PLANNING COMMISSION AGENDA

January 16, 2014

PLANNING COMMISSION MEETING – 7:00 P.M.

CITY OF MORENO VALLEY
City Hall Council Chambers
14177 Frederick Street
Moreno Valley, California 92553

CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

APPROVAL OF AGENDA

PUBLIC ADVISED OF THE PROCEDURES TO BE FOLLOWED IN THE MEETING

(ON DISPLAY AT THE REAR OF THE ROOM)

COMMENTS BY ANY MEMBER OF THE PUBLIC ON ANY MATTER WHICH IS NOT LISTED ON THE AGENDA AND WHICH IS WITHIN THE SUBJECT MATTER JURISDICTION OF THE COMMISSION

The City of Moreno Valley complies with the Americans with Disabilities Act of 1990. If you need special assistance to participate in this meeting, please contact Mel Alonzo, ADA Coordinator at (951) 413-3027 at least 48 hours prior to the meeting. The 48-hour notification will enable the City to make arrangements to ensure accessibility to this meeting.

NON-PUBLIC HEARING ITEMS

PUBLIC HEARING ITEMS

1. Case Description: P13-111 - Appeal of the Community & Economic Development Director's November 22, 2013 approval of Amended Plot Plan P13-111.

Applicant: ALDI
Owner: Ridge Rancho Belago
Representative: The Walker Companies
Location: South side of State Route 60, on the north side of Eucalyptus Avenue and approximately 650 feet west of Redlands Boulevard.
Proposal: Amended Plot Plan for the Project Orion Distribution Center (ALDI Foods) to construct an 800,340 square foot warehouse distribution facility in place of the 937,260 square foot warehouse facility originally approved for the West Ridge Commerce Center project (PA08-0097).
Case Planner: Jeff Bradshaw

Recommendation: **APPROVE** Resolution No. 2014-02 and thereby:

1. **RECOGNIZE** that an Addendum to the original West Ridge Commerce Center project Environmental Impact Report was prepared for Amended Plot Plan P13-111. The Addendum concludes that implementation and operation of the amended plot plan will not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified EIR. See copy of the attached Addendum included as Exhibit A; and

2. **APPROVE** Amended Plot Plan P13-111, subject to the attached conditions of approval included as Exhibit B.

2. Case Description: PA13-0027 (Housing Element Update)
Applicant: City of Moreno Valley
Owner: City of Moreno Valley
Representative: Community & Economic Development Department - Planning
Location: Citywide
Proposal: General Plan Amendment to update the City of Moreno Valley's Housing Element.
Case Planner: Claudia Manrique

Recommendation: **APPROVE** Resolution No. 2014-01 and thereby **RECOMMEND** that the City Council:

1. **RECOGNIZE** that this item is exempt from the provisions of the California Environmental Quality Act (CEQA), as a Class 32 Categorical Exemption, CEQA Guidelines, Section 15061(b)(3), which states the general rule is that CEQA applies only to projects which have the potential for causing a significant effect on the environment; and

2. **APPROVE** PA13-0027 (General Plan Amendment) based on the findings contained in the resolution.

OTHER BUSINESS

STAFF COMMENTS

PLANNING COMMISSIONER COMMENTS

ADJOURNMENT

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PLANNING COMMISSION
STAFF REPORT

Case:	P13-111 – Amended Plot Plan
Date:	January 16, 2014
Applicant:	ALDI
Representative:	Ridge Rancho Belago
Location:	South side of State Route 60, on the north side of Eucalyptus Avenue and approximately 650 feet west of Redlands Boulevard.
Proposal:	Appeal of the Community & Economic Development Director's November 22, 2013 approval of Amended Plot Plan P13-111 to construct an 800,430 square foot warehouse distribution facility in place of the 937,260 square foot warehouse facility originally approved for the West Ridge Commerce Center project (PA08-0097).
Recommendation:	Approval

SUMMARY

The applicant proposes to develop the an 800,430 square foot refrigerated warehouse facility on a 55 acre site in place of a 937,260 square foot warehouse facility which was originally approved by the City Council for the same site on September 6, 2011.

PROJECT DESCRIPTION

Amended Plot Plan P13-111 was approved by the Community and Economic Development Director on November 22, 2013 following review of the project plans and preparation of an Addendum to the Certified Environmental Impact Report (EIR) for the West Ridge Commerce Center project.

