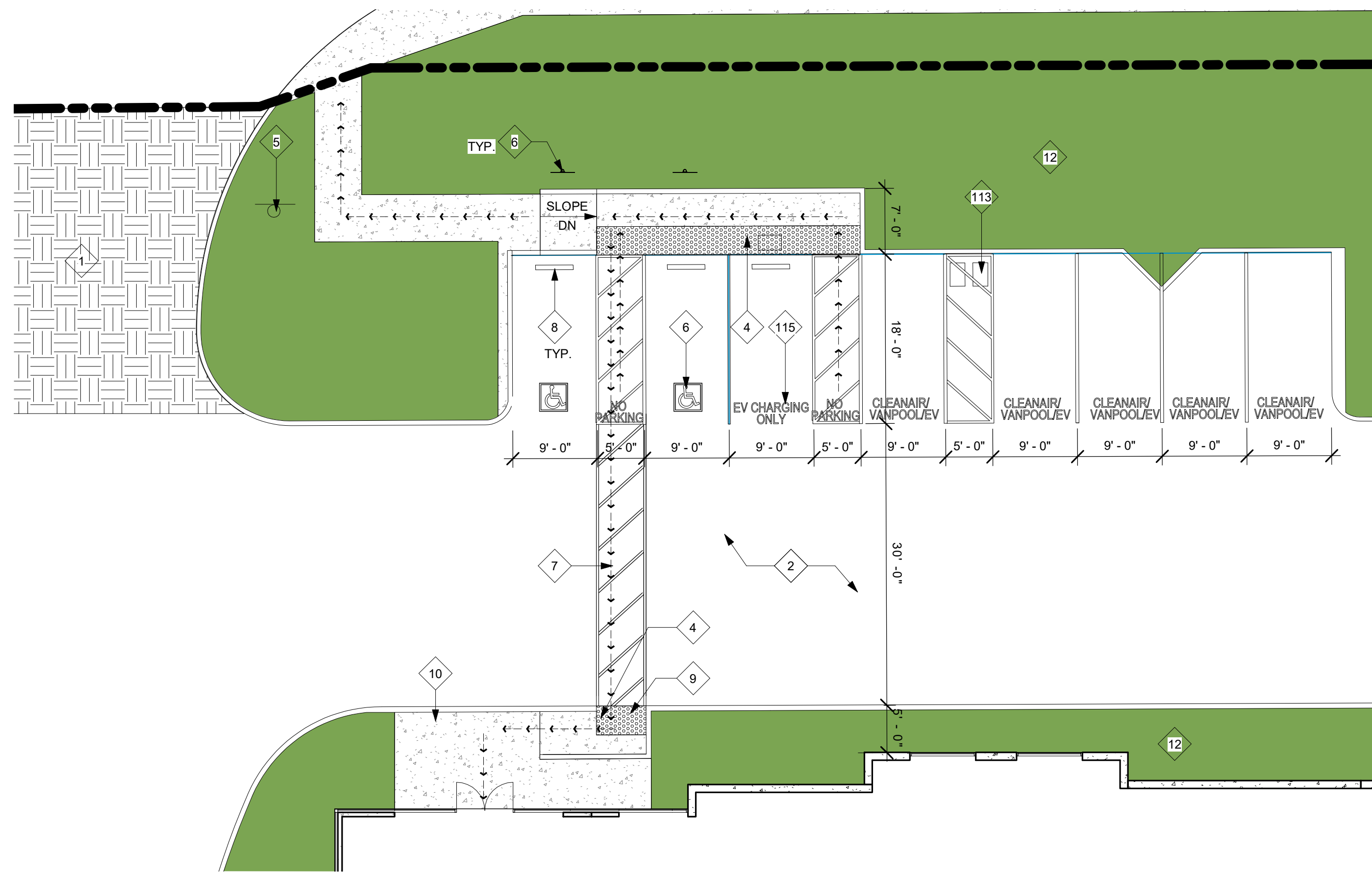
PROJECT
4TH PLANNING SUBMITTAL



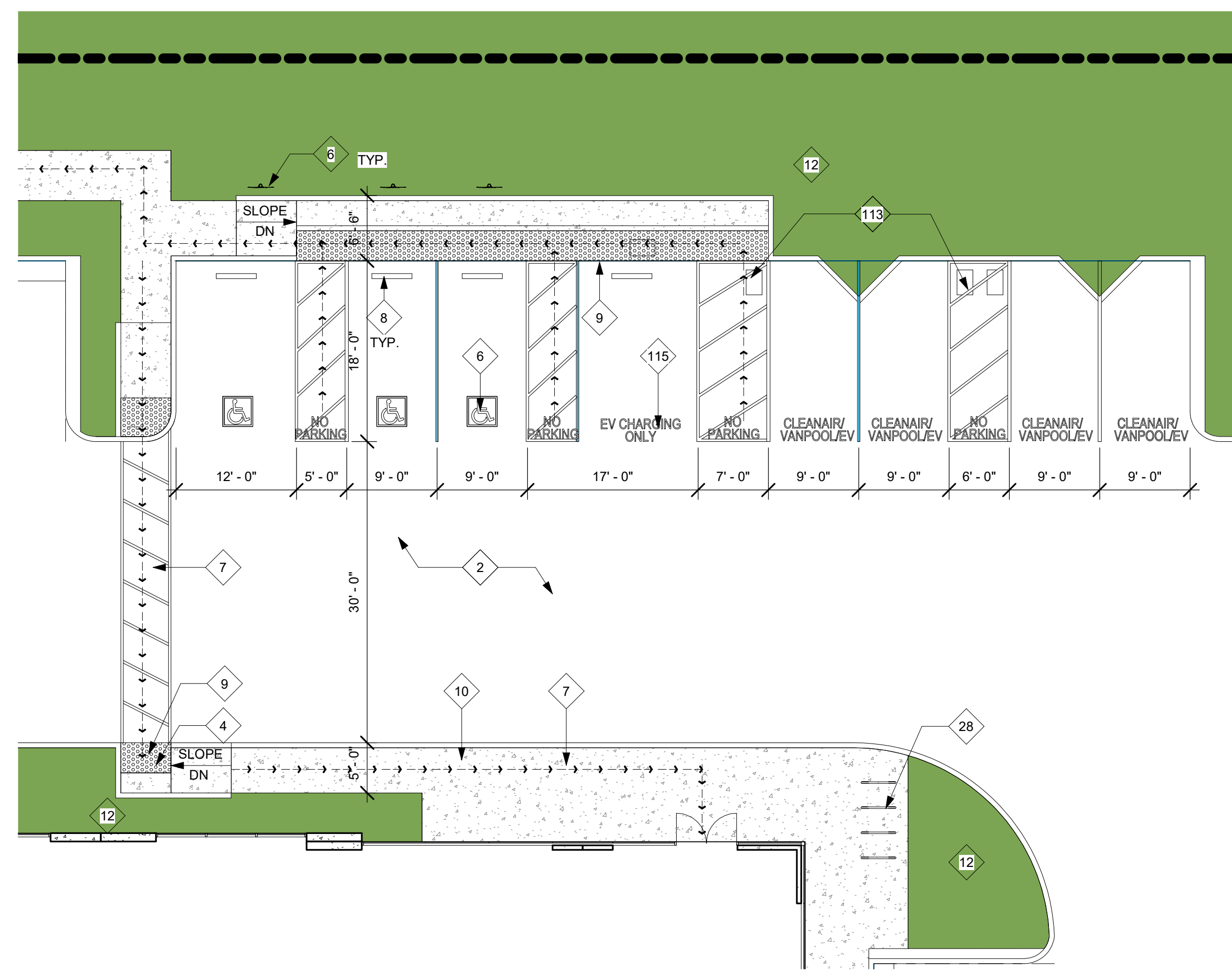
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SITE PLAN

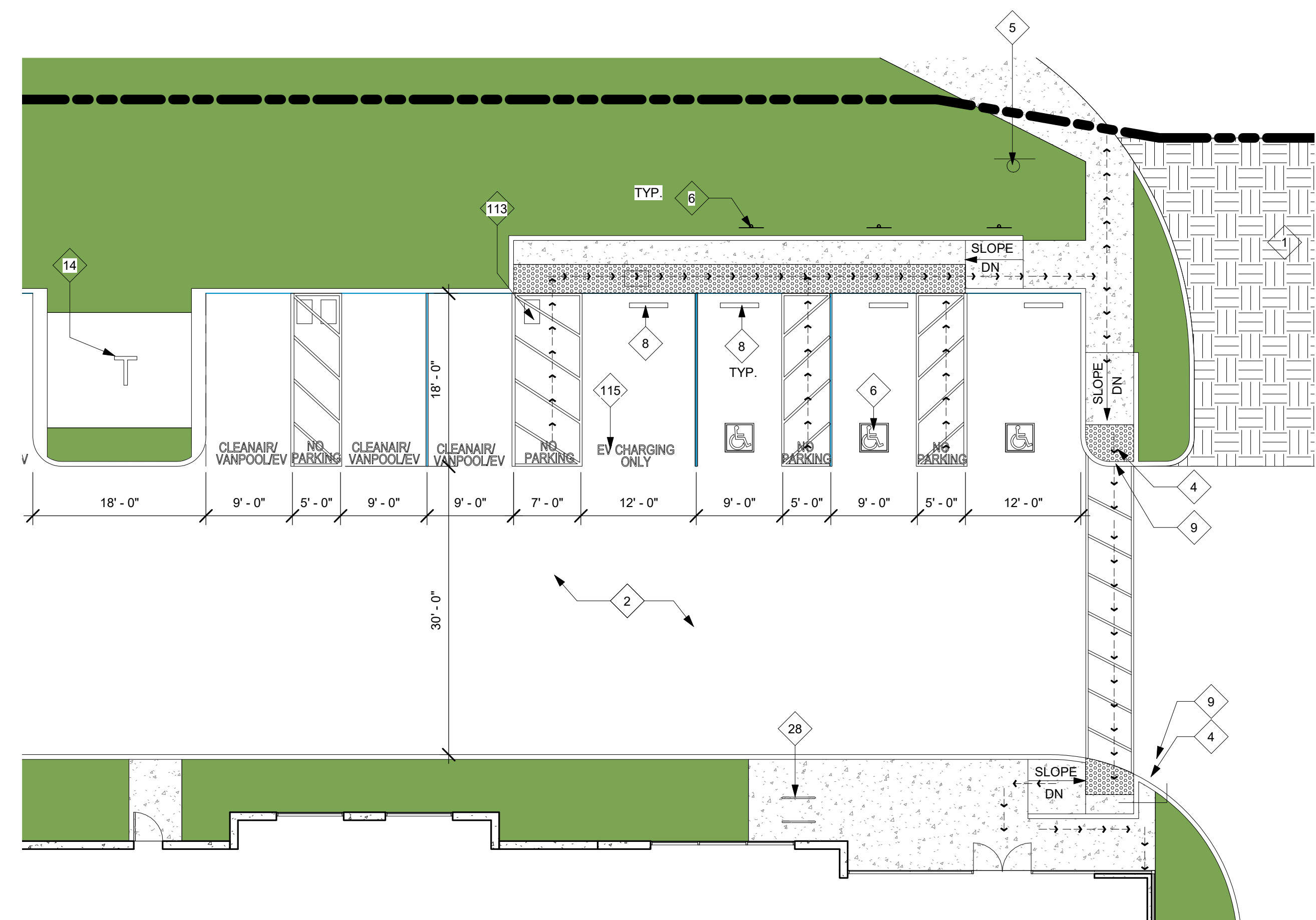
A1



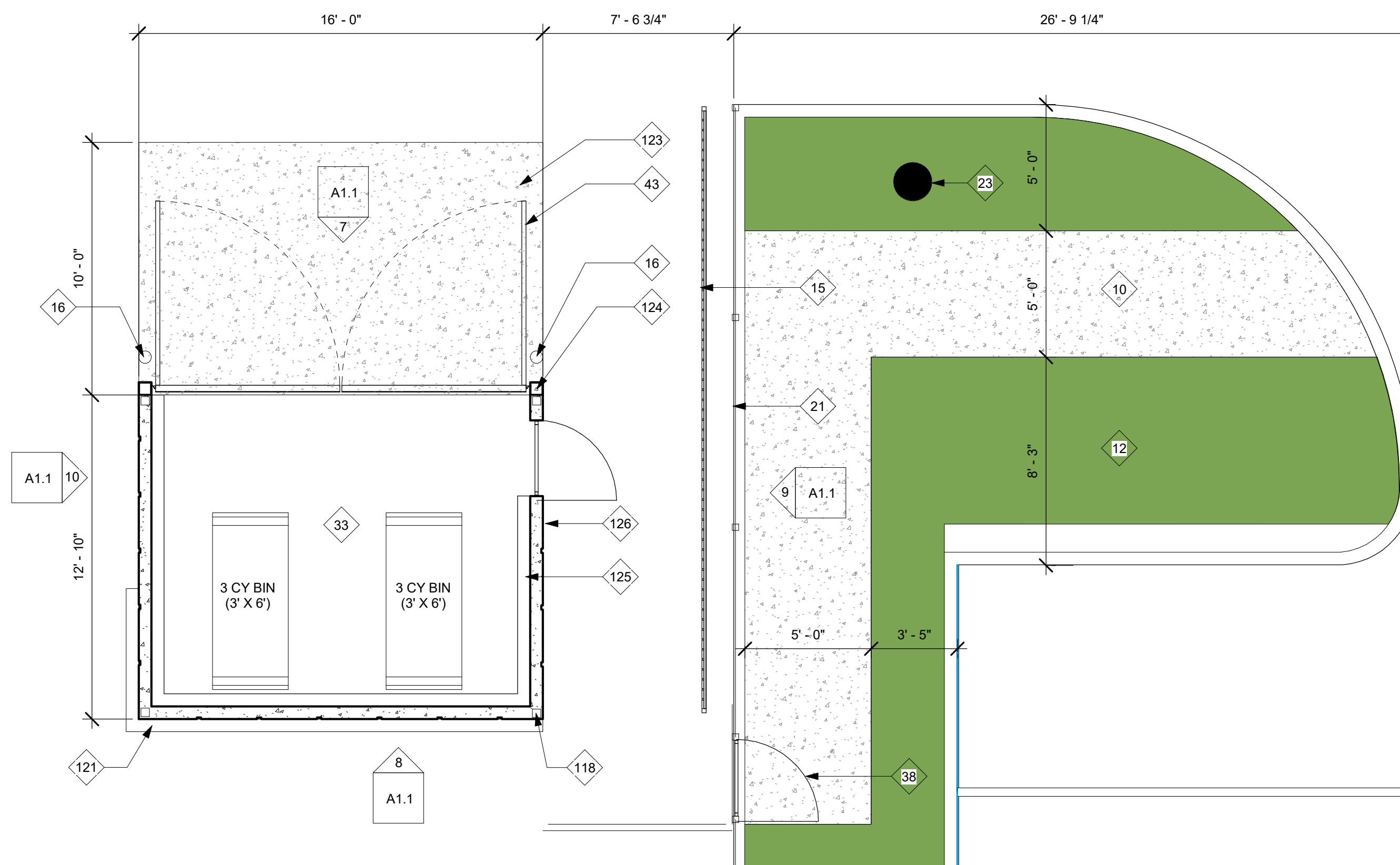
1 ENLARGED ACCESSIBLE PARKING NORTHWEST
1" = 10'-0"



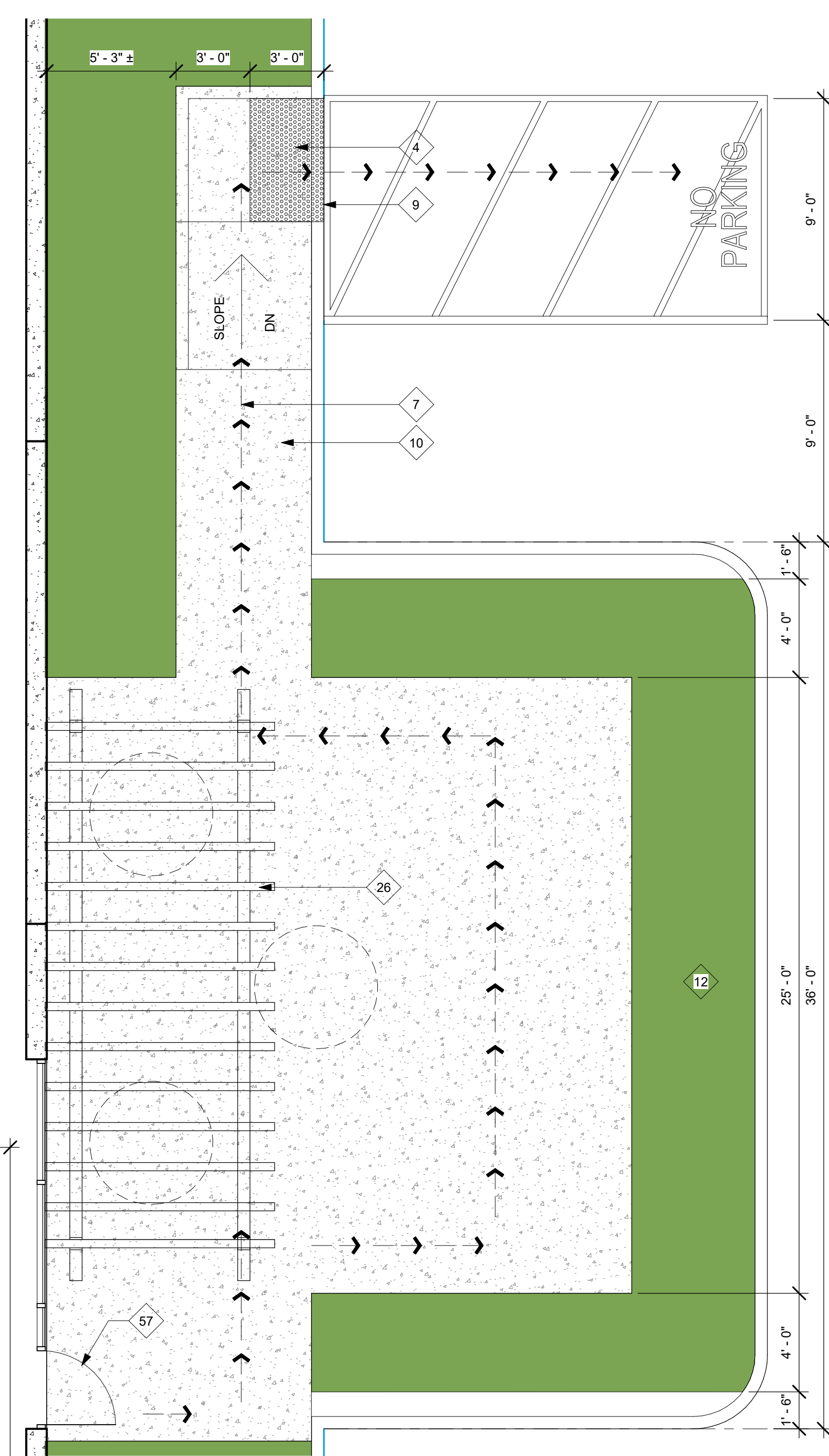
2 ENLARGED ACCESSIBLE PARKING NORTH
1" = 10'-0"



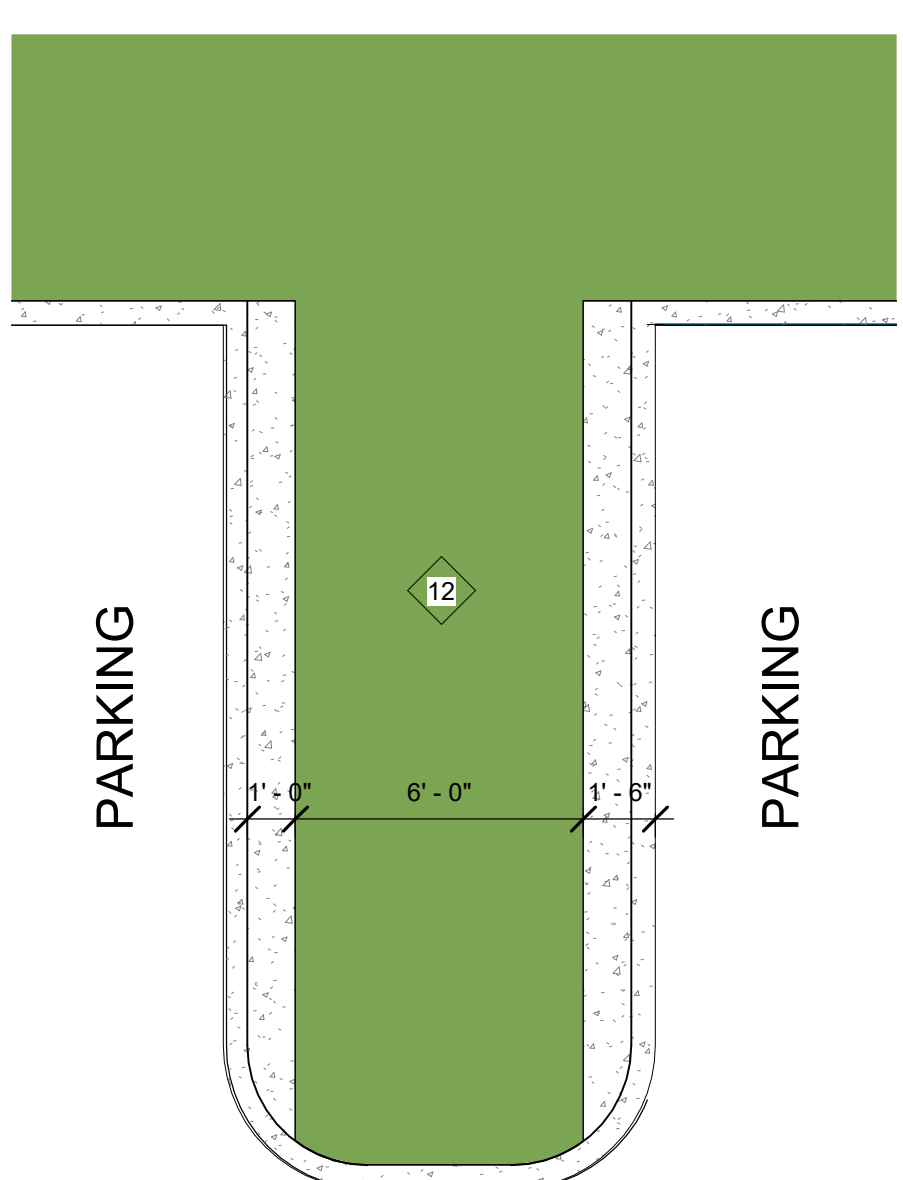
3 ENLARGED ACCESSIBLE PARKING NORTHEAST
1" = 10'-0"



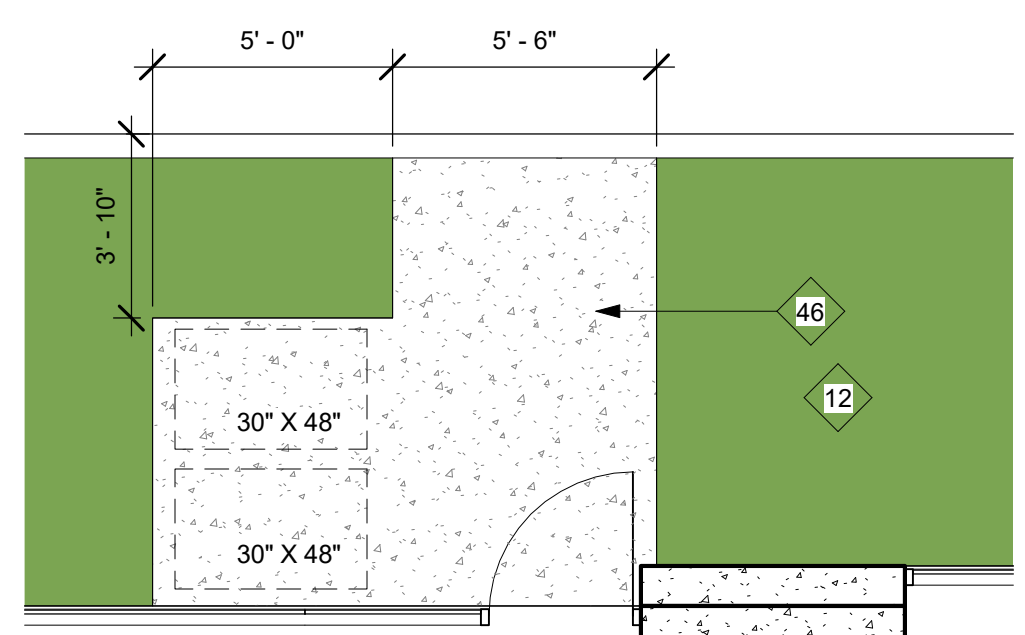
6 TYPICAL TRASH ENCLOSURE PLAN
1/4" = 1'-0"



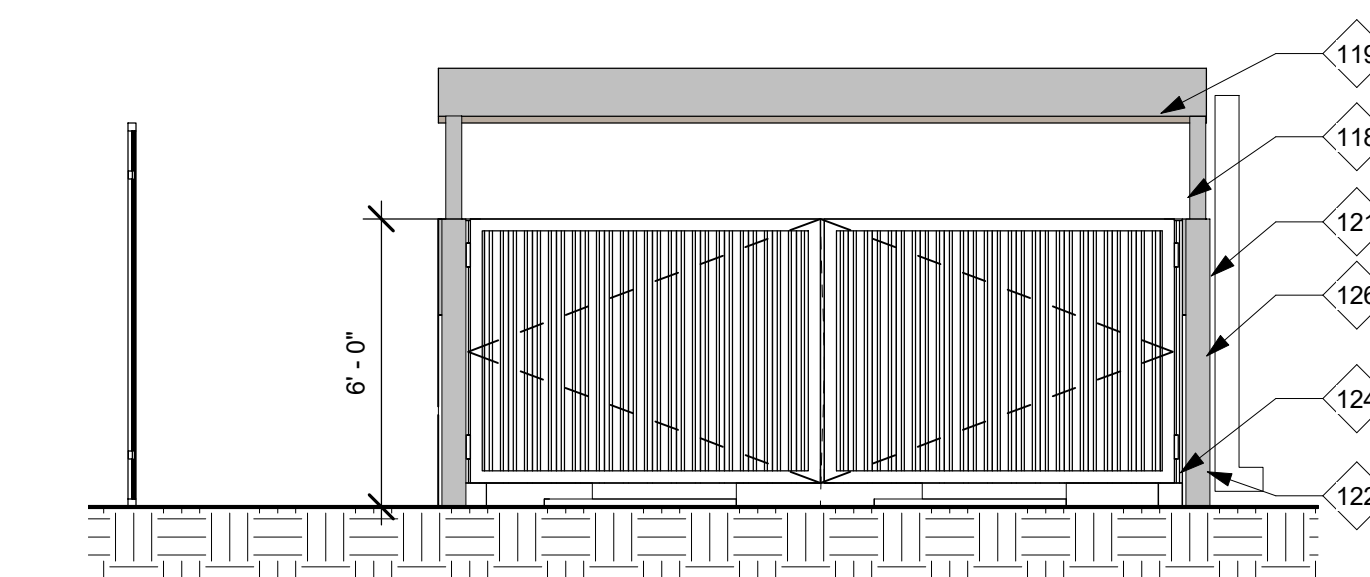
11 ENLARGED EMPLOYEE OUTDOOR BREAK AREA
1/4" = 1'-0"