An appeal of this administrative decision to the Planning Commission was received by the City on December 5, 2013. The project was then scheduled for a Planning Commission public hearing on January 16, 2014. The appeal letter challenges the appropriateness of preparing an EIR Addendum to address the changes to the project proposed by Amended Plot Plan P13-111. A copy of the appeal letter has been included in the staff report as Attachment 8.

Project

The project includes an 800,430 square foot refrigerated warehouse distribution facility on 55 acres for use as the regional headquarters for grocery retailer, Aldi. Aldi is the owner/operator of the facility and would employ approximately 200 employees at this location.

The proposed refrigerated warehouse facility would replace a 937,260 square foot warehouse facility (West Ridge Commerce Center) which was approved by the City Council as Plot Plan PA08-0097 for the same site on September 6, 2011. The original approval included the Certification of an Environmental Impact Report for the West Ridge Commerce Center project.

The Amended Plot Plan P13-111 proposes the following minor changes:

- A reduction in building area from 937,260 square feet to 800,430 square feet;
- Revised elevations and colors;
- Revised on-site parking layout and circulation; and
- Re-design of the storm water detention system from two basins to a single basin.

Site

The project site is comprised of vacant land that is mostly level and at grade with Fir Avenue/Future Eucalyptus Avenue and at or below grade of adjacent State Route 60. There are no trees, rock outcroppings or existing structures located within the limits of the project site. The project site includes a portion of the Quincy Channel which includes some riparian vegetation.

The project site is zoned Light Industrial (LI) with a Business Park (BP) General Plan land use designation.

The proposed refrigerated warehouse distribution facility is a permitted use in the Light Industrial zone.

Surrounding Area

The project is located in an area that includes a mix of business park, office, commercial, residential and agricultural uses.

Developed land within proximity to the project site includes citrus groves, the Moreno Valley Auto Mall and Moreno Beach Plaza (Walmart) center to the west at Moreno Beach Drive, the 1.8 million square foot Highland Fairview Business Park (Skechers) warehouse facility to the east between Redlands and Theodore and large lot subdivisions approximately 1/4 mile to the south in the RA-2 zone.

Developed uses to the north on the other side of State Route 60 include an RV storage site, a telecommunications antenna, a residence and a feed store. The vacant 120 acre site to the west is currently proposed for development of a 2.2 million square foot industrial park by ProLogis.

Access/Parking

The project site will be accessed directly from Fir Avenue/Future Eucalyptus Avenue via Redlands Boulevard and State Route 60. This portion of Fir Avenue/Future Eucalyptus Avenue would be constructed by the applicant/developer as a condition of the project.

The driveways and interior drive aisles associated with the project have been approved by the Fire Prevention Bureau for fire truck access and turnaround. The site has also been designed for adequate truck maneuvering and turnaround within the designated loading zones located on the north and south elevations of the building.

Based upon the results of a parking study prepared per Municipal Code Section 9.11.070 a total of 313 employee spaces is needed for the operation of the proposed warehouse. The project design provides 374 employee/visitor spaces. The project satisfies all parking requirements of the City's Municipal Code.

Design/Landscaping

The site layout has been modified from the original approval by replacing two detention basins along Fir Avenue/Future Eucalyptus Avenue with a single basin and re-designing on-site circulation and employee parking.

The building has been reduced in size from 937,260 square feet to 800,430 square feet and new elevations proposed. The proposed use requires the installation of roof-mounted refrigeration units and the addition of emergency generators near the building's northwest corner.

The facility includes the following:

- 263,800 square feet of perishable area;
- 506,380 square feet of warehouse;
- 5,250 square feet mechanical room;
- 25,000 square feet of 1st floor office and 25,000 square of 2nd floor office.

The architectural design of the building is concrete tilt-up construction. Building and wall colors include earthtones with varying amounts of accent colors and vertical features to break up the architecture of building. All roof top equipment will be screened by parapet walls and screen shelters.

Site design and architectural design of the proposed warehouse distribution facility is consistent with requirements of the City's Municipal Code.

Staff worked with the applicant to ensure that all sides of the building include architectural treatment consistent with the Municipal Code. The loading bays and trailer storage areas along the northern and southern elevations have been screened from view. The screen wall along the south elevation is a fourteen (14) foot wall of concrete tilt-up construction which will match the building design and colors.