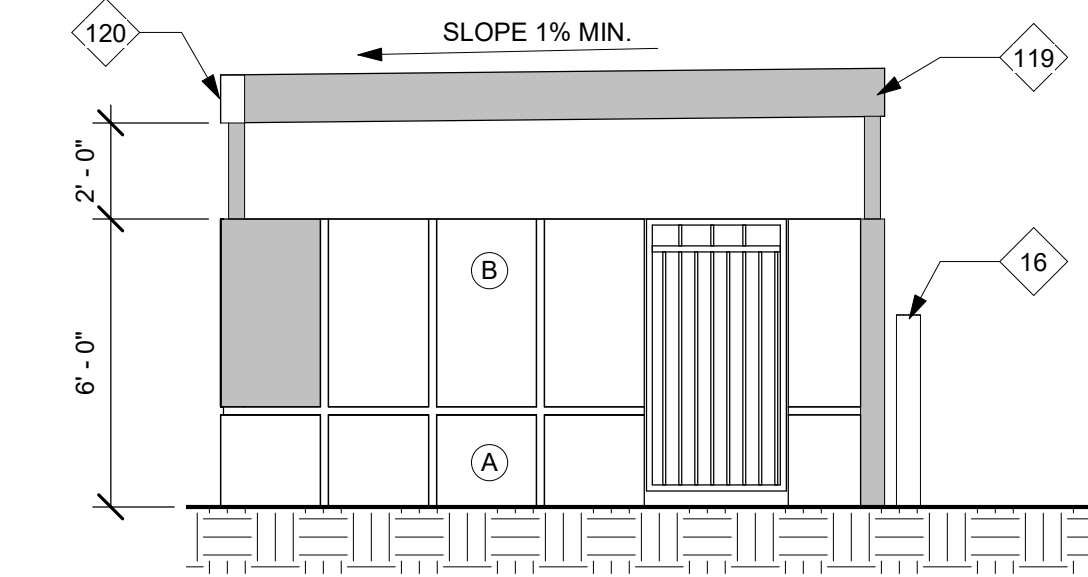
4 TYPICAL LANDSCAPE FINGER DETAIL
1/4" = 1'-0"



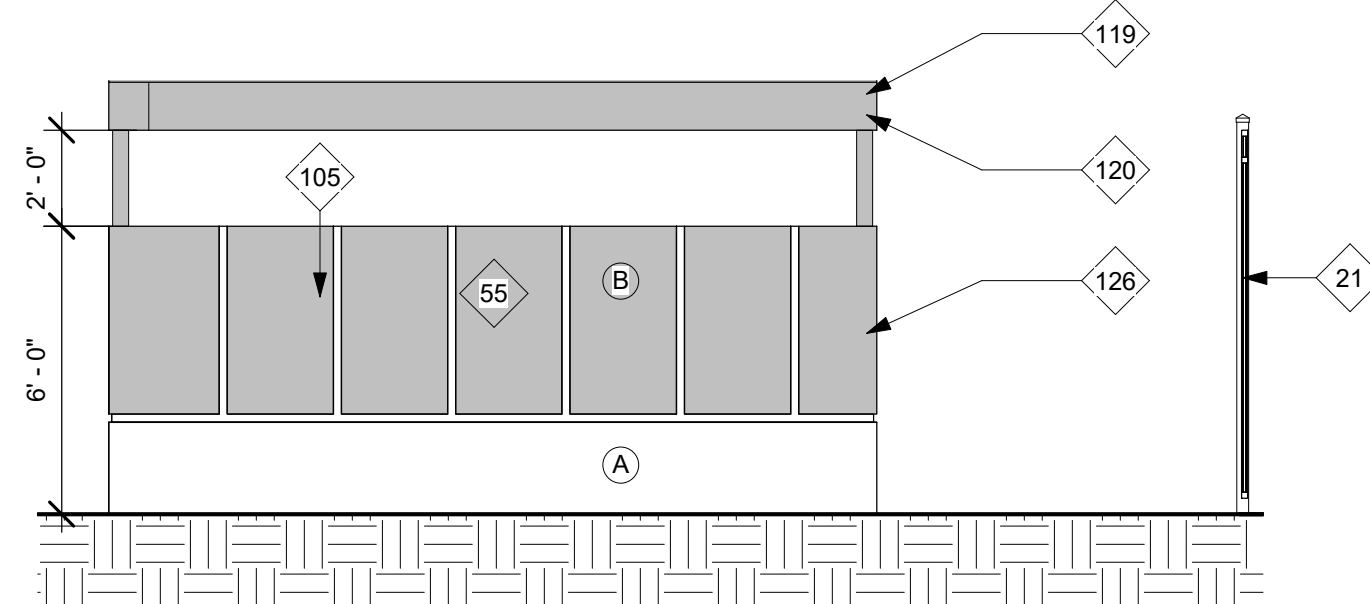
5 ENLARGED TYPICAL EXTERIOR AREA OF ASSISTED RESCUE
1/4" = 1'-0"



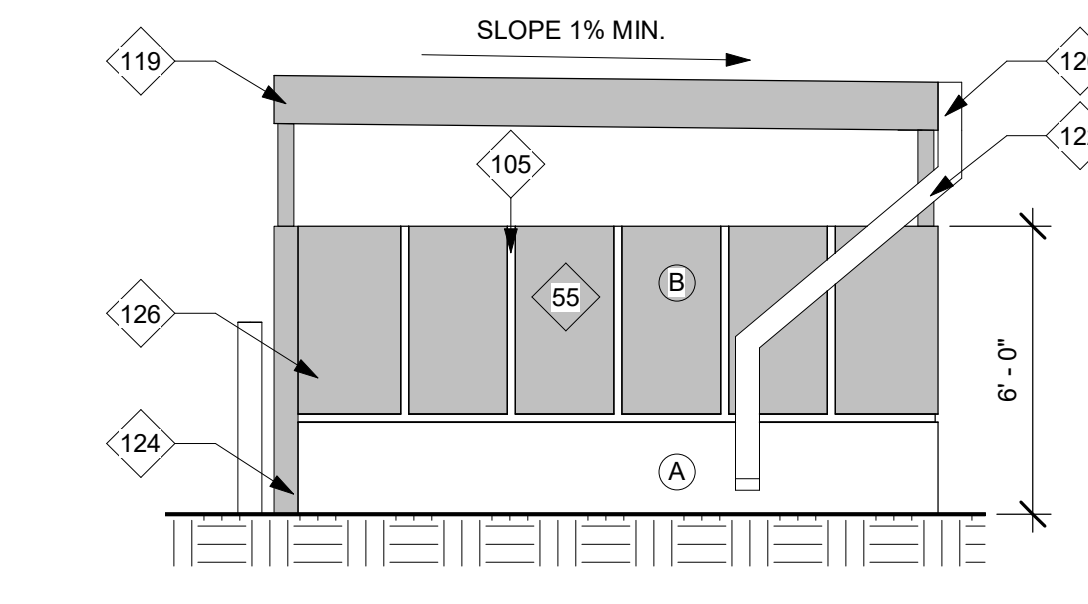
7 TRASH ENCLOSURE FRONT ELEVATION
1/4" = 1'-0"



9 TRASH ENCLOSURE SIDE ELEVATION
1/4" = 1'-0"



8 TRASH ENCLOSURE REAR ELEVATION
1/4" = 1'-0"



10 TRASH ENCLOSURE SIDE ELEVATION
1/4" = 1'-0"

KEYNOTES

- NEW DRIVE CUT, PER CITY OR COUNTY STANDARDS. REFER TO LANDSCAPE DRAWINGS FOR ENHANCED PAVING DESIGN IF APPLICABLE. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFO.
- ASPHALT PAVING, TYP. REFER TO SOILS REPORT @ CIVIL DRAWINGS FOR ADDITIONAL DESIGN CRITERIA.
- TRUNCATED DOMES
- ADA SITE ENTRY SIGN PER CODE, TYP.
- ADA PARKING STALL SIGN PER CODE, TYP. PROVIDE AT ALL ADA STALLS.
- ADA PATH OF TRAVEL
- PRECAST CONCRETE WHEEL STOP
- ZERO CURB FACE
- CONCRETE WALK, SEE SITE PLAN FOR ADA PATH OF TRAVEL, 4" MIN THICKNESS, SCORE CONCRETE @ 5' O.C., PROVIDE A LIGHT BROOM FINISH. REFER TO LANDSCAPE DRAWINGS FOR SPECIALTY CONCRETE FINISHING, TYP. REFER TO SOILS REPORT FOR ADDITIONAL MIN. REQ.
- LANDSCAPE AREA - SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
- PROPOSED TRANSFORMER LOCATION, PROVIDE BOLLARDS PER UTILITY COMPANY REQUIREMENTS. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- SLIDING METAL GATE, ELECTRONICALLY OR MANUALLY OPERATED, PROVIDE CONDUIT TO GUARD SHACK AND OFFICE AREA FOR GATE CONTROL @ INTERCOM. PROVIDE KNOX PAD PER FIRE DEPT. STD.
- PROTECTIVE METAL BOLLARDS, CONCRETE FILLED, PAINTED, TYP.
- METAL TUBE STEEL FENCE, 8' HIGH
- NEW FIRE HYDRANT, SEE FIRE PROTECTION DRAWINGS.
- EMPLOYEE OUTDOOR BREAK AREA
- SECURE BICYCLE RACK
- CONCRETE TRASH ENCLOSURE PER CITY REQUIREMENTS. PROVIDE AN EXIT SWING GATE 3'-0" WIDE X 7'-0" FROM THE ENCLOSED YARD. PROVIDE KNOX PAD PER FIRE DEPT. STANDARDS.
- SWINGING METAL GATE, ELECTRONICALLY OR MANUALLY OPERATED, PROVIDE CONDUIT TO GUARD SHACK/OFFICE AREA FOR GATE CONTROL @ INTERCOM. PROVIDE KNOX PAD PER FIRE DEPT. STD.
- CONCRETE LANDING PAD @ EXTERIOR MAN DOOR WITH STEPS (WHEN SHOWN, PROVIDE HANDRAIL/GUARDRAIL AS REQUIRED, TYP. CONFIRM QUANTITY OF RISERS W/FINAL GRADING PLAN.
- CONCRETE TILT-UP PANEL, TYP. PAINTED, SEE EXTERIOR COLOR SCHEDULE. REFER TO ELEVATIONS AND "S" DRAWINGS FOR ADDITIONAL INFORMATION.
- EXTERIOR STOREFRONT DOOR, SEE EXTERIOR COLOR SCHEDULE & DOOR SCHEDULE FOR ADDITIONAL INFO.
- 2" DECORATIVE CONCRETE REVEAL WITH CHAMFERED EDGES, TYP.
- EV CHARGERS - CONDUIT FOR FUTURE ONLY
- EV CHARGING STALL FOR ADA ACCESS
- 4" X 4" STRUCTURAL POST FOR METAL DECK ROOF
- SOLID METAL DECK ROOF
- ROOF GUTTER
- G.I. GUTTER
- G.I. DOWNSPOUT CONNECTION FROM ROOF DRAIN
- CONCRETE APRON 8" THICK
- 6" X 8" STEEL TUBE FRAME
- 6" HIGH CONCRETE CURB
- 6" HIGH CONCRETE TILT UP TRASH ENCLOSURE WALL, TYP.

EXTERIOR COLOR SCHEDULE

(A)	OFF WHITE EXTERIOR PAINT COLOR: SW6570 HERON PLUME
(B)	MEDIUM TALPE EXTERIOR PAINT COLOR: SW6073 PERFECT GREIGE

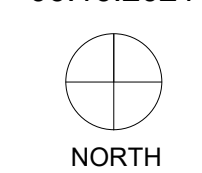
PROJECT
4TH PLANNING SUBMITTAL

COMPASS DANBE CENTERPOINTE
MORENO VALLEY, CA



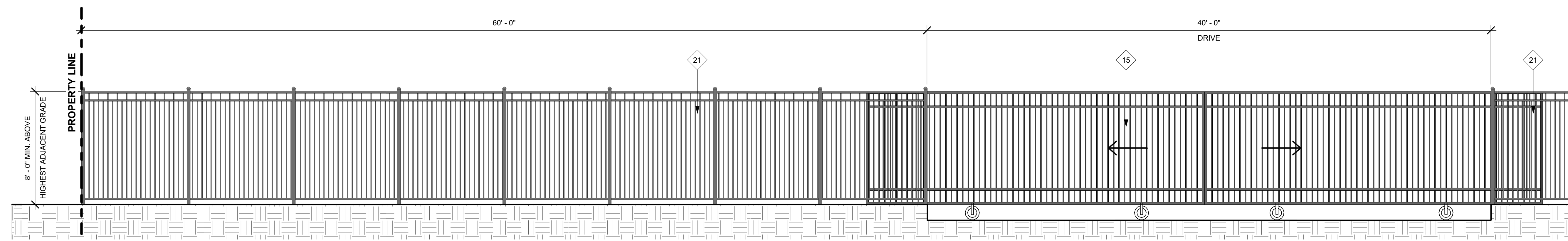
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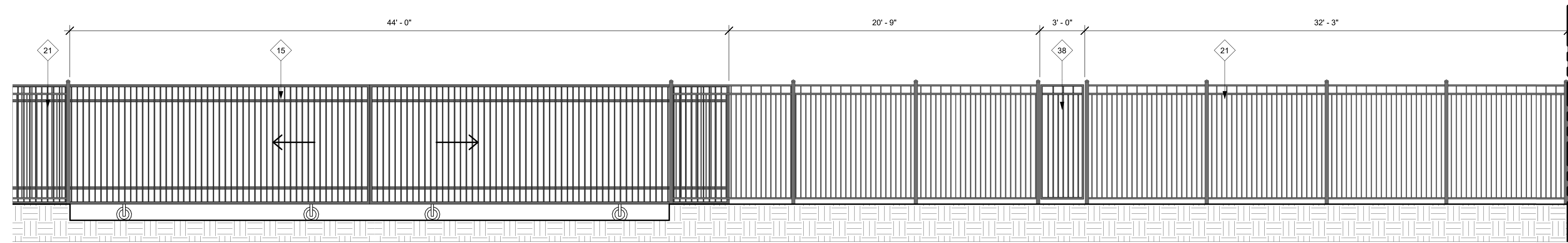


SITE DETAILS

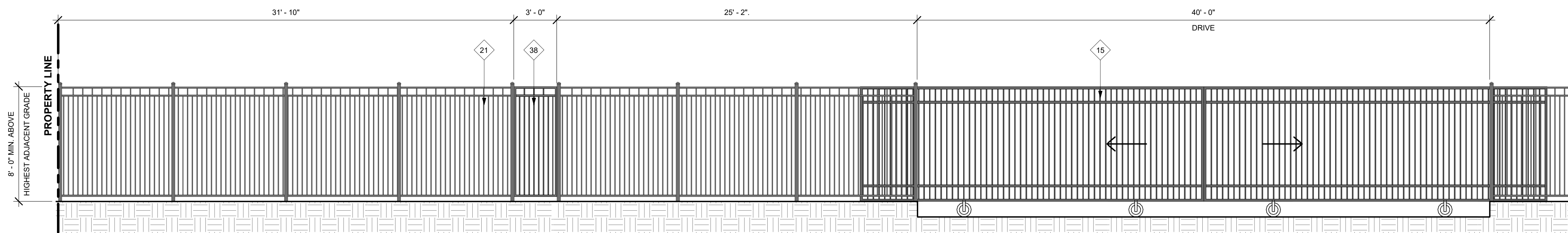
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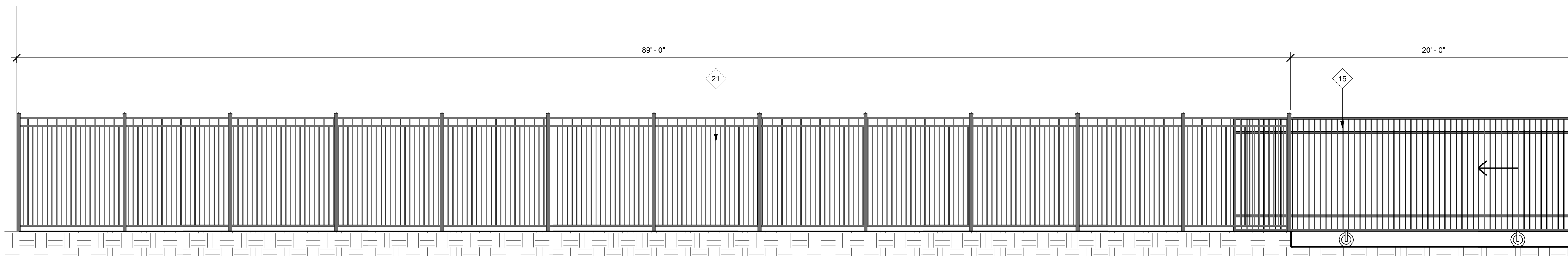
1 BUILDING 1 EAST GATE ELEVATION
1/4" = 1'-0"



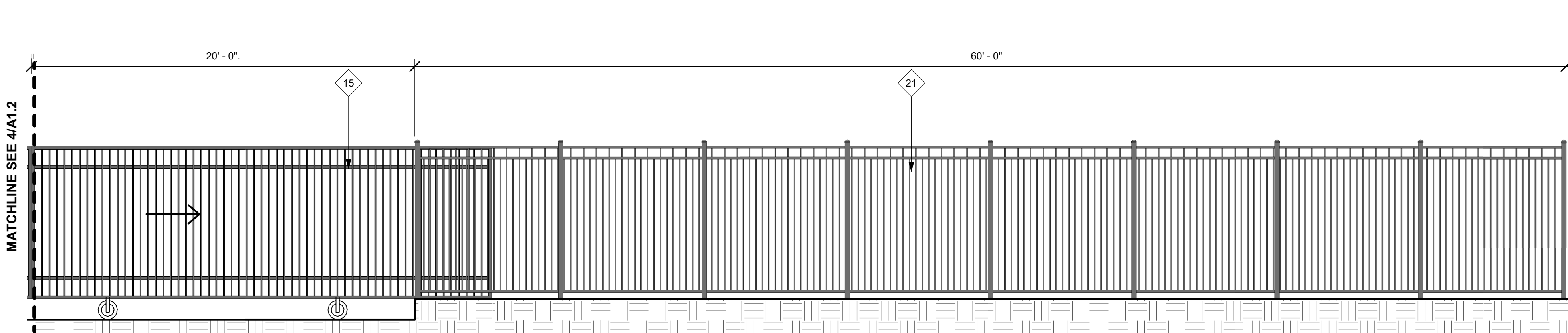
2 BUILDING 1 WEST GATE ELEVATION
1/4" = 1'-0"



3 BUILDING -2 EAST GATE ELEVATION
1/4" = 1'-0"



4 BUILDING 2 WEST GATE ELEVATION - A
1/4" = 1'-0"



5 BUILDING 2 WEST GATE ELEVATION - B
1/4" = 1'-0"

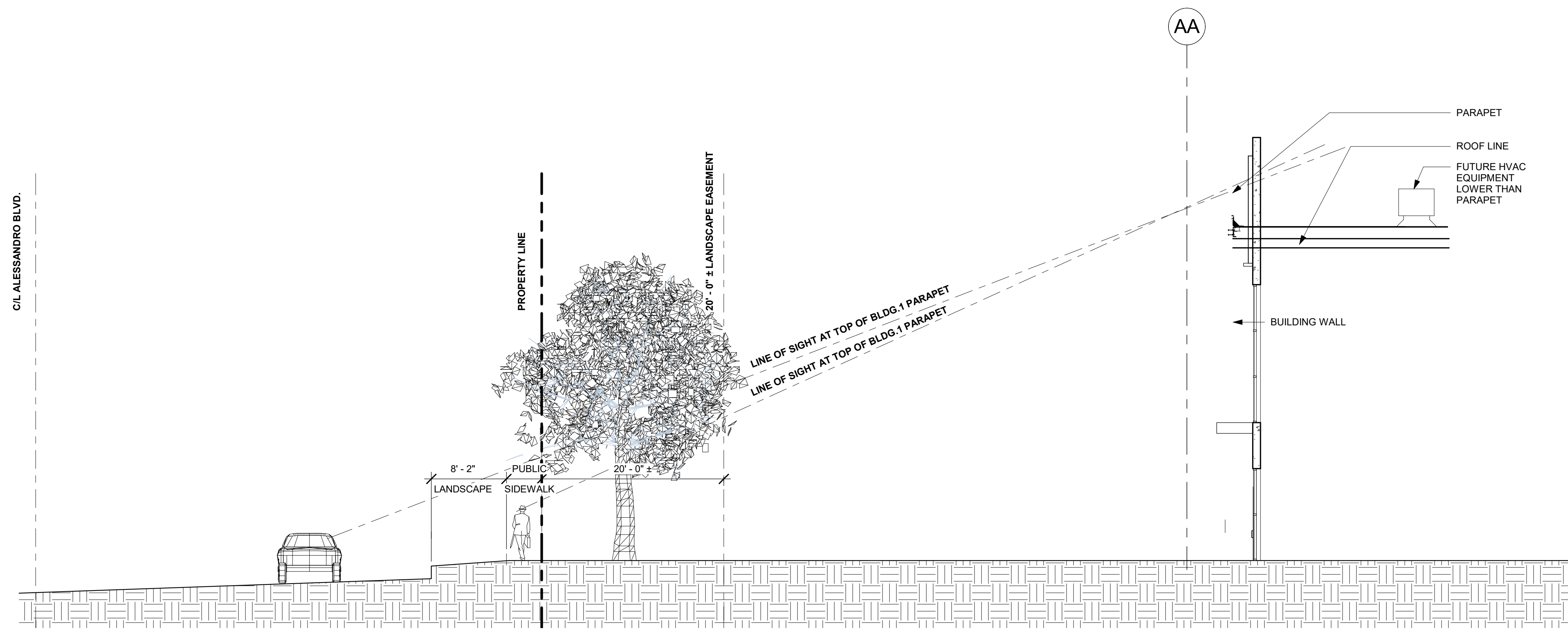
KEYNOTES	
15	SLIDING METAL GATE. ELECTRONICALLY OR MANUALLY OPERATED. PROVIDE CONDUIT TO GUARD SHACK AND OFFICE AREA FOR GATE CONTROL @ INTERCOM. PROVIDE KNOX PAD PER FIRE DEPT. STD.
21	METAL TUBE STEEL FENCE, 8' HIGH
38	PROVIDE AN EXIT SWING GATE 3'-0" WIDE X 7'-0" FROM THE ENCLOSED YARD. PROVIDE KNOX PAD PER FIRE DEPT. STANDARDS.



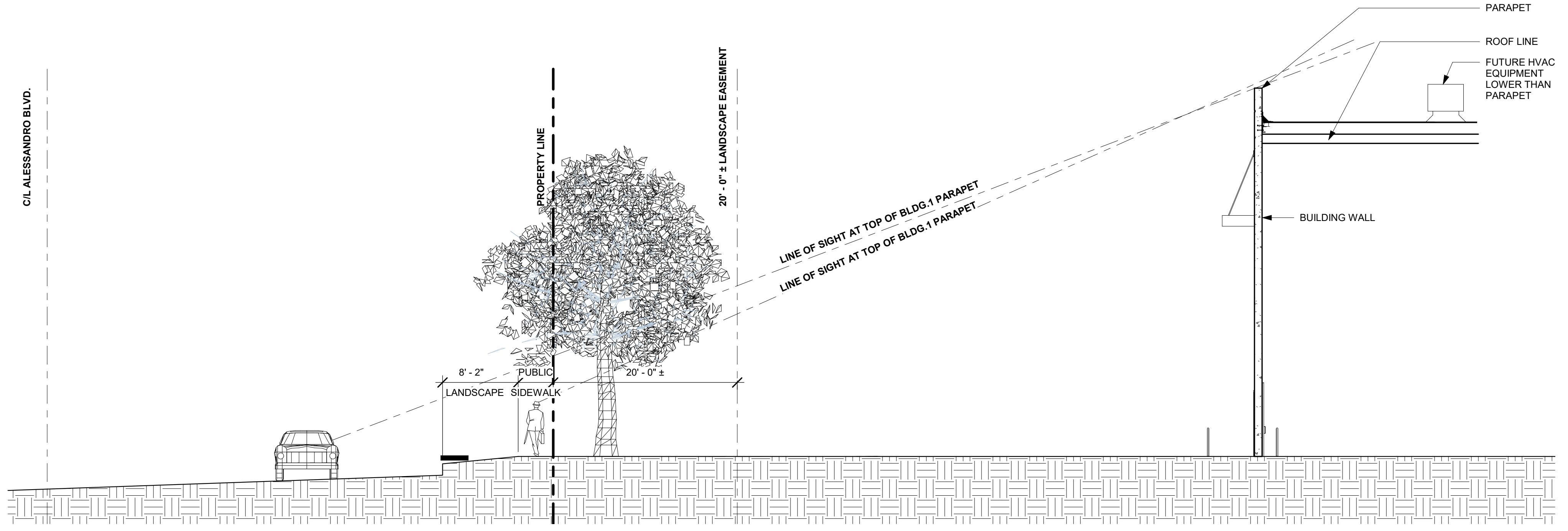
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SITE DETAILS

A1.2



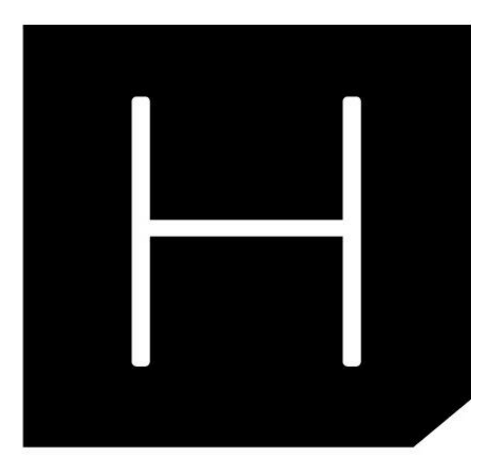
1 BUILDING 1 LINE OF SIGHT OF FROM ALESSANDRO BLVD.
1/8" = 1'-0"