The site plan has been designed to provide landscape areas and parking lot planters consistent with the City's Municipal Code. The City's Municipal Code does not require a minimum percentage of landscape on a site. Instead, there are requirements for landscape setback areas along perimeter streets, parking lot landscape, street trees and landscape treatments around the perimeter of the buildings where visible from the public right-of-way. The project as designed meets the City's current landscape criteria.

Signs are not a part of this approval and will be reviewed and approved under separate administrative permit.

This project has been reviewed and the design of the proposed Amended Plot Plan conforms to all development standards of the LI zone and the design guidelines for industrial uses as required within the City's Municipal Code.

REVIEW PROCESS

The project was reviewed by the Project Review Staff Committee (PRSC) in September and October 2013. Minor modifications were required to the plot plan exhibits and preliminary grading plan.

Revised plans were submitted in October 2013. Following review of the revised exhibits, notice of a pending Administrative Decision was published and circulated with the Amended Plot Plan being approved by the Community and Economic Development Director on November 22, 2013.

An appeal of this decision was received by the City on December 5, 2013 and a determination was made to schedule the project for a Planning Commission public hearing on January 16, 2014.

ENVIRONMENTAL

Following review of the Amended Plot Plan application P13-111, staff determined that preparation of an Addendum to the Certified EIR for the West Ridge Commerce Center project was warranted to address minor changes and since none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR had occurred. Section 1.3 of the Addendum provides a brief explanation of the decision to not prepare a subsequent EIR for Amended Plot Plan P13-111.

The preparation of the Addendum included updates to the environmental checklist, updates to the project's traffic and air quality studies, and a field review update to the original biological study.

The Addendum concluded that implementation and operation of the amended plot plan will not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified EIR.

The California Environmental Quality Act Guidelines do not require the circulation of an addendum for public review. However, notices of a Pending Administrative Review for Amended Plot Plan P13-111 were distributed through the United State Postal Service to all property owners within 300 feet of the project site and to all interested parties.

Copies of the Addendum have been available to the public during the 10 day notice period and provided to all interested parties upon request.

NOTIFICATION

As noted above, public notice of a Pending Administrative Review for Amended Plot Plan P13-111 was distributed to all property owners within 300 feet of the project site and to all interested parties in advance of the November 22, 2013 approval of the project.

In response to the notices, the City received two comments letters which have been included in the staff report as Attachment 6.

Concerns raised in the letters included:

- Site design and aesthetics;
- Multi-use trail installation;
- Mitigation for traffic impacts;
- Impacts to air quality;
- Increased greenhouse gas emissions; and
- The adequacy of existing mitigation measures.

The applicant and the environmental consultant prepared responses to those comment letters which are included in the staff report as Attachment 7.

An appeal of this decision was received by the City on December 5, 2013 and the project was placed on the Planning Commission's January 16, 2014 public hearing agenda. A copy of the appeal letter has been included in the staff report as Attachment 8.

Public notice of the January 16, 2014 Planning Commission public hearing was sent to all property owners of record within 300' of the project. The public hearing notice for this project was also posted on the project site and published in the local newspaper.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission **APPROVE** Resolution No. 2014-02 and thereby:

1. **RECOGNIZE** that an Addendum to the original West Ridge Commerce Center project Environmental Impact Report was prepared for Amended Plot Plan P13-111. The Addendum concludes that implementation and operation of the amended plot plan will not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified EIR. See copy of the attached Addendum included as Exhibit A; and

2. **APPROVE** P13-111 (Amended Plot Plan), subject to the attached conditions of approval included as Exhibit B.

Prepared by:

Jeff Bradshaw
Associate Planner

Approved by:

Chris Ormsby, AICP
Interim Planning Official

ATTACHMENTS:

1. Public Hearing Notice
2. Planning Commission Resolution No. 2014-02 with copy of Addendum and conditions of approval
3. Aerial Photograph
4. Architectural Plans
5. Preliminary Grading Plan
6. Administrative approval comment letters
7. Responses to comment letters
8. Appeal letter
9. Certified Final EIR – For Reference
10. Draft EIR – For Reference

Notice of
PUBLIC HEARING

This may affect your property. Please read.

Notice is hereby given that a Public Hearing will be held by the Planning Commission of the City of Moreno Valley on the following item(s):

CASE: P13-111 (Amended Plot Plan – Appeal)

APPLICANT: ALDI

OWNER: Ridge Rancho Belago

REPRESENTATIVE: The Walker Companies

LOCATION: South side of State Route 60, on the north side of Eucalyptus Avenue and approximately 650 feet west of Redlands Boulevard.

PROPOSAL: Appeal of the Community & Economic Development Director's November 22, 2013 approval of Amended Plot Plan P13-111 for the Project Orion Distribution Center (ALDI Foods) project. This project proposes to construct an 800,340 square foot warehouse distribution facility in place of the 937,260 square foot warehouse facility originally approved for the West Ridge Commerce Center project (PA08-0097).

ENVIRONMENTAL DETERMINATION: An Addendum to the certified West Ridge Commerce Center project Environmental Impact Report was prepared for the Amended Plot Plan. The Addendum concludes that implementation and operation of the Project Orion development plan will not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the certified EIR.

COUNCIL DISTRICT: 3

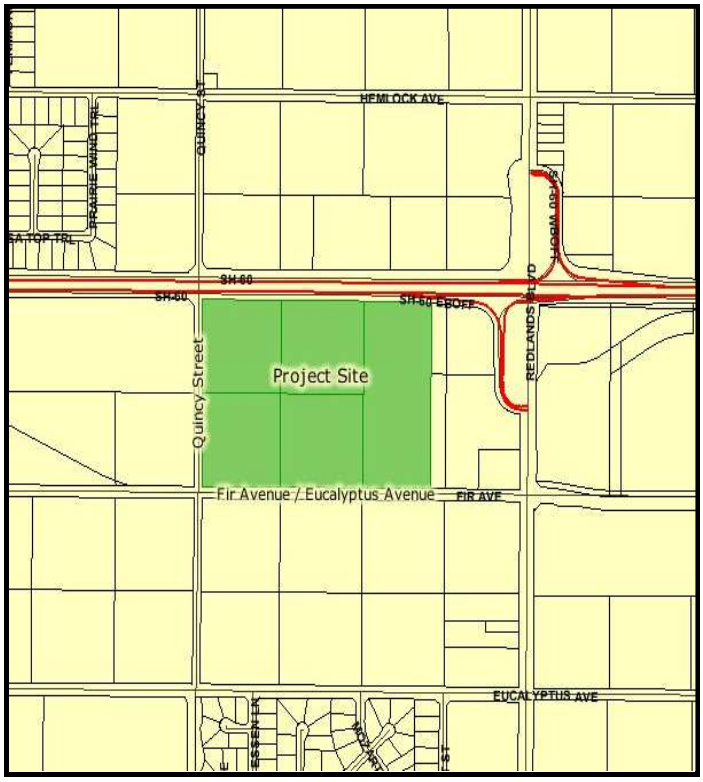
STAFF RECOMMENDATION: Approval

Any person interested in any listed proposal can contact the Community & Economic Development Department, Planning Division, at 14177 Frederick St., Moreno Valley, California, during normal business hours (7:30 a.m. to 6:00 p.m., Monday through Thursday and 2nd and 4th Fridays from 7:30 a.m. to 1:30 p.m.), or may telephone (951) 413-3206 for further information. The associated documents will be available for public inspection at the above address.

In the case of Public Hearing items, any person may also appear and be heard in support of or opposition to the project or recommendation of adoption of the Environmental Determination at the time of the Hearing.

The Planning Commission, at the Hearing or during deliberations, could approve changes or alternatives to the proposal.

If you challenge any of these items in court, you may be limited to raising only those items you or someone else raised at the Public Hearing described in this notice, or in written correspondence delivered to the Planning Commission at, or prior to, the Public Hearing.



LOCATION N ∅

PLANNING COMMISSION HEARING

City Council Chamber, City Hall
14177 Frederick Street
Moreno Valley, Calif. 92553

DATE AND TIME: January 16, 2014 at 7 PM

CONTACT PLANNER: Jeff Bradshaw

PHONE: (951) 413-3224

ATTACHMENT 1

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RESOLUTION NO. 2014-02

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY APPROVING AMENDED PLOT PLAN APPLICATION NO. P13-111 FOR AN 800,430 SQUARE FOOT REFRIGERATED WAREHOUSE DISTRIBUTION FACLITY ON 55 ACRES WITHIN ASSESSOR'S PARCEL NUMBERS 488-330-003 to -006 AND -026, AND RECOGNIZING THE PREPARATION OF AN ADDENDUM TO THE CERTIFIED WEST RIDGE COMMERCE CENTER ENVIRONMENTAL IMPACT REPORT (SCH #2009101008).