2 BUILDING 1 LINE OF SIGHT OF FROM ALESSANDRO BLVD.
1/8" = 1'-0"



3 BUILDING 2 LINE OF SIGHT OF FROM ALESSANDRO BLVD.
1/8" = 1'-0"

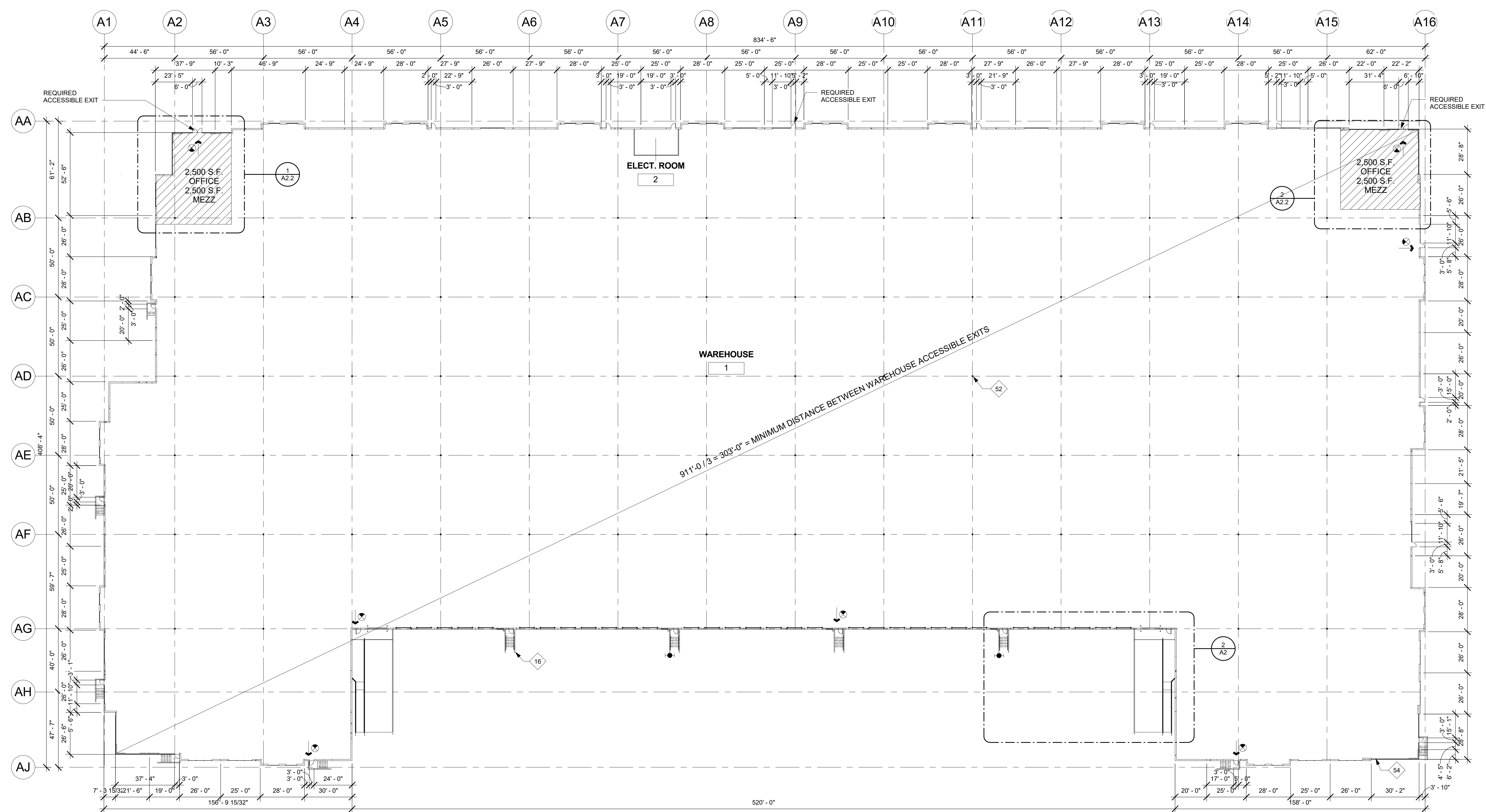


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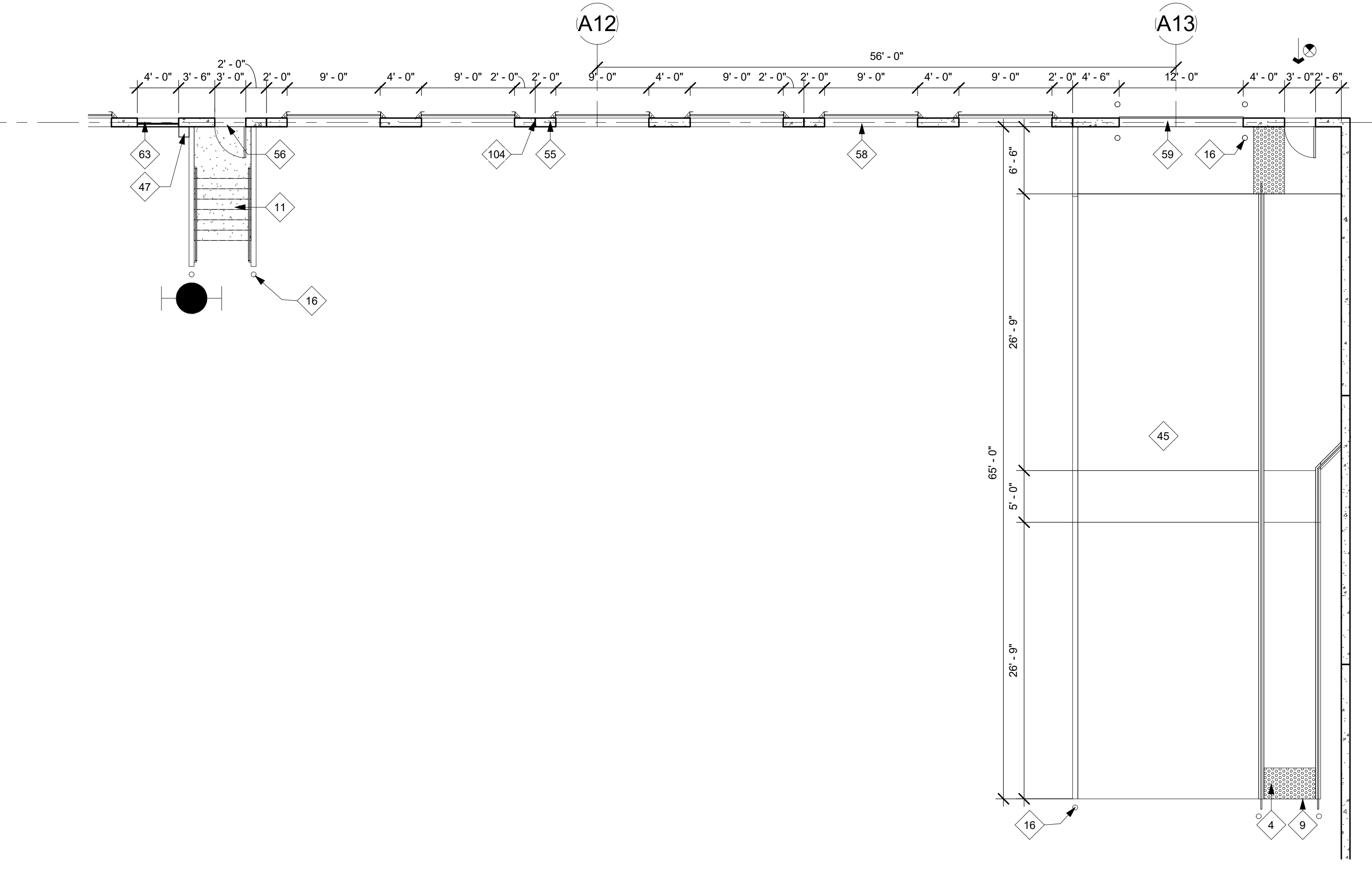
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SITE DETAILS

A1.3



1 PROPOSED BUILDING 1 FLOOR PLAN
1" = 30'-0"



2 ENLARGED TRUCK RAMP & DOCK DOOR SPACING
1/8" = 1'-0"

OCCUPANCY & EXIT REQUIREMENT
BUILDING 1 (PER CBC SECTION 1004):
B (FIRST FLOOR) - 5,000 SF / 150 = 34 OCCUPANTS
B (MEZZANINE) - 5,000 SF / 150 = 34 OCCUPANTS
S-1 (WAREHOUSE) - 285,031 / 500 = 571 OCCUPANTS
TOTAL OCCUPANTS = 639 OCCUPANTS
NUMBER OF EXITS
FOR B OCCUPANCY:
EXITS REQUIRED - 2 EXITS REQUIRED
EXITS PROVIDED - 2 EXITS PROVIDED
ACCESSIBLE EXITS REQUIRED - 1 ACCESSIBLE EXIT REQUIRED PER 1009.1 EXCEPTION 1.
ACCESSIBLE EXITS PROVIDED - 2 ACCESSIBLE EXITS PROVIDED
FOR S-1 OCCUPANCY:
EXITS REQUIRED - 3 EXITS REQUIRED DUE TO MAX ALLOWABLE EXIT DISTANCE
EXITS PROVIDED - 5 EXITS PROVIDED
ACCESSIBLE EXITS REQUIRED - 3 ACCESSIBLE EXITS REQUIRED PER 1009.1
ACCESSIBLE EXITS PROVIDED - 3 ACCESSIBLE EXITS PROVIDED
TRAVEL DISTANCE WITH SPRINKLERS
FOR B OCCUPANCY:
REQUIRED MAXIMUM ALLOWABLE TRAVEL DISTANCE - 300'
FOR S-1 OCCUPANCY:
REQUIRED MAXIMUM ALLOWABLE TRAVEL DISTANCE - 400'
PROVIDED TRAVEL DISTANCE - NO AREA OF THE WAREHOUSE IS MORE THAN 400' FROM ONE OF THE 4 PROVIDED EXITS

KEYNOTES
4 TRUNCATED DOMES
9 ZERO CURB FACE
11 EXTERIOR CONCRETE STAIR W/CONCRETE WALLS, WALLS & RAILINGS PAINTED PER EXTERIOR COLOR SCHEDULE. REFER TO CIVIL AND STRUCTURAL DRAWINGS
16 PROTECTIVE METAL BOLLARDS, CONCRETE FILLED, PAINTED, TYP.
47 EXTERIOR METAL DOWNSPOUT AND OVERFLOW SCUPPERS PAINTED TO MATCH BUILDING. REFER TO PLUMBING PLANS FOR MINIMUM SCUPPER OPENINGS ALLOWABLE PER CODE
52 STRUCTURAL BUILDING COLUMN
54 STOREFRONT: SEE ELEVATIONS & EXTERIOR COLOR SCHEDULE. STORE FRONT TO BE DESIGNED TO RESIST WIND LOAD AS REQUIRED BY BUILDING CODES AND LOCAL JURISDICTION. DESIGN OF STOREFRONT FRAMING SYSTEM AND STRUCTURAL CALCULATIONS TO BE DESIGN BUILT BY G.C. AND UNDER DEFERRED SUBMITTAL.
55 CONCRETE TILT UP PANEL, TYP. PAINTED. SEE EXTERIOR COLOR SCHEDULE. REFER TO ELEVATIONS AND 'S' DRAWINGS FOR ADDITIONAL INFORMATION.
56 EXTERIOR MAN DOOR 6'X7', HOLLOW METAL, PAINTED. SEE EXTERIOR COLOR SCHEDULE & DOOR SCHEDULE FOR ADDITIONAL INFO.
58 DOCK-HI LOADING DOOR, 9'X10', WITH VISION GLAZING PRE FINISHED BY MANUFACTURER PER COLOR SCHEDULE.
59 DRIVE THRU LOADING DOOR 12'X14' WITH VISION GLAZING, PRE FINISHED BY MANUFACTURER PER COLOR SCHEDULE.
63 AIR INTAKE LOUVER, PAINT TO MATCH BUILDING WALL, TYP. SIZE VERTICAL 4'X 8', PROVIDE BIRD SCREEN, FILTER AND BURGLAR BARS.
104 PANEL JOINT, TYP.

FLOOR PLAN WALL LEGEND
CONCRETE TILT UP WALL, SEE 'S' DRAWINGS FOR ADDITIONAL INFORMATION. PROVIDE METAL STUD FURRING (SEE STUD SCHEDULE AD 2) AND FULL HEIGHT BATT INSULATION PER TITLE 24 REQUIREMENTS. SEE 3AD 2 FOR CONNECTION DETAIL.
STOREFRONT SYSTEM, UNDER DEFERRED SUBMITTAL. SEE ELEVATIONS FOR ARCHITECTURAL DETAILS
STRUCTURAL BUILDING COLUMN
ILLUMINATED EMERGENCY EXIT SIGN PER CBC AND FIRE DEPT. SEE 'E' DRAWINGS FOR LOCATION. SIGN SHALL BE CONTINUOUSLY ILLUMINATED FOR DURATION OF 90 MIN. IN CASE OF PRIMARY POWER LOSS.

FLOOR PLAN GENERAL NOTES
1. FINISH FLOOR SLAB SLOPES. REFER TO CIVIL DRAWINGS FOR ELEVATIONS AND ADDITIONAL INFORMATION.
2. PROVIDE STEGO WRAP 15MIL BARRIER BELOW SLAB PER MANUFACTURERS INSTRUCTIONS AND PER SOILS REPORT IN LOCATIONS FOR PROPOSED OFFICE AREAS. SEE FLOOR PLAN LEGEND FOR HATCHED AREAS.
3. REFER TO STRUCTURAL DRAWINGS FOR DESIGN OF FOUNDATION.
4. POUR STRIP TO BE SLOPED TO EXTERIOR DOORS 1/2".
5. PROVIDE FIRE EXTINGUISHERS AS REQUIRED BY FIRE DEPARTMENT AND CBC/IFC.
6. PROVIDE ILLUMINATED EXIT SIGNS AT ALL EXTERIOR EXIT DOORS, DOORS EXITING FROM TENANT SPACES, DOORS INTO EXIT ENCLOSURES, AND ANY ADDITIONAL LOCATIONS NOTED ON PLANS. SEE 'E' DRAWINGS FOR ADDITIONAL REQUIREMENTS. SIGN TO BE CONTINUOUSLY ILLUMINATED FOR DURATION OF 90 MIN IN CASE OF PRIMARY POWER LOSS.
7. ALL FIRE RATED PARTITIONS TO EXTEND TO DECK ABOVE, AND PENETRATIONS TO BE SEALED.
8. DO NOT USE CURING COMPOUND OR RELEASE AGENTS TO CURE SLAB.
9. CRANES, CONCRETE TRUCKS, AND SIMILAR HEAVY EQUIPMENT PROHIBITED ON SLAB.
10. FLY-ASH PROHIBITED IN CONCRETE SLAB MIX.
11. FLOOR SLAB TO BE CLASS V PER ACI 302-IR-89
12. FLOOR COMPACTION TO BE 95% MIN
13. TRENCH COMPACTION TO BE 90% MIN
14. SLAB FINISH TO BE STEEL FLOAT HARD TROWEL BURNISHED FINISH
15. DIMENSIONS ARE TO FACE OF CONCRETE PANEL, FINISH FACE OF DRYWALL, FINISH OPENING, TYPICAL UNLESS NOTED OTHERWISE.
16. PROVIDE EXIT SIGNS INCLUDING TACTILE SIGN REQUIRED BY SECTION 1011 OF 2013 CBC. SIGN TO BE CONTINUOUSLY ILLUMINATED FOR DURATION OF 90 MIN IN CASE OF PRIMARY POWER LOSS.
17. ALL MAN DOORS, OVERHEAD DOORS, AND ROLL-UP DOORS TO BE DESIGNED FOR WIND LOAD AND EXPOSURE DETERMINED BY BUILDING CODE AND LOCAL JURISDICTION.
18. ALL STOREFRONT SYSTEMS TO BE DESIGNED FOR WIND LOAD AND EXPOSURE DETERMINED BY THE BUILDING CODE AND LOCAL JURISDICTION. STOREFRONT SYSTEMS TO BE DESIGN BUILT G.C. TO PROVIDE SHOP DRAWINGS FOR ARCHITECT'S REVIEW
19. REFER TO CIVIL DRAWINGS FOR ALL POINT OF CONNECTIONS FOR UTILITIES CONTRACTOR TO VERIFY LOCATIONS.
20. PROVIDE STEEL BOLLARDS FILLED WITH CONCRETE AND PAINTED PER FINISH SCHEDULE AT FIRE RISERS, PIVS, TRANSFORMERS, AND OTHER LOCATIONS AS REQUIRED. CONTRACTOR TO MAINTAIN A CLEAN FLOOR SLAB. ALL TRUCKS AND EQUIPMENT TO BE DIAPERED.
21. NO ACCESS HARDWARE ON THE EXTERIOR SIDE OF THE NON-ENTRY DOORS
22. FOR TYPICAL DOOR LANDING CLEARANCES, REFER 2/AO.2.2 FOR MORE INFORMATION.
24. NO SMOKING WITHIN 25' OF BUILDING ENTRIES, ACCORDING TO GREEN BUILDING STANDARD CODE DIVISION 5.504.7

PROJECT
4TH PLANNING SUBMITTAL

COMPASS DANBE CENTERPOINTE
MORENO VALLEY, CA

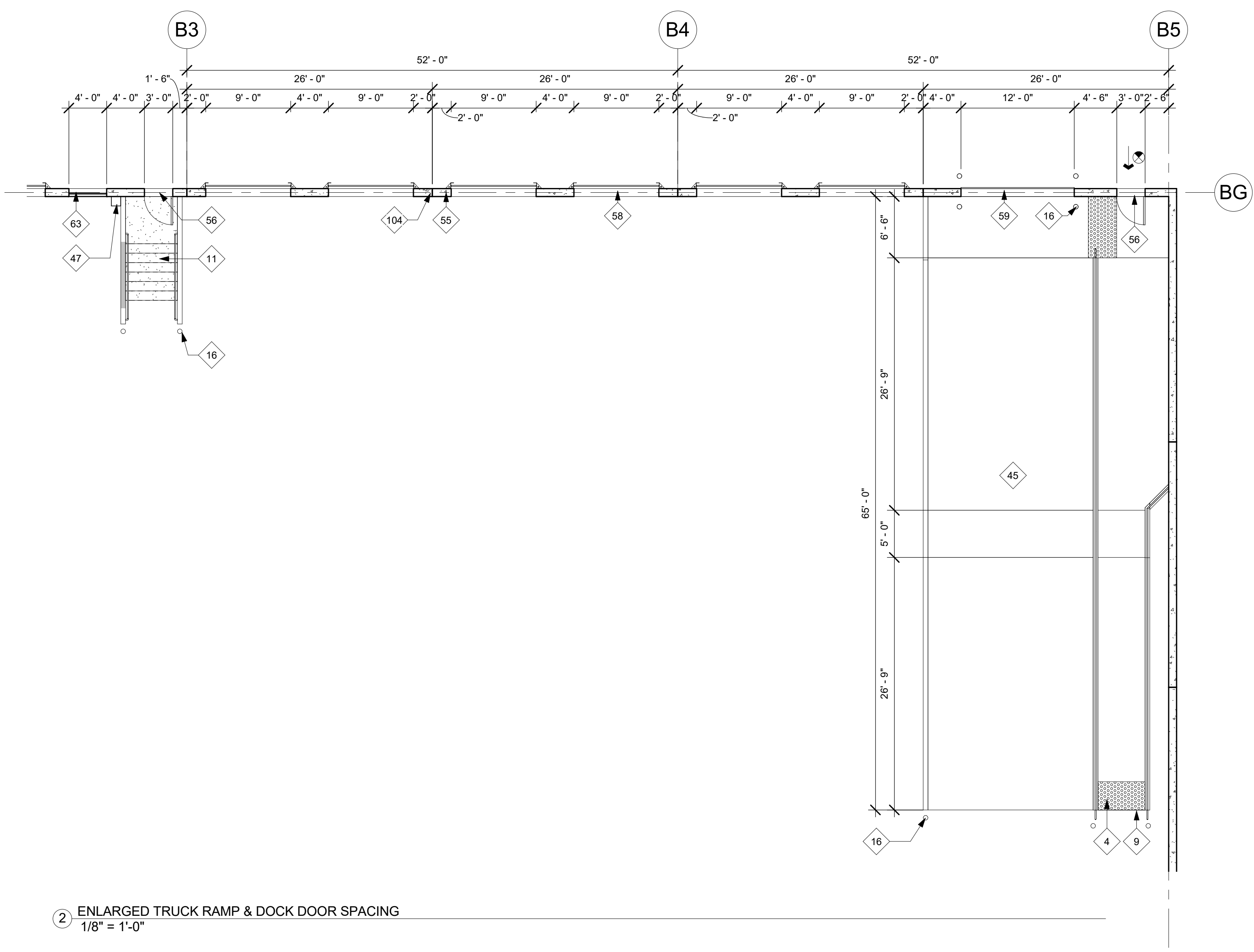
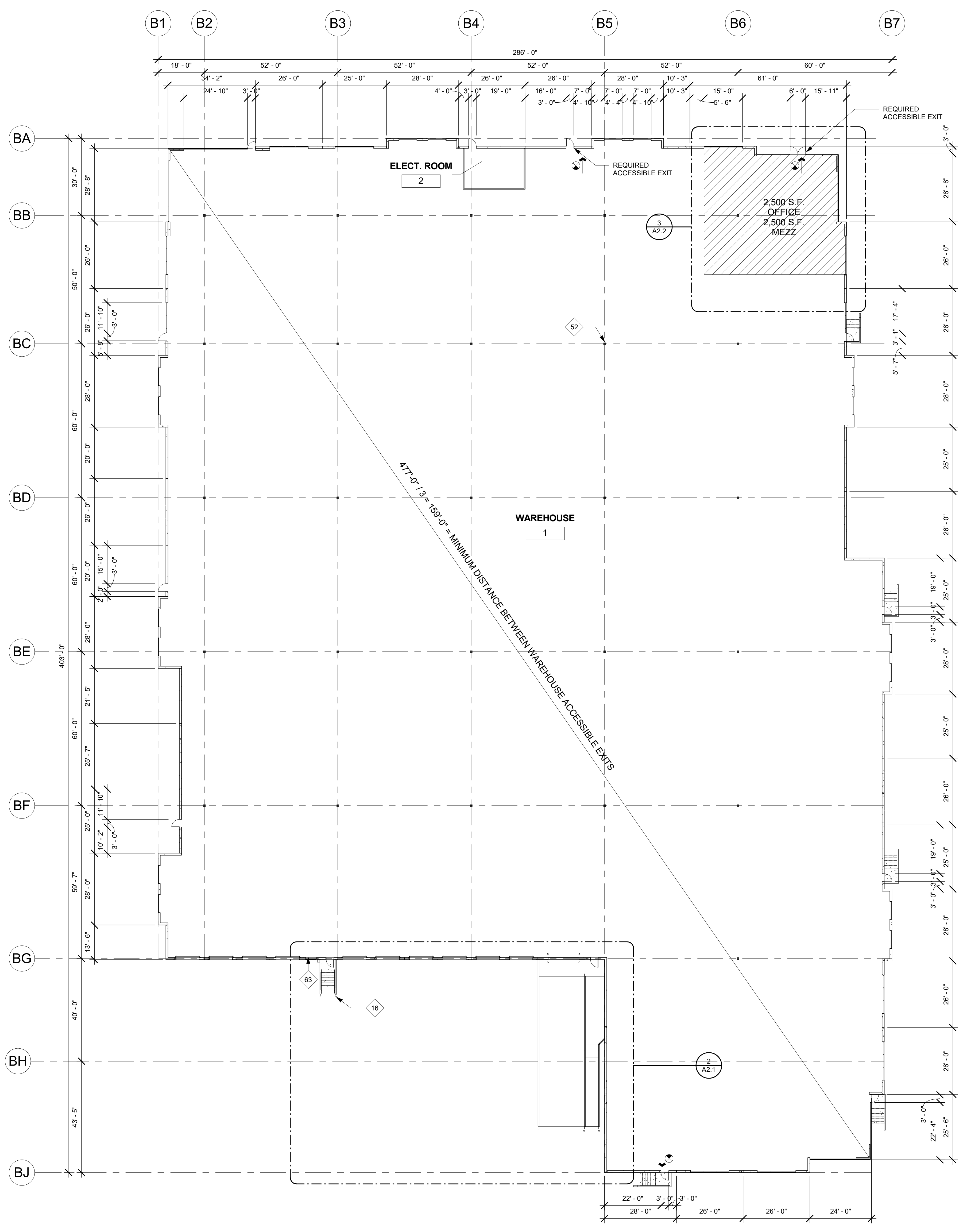


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NORTH

FLOOR PLAN -B1

A2

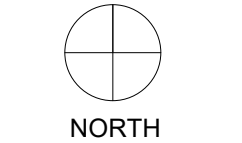


OCCUPANCY & EXIT REQUIREMENT	KEYNOTES	FLOOR PLAN GENERAL NOTES
BUILDING 2 (PER CBC SECTION 1004): B (FIRST FLOOR) - 2,500 SF / 150 = 17 OCCUPANTS B (MEZZANINE) - 2,500 SF / 150 = 17 OCCUPANTS S-1 (WAREHOUSE) - 96,244 SF / 500 = 193 OCCUPANTS TOTAL OCCUPANTS = 227 OCCUPANTS	4 TRUNCATED DOMES 9 ZERO CURB FACE 11 EXTERIOR CONCRETE STAIR W/CONCRETE WALLS, WALLS & RAILINGS PAINTED PER EXTERIOR COLOR SCHEDULE. REFER TO CIVIL AND STRUCTURAL DRAWINGS 16 PROTECTIVE METAL BOLLARDS, CONCRETE FILLED, PAINTED, TYP. 45 CONCRETE TRUCK RAMP WITH 42" HIGH CONC. TILT UP GUARD WALLS PAINTED TO MATCH BUILDING. SEE ELEVATIONS. 47 EXTERIOR METAL DOWNSPOUT AND OVERFLOW SCUPPERS PAINTED TO MATCH BUILDING. REFER TO PLUMBING PLANS FOR MINIMUM SCUPPER OPENINGS ALLOWABLE PER CODE. 52 STRUCTURAL BUILDING COLUMN. 55 CONCRETE TILT-UP PANEL, TYP. PAINTED. SEE EXTERIOR COLOR SCHEDULE. REFER TO ELEVATIONS AND "S" DRAWINGS FOR ADDITIONAL INFORMATION. 56 EXTERIOR MAN DOOR 3X7', HOLLOW METAL, PAINTED. SEE EXTERIOR COLOR SCHEDULE & DOOR SCHEDULE FOR ADDITIONAL INFO. 58 DOCK-HI LOADING DOOR, 9'X10', WITH VISION GLAZING PRE FINISHED BY MANUFACTURER PER COLOR SCHEDULE. 59 DRIVE THRU LOADING DOOR 12X14' WITH VISION GLAZING, PRE FINISHED BY MANUFACTURER PER COLOR SCHEDULE. 63 AIR INTAKE LOUVER, PAINT TO MATCH BUILDING WALL, TYP. SIZE VERTICAL 4'X 8', PROVIDE BIRD SCREEN, FILTER AND BIRGLAR BARS. 104 PANEL JOINT, TYP.	1. FINISH FLOOR SLAB SLOPES. REFER TO CIVIL DRAWINGS FOR ELEVATIONS AND ADDITIONAL INFORMATION. 2. PROVIDE STEGO WRAP 15MIL BARRIER BELOW SLAB PER MANUFACTURERS INSTRUCTIONS AND PER SOILS REPORT IN LOCATIONS FOR PROPOSED OFFICE AREAS. SEE FLOOR PLAN LEGEND FOR HATCHED AREAS. 3. REFER TO STRUCTURAL DRAWINGS FOR DESIGN OF FOUNDATION. 4. POUR STRIP TO BE SLOPED TO EXTERIOR DOORS 1/2" PROVIDE FIRE EXTINGUISHERS AS REQUIRED BY FIRE DEPARTMENT AND CBC/IFC. 5. PROVIDE ILLUMINATED EXIT SIGNS AT ALL EXTERIOR EXIT DOORS, DOORS EXITING FROM TENANT SPACES, DOORS INTO EXIT ENCLOSURES, AND ANY ADDITIONAL LOCATIONS NOTED ON PLANS. SEE "E" DRAWINGS FOR ADDITIONAL REQUIREMENTS SIGN TO BE CONTINUOUSLY ILLUMINATED FOR DURATION OF 90 MIN IN CASE OF PRIMARY POWER LOSS. 6. ALL FIRE RATED PARTITIONS TO EXTEND TO DECK ABOVE, AND PENETRATIONS TO BE SEALED. 7. DO NOT USE CURING COMPOUND OR RELEASE AGENTS TO CURE SLAB. 8. CRANES, CONCRETE TRUCKS, AND SIMILAR HEAVY EQUIPMENT PROHIBITED ON SLAB. 9. FLY ASH PROHIBITED IN CONCRETE SLAB MIX. 10. FLOOR SLAB TO BE CLASS V PER ACI 302-IR-89 11. FLOOR COMPACTION TO BE 95% MIN 12. TRENCH COMPACTION TO BE 90% MIN 13. SLAB FINISH TO BE STEEL FLOAT HARD TROWEL BURNISHED FINISH 14. DIMENSIONS ARE TO FACE OF CONCRETE PANEL, FINISH FACE OF DRYWALL, FINISH OPENING, TYPICAL UNLESS NOTED OTHERWISE. 15. PROVIDE EXIT SIGNS INCLUDING TACTILE SIGN REQUIRED BY SECTION 1011 OF 2013 CBC. SIGN TO BE CONTINUOUSLY ILLUMINATED FOR DURATION OF 90 MIN IN CASE OF PRIMARY POWER LOSS. 16. ALL MAN DOORS, OVERHEAD DOORS, AND ROLL-UP DOORS TO BE DESIGNED FOR WIND LOAD AND EXPOSURE DETERMINED BY BUILDING CODE AND LOCAL JURISDICTION. 17. ALL STOREFRONT SYSTEMS TO BE DESIGNED FOR WIND LOAD AND EXPOSURE DETERMINED BY THE BUILDING CODE AND LOCAL JURISDICTION. STOREFRONT SYSTEMS TO BE DESIGN BUILD G.C. TO PROVIDE SHOP DRAWINGS FOR ARCHITECT'S REVIEW. 18. REFER TO CIVIL DRAWINGS FOR ALL POINT OF CONNECTIONS FOR UTILITIES CONTRACTOR TO VERIFY LOCATIONS. 19. PROVIDE STEEL BOLLARDS FILLED WITH CONCRETE AND PAINTED PER FINISH SCHEDULE AT FIRE RISERS, PIVS, TRANSFORMERS, AND OTHER LOCATIONS AS REQUIRED. 20. CONTRACTOR TO MAINTAIN A CLEAN FLOOR SLAB. ALL TRUCKS AND EQUIPMENT TO BE DIAPERED. 21. NO ACCESS HARDWARE ON THE EXTERIOR SIDE OF THE NON-ENTRY DOORS. 22. FOR TYPICAL DOOR LANDING CLEARANCES, REFER 2/A0.2.2 FOR MORE INFORMATION. 23. NO SMOKING WITHIN 25' OF BUILDING ENTRIES, ACCORDING TO GREEN BUILDING STANDARD CODE DIVISION 5.504.7
NUMBER OF EXITS FOR B OCCUPANCY: EXITS REQUIRED - 2 EXITS REQUIRED ACCESSIBLE EXITS REQUIRED - 1 ACCESSIBLE EXIT REQUIRED PER 1009.1 EXCEPTION 1. ACCESSIBLE EXITS PROVIDED - 2 ACCESSIBLE EXITS PROVIDED FOR S-1 OCCUPANCY: EXITS REQUIRED - 2 EXITS REQUIRED DUE TO MAX ALLOWABLE EXIT DISTANCE EXITS PROVIDED - 2 EXITS PROVIDED ACCESSIBLE EXITS REQUIRED - 2 ACCESSIBLE EXITS REQUIRED PER 1009.1 ACCESSIBLE EXITS PROVIDED - 2 ACCESSIBLE EXITS PROVIDED	FLOOR PLAN WALL LEGEND <p>CONCRETE TILT UP WALL, SEE "S" DRAWINGS FOR ADDITIONAL INFORMATION. PROVIDE METAL STUD FURRING (SEE STUD SCHEDULE AD 2) AND FULL HEIGHT BATT INSULATION PER TITLE 24 REQUIREMENTS. SEE 3/A0.2 FOR CONNECTION DETAIL.</p> <p>STOREFRONT SYSTEM, UNDER DEFERRED SUBMITTAL. SEE ELEVATIONS FOR ARCHITECTURAL DETAILS.</p> <p>STRUCTURAL BUILDING COLUMN</p>	
TRAVEL DISTANCE WITH SPRINKLERS FOR B OCCUPANCY: REQUIRED MAXIMUM ALLOWABLE TRAVEL DISTANCE - 300' FOR S-1 OCCUPANCY: REQUIRED MAXIMUM ALLOWABLE TRAVEL DISTANCE - 400' PROVIDED TRAVEL DISTANCE - NO AREA OF THE WAREHOUSE IS MORE THAN 400' FROM ONE OF THE 2 PROVIDED EXITS	ILLUMINATED EMERGENCY EXIT SIGN PER CBC AND FIRE DEPT. SEE "E" DRAWINGS FOR LOCATION. SIGN SHALL BE CONTINUOUSLY ILLUMINATED FOR DURATION OF 90 MIN. IN CASE OF PRIMARY POWER LOSS.	



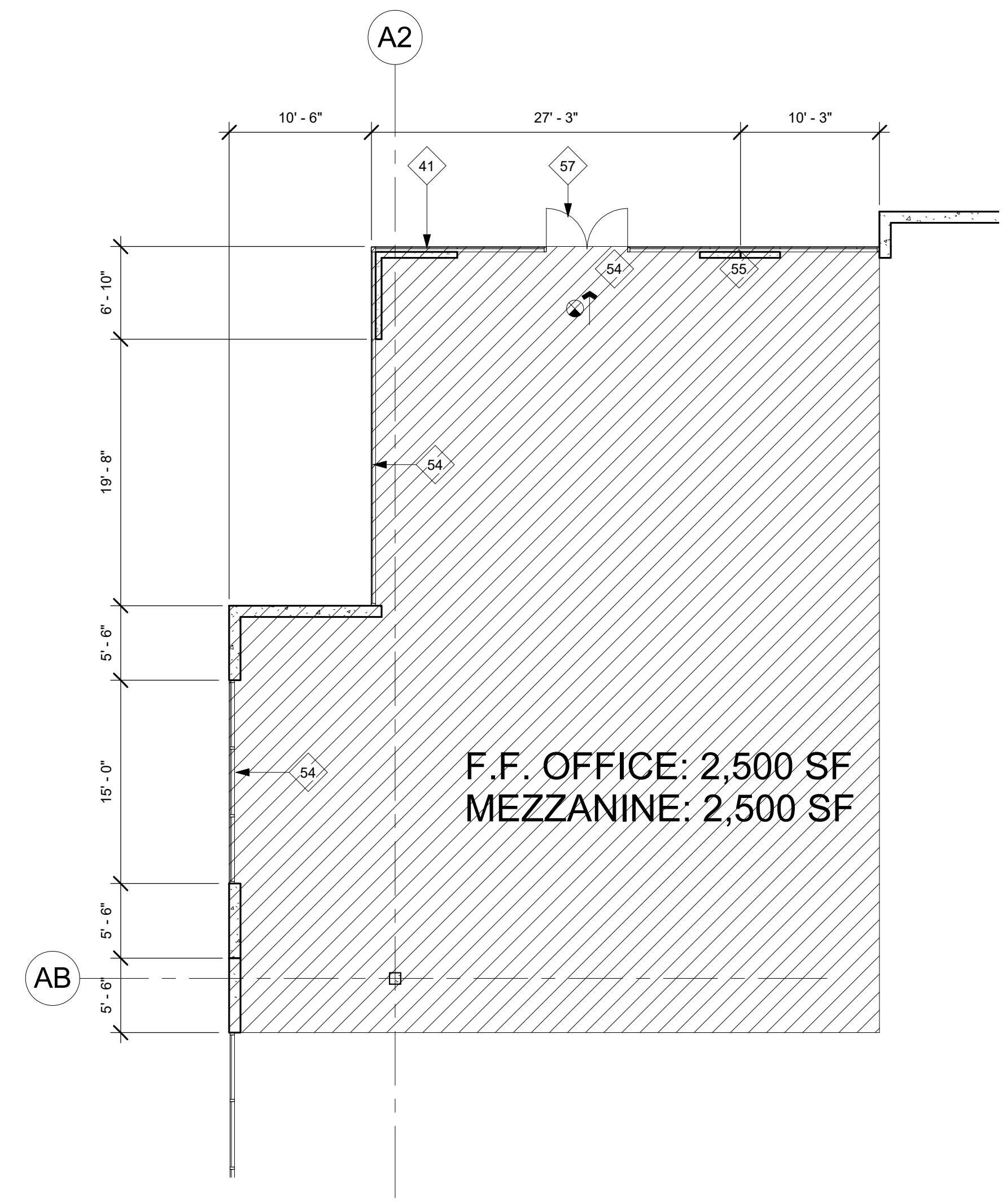
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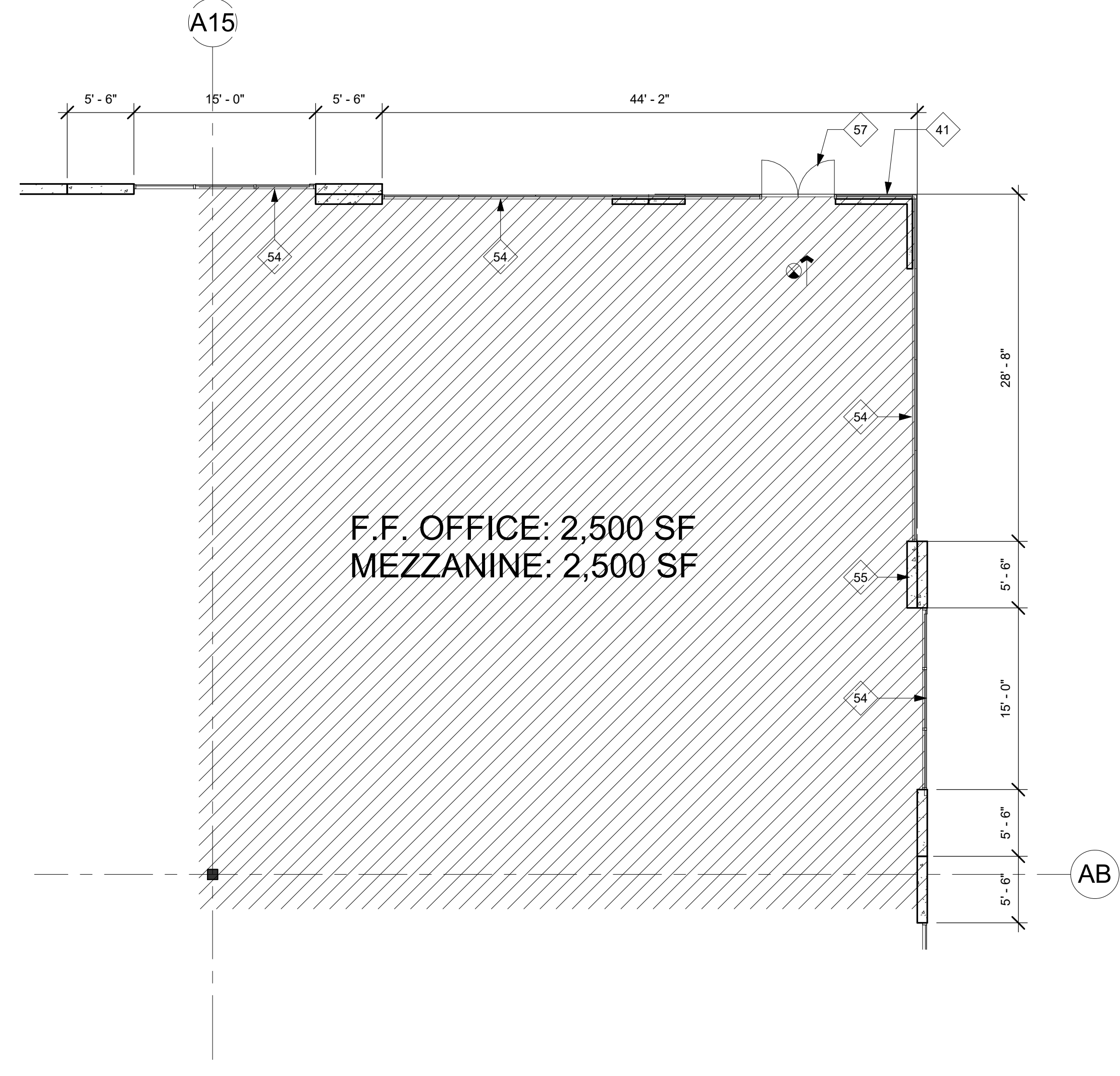


FLOOR PLAN -B2

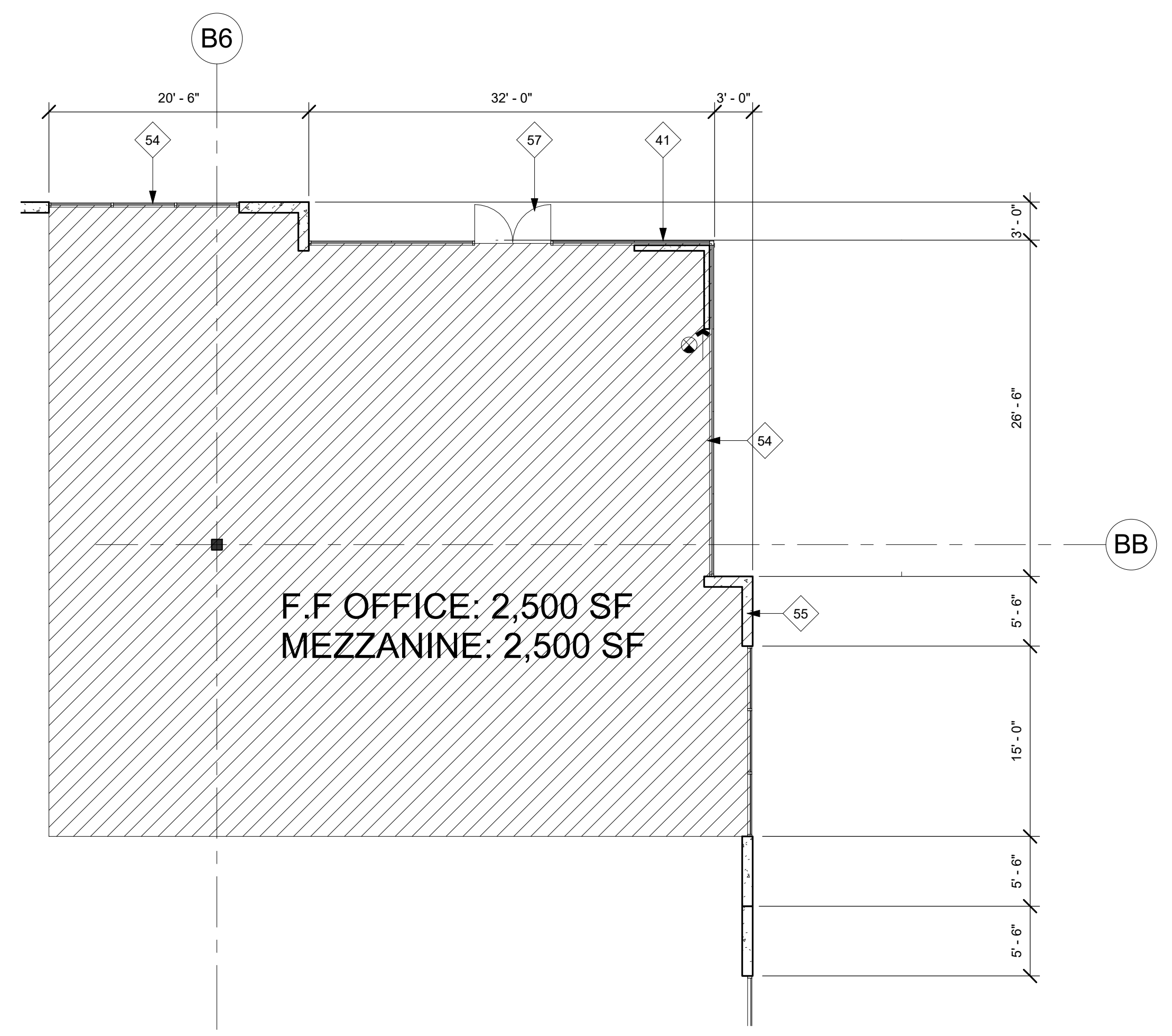
A2.1



1 ENLARGED BUILDING 1 NW OFFICE PLAN
1/8" = 1'-0"



2 ENLARGED BUILDING 1 NE OFFICE PLAN
1/8" = 1'-0"



3 ENLARGED BUILDING 2 NE OFFICE PLAN
1/8" = 1'-0"

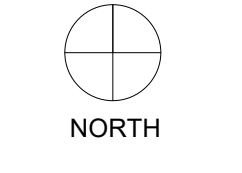
KEYNOTES	
41	AFFIX THE INTERNATIONAL ACCESSIBILITY SYMBOL AT ALL ACCESSIBLE ENTRANCES.
54	STOREFRONT. SEE ELEVATIONS & EXTERIOR COLOR SCHEDULE. STORE FRONT TO BE DESIGNED TO RESIST WIND LOAD AS REQUIRED BY BUILDING CODES AND LOCAL JURISDICTION. DESIGN OF STOREFRONT FRAMING SYSTEM AND STRUCTURAL CALCULATIONS TO BE DESIGN BUILD BY G.C. AND UNDER DEFERRED SUBMITTAL.
55	CONCRETE TILT-UP PANEL. TYP. PAINTED. SEE EXTERIOR COLOR SCHEDULE. REFER TO ELEVATIONS AND "S" DRAWINGS FOR ADDITIONAL INFORMATION.
57	EXTERIOR STOREFRONT DOOR. SEE EXTERIOR COLOR SCHEDULE & DOOR SCHEDULE FOR ADDITIONAL INFO.

FLOOR PLAN WALL LEGEND	
	CONCRETE TILT UP WALL. SEE "S" DRAWINGS FOR ADDITIONAL INFORMATION. PROVIDE METAL STUD FURRING (SEE STUD SCHEDULE AD 2) AND FULL HEIGHT BATT INSULATION PER TITLE 24 REQUIREMENTS. SEE 3/AD 2 FOR CONNECTION DETAIL.
	STOREFRONT SYSTEM. UNDER DEFERRED SUBMITTAL. SEE ELEVATIONS FOR ARCHITECTURAL DETAILS.
	STRUCTURAL BUILDING COLUMN
	ILLUMINATED EMERGENCY EXIT SIGN PER CBC AND FIRE DEPT. SEE "E" DRAWINGS FOR LOCATION. SIGN SHALL BE CONTINUOUSLY ILLUMINATED FOR DURATION OF 90 MIN. IN CASE OF PRIMARY POWER LOSS.



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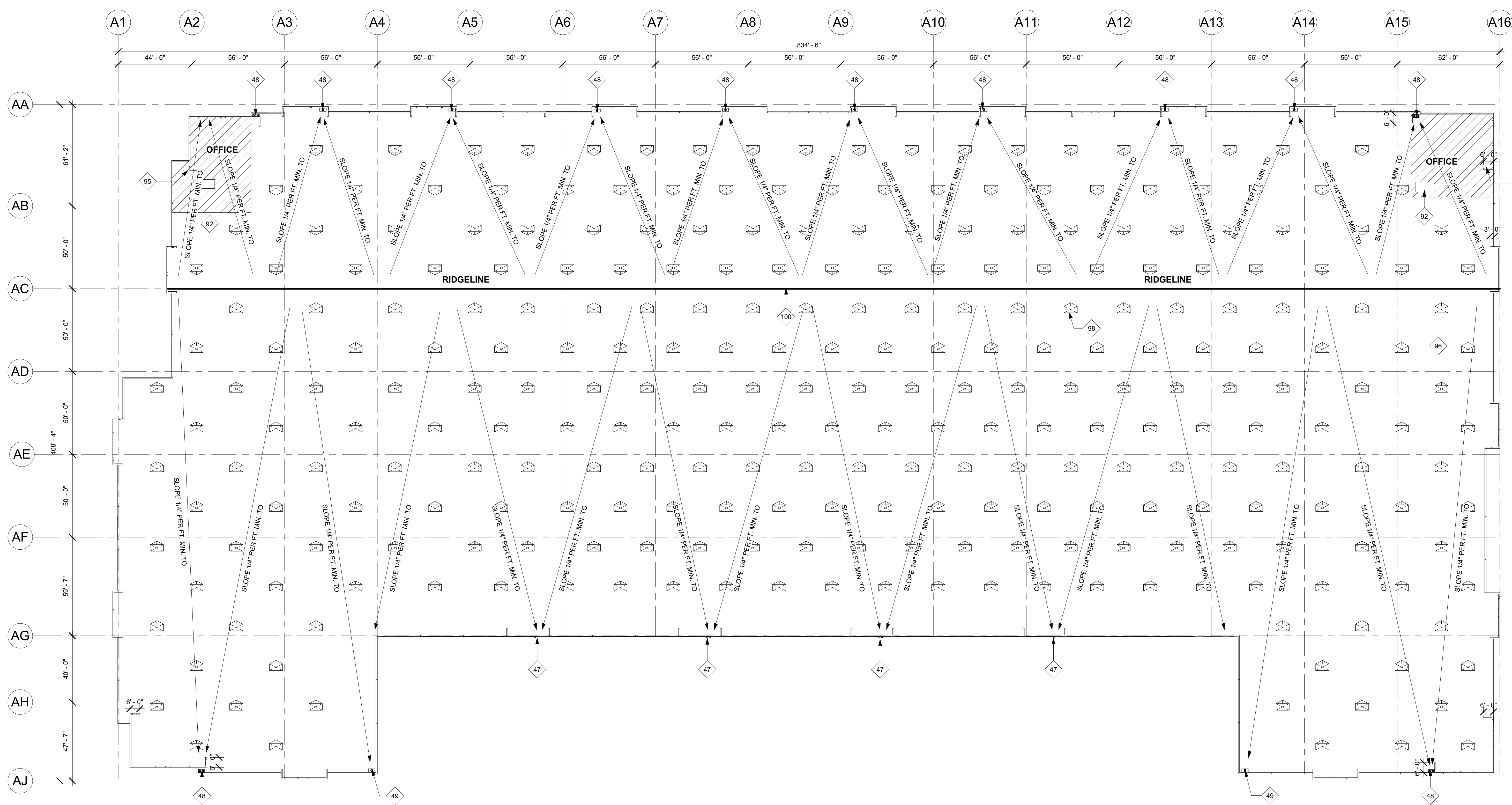
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NORTH

ENLARGED FLOOR PLANS

A2.2



1 PROPOSED ROOF PLAN - BUILDING 1
1" = 30'-0"

SKYLIGHTS NOTES	KEYNOTES	ROOF PLAN GENERAL NOTES
<p>PROPOSED BLDG: ROOF AREA = 290,236 SF. SKYLIGHTS : 3% OF ROOF AREA = 8,708 SF. EACH UNIT: 32 SF (#28) UNITS PROVIDED: 273 = 8,736 SF</p> <p>SKYLIGHTS: SPECIFICATION BY GENERAL CONTRACTOR. DESIGN BUILDING SUB-CONTRACTOR TO CONFIRM WITH APPLICABLE BUILDING AND OSHA REQUIREMENTS. COMPLIANCE WITH CBC SECTION 2406.</p> <p>MECHANICAL EXHAUST NOTE TO BIDDING CONTRACTORS: QUANTITY & LOCATION OF ROOFTOP EXHAUST FANS & WALL MOUNTED LOUVERS TO BE DETERMINED BY DESIGN BUILD MECHANICAL ENGINEER TO PROVIDE MINIMUM 1 AIR CHANGE PER HOUR LOCATIONS TO BE COORDINATED WITH THE ARCHITECT, STRUCTURAL ENGINEER AND FIRE SPRINKLERS.</p>	<p>47 EXTERIOR METAL DOWNSPOUT AND OVERFLOW SCUPPERS PAINTED TO MATCH BUILDING. REFER TO PLUMBING PLANS FOR MINIMUM SCUPPER OPENINGS ALLOWABLE PER CODE.</p> <p>48 INTERIOR ROOF DRAIN AND INTERIOR OVERFLOW DRAIN PROVIDE BRASS LAMNS TONGUE AT ABOVE GRADE OUTLET.</p> <p>49 INTERIOR ROOF DRAIN AND OVERFLOW SCUPPERS PAINTED TO MATCH BUILDING. REFER TO PLUMBING PLANS FOR MINIMUM SCUPPER OPENINGS ALLOWABLE PER CODE.</p> <p>92 FUTURE MECHANICAL EQUIPMENT</p> <p>95 PARAPET RETURN 3' MIN. OR PER PLAN. SEE "S" DRAWINGS.</p> <p>96 ROOF TOP ADDRESS NUMBER TO BE 3 FEET IN LENGTH AND 1 FOOT IN WIDTH MINIMUM AND SHALL BE PAINTED IN REFLECTIVE WHITE PAINT ON A FLAT BLACK PAINTED BACKGROUND. PAINT PARALLEL TO STREET BUILDING IS ADDRESSED ON.</p> <p>98 4' X 8' SKYLIGHT.</p> <p>100 RIDGE/HIGH POINT OF ROOF.</p>	<p>1. CONTRACTOR TO VERIFY POSITIVE ROOF DRAINAGE. ROOFING CONTRACTOR TO VERIFY PRIOR TO INSTALLING RIGID INSULATION OR ROOFING. SEE "S" DRAWINGS FOR CRICKETS, ETC.</p> <p>2. BUILT UP ROOFING TO BE CLASS 1 UL LISTED ROOFING ASSEMBLY DESIGNED TO RESIST 90MPH OR AS REQUIRED.</p> <p>3. SEE STRUCTURAL DRAWINGS FOR ROOF ELEVATIONS, TYP.</p> <p>4. REFER TO DETAIL 1/AD 1 FOR TYPICAL ROOF SECTION. PROVIDE CRICKETS ON (HIGH SIDE) OF ALL MECHANICAL UNITS AND ROOF EQUIPMENT AT SKYLIGHTS & SMOKE HATCHES. PROVIDE POSITIVE DRAINAGE AROUND UNITS AT 1/2" PER SLOPE MINIMUM.</p> <p>5. CONTRACTOR TO COORDINATE ALL ROOF PENETRATIONS. SEE ROOF DETAIL SHEET FOR PENETRATIONS.</p> <p>6. ALL SKYLIGHTS AND SMOKEHATCHES TO BE DESIGNED TO MEET WINDLOAD AS DETERMINED BY THE BUILDING CODE AND LOCAL JURISDICTION.</p> <p>7. ALL MECHANICAL CONDENSATE DRAINS TO BE BELOW ROOF.</p> <p>8. G.C. TO CONFIRM REQUIREMENT FOR ROOF WALK PADS WITH OWNER.</p> <p>9. ROOFING CAP SHEET TO HAVE MINIMUM AGED SOLAR REFLECTANCE EQUAL TO OR GREATER THAN 0.63, AND AN SRI EQUAL TO OR GREATER THAN 72 PER 2014 COUNTY OF LOS ANGELES GREEN BUILDING STANDARDS CODE.</p> <p>10. ROOF ELEVATIONS TO BE VERIFIED WITH TABLE A5.106.11.2.2 STRUCTURAL DRAWINGS.</p> <p>11. FOR ALL PIPE AND DUCT PENETRATIONS THRU ROOF, SEE DETAILS ON AD SHEETS.</p> <p>12. ALL CONDESATE LINES FROM HVAC UNITS MUST BE INSTALLED BELOW ROOF.</p> <p>13. ALL MECHANICAL EQUIPMENT WEIGHTS ARE OPERATING WEIGHTS.</p> <p>14. PROVIDE A FULL TIME OSB MOISTURE INSPECTION AND GAP DISTANCE, BY A QUALIFIED ROOFING INSPECTION FIRM APPROVED BY THE OWNER AND THE OSB MANUFACTURER. INSPECTION FIRM TO BE ON SITE PRIOR TO THE START OF ANY BUILT UP ROOFING WORK. ALL WOOD CURBS TO BE P.T.D.F.</p> <p>15. ROOF EXHAUST FANS SHALL BE CENTERED DIRECTLY ABOVE A SPRINKLER HEAD. VERIFY WITH FIRE PROTECTION PLANS PRIOR TO INSTALLATION.</p> <p>16. ALL SUB-PURLIN HANGERS SHALL BE "Z-MAX" TRIPLE ZINC COATED AS MANUF. BY SIMPSON OR APPROVED EQUAL. AUTOMATIC SPRINKLER SYSTEMS SERVING MORE THAN 100 SPRINKLER HEADS SHALL BE SUPERVISED BY AN APPROVED CENTRAL PROPRIETARY, OR REMOTE STATION SERVICE, OR A LOCAL ALARM WHICH WILL GIVE AN AUDIBLE SIGNAL AT CONSTANTLY ATTENDED LOCATION.</p>
<p>ROOF PLAN LEGEND</p> <p> OFFICE AREA, LOCATION OF EQUIPMENT T.B.D.</p> <p> SKYLIGHT</p>		