WHEREAS, the applicant, filed an application on September 17, 2013 for the approval of Amended Plot Plan application P13-111 for development of a refrigerated warehouse distribution facility as described in the title of this Resolution; and

WHEREAS, on September 6, 2011, the City Council of the City of Moreno Valley reviewed in full the Final EIR, the Statement of Overriding Considerations and Mitigation Monitoring Program for the West Ridge Commerce Center Project and Certified the Environmental Impact Report (State Clearinghouse #2009101008) and approved Plot Plan PA08-0097; and

WHEREAS, staff determined that an Addendum to the Certified Environmental Impact Report for the West Ridge Commerce Center project should be prepared for Amended Plot Plan P13-111 in conformance with CEQA Guidelines; and

WHEREAS, an Addendum was prepared by the environmental consulting firm, Applied Planning, and reviewed by Planning staff; and

WHEREAS, the Addendum concludes that implementation and operation of Amended Plot Plan P13-111 will not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified EIR;

WHEREAS, Amended Plot Plan P13-111 has been conditioned to implement the original Mitigation Monitoring Program for the West Ridge Commerce project as outlined in the Certified EIR are implemented; and

WHEREAS, the Amended Plot Plan was approved by the Community and Economic Development Director on November 22, 2013; and

WHEREAS, an appeal of the November 22, 2013 approval was filed with the City on December 5, 2013; and

WHEREAS, on January 16, 2014, the Planning Commission of the City of Moreno Valley held a meeting to consider the application; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

WHEREAS, there is hereby imposed on the subject development project certain fees, dedications, reservations and other exactions pursuant to state law and City ordinances;

WHEREAS, pursuant to Government Code Section 66020(d)(1), **NOTICE IS HEREBY GIVEN** that this project is subject to certain fees, dedications, reservations and other exactions as provided herein.

NOW, THEREFORE, BE IT RESOLVED, it is hereby found, determined and resolved by the Planning Commission of the City of Moreno Valley as follows:

Section 1 – Addendum to Certified EIR:

NOW, THEREFORE, the Planning Commission of the City of Moreno Valley does hereby resolve as follows:

A. This Planning Commission hereby specifically finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the above-referenced meeting on January 16, 2014, including written and oral staff reports, and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. No Subsequent or Supplemental EIR is required.

FACT: Preparation of an Addendum to the Certified EIR for the West Ridge Commerce Center project for Amended Plot Plan P13-111 is warranted to address changes or additions since none of the conditions described in the California Environmental Quality Act (CEQA) Guidelines Section 15162 calling for preparation of a Subsequent EIR have occurred. Section 1.3 of the Addendum provides a brief explanation of the decision to not prepare a subsequent EIR for Amended Plot Plan P13-111.

2. An Addendum Need Not Be Circulated for Public Review.

FACT: As stated in Section 15164(c) of the CEQA Guidelines, an Addendum to the Environmental Impact Report need not be recirculated for public review. The Addendum was not circulated for public review. However, notices of a Public Hearing for Amended Plot Plan P13-111 were distributed through the United State Postal Service to all property owners within 300 feet of the project site and to all interested parties. The notice provided a general project description and referenced the public hearing date of January 16, 2014.

Copies of the Addendum were available during the noticing period and provided to all interested parties upon request.

3. Independent Judgment Finding

FACT: The Applicant retained the independent consulting firm of Applied Planning, Inc. ("Applied Planning") to prepare the Addendum for the Project. Applied Planning has prepared the Addendum under the supervision, direction and review of the City. The City of Moreno Valley is the Lead Agency for the preparation of the Addendum to the EIR, as defined by CEQA CPRC Section 21067 as amended. The Planning Commission has received and reviewed the Addendum prior to making any decision to approve or disapprove the Project.

The Addendum for the Project reflects the City's independent judgment. The City has exercised independent judgment in accordance with *Public Resources Code* Section 21082.1(c) (3) in directing the consultant in the preparation of the Addendum as well as reviewing, analyzing and revising material prepared by the consultant.