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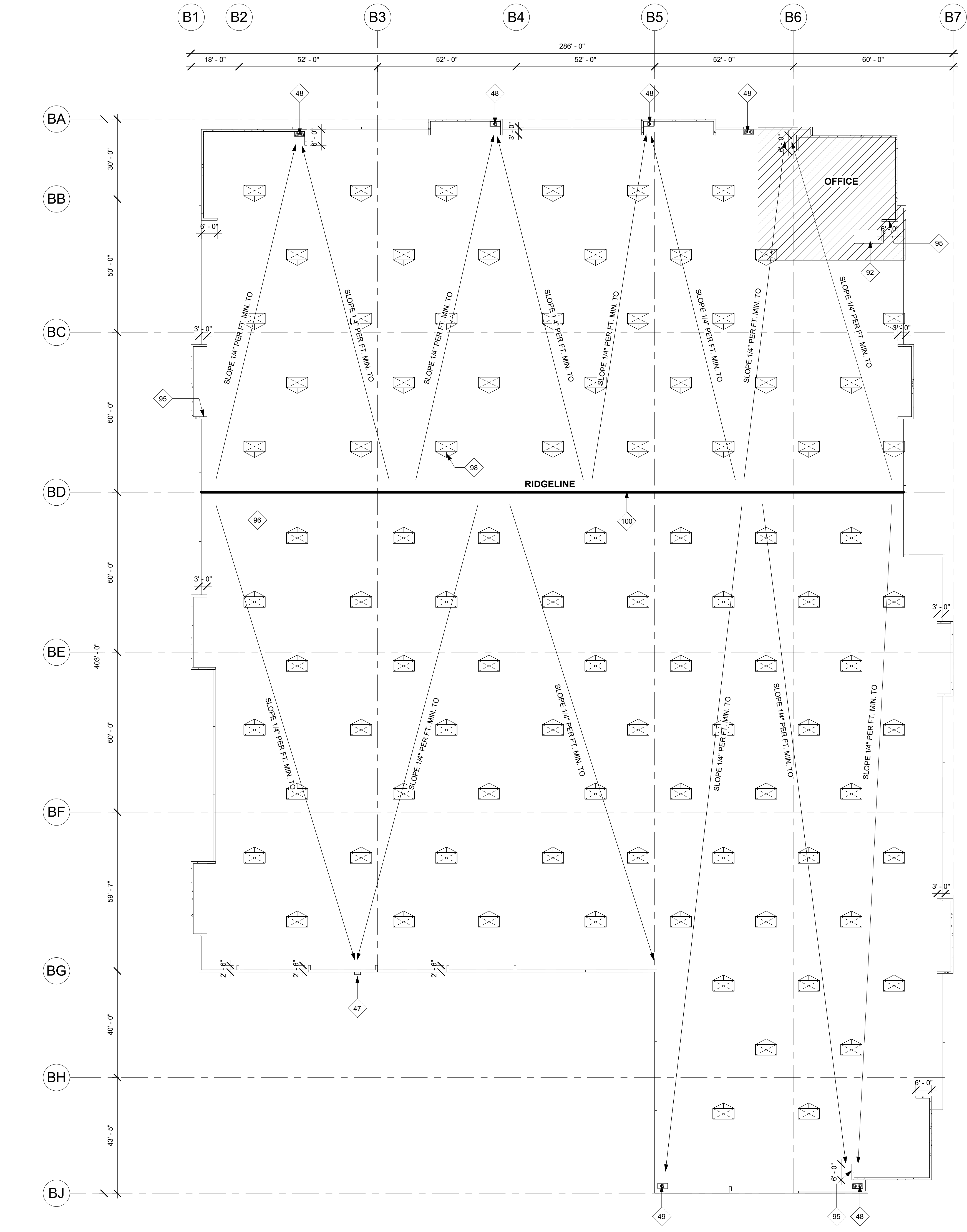
06.16.2021



NORTH

ROOF PLAN - B1

A3



1 PROPOSED ROOF PLAN - BUILDING 2
1" = 20'-0"

KEYNOTES	
47	EXTERIOR METAL DOWNSPOUT AND OVERFLOW SCUPPERS PAINTED TO MATCH BUILDING. REFER TO PLUMBING PLANS FOR MINIMUM SCUPPER OPENINGS ALLOWABLE PER CODE.
48	INTERIOR ROOF DRAIN AND INTERIOR OVERFLOW DRAIN PROVIDE BRASS LAMNS TONGUE AT ABOVE GRADE OUTLET.
49	INTERIOR ROOF DRAIN AND OVERFLOW SCUPPERS PAINTED TO MATCH BUILDING. REFER TO PLUMBING PLANS FOR MINIMUM SCUPPER OPENINGS ALLOWABLE PER CODE.
92	FUTURE MECHANICAL EQUIPMENT
95	PARAPET RETURN 3' MIN. OR PER PLAN. SEE "S" DRAWINGS.
96	ROOF TOP ADDRESS NUMBER TO BE 3 FEET IN LENGTH AND 1 FOOT IN WIDTH MINIMUM AND SHALL BE PAINTED IN REFLECTIVE WHITE PAINT ON A FLAT BLACK PAINTED BACKGROUND. PAINT PARALLEL TO STREET BUILDING IS ADDRESSED ON.
98	4' X 8' SKYLIGHT.
100	RIDGE/HIGH POINT OF ROOF.

ROOF PLAN LEGEND	
	OFFICE AREA, LOCATION OF EQUIPMENT T.B.D.
	SKYLIGHT

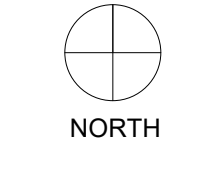
SKYLIGHTS NOTES	
PROPOSED BLDG: ROOF AREA = 98,752 SF. SKYLIGHTS - 3% OF ROOF AREA = 2,963 SF. EACH UNIT: 32 SF (4'X8') UNITS PROVIDED: 93 = 2,976 SF	
SKYLIGHTS: SPECIFICATION BY GENERAL CONTRACTOR. DESIGN BUILDING SUB-CONTRACTOR TO CONFIRM WITH APPLICABLE BUILDING AND OSHA REQUIREMENTS. COMPLIANCE WITH CBC SECTION 2405.	
MECHANICAL EXHAUST NOTE TO BIDDING CONTRACTORS: QUANTITY & LOCATION OF ROOFTOP EXHAUST FANS & WALL MOUNTED LOUVERS TO BE DETERMINED BY DESIGN BUILD MECHANICAL ENGINEER TO PROVIDE MINIMUM 1 AIR CHANGE PER HOUR LOCATIONS TO BE COORDINATED WITH THE ARCHITECT, STRUCTURAL ENGINEER AND FIRE SPRINKLERS.	

ROOF PLAN GENERAL NOTES	
1.	CONTRACTOR TO VERIFY POSITIVE ROOF DRAINAGE. ROOFING CONTRACTOR TO VERIFY PRIOR TO INSTALLING RIGID INSULATION OR ROOFING. SEE "S" DRAWINGS FOR CRICKETS, ETC.
2.	BUILT UP ROOFING TO BE CLASS 1 UL LISTED ROOFING ASSEMBLY DESIGNED TO RESIST 90MPH OR AS REQUIRED.
3.	SEE STRUCTURAL DRAWINGS FOR ROOF ELEVATIONS, TYP.
4.	REFER TO DETAIL 11AD.1 FOR TYPICAL ROOF SECTION. PROVIDE CRICKETS ON (HIGH SIDE) OF ALL MECHANICAL UNITS AND ROOF EQUIPMENT AT SKYLIGHTS & SMOKE HATCHES. PROVIDE POSITIVE DRAINAGE AROUND UNITS AT 1:2 PER SLOPE MINIMUM.
5.	CONTRACTOR TO COORDINATE ALL ROOF PENETRATIONS. SEE ROOF DETAIL SHEET FOR PENETRATIONS.
6.	ALL SKYLIGHTS AND SMOKEHATCHES TO BE DESIGNED TO MEET WINDLOAD AS DETERMINED BY THE BUILDING CODE AND LOCAL JURISDICTION.
7.	ALL MECHANICAL CONDENSATE DRAINS TO BE BELOW ROOF.
8.	G.C. TO CONFIRM REQUIREMENT FOR ROOF WALK PADS WITH OWNER.
9.	ROOFING CAP SHEET TO HAVE MINIMUM AGED SOLAR REFLECTANCE EQUAL TO OR GREATER THAN 0.63, AND AN SRI EQUAL TO OR GREATER THAN 72 PER 2014 COUNTY OF LOS ANGELES GREEN BUILDING STANDARDS CODE.
10.	ROOF ELEVATIONS TO BE VERIFIED WITH TABLE A5.106.11.2.2 STRUCTURAL DRAWINGS.
11.	FOR ALL PIPE AND DUCT PENETRATIONS THRU ROOF, SEE DETAILS ON AD SHEETS.
12.	ALL CONDENSATE LINES FROM HVAC UNITS MUST BE INSTALLED BELOW ROOF.
13.	ALL MECHANICAL EQUIPMENT WEIGHTS ARE OPERATING WEIGHTS.
14.	PROVIDE A FULL TIME OSB MOISTURE INSPECTION AND GAP DISTANCE, BY A QUALIFIED ROOFING INSPECTION FIRM APPROVED BY THE OWNER AND THE OSB MANUFACTURER. INSPECTION FIRM TO BE ON SITE PRIOR TO THE START OF ANY BUILT UP ROOFING WORK.
15.	ALL WOOD CURBS TO BE P.T.D.F.
16.	ROOF EXHAUST FANS SHALL BE CENTERED DIRECTLY ABOVE A SPRINKLER HEAD. VERIFY WITH FIRE PROTECTION PLANS PRIOR TO INSTALLATION.
17.	ALL SUB-PURLIN HANGERS SHALL BE Z-MAX TRIPLE ZINC COATED AS MANUF. BY SIMPSON OR APPROVED EQUAL.
18.	AUTOMATIC SPRINKLER SYSTEMS SERVING MORE THAN 100 SPRINKLER HEADS SHALL BE SUPERVISED BY AN APPROVED CENTRAL PROPRIETARY, OR REMOTE STATION SERVICE, OR A LOCAL ALARM WHICH WILL GIVE AN AUDIBLE SIGNAL AT CONSTANTLY ATTENDED LOCATION.



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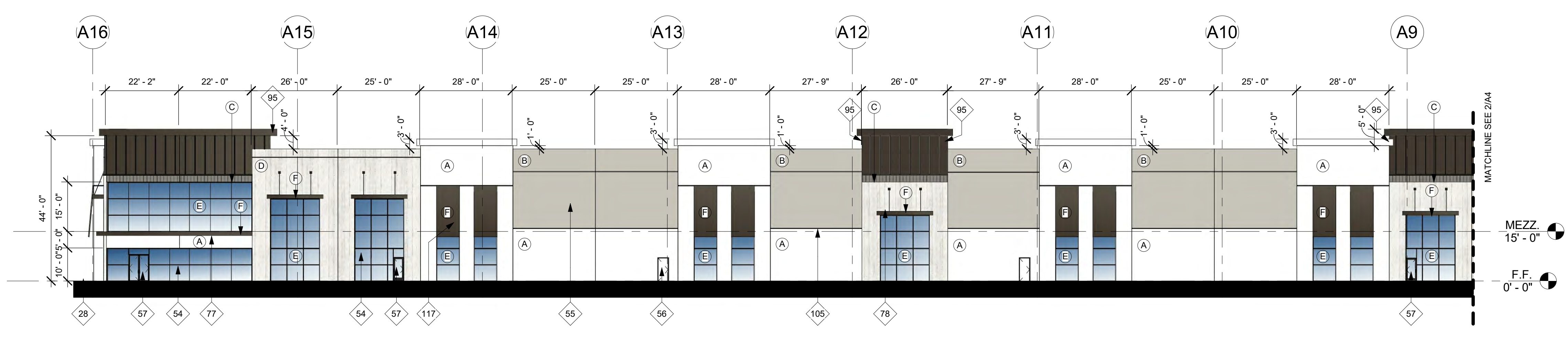
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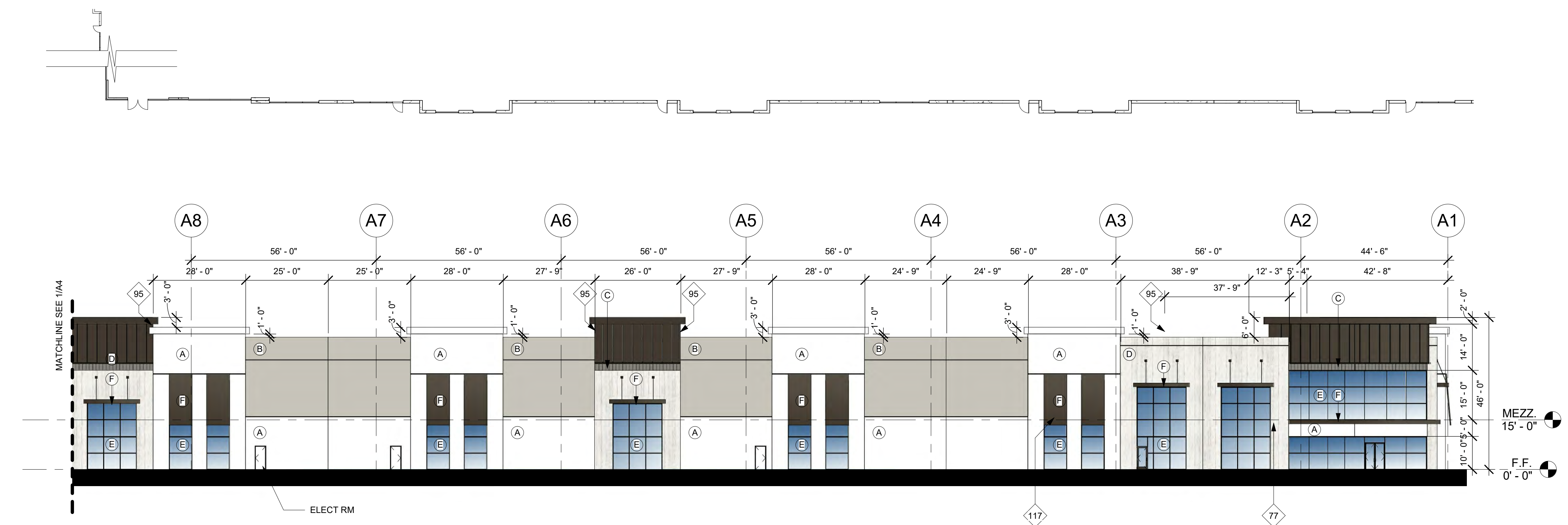
NORTH

ROOF PLAN - B2

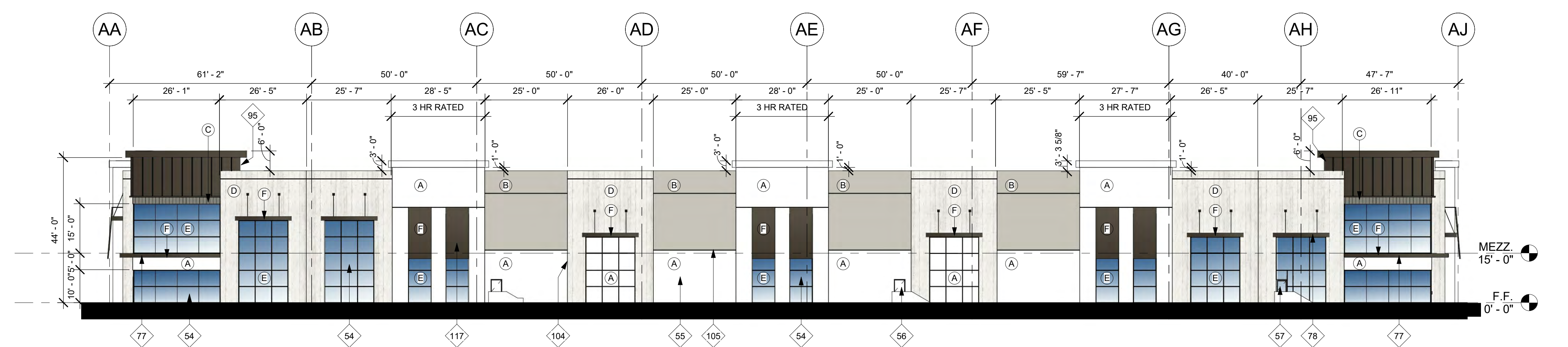
A3.1



1 BUILDING 1 - NORTH ELEVATION - A
1" = 20'-0"



2 BUILDING 1 - NORTH ELEVATION - B
1" = 20'-0"



3 BUILDING 1 - WEST ELEVATION
1" = 20'-0"

KEYNOTES

- 28 SECURE BICYCLE RACK.
- 54 STOREFRONT. SEE ELEVATIONS & EXTERIOR COLOR SCHEDULE. STORE FRONT TO BE DESIGNED TO RESIST WIND LOADS AS REQUIRED BY BUILDING CODES AND LOCAL JURISDICTION. DESIGN OF STOREFRONT FRAMING SYSTEM AND STRUCTURAL CALCULATIONS TO BE DESIGN BUILD BY G.C. AND UNDER DEFERRED SUBMITTAL.
- 55 CONCRETE TILT-UP PANEL, TYP. PAINTED. SEE EXTERIOR COLOR SCHEDULE. REFER TO ELEVATIONS AND "S" DRAWINGS FOR ADDITIONAL INFORMATION.
- 56 EXTERIOR MAN DOOR 3'X7'. HOLLOW METAL, PAINTED. SEE EXTERIOR COLOR SCHEDULE & DOOR SCHEDULE FOR ADDITIONAL INFO.
- 57 EXTERIOR STOREFRONT DOOR. SEE EXTERIOR COLOR SCHEDULE & DOOR SCHEDULE FOR ADDITIONAL INFO.
- 77 CANOPY. REFER TO ELEVATIONS - STRUCTURAL DETAILS.
- 78 DECORATIVE METAL BROW. REFER TO ARCHITECTURAL-STRUCTURAL DETAILS.
- 95 PARAPET RETURN 3' MIN. OR PER PLAN. SEE "S" DRAWINGS.
- 104 PANEL JOINT, TYP.
- 105 2" DECORATIVE CONCRETE REVEAL WITH CHAMFERED EDGES, TYP.
- 117 DECORATIVE METAL AWNING. REFER TO ARCHITECTURAL ELEVATIONS.

GLAZING LEGEND

VISION GLAZING: [Symbol]

NON VISION GLAZING: [Symbol]

TEMPERED: [Symbol]

NOTE:
REFER TO ELEVATIONS FOR TEMPERED GLAZING LOCATIONS.

NON VISION GLAZING NOTES:
1. SINGLE PANE GLAZING PAINT FACE OF CONCRETE PANEL BEHIND BLACK. NO COATING REQUIRED.
2. PROVIDE BREATHABLE MULLION SYSTEM @ NON-VISION GLAZING SECTIONS, NO HOLES REQUIRED IN CONCRETE.
3. PROVIDE SHADE CLOTH BEHIND GLASS IN AREAS INTENDED TO BE NON-VISION WHEN THERE IS NO SPANDREL CONCRETE. TENCATE MIRAFI 140N 12.5' X 360' FILTER FABRIC.

TEMPERED GLAZING NOTES:
1. IN OPERABLE DOORS, WINDOWS AND WITHIN 18" OF WALKING SURFACE TO BE TEMPERED.

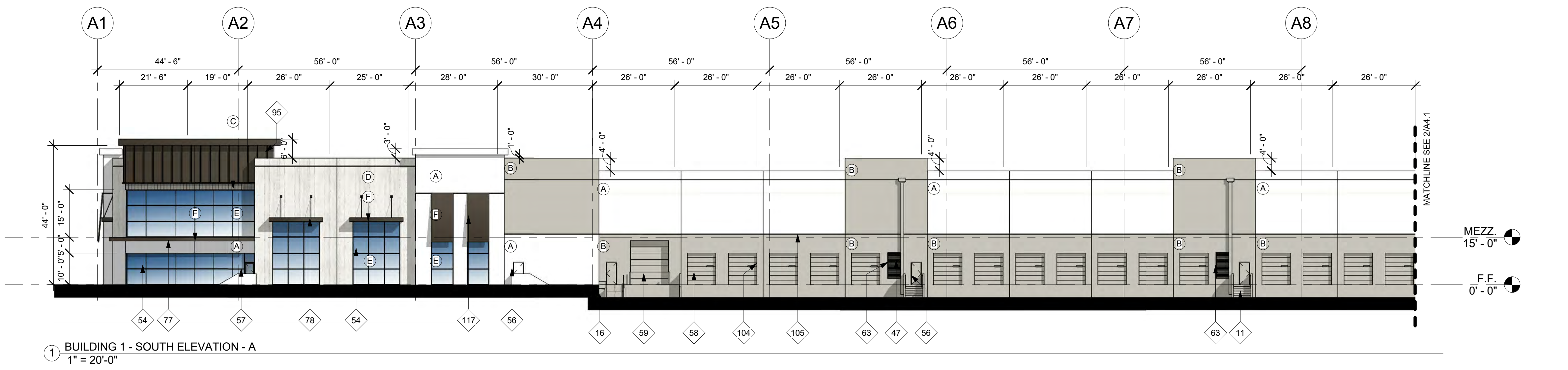
EXTERIOR COLOR SCHEDULE

- (A) OFF WHITE EXTERIOR PAINT COLOR: SW6070 HERON PLUME
- (B) MEDIUM TAUPE EXTERIOR PAINT COLOR: SW6073 PERFECT GREIGE
- (C) WARM GRAY TILE
- (D) BOARD FORMED OFF WHITE PAINTED CONCRETE
- (E) STOREFRONT BLUE REFLECTIVE GLAZING & CHARCOAL ANODIZED MULLIONS
- (F) DARK BRONZE BROW/AWNING

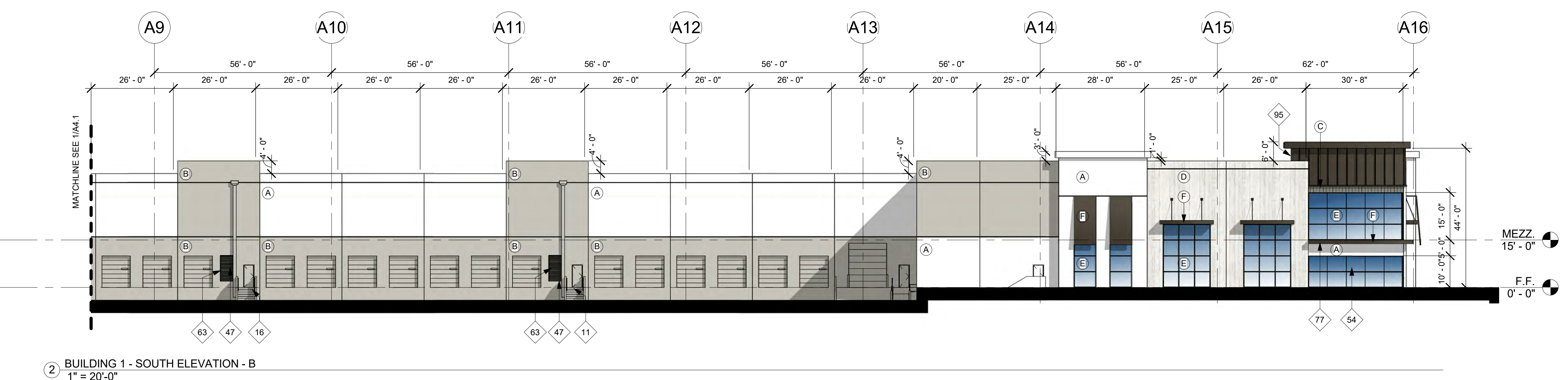
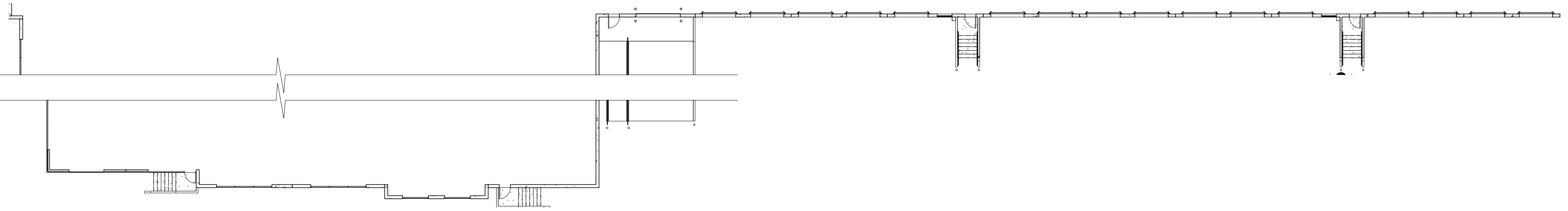
TYP PAINT NOTES:
PAINT MAN DOORS, GUARD WALLS, RAMP WALLS, STAIR WALLS, GUARD RAILS, ROOF DRAINS, AND LOUVERS TO MATCH ADJACENT BUILDING WALL U.N.O.

TRUCK DOORS TO BE PRE-FINISHED BY MANUFACTURER IN WHITE FINISH

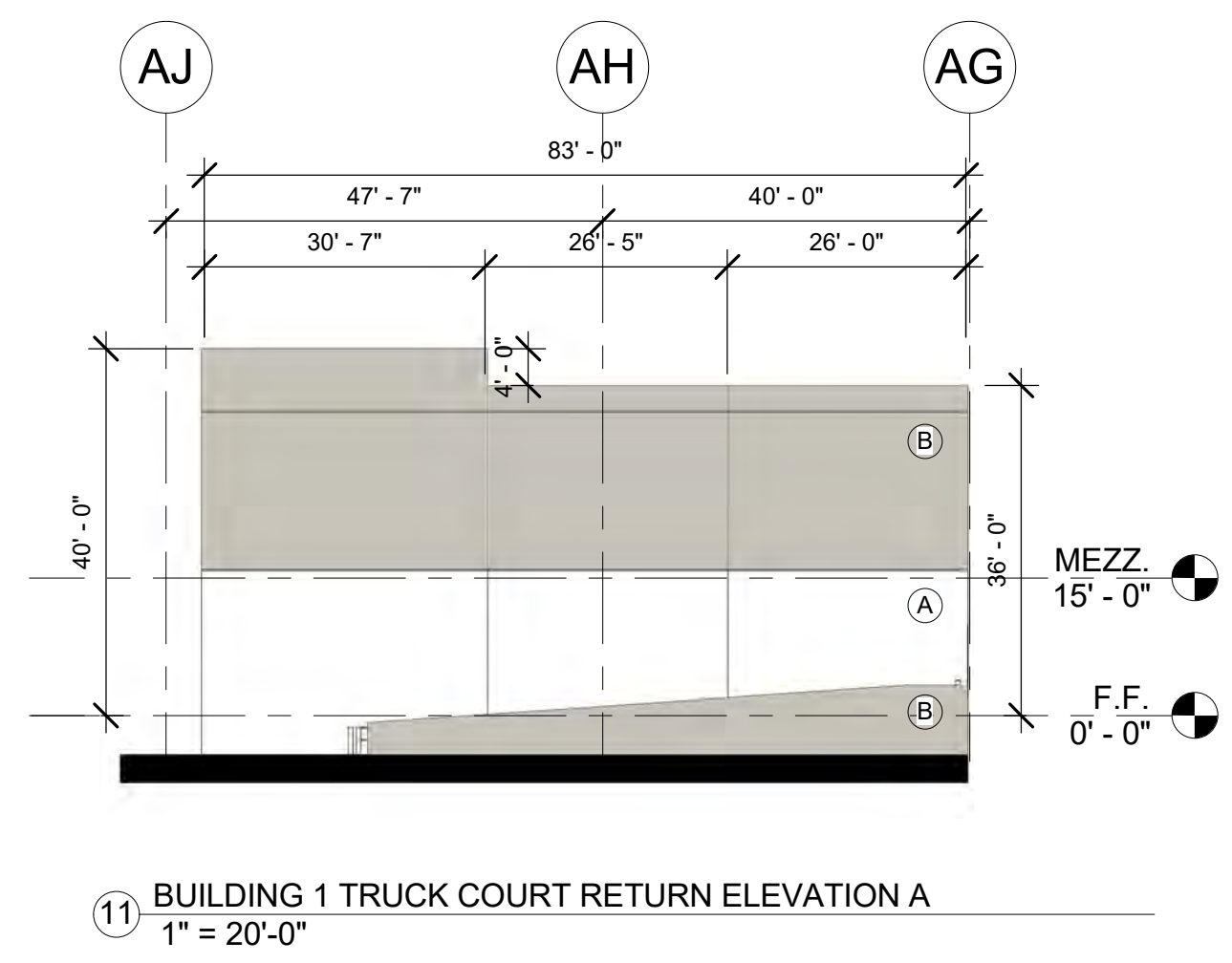
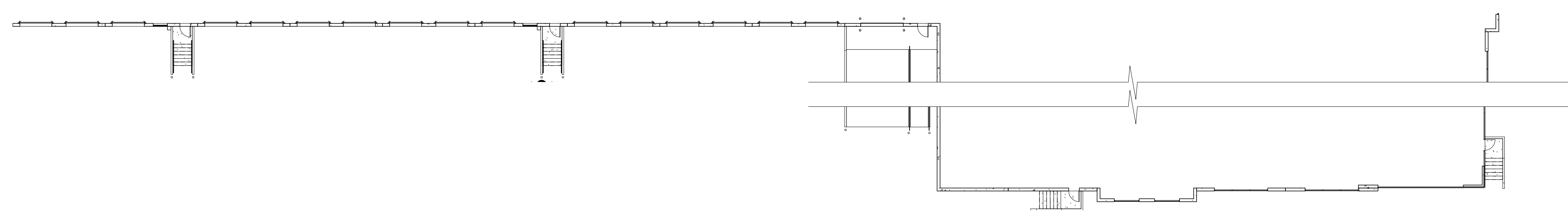




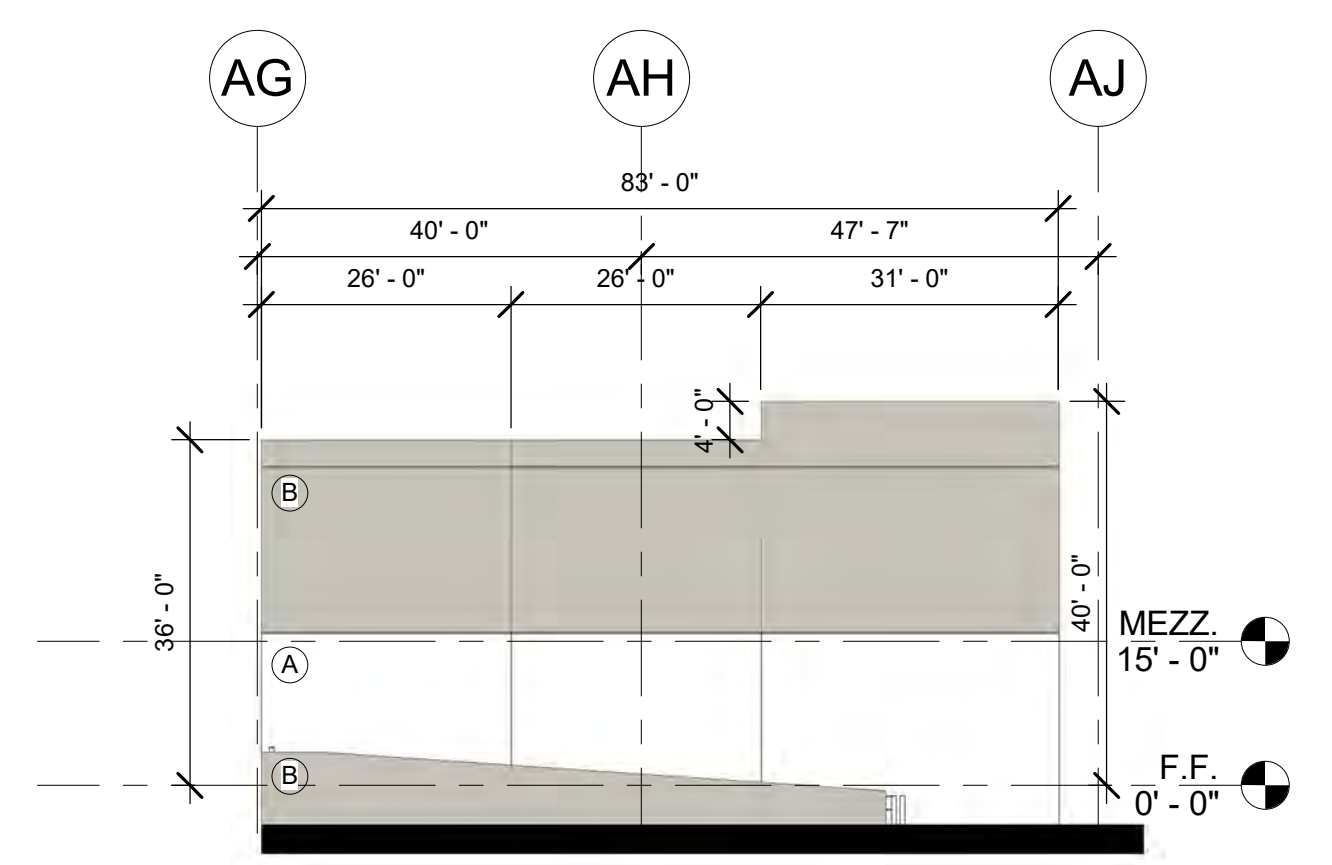
1 BUILDING 1 - SOUTH ELEVATION - A
1" = 20'-0"



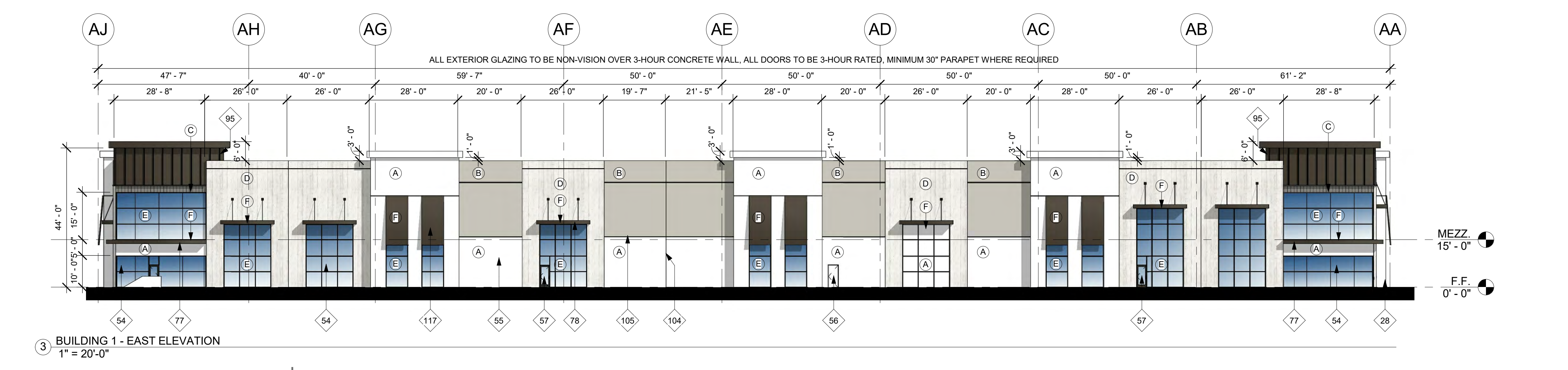
2 BUILDING 1 - SOUTH ELEVATION - B
1" = 20'-0"



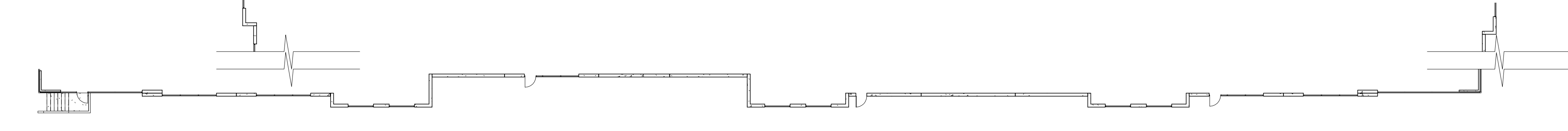
11 BUILDING 1 TRUCK COURT RETURN ELEVATION A
1" = 20'-0"



12 BUILDING 1 TRUCK COURT RETURN ELEVATION B
1" = 20'-0"



3 BUILDING 1 - EAST ELEVATION
1" = 20'-0"



KEYNOTES

- 11 EXTERIOR CONCRETE STAIR W/CONCRETE WALLS, WALLS & RAILINGS PAINTED PER EXTERIOR COLOR SCHEDULE. REFER TO CIVIL AND STRUCTURAL DRAWINGS
- 16 PROTECTIVE METAL BOLLARDS, CONCRETE FILLED, PAINTED, TYP.
- 28 SECURE BICYCLE RACK.
- 47 EXTERIOR METAL DOWNSPOUT AND OVERFLOW SCUPPERS PAINTED TO MATCH BUILDING. REFER TO PLUMBING PLANS FOR MINIMUM SCUPPER OPENINGS ALLOWABLE PER CODE.
- 54 STOREFRONT, SEE ELEVATIONS & EXTERIOR COLOR SCHEDULE. STORE FRONT TO BE DESIGNED TO RESIST WIND LOAD AS REQUIRED BY BUILDING CODES AND LOCAL JURISDICTION. DESIGN OF STOREFRONT FRAMING SYSTEM AND STRUCTURAL CALCULATIONS TO BE DESIGN BUILT BY G.C. AND UNDER DEFERRED SUBMITTAL.
- 55 CONCRETE TILT-UP PANEL, TYP. PAINTED, SEE EXTERIOR COLOR SCHEDULE. REFER TO ELEVATIONS AND "S" DRAWINGS FOR ADDITIONAL INFORMATION.
- 56 EXTERIOR MAN DOOR 3X7', HOLLOW METAL, PAINTED, SEE EXTERIOR COLOR SCHEDULE & DOOR SCHEDULE FOR ADDITIONAL INFO.
- 57 EXTERIOR STOREFRONT DOOR, SEE EXTERIOR COLOR SCHEDULE & DOOR SCHEDULE FOR ADDITIONAL INFO.
- 58 DOCK-HI LOADING DOOR, 8'X10', WITH VISION GLAZING PRE FINISHED BY MANUFACTURER PER COLOR SCHEDULE.
- 59 DRIVE THRU LOADING DOOR 12'X14' WITH VISION GLAZING, PRE FINISHED BY MANUFACTURER PER COLOR SCHEDULE.
- 63 AIR INTAKE LOUVER, PAINT TO MATCH BUILDING WALL, TYP. SIZE VERTICAL 4'X 8', PROVIDE BIRD SCREEN, FILTER AND BURGLAR BARS.
- 77 CANOPY, REFER TO ELEVATIONS - STRUCTURAL DETAILS. DECORATIVE METAL BROW, REFER TO ARCHITECTURAL-STRUCTURAL DETAILS.
- 95 PARAPET RETURN 3' MIN. OR PER PLAN. SEE "S" DRAWINGS.
- 104 PANEL JOINT, TYP.
- 105 2" DECORATIVE CONCRETE REVEAL WITH CHAMFERED EDGES, TYP.
- 117 DECORATIVE METAL AWNING, REFER TO ARCHITECTURAL ELEVATIONS

GLAZING LEGEND

VISION GLAZING:	
NON VISION GLAZING:	
TEMPERED:	

NOTE: REFER TO ELEVATIONS FOR TEMPERED GLAZING LOCATIONS.

NON VISION GLAZING NOTES:

- SINGLE PANE GLAZING PAINT FACE OF CONCRETE PANEL BEHIND BLACK. NO COATING REQUIRED.
- PROVIDE BREATHABLE MULLION SYSTEM @ NON-VISION GLAZING SECTIONS, NO HOLES REQUIRED IN CONCRETE.
- PROVIDE SHADE CLOTH BEHIND GLASS IN AREAS INTENDED TO BE NON-VISION WHEN THERE IS NO SPANDREL CONCRETE: TENCATE MIRAF1 140N 12.5' X 360' FILTER FABRIC

TEMPERED GLAZING NOTES:

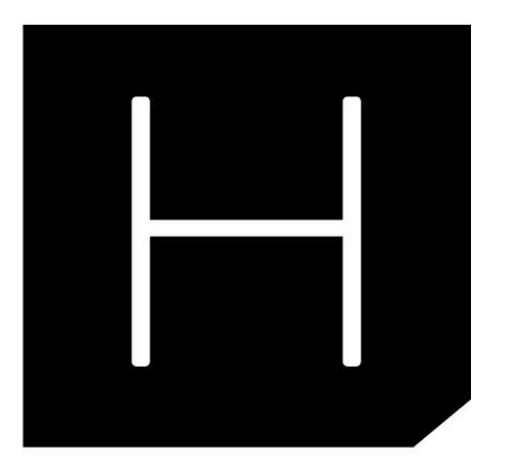
- IN OPERABLE DOORS, WINDOWS AND WITHIN 18" OF WALKING SURFACE TO BE TEMPERED.

EXTERIOR COLOR SCHEDULE

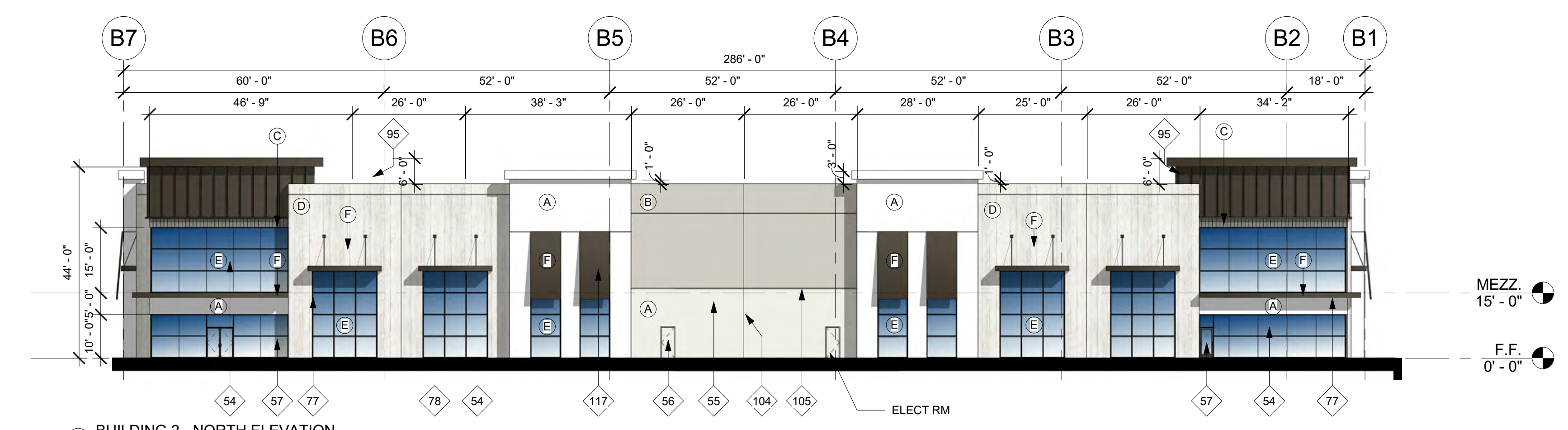
	A	OFF WHITE EXTERIOR PAINT COLOR: SW6070 HERON PLUME
	B	MEDIUM TAUPE EXTERIOR PAINT COLOR: SW6073 PERFECT GREIGE
	C	WARM GRAY TILE
	D	BOARD FORMED OFF WHITE PAINTED CONCRETE
	E	STOREFRONT BLUE REFLECTIVE GLAZING & CHARCOAL ANODIZED MULLIONS
	F	DARK BRONZE BROWAWNING

TYP PAINT NOTES:
PAINT MAN DOORS, GUARD WALLS, RAMP WALLS, STAIR WALLS, GUARD RAILS, ROOF DRAINS, AND LOUVERS TO MATCH ADJACENT BUILDING WALL U.N.O.

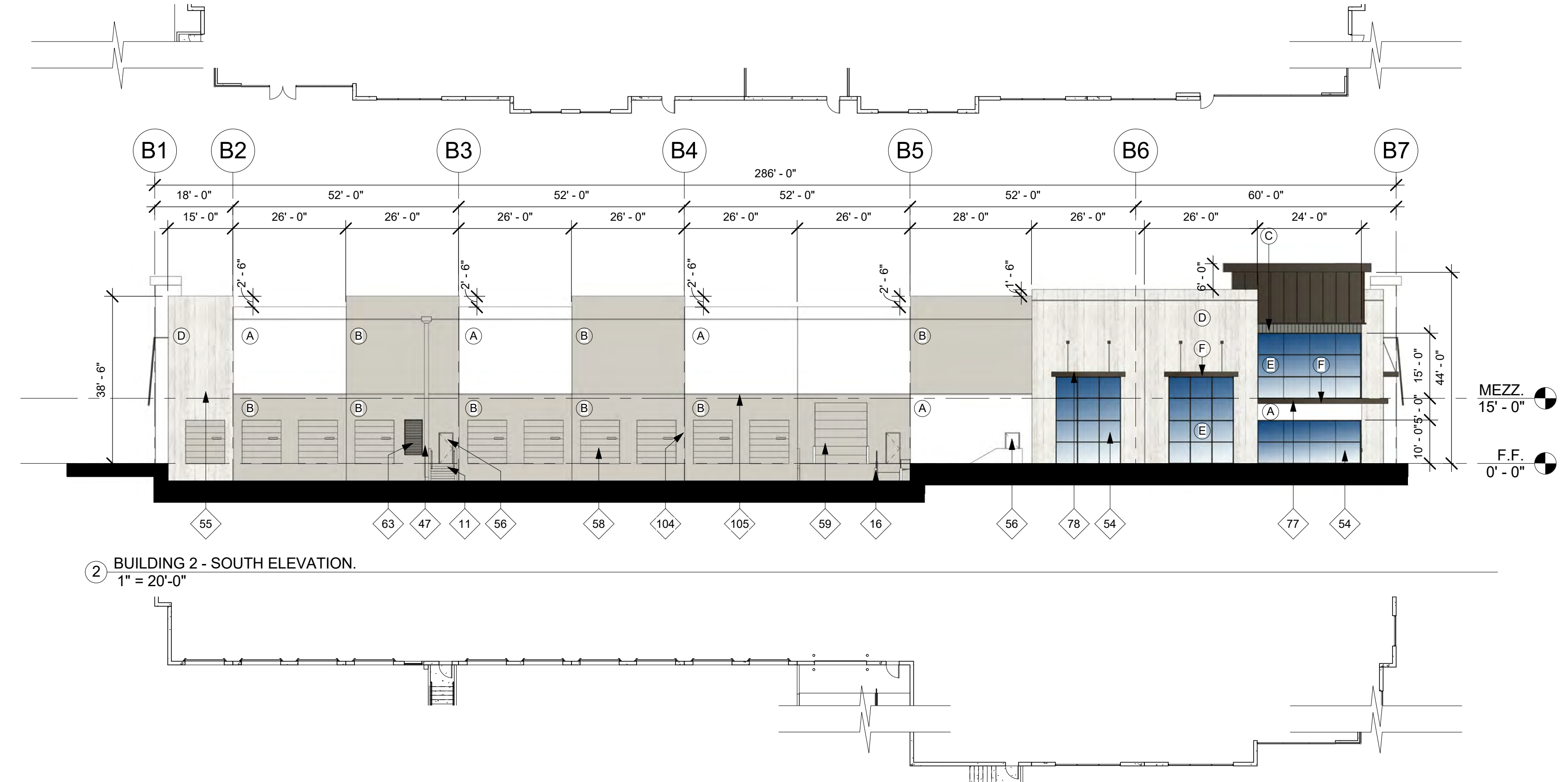
TRUCK DOORS TO BE PRE-FINISHED BY MANUFACTURER IN WHITE FINISH



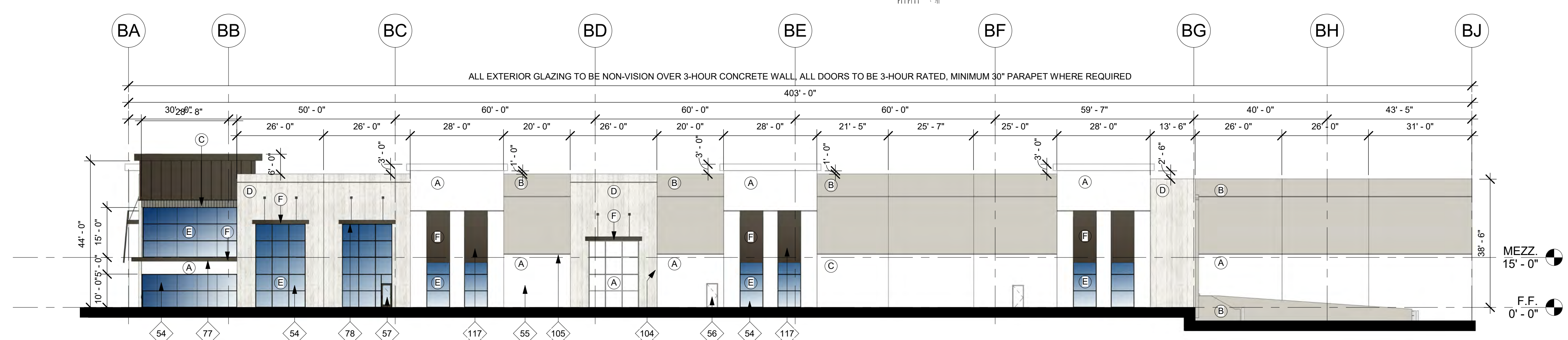
A19-2062
06.16.2021



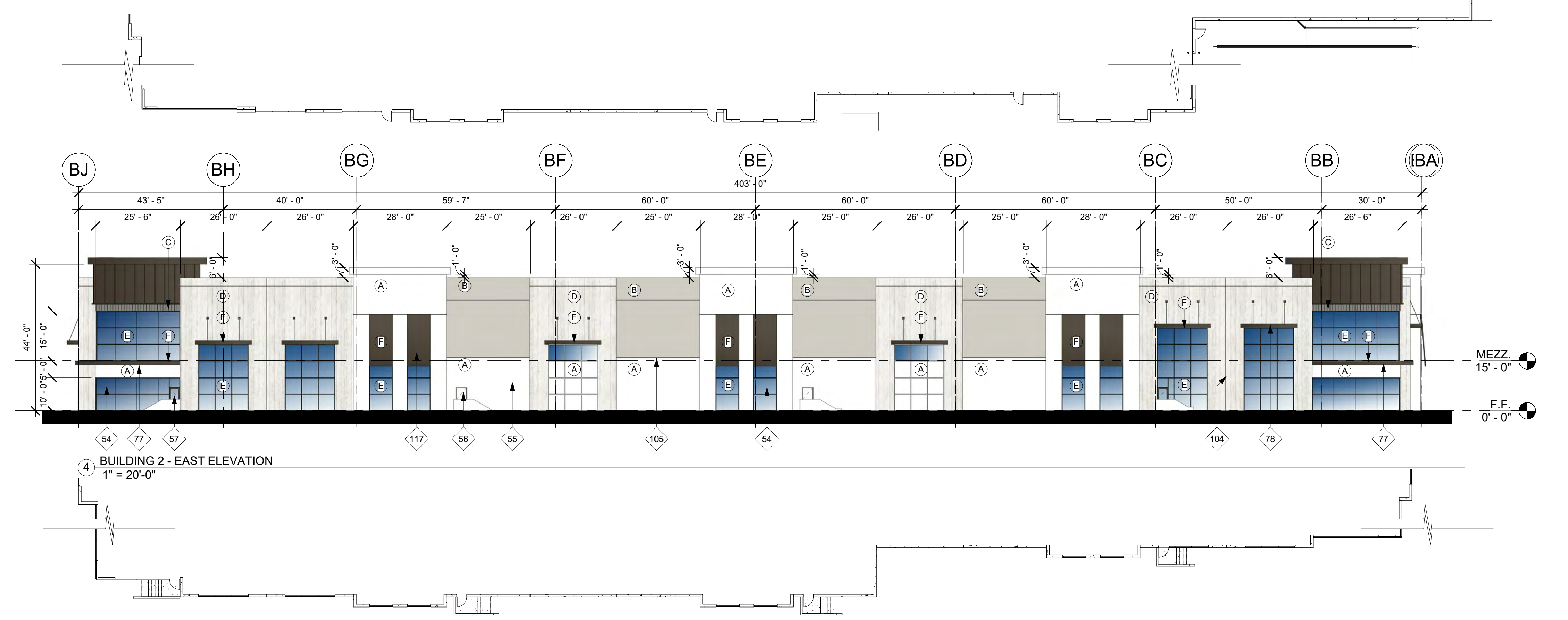
1 BUILDING 2 - NORTH ELEVATION.
1" = 20'-0"



2 BUILDING 2 - SOUTH ELEVATION.
1" = 20'-0"



3 BUILDING 2 - WEST ELEVATION
1" = 20'-0"



4 BUILDING 2 - EAST ELEVATION
1" = 20'-0"

KEYNOTES	
11	EXTERIOR CONCRETE STAIR W/CONCRETE WALLS & RAILINGS PAINTED PER EXTERIOR COLOR SCHEDULE. REFER TO CIVIL AND STRUCTURAL DRAWINGS
16	PROTECTIVE METAL BOLLARDS, CONCRETE FILLED, PAINTED, TYP.
47	EXTERIOR METAL DOWNSPOUT AND OVERFLOW SCUPPERS PAINTED TO MATCH BUILDING. REFER TO PLUMBING PLANS FOR MINIMUM SCUPPER OPENINGS ALLOWABLE PER CODE.
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57	EXTERIOR STOREFRONT DOOR, SEE EXTERIOR COLOR SCHEDULE & DOOR SCHEDULE FOR ADDITIONAL INFO.
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77	CANOPY, REFER TO ELEVATIONS - STRUCTURAL DETAILS.
78	DECORATIVE METAL BROW, REFER TO ARCHITECTURAL-STRUCTURAL DETAILS.
95	PARAPET RETURN 3' MIN. OR PER PLAN, SEE "S" DRAWINGS.
104	PANEL JOINT, TYP.
105	2" DECORATIVE CONCRETE REVEAL WITH CHAMFERED EDGES, TYP.
117	DECORATIVE METAL AWNING, REFER TO ARCHITECTURAL ELEVATIONS

GLAZING LEGEND	
VISION GLAZING:	
NON VISION GLAZING:	
TEMPERED:	
NOTE: REFER TO ELEVATIONS FOR TEMPERED GLAZING LOCATIONS.	
NON VISION GLAZING NOTES: 1. SINGLE PANE GLAZING PAINT FACE OF CONCRETE PANEL BEHIND BLACK, NO COATING REQUIRED. 2. PROVIDE BREATHABLE MULLION SYSTEM @ NON-VISION GLAZING SECTIONS, NO HOLES REQUIRED IN CONCRETE. 3. PROVIDE SHADE CLOTH BEHIND GLASS IN AREAS INTENDED TO BE NON-VISION WHEN THERE IS NO SPANDREL CONCRETE: TENCATE MIRAFI 140N 12.5' X 360' FILTER FABRIC	
TEMPERED GLAZING NOTES: 1. IN OPERABLE DOORS, WINDOWS AND WITHIN 18" OF WALKING SURFACE TO BE TEMPERED.	

EXTERIOR COLOR SCHEDULE	
	(A) OFF WHITE EXTERIOR PAINT COLOR: SW6070 HERON PLUME
	(B) MEDIUM TAUPE EXTERIOR PAINT COLOR: SW6073 PERFECT GREIGE
	(C) WARM GRAY TILE
	(D) BOARD FORMED OFF WHITE PAINTED CONCRETE
	(E) STOREFRONT BLUE REFLECTIVE GLAZING & CHARCOAL ANODIZED MULLIONS
	(F) DARK BRONZE BROW/AWNING
TYP PAINT NOTES: PAINT MAN DOORS, GUARD WALLS, RAMP WALLS, STAIR WALLS, GUARD RAILS, ROOF DRAINS, AND LOUVERS TO MATCH ADJACENT BUILDING WALL U.N.O.	
TRUCK DOORS TO BE PRE-FINISHED BY MANUFACTURER IN WHITE FINISH	



LEGAL DESCRIPTION
 PARCEL 1:
 LOT 2, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA, EXCEPTING THEREFROM THAT PORTION OF ALESSANDRO BOULEVARD AS CONVEYED TO THE COUNTY OF RIVERSIDE BY DOCUMENT RECORDED NOVEMBER 26, 1972 AS INSTRUMENT NO. 157190, OFFICIAL RECORDS.
 PARCEL 2:
 LOT 3, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA, EXCEPTING THEREFROM THAT PORTION DESCRIBED IN THE DEED TO THE COUNTY OF RIVERSIDE DOCUMENT RECORDED MAY 30, 1972 AS INSTRUMENT NO. 69766, OFFICIAL RECORDS.

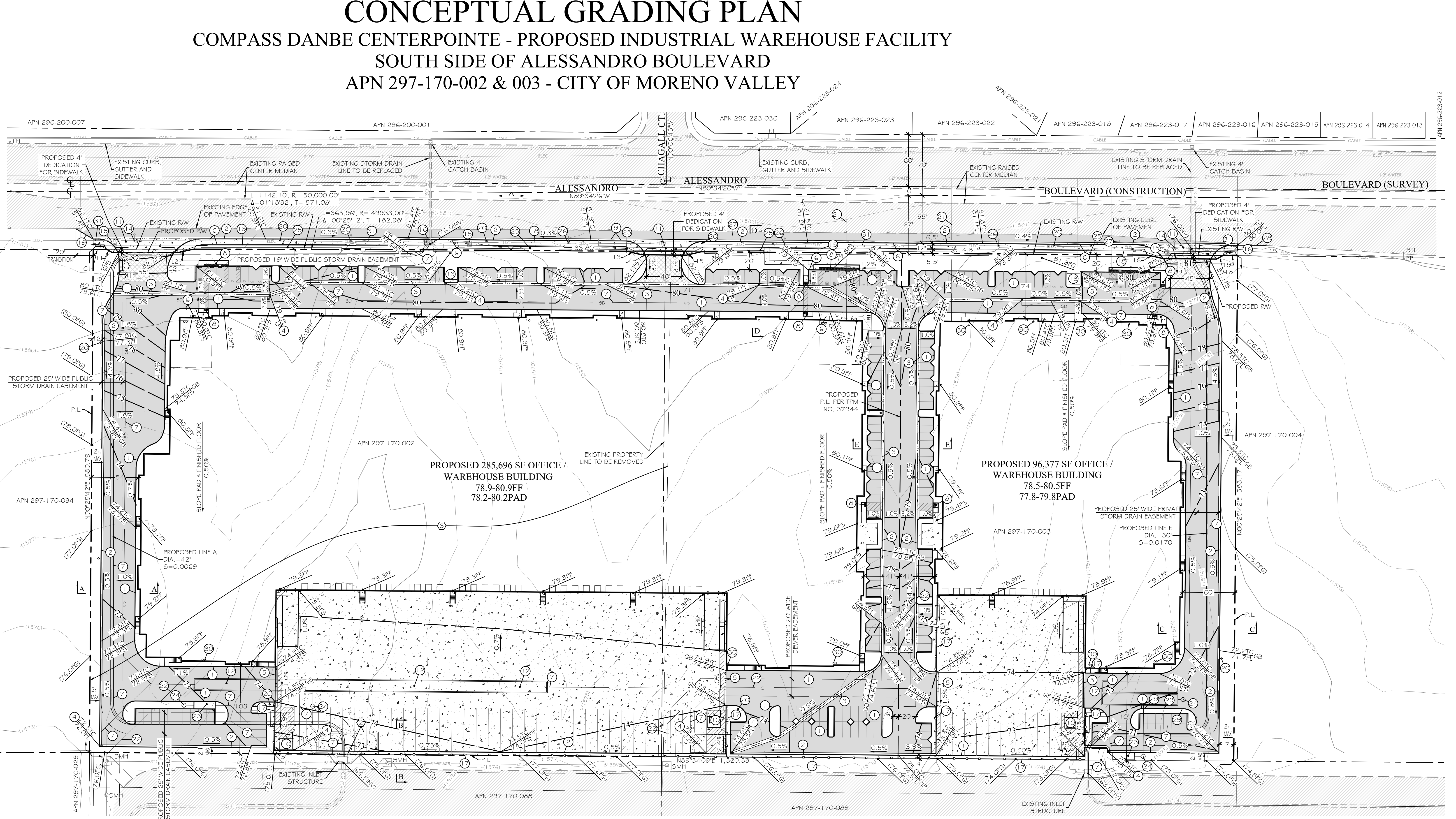
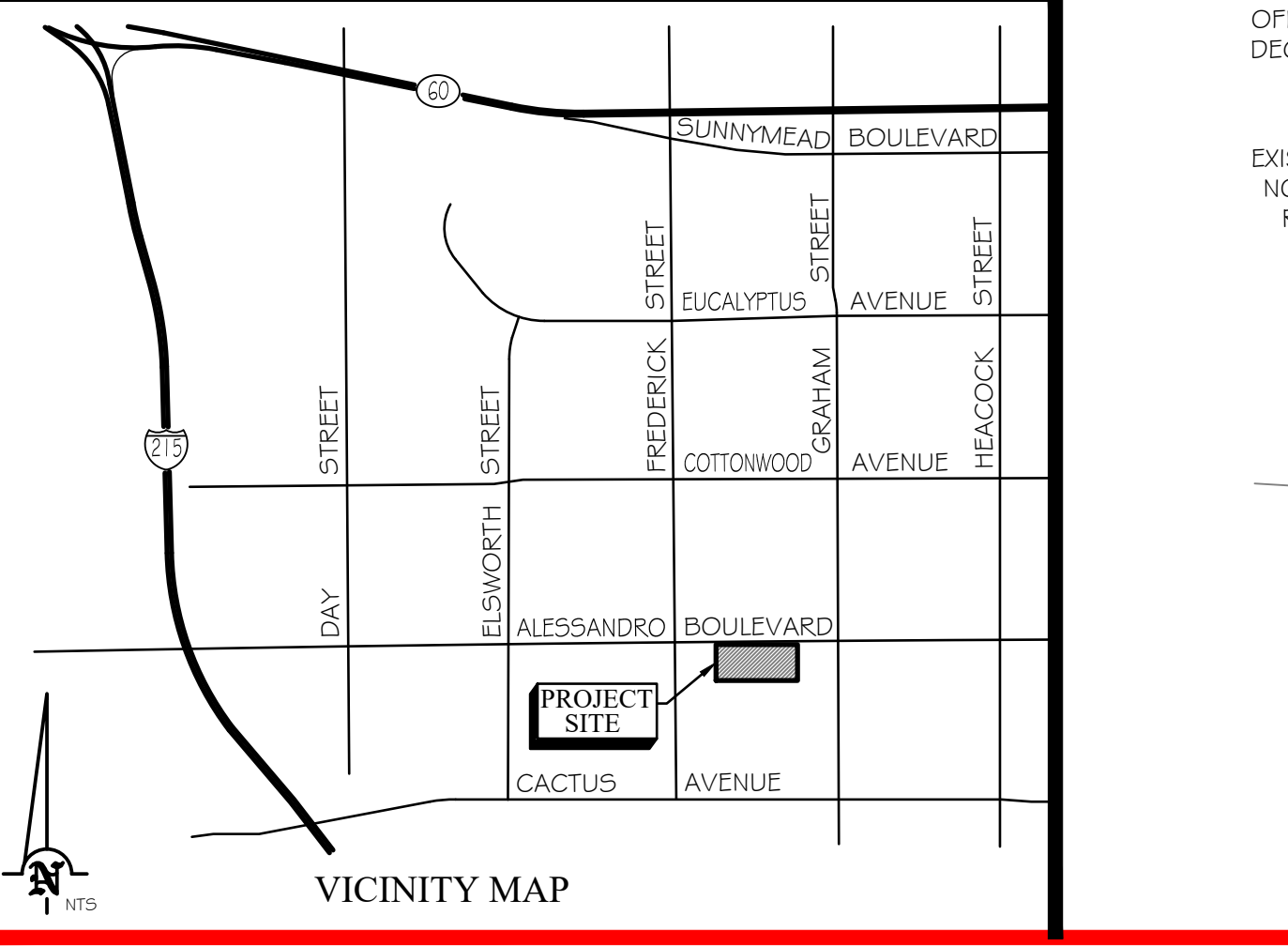
EASEMENTS
 1. THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "TEMPORARY DECLARATION OF EASEMENT FOR ACCEPTANCE OF DRAINAGE WATERS" RECORDED JANUARY 22, 2009 AS INSTRUMENT NO. 2009-029343 OF OFFICIAL RECORDS, PER THE PROVISIONS OF THE EASEMENT DOCUMENT, SAID EASEMENT WILL BE ABANDONED UPON THE DEVELOPMENT OF THE PROPERTY.
 2. AN OFFER OF DEDICATION FOR FLOOD CONTROL AND DRAINAGE AND INCIDENTAL PURPOSES, IN FAVOR OF RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT RECORDED DECEMBER 23, 2009 AS INSTRUMENT NO. 2009-0657601 OF OFFICIAL RECORDS.
 3. MATTERS IN A DOCUMENT ENTITLED "DRAINAGE EASEMENT AGREEMENT" EXECUTED BY AND BETWEEN WILMA PACIFIC INC. AND THE CENTENNIAL GROUP INC., RECORDED DECEMBER 2, 1987 AS INSTRUMENT NO. 341821 OF OFFICIAL RECORDS, INCLUDING BUT NOT LIMITED TO COVENANTS, CONDITIONS, RESTRICTIONS, EASEMENTS, ASSESSMENTS, LIENS AND CHARGES.

NOTES
 1. EXISTING GROSS AREA: 871,608 SF = 20.01 AC
 2. EXISTING NET AREA: 769,571 SF = 17.67 AC
 3. PROPOSED DEDICATION: 924 SF = 0.02 AC
 4. PROPOSED NET AREA: 768,647 SF = 17.65 AC
 5. PROJECT SITE IS LOCATED WITHIN ZONE X (AREA OF MINIMAL FLOOD HAZARD PER FIRM MAP NO. 06065C0745G DATED AUGUST 28, 2008)
 6. SEE SITE PLAN FOR PARKING STALL DIMENSIONS.
 7. EXISTING FEATURES ARE TO REMAIN UNLESS OTHERWISE NOTED.

PROPOSED FEATURES
 1. PROPOSED CURB
 2. PROPOSED CURB & GUTTER
 3. PROPOSED RIBBON GUTTER
 4. PROPOSED DROP INLET
 5. PROPOSED ROLLING GATE
 6. PROPOSED SIDEWALK
 7. PROPOSED STORM DRAIN
 8. PROPOSED ADA RAMP
 9. EXISTING BUS STOP TO BE REMOVED
 10. PROPOSED TRASH ENCLOSURE
 11. PROPOSED DRIVEWAY
 12. PROPOSED UNDERGROUND DETENTION TANK
 13. PROPOSED TRANSFORMER
 14. EXISTING POWER POLE/STREET LIGHT TO BE RELOCATED
 15. EXISTING PULLBOX TO BE RELOCATED
 16. PROPOSED CATCH BASIN
 17. PROPOSED 8" HIGH TUBULAR STEEL FENCE
 18. PROPOSED COMMUNICATION CONDUIT PER CITY STANDARDS
 19. PROPOSED AC BERM
 20. PROPOSED FIRE HYDRANT
 21. PROPOSED WATER SERVICE
 22. PROPOSED SEWER SERVICE
 23. PROPOSED MODULAR WETLAND BIOTREATMENT DEVICE
 24. PROPOSED SUMP AND PUMP
 25. PROPOSED BIORETENTION SWALE
 26. EXISTING POWER POLE/STREET LIGHT TO REMAIN
 27. EXISTING SIGN TO BE RELOCATED
 28. PROPOSED EDGE OF PAVEMENT
 29. PROPOSED CURB OPENING
 30. PROPOSED ROOF DRAIN
 31. OVERHEAD UTILITIES AND ELECTRICAL LINES LESS THAN 11KV TO BE UNDERGROUNDED

NOTE
 THE CITY ENGINEER MAY REQUIRE THE REMOVAL AND REPLACEMENT OF THE STRUCTURAL SECTION FOR PAVEMENT TO HALF-STREET WIDTHS PLUS 1' OR PROVIDE CORE TEST RESULTS CONFIRMING THAT THE EXISTING PAVEMENT SECTION IS PER CURRENT CITY STANDARD.

PAVING LEGEND
 [Symbol] PROPOSED AC PAVING
 [Symbol] PROPOSED PCC PAVING
 [Symbol] PROPOSED DECORATIVE PAVING
 [Symbol] EXISTING AC PAVING
 [Symbol] EXISTING CURB & GUTTER
 [Symbol] EXISTING CONTOURS
 [Symbol] FLOWLINES
 [Symbol] CENTERLINE
 [Symbol] EXISTING RW
 [Symbol] PROPERTY LINES
 [Symbol] EXISTING UTILITY LINE
 [Symbol] PROPOSED BUILDING FOOTPRINT
 [Symbol] PROPOSED PRIVATE STORM DRAIN
 [Symbol] PROPOSED CITY STORM DRAIN



CURVE DATA

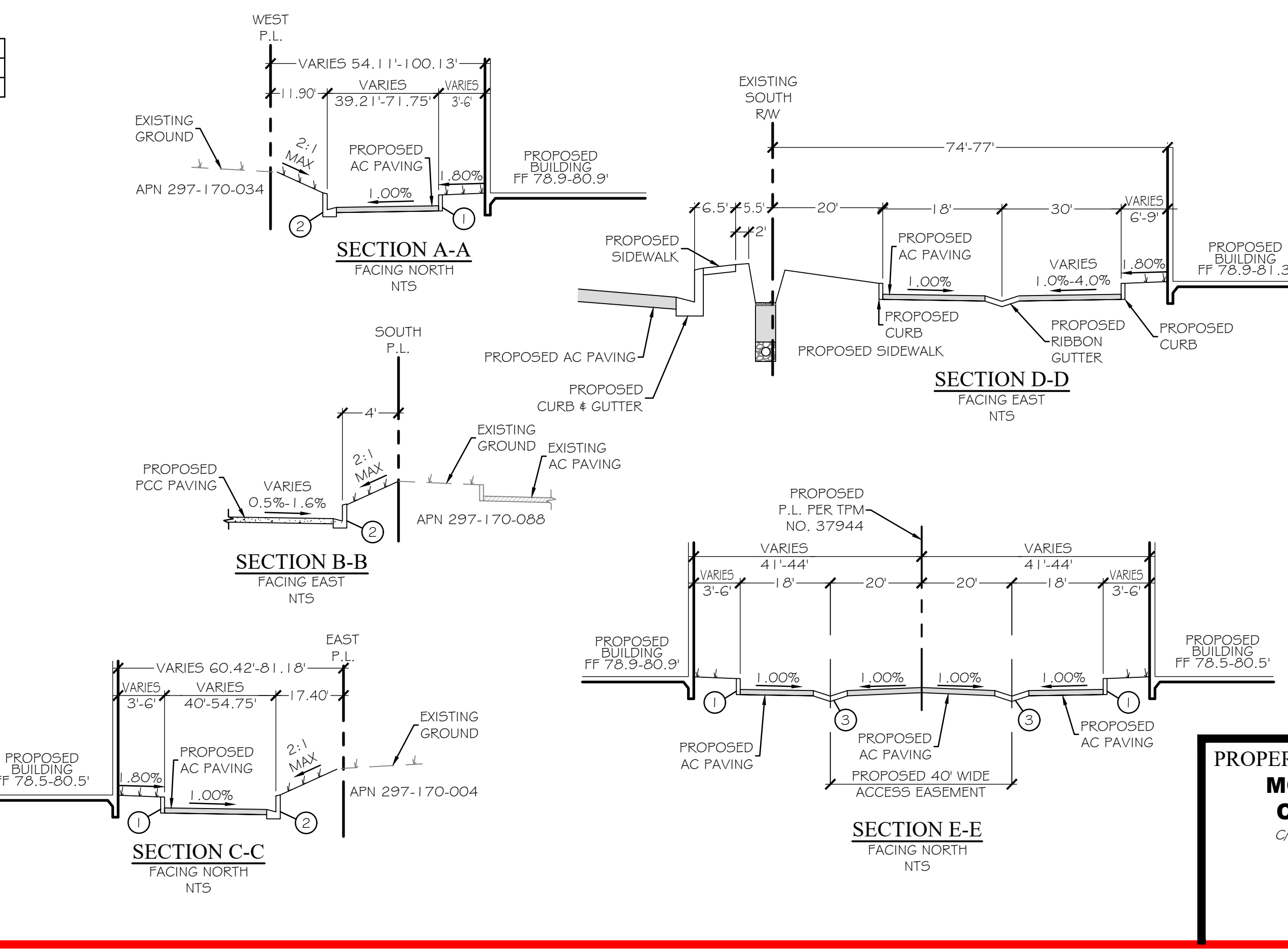
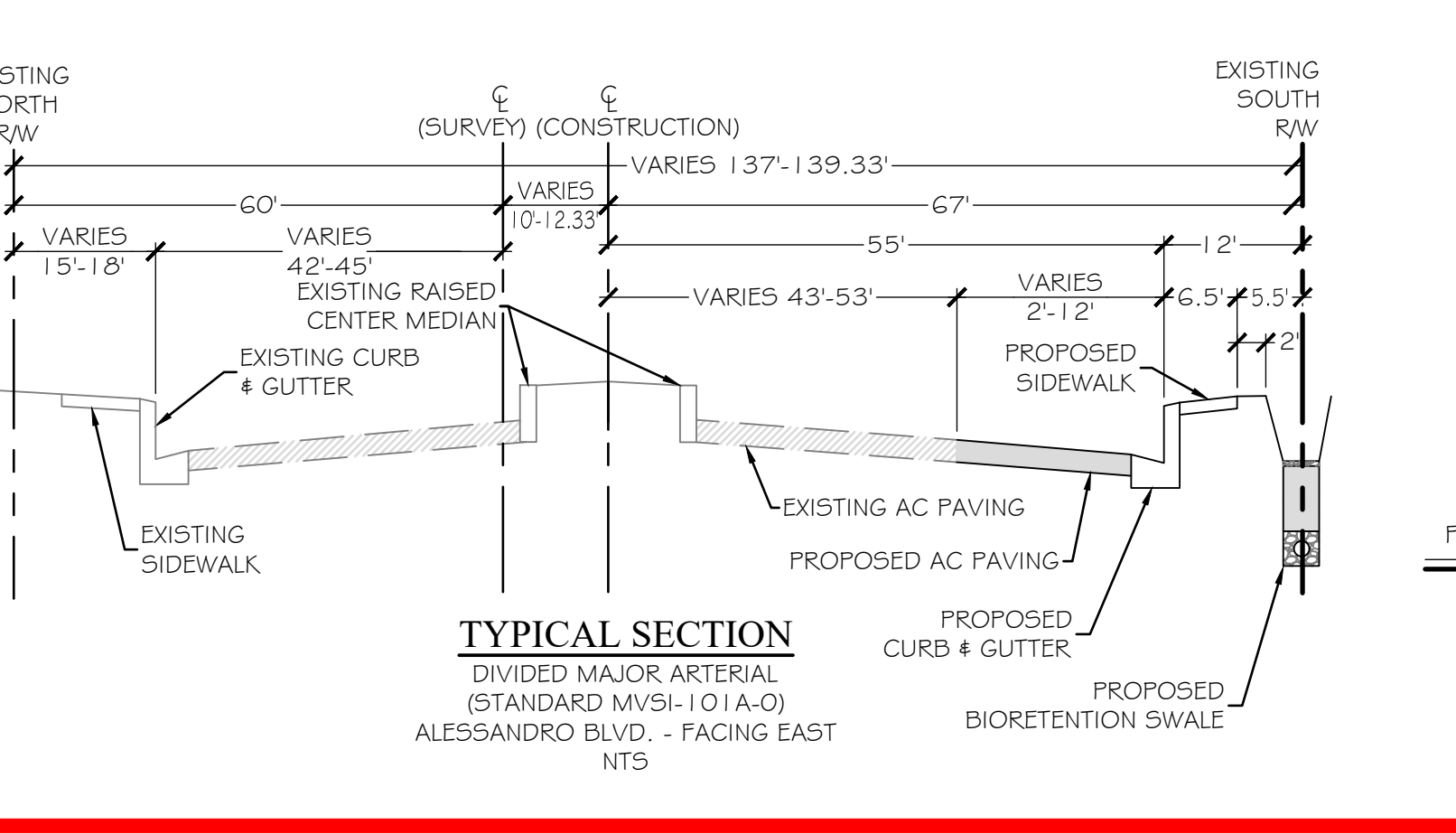
CI	Δ	R	T	L
C1	0°0'10.4"	49933.00'	7.71'	15.41'
C2	0°0'51.2"	49929.00'	37.73'	75.46'

LINE DATA

LI	BEARING	DISTANCE
L1	N59°38'55"W	7.89'
L2	N77°40'24"E	18.74'
L3	N76°15'09"W	17.36'
L4	N89°34'26"W	52.09'
L5	N77°06'18"E	17.36'
L6	N77°32'35"E	19.19'
L7	N89°34'26"W	61.12'
L8	N60°53'25"E	8.11'
L9	N89°34'26"W	16.97'

BENCHMARK
 TOP OF CONCRETE STORM DRAINAGE BASIN 268.58'
 N86°21'35"W FROM THE SOUTHWEST CORNER OF THE PROPERTY. ELEVATION = 1574.20'

BASIS OF BEARING
 BASIS OF BEARINGS IS THE CENTER LINE OF BRODIAEA AVENUE, KNOWN AS N89°34'09"W, AS DESCRIBED IN PARCEL MAP NO. 36463, BOOK 238 PAGE 43, OF OFFICIAL RECORDS IN RIVERSIDE COUNTY, DATED DECEMBER 19, 2014.



SCHOOL DISTRICT
 MORENO VALLEY UNIFIED SCHOOL DISTRICT
 26634 ALESSANDRO BOULEVARD
 MORENO VALLEY, CA 92553
 (951) 571-7500

UTILITIES
 ELECTRIC: SOUTHERN CALIFORNIA EDISON COMPANY
 26100 MENIFEE ROAD
 ROMOLAND, CA 92585
 (951) 928-8334
 WATER: EASTERN MUNICIPAL WATER DISTRICT
 2270 TRUMBULE ROAD
 PERRIS, CA 92570
 (951) 406-1666
 SEWER: EASTERN MUNICIPAL WATER DISTRICT
 2270 TRUMBULE ROAD
 PERRIS, CA 92570
 (951) 928-3777
 GAS: SOUTHERN CALIFORNIA GAS COMPANY
 1981 WEST LUGONIA AVENUE
 REDLANDS, CA 92373
 (909) 335-7837
 TELECOMMUNICATIONS: CHARTER COMMUNICATIONS
 7337 CENTRAL AVE.
 RIVERSIDE, CA 92504
 (951) 406-1666
 FRONTIER COMMUNICATIONS
 9 S. 4TH STREET
 REDLANDS, CA 92373
 (909) 748-6676
 AT&T
 3939 E. CORONADO ST.
 2ND FLOOR
 ANAHEIM, CA 92807
 (714) 507-3526

SOURCE OF SURVEY
 TOPOGRAPHIC SURVEY DATED JANUARY 31, 2020 AS CONDUCTED BY PARTNER ENGINEERING AND SCIENCE, INC. 1761 EAST GARRIS AVENUE SANTA ANA, CA 92705 PHONE: (714) 477-8657

SOILS ENGINEER
 REPORT DATED JANUARY 31, 2020 PROJECT NO. 21631-20 AS CONDUCTED BY NORCAL ENGINEERING 10641 HUMBOLT STREET LOS ALAMITOS, CA 90720 PHONE: (562) 799-9469 FAX: (562) 799-9459

PRELIMINARY EARTHWORK QUANTITIES
 CUT 30,500 CY (RAW/UNADJUSTED)
 FILL 26,000 CY (SITE EXPECTED TO BALANCE AFTER LOSSES)
 NOTE: THE PROPOSED GRADING ON THIS PLAN IS STRICTLY CONCEPTUAL AND SHOULD ONLY BE USED FOR PLANNING PURPOSES.

PROPERTY OWNER:
MORENO VALLEY CENTERPOINTE
 CO CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

PREPARED FOR/APPLICANT:
CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

PEN20-0120
TPM NO. 37944
PEN20-0121 - PLOT PLAN

CONCEPTUAL GRADING PLAN
 APN 297-170-002 & 003
 COMPASS DANBE CENTERPOINTE
 PROPOSED INDUSTRIAL WAREHOUSE FACILITY
 SOUTH SIDE OF ALESSANDRO BOULEVARD
 CITY OF MORENO VALLEY

thatcher engineering & associates, inc.
 1481 16th street, suite 105, redlands, ca 92373
 • land planning
 • civil engineering
 • landscape architecture
 phone 959.748.7777
 fax 959.748.7778

PROPERTY OWNER:
MORENO VALLEY CENTERPOINTE
 CO CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

PREPARED FOR/APPLICANT:
CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

Job Number: 162012 Date Prepared: 6/16/21 Drawn By: RL Reference Number: 162012CGP Sheet Number: CG-1

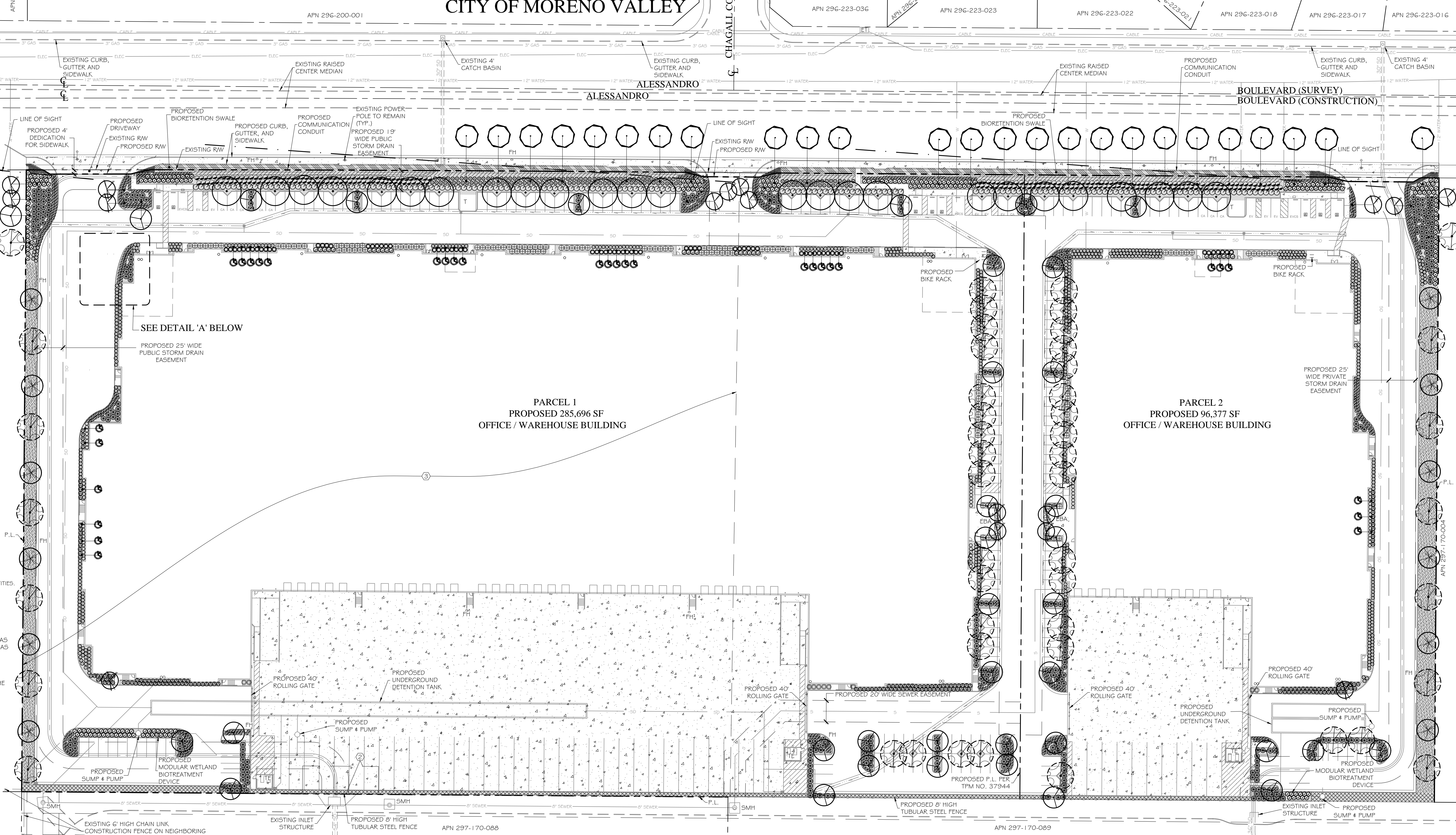
CONCEPTUAL LANDSCAPE PLAN

COMPASS DANBE CENTERPOINTE PROPOSED INDUSTRIAL WAREHOUSE FACILITY, SOUTH SIDE OF ALESSANDRO BOULEVARD APN 297-170-002 & 003 CITY OF MORENO VALLEY

PROPOSED PLANT PALETTE:

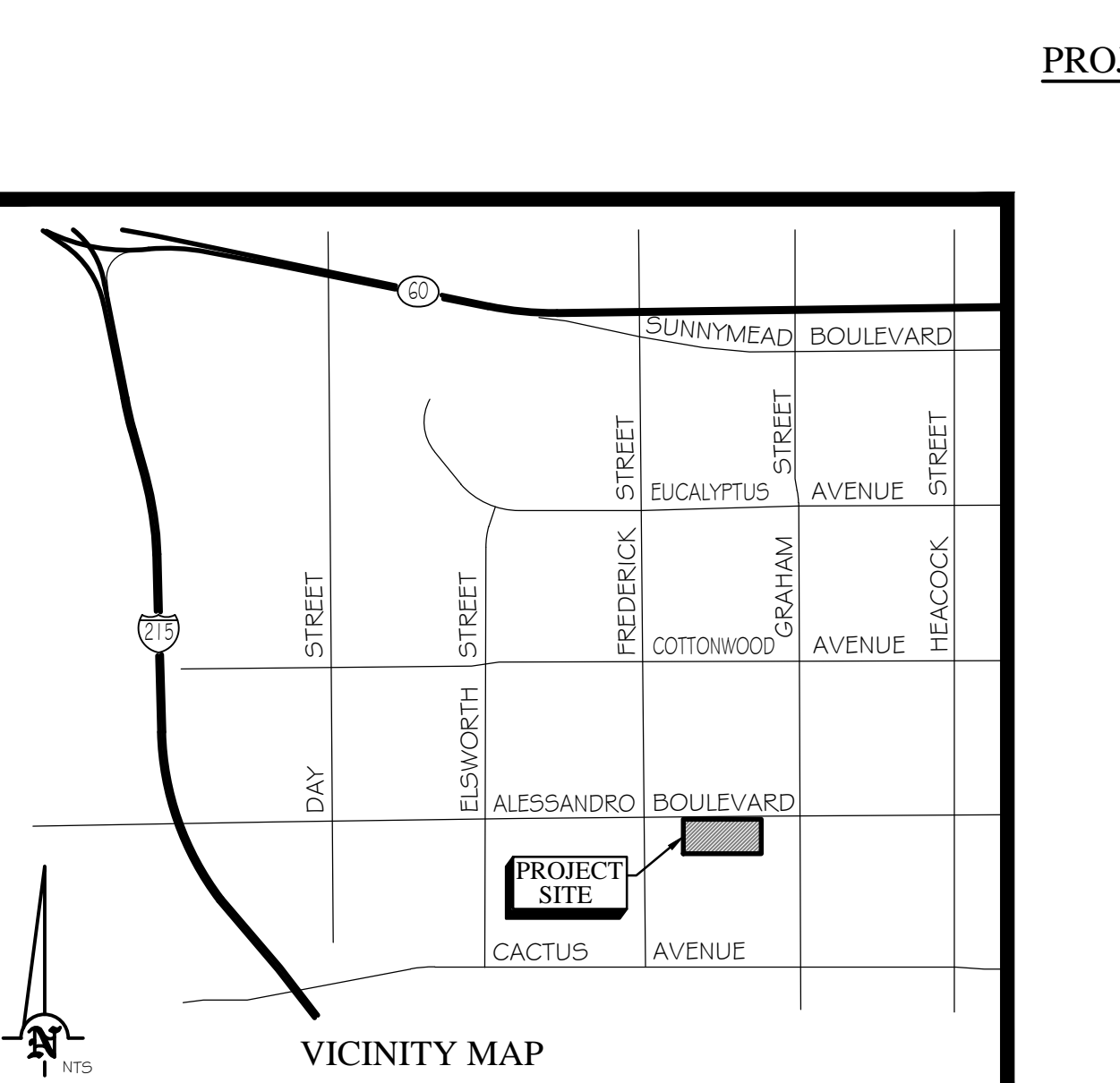
SYMBOL	PLANT NAME	SIZE	WUCOL	QUANTITY
TREES				
	BRACHYCTENON POPULNEUS BOTTLE TREE	24" BOX	L	25
	GEUERA PARVIFLORA AUSTRALIAN WILLOW	15 GAL	M	37
	LAGERSTROEMIA INDICA CRAPE MYRTLE	24" BOX	M	17
	PINUS CANARIENSIS CANARY ISLAND PINE	24" BOX	M	25
	PODOCARPUS GRACILIOR FERN PINE	15 GAL	M	12
	PRUNUS CERASIFERA CRUPOIZAM CRIMSON POINT FLOWERING PLUM	24" BOX	M	27
	TRISTANIA CONFERTA BRISBANE BOX	24" BOX	M	48
GROUND COVER				
	3" THICK WOOD CHIPS AS MULCH	76,300 SF		
	JUNCUS PATENS BLUE RUSH	FLUGS 12" OC	M	7,500 SF
	FESTUCA GLAUCA BLUE FESCUE	FLATS 6" OC	M	2,200 SF
	GAZANIA RIGENS 'LEUCOLENA' TRAILING GAZANIA	FLATS 10" OC	M	5,100 SF
	ROSMARINUS OFFICINALIS 'HUNTINGTON CARPET' ROSEMARY	FLATS 18" OC	L	13,400 SF
SHRUBS				
	ARBUTUS UNEDO STRAWBERRY TREE	5 GAL	L	10
	CALLISTEMON LITTLE JOHN DWARF BOTTLEBRUSH	1 GAL	M	383
	DIETES BICOLOR FORTNIGHT LILY	1 GAL	M	737
	HEMEROCALLIS 'STELLA DE ORO' DAILY	1 GAL	M	175
	HESPERALOE PARVIFLORA RED YUCCA	5 GAL	L	186
	LANTANA DWARF YELLOW N.C.H.	5 GAL	L	146
	MUHLENBERGIA CAPILLARIS 'REGAL MIST' PINK MUHLY	5 GAL	M	244
	PHORMIUM TENAX NEW ZEALAND FLAX	5 GAL	M	79
	PITOSPORIUM TOBIRA WHEELERS DWARF MOCK ORANGE	1 GAL	M	626
	PODOCARPUS MACROPHYLLUS 'MAKI' NEW PINE	5 GAL	M	28
	PRUNUS CAROLINIANA CAROLINA LAUREL CHERRY	5 GAL	M	69
	RHAMNUS INDICA INDIAN HAWTHORN	5 GAL	M	172
	SALVIA GREGGII 'FURMAN'S RED' FURMAN'S RED AUTUMN SAGE	1 GAL	L	234
	TULBAGHIA VIOLACEA SOCIETY GARLIC	4" POT	M	472

*QUANTITIES ARE FOR PLANNING PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR OWN QUANTITIES.



LEGAL DESCRIPTION
 PARCEL 1:
 LOT 2, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA; EXCEPT THEREFROM THAT PORTION OF ALESSANDRO BOULEVARD AS CONVEYED TO THE COUNTY OF RIVERSIDE BY DOCUMENT RECORDED NOVEMBER 28, 1972 AS INSTRUMENT NO. 157190, OFFICIAL RECORDS.
 PARCEL 2:
 LOT 3, BLOCK 242 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA; EXCEPT THEREFROM THAT PORTION DESCRIBED IN THE DEED TO THE COUNTY OF RIVERSIDE DOCUMENT RECORDED MAY 30, 1972 AS INSTRUMENT NO. 69766, OFFICIAL RECORDS.

EASEMENTS
 1. THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "TEMPORARY DECLARATION OF EASEMENT FOR ACCEPTANCE OF DRAINAGE WATERS" RECORDED JANUARY 22, 2009 AS INSTRUMENT NO. 2009-0028343 OF OFFICIAL RECORDS; PER THE PROVISIONS OF THE EASEMENT DOCUMENT, SAID EASEMENT WILL BE ABANDONED UPON THE DEVELOPMENT OF THE PROPERTY.
 2. AN OFFER OF DEDICATION FOR FLOOD CONTROL AND DRAINAGE AND INCIDENTAL PURPOSES, IN FAVOR OF RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, RECORDED DECEMBER 23, 2009 AS INSTRUMENT NO. 2009-0657601 OF OFFICIAL RECORDS.
 3. MATTERS IN A DOCUMENT ENTITLED "DRAINAGE EASEMENT AGREEMENT", EXECUTED BY AND BETWEEN WILMA PACIFIC INC. AND THE CENTENNIAL GROUP INC., RECORDED DECEMBER 02, 1987 AS INSTRUMENT NO. 341821 OF OFFICIAL RECORDS, INCLUDING BUT NOT LIMITED TO COVENANTS, CONDITIONS, RESTRICTIONS, EASEMENTS, ASSESSMENTS, LEVIES AND CHARGES.



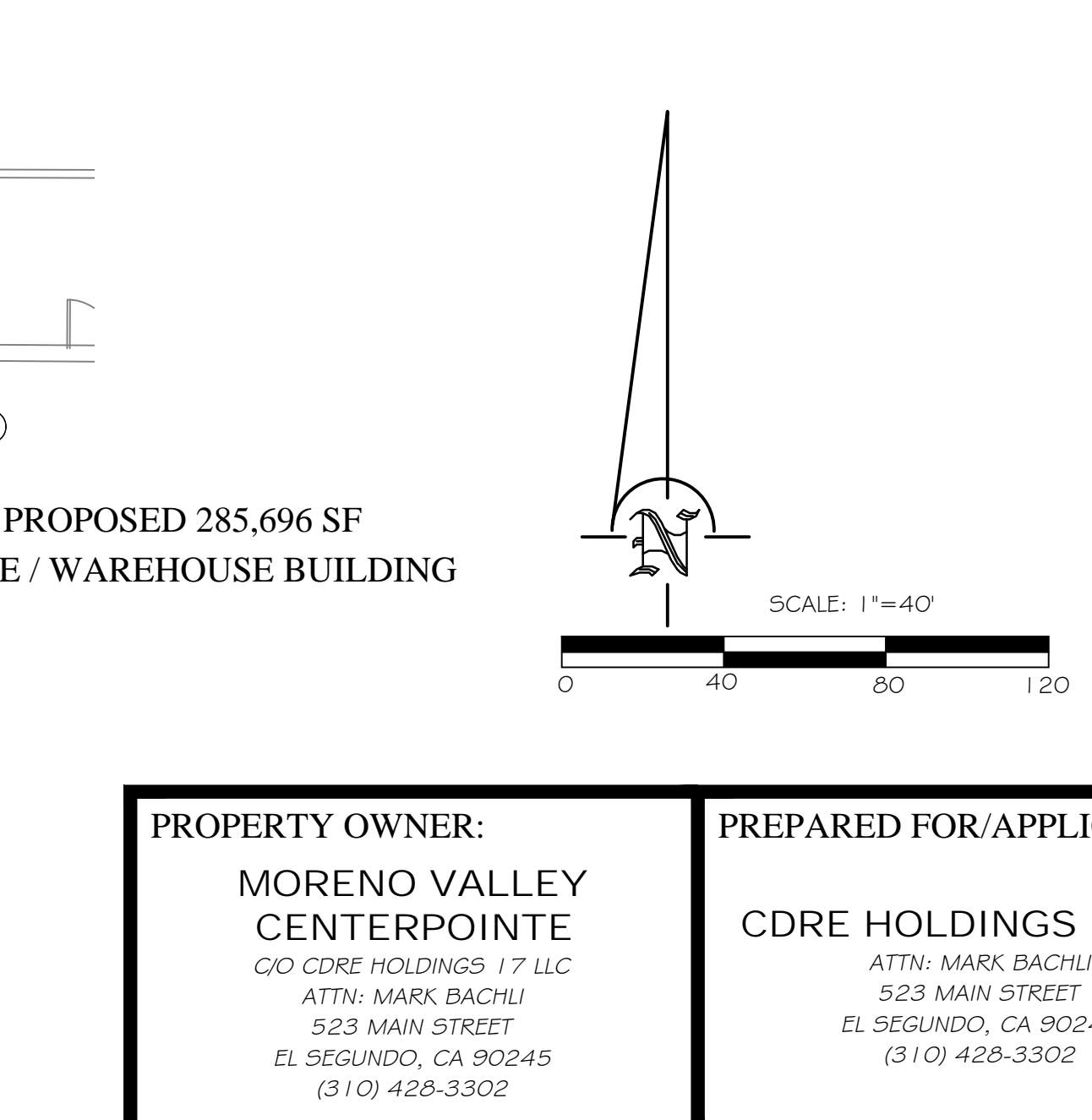
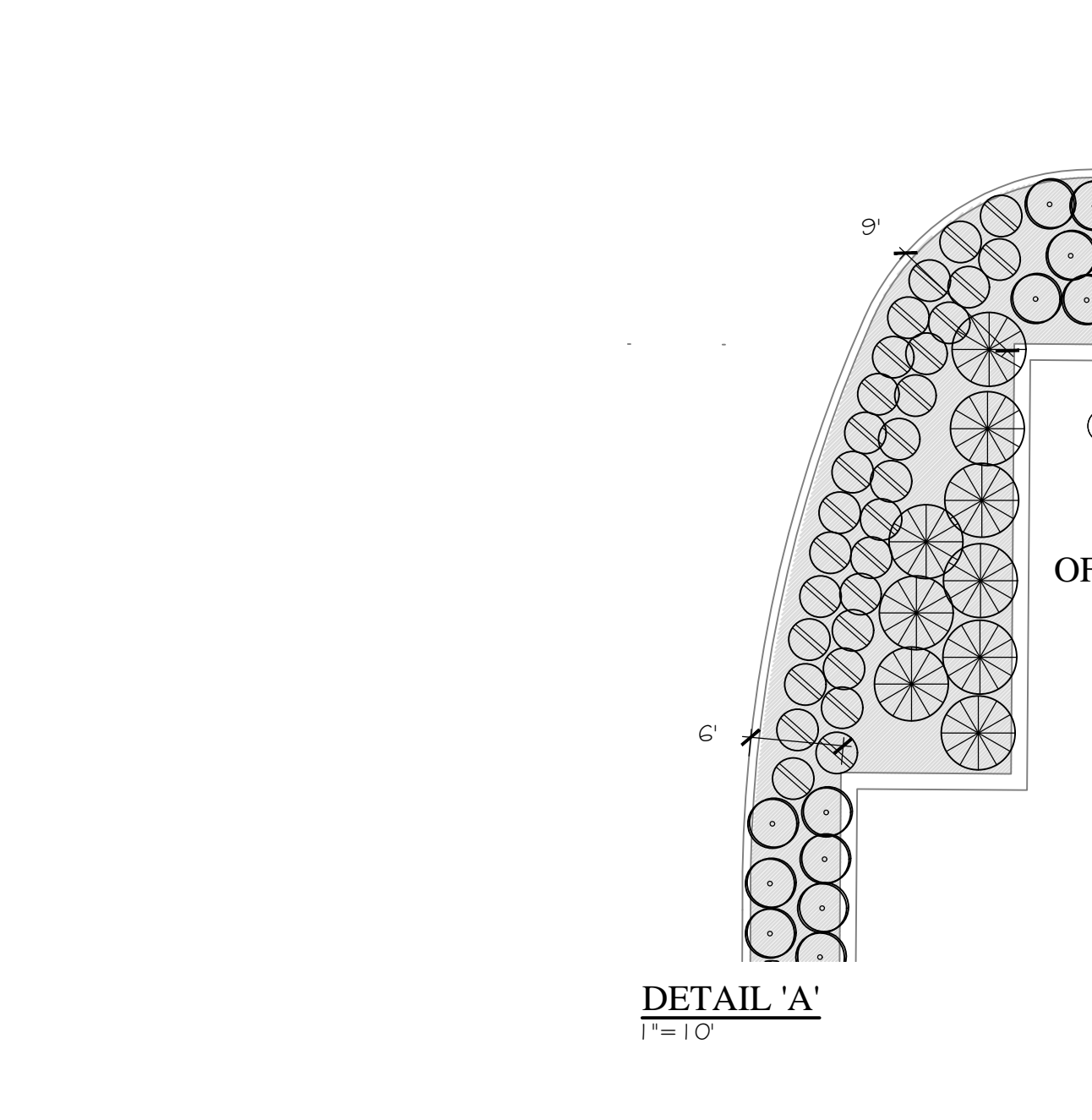
PROJECT NOTES

1. ASSESSOR'S PARCEL NUMBER: 297-170-002 & 003
 EXISTING GROSS AREA: 871,608 SF = 20.01 AC
 EXISTING NET AREA: 769,571 SF = 17.67 AC
 PROPOSED DEDICATION: 924 SF = 0.02 AC
 PROPOSED NET AREA: 768,647 SF = 17.65 AC
 EXISTING ZONE DESIGNATION: COMMERCIAL
 PROPOSED ZONE DESIGNATION: LIGHT INDUSTRIAL
 EXISTING LAND USE: VACANT
 PROPOSED LAND USE: WAREHOUSE / OFFICE
 2. SEE SITE PLAN FOR BOUNDARY AND PLANTER DIMENSIONS
 3. AREA SUMMARY:
 PARCEL 1:
 PROPOSED NET AREA: 543,010 SF = 100%
 ACCESS/PARKING: 207,868 SF = 38.3% OF NET AREA
 LANDSCAPING: 54,446 SF = 10.0% OF NET AREA
 BUILDING FOOTPRINT: 280,696 SF = 51.7% OF NET AREA
 PARCEL 2:
 PROPOSED NET AREA: 225,637 SF = 100%
 ACCESS/PARKING: 97,774 SF = 43.3% OF NET AREA
 LANDSCAPING: 33,966 SF = 15.1% OF NET AREA
 BUILDING FOOTPRINT: 93,877 SF = 41.6% OF NET AREA

LEGEND

AC	ASPHALT CONCRETE
ET	EXISTING TRANSFORMER
FH	PROPOSED FIRE HYDRANT
PCC	PORTLAND CEMENT CONCRETE
PL	PROPERTY LINE
RW	RIGHT-OF-WAY
SMH	SEWER MANHOLE
TYP.	TYPICAL

---	EXISTING CURB & GUTTER
---	PROPOSED CURB & GUTTER
---	FLOWLINES
---	CENTERLINE
---	EXISTING R/W
---	PROPERTY LINES
---	EXISTING UTILITY LINE
---	PROPOSED BUILDING FOOTPRINT
---	PROPOSED SEWER SERVICE
---	PROPOSED WATER SERVICE
---	PROPOSED TRASH ENCLOSURE
---	PROPOSED TRANSFORMER
---	PROPOSED EMPLOYEE BREAK AREA PER ARCH. PLANS
---	PROPOSED PRIVATE STORM DRAIN
---	PROPOSED CITY STORM DRAIN
---	PROPOSED AC PAVING, EXISTING AC PAVING, & PROPOSED COLORED AND SCORED PCC PAVING SEE SITE PLAN
---	PROPOSED PCC PAVING



SOILS ENGINEER
 REPORT DATED JANUARY 31, 2020
 PROJECT NO. 21631-20
 AS CONDUCTED BY
 NORCAL ENGINEERING
 10641 HUMBOLDT STREET
 LOS ALAMITOS, CA 90720
 PHONE: (562) 799-9429
 FAX: (562) 799-9459

SOURCE OF SURVEY
 TOPOGRAPHIC SURVEY
 DATED DECEMBER 2019
 AS CONDUCTED BY
 PARTNER ENGINEERING
 AND SCIENCE, INC.
 1761 EAST GARRY AVENUE
 SANTA ANA, CA 92705
 PHONE: (714) 477-8657

PEN20-0120
 TPM NO. 37944
 PEN20-0121 - PLOT PLAN

CONCEPTUAL LANDSCAPE PLAN
 APN 297-170-002 & 003
 COMPASS DANBE CENTERPOINTE
 PROPOSED INDUSTRIAL WAREHOUSE FACILITY
 SOUTH SIDE OF ALESSANDRO BOULEVARD
 CITY OF MORENO VALLEY

thatcher engineering & associates, inc.
 • land planning
 • civil engineering
 • landscape architecture
 phone 909.748.7777
 fax 909.748.7776
 1461 ford street suite 105, redlands, ca 92373

PROPERTY OWNER:
 MORENO VALLEY CENTERPOINTE
 C/O CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

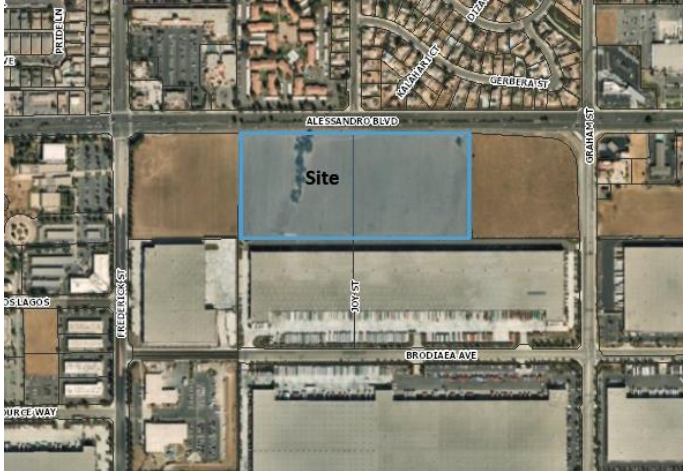
PREPARED FOR/APPLICANT:
 CDRE HOLDINGS 17 LLC
 ATTN: MARK BACHLI
 523 MAIN STREET
 EL SEGUNDO, CA 90245
 (310) 428-3302

Job Number: 162012 | Date Prepared: 6/16/21 | Drawn By: RL | Reference Number: 162012CLP | Sheet Number: CLP-1



City of Moreno Valley
 Community Development Department
 Planning Division
 City Hall Council Chamber
 14177 Frederick Street
 Moreno Valley, CA 92553

NOTICE OF PUBLIC HEARING



Notice of Public Hearing before the Planning Commission of
 City of Moreno Valley for the following item(s):

MEETING INFORMATION: August 26, 2021 at 7:00 P
 Moreno Valley Council Chamber, 14177 Frederick Street

PROJECT LOCATION: South side of Alessan
 Boulevard east of Frederick west of Graham Street, District 1

CASE NUMBER(s): General Plan Amendment PEN20-01
 Change of Zone PEN20-0119, Tentative Parcel Map 379
 PEN20-0120, Plot Plan PEN20-0121, and Plot Plan PEN20-01

CASE PLANNER: Julia Descoteaux, Associate Plan
 (951) 413 3209 or juliad@moval.org

<APN>
 <Property Owner>
 <Street Address>
 <City, State, Zip>

NOTICE OF PUBLIC HEARING

1.ah

PROPOSAL: Applicant is requesting approval of the following entitlements for the Compass Danbe Centerpointe project: 1) a General Plan Amendment (GPA) amending the City's General Plan from Commercial to Business Park, 2); a Change of Zone from Community Commercial District (CC) to Light Industrial District (LI); 3) a Plot Plan for an approximately 290,726 square foot light industrial building; and, 4) a Plot Plan for a 98,877 square foot light industrial building located on a 17.67 acre site.

ENVIRONMENTAL DETERMINATION: The project has been evaluated against the criteria set forth in the California Environmental Quality Act (CEQA) and CEQA Guidelines and staff has determined that a Mitigated Negative Declaration is the appropriate environmental document for the proposed project.

The Draft Initial Study/Mitigated Negative Declaration was circulated for public review by responsible and trustee agencies and other interested parties for a review period commencing July 26, 2021 through August 25, 2021. The documents can be obtained in electronic format via email by request. The final document may be inspected by appointment at the Community Development Department at 14177 Frederick Street, Moreno Valley, California by calling (951) 413-3206 during normal business hours (7:30 a.m. to 5:30 p.m., Monday through Thursday, 7:30 a.m. to 4:30 p.m., Friday).

PUBLIC HEARING: All interested parties will be provided an opportunity to submit oral testimony during the Public Hearing and/or provide written testimony during or prior to the Public Hearing. The application file and related environmental documents may be inspected at the Community Development Department at 14177 Frederick Street, Moreno Valley, California during normal business hours (7:30 a.m. to 5:30 p.m., Monday through Thursday, and 7:30 a.m. to 4:30 p.m. Friday).

PLEASE NOTE: The Planning Commission may consider and approve changes to the proposed items under consideration during the Public Hearing.

GOVERNMENT CODE § 65009 NOTICE: If you challenge any of the proposed actions taken by the Planning Commission in court, you may be limited to raising only those issues you or someone else raised during the Public Hearing described in this notice, or in written correspondence delivered to the Planning Division of the City of Moreno Valley during or prior to, the Public Hearing.

Upon request and in compliance with the Americans with Disabilities Act of 1990, any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to James Verdugo, ADA Coordinator, at 951.413.3350 at least 48 hours before the meeting. The 48-hour notification will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

Packet Pg. 3386

Attachment: 600 Foot Mailing Notice (4465 : PEN20-0118-