Section 2 – Amended Plot Plan:

A. This Planning Commission hereby specifically finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the above-referenced meeting on January 16, 2014, including written and oral staff reports, and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. **Conformance with General Plan Policies –** The proposed Amended Plot Plan is consistent with the General Plan, and its goals, objectives, policies and programs.

   FACT: The General Plan encourages a mix of industrial uses to provide a diversified economic base and ample employment opportunities. Stated policies require the avoidance of adverse impacts on surrounding properties and the screening of industrial uses to reduce glare, noise, dust, vibrations and unsightly views. The project as designed and conditioned would achieve the objectives of the City of Moreno Valley's General Plan. The proposed project is consistent with the General Plan and do not conflict with the goals, objectives, policies, and programs established within the Plan.

2. **Conformance with Zoning Regulations –** The proposed Amended Plot Plan complies with all applicable zoning and other regulations.

FACT: The project site is currently zoned Industrial. The proposed use will comply with all applicable zoning regulations. The project is designed in accordance with the provisions of Chapter 9.05 Industrial Districts of the City's Municipal Code.

3. **Health, Safety and Welfare –** The proposed use as identified on the Amended Plot Plan will not be detrimental to the public health, safety or welfare or materially injurious to properties or improvements in the vicinity.

   FACT: The proposed 800,430 square foot refrigerated warehouse facility as designed and conditioned will not adversely affect the public health, safety or general welfare. An Addendum to the Certified West Ridge Commerce Center EIR was prepared to address the potential environmental impacts of the project in accordance with the provisions of the California Environmental Quality Act (CEQA). The Addendum concluded that implementation and operation of the Project Orion development plan will not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified EIR.

4. **Location, Design and Operation –** The location, design and operation of the proposed project will be compatible with existing and planned land uses in the vicinity.

   FACT: The project is located on the south side of State Route 60 and east of the Moreno Valley Auto Mall. Land uses to the north include the freeway with BP zone land to the west and Community Commercial zone land to the east. South of the facility on the other side of Fir Avenue/Future Eucalyptus Avenue is vacant RA-2 zone land with tract homes in the RA-2 zone approximately ¾ miles further south. The proposed refrigerated warehouse distribution facility is a permitted use within the site's Light Industrial (LI) zone. The facility has been designed to meet the setback/buffering requirements for warehouse projects in the Industrial zone that are proximate to single-family residential zoned land. As designed and conditioned the project is compatible with existing and proposed land uses in the vicinity.

C. FEES, DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

1. FEES

Impact, mitigation and other fees are due and payable under currently applicable ordinances and resolutions. These fees may include but are not limited to: Development Impact Fee, Transportation Uniform Mitigation Fee (TUMF), Multi-species Habitat Conservation Plan (MSHCP) Mitigation Fee, Stephens Kangaroo Habitat Conservation fee, Underground Utilities in lieu Fee, Area Drainage Plan fee, Bridge and

Thoroughfare Mitigation fee (Future) and Traffic Signal Mitigation fee. The final amount of fees payable is dependent upon information provided by the applicant and will be determined at the time the fees become due and payable.

Unless otherwise provided for by this resolution, all impact fees shall be calculated and collected at the time and in the manner provided in Chapter 3.32 of the City of Moreno Valley Municipal Code or as so provided in the applicable ordinances and resolutions. The City expressly reserves the right to amend the fees and the fee calculations consistent with applicable law.

2. DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

The adopted Conditions of Approval for P13-111, incorporated herein by reference, may include dedications, reservations, and exactions pursuant to Government Code Section 66020 (d) (1).

3. CITY RIGHT TO MODIFY/ADJUST; PROTEST LIMITATIONS

The City expressly reserves the right to establish, modify or adjust any fee, dedication, reservation or other exaction to the extent permitted and as authorized by law.

Pursuant to Government Code Section 66020(d)(1), NOTICE IS FURTHER GIVEN that the 90 day period to protest the imposition of any impact fee, dedication, reservation, or other exaction described in this resolution begins on the effective date of this resolution and any such protest must be in a manner that complies with Section 66020(a) and failure to timely follow this procedure will bar any subsequent legal action to attack, review, set aside, void or annul imposition.

The right to protest the fees, dedications, reservations, or other exactions does not apply to planning, zoning, grading, or other similar application processing fees or service fees in connection with this project and it does not apply to any fees, dedication, reservations, or other exactions of which a notice has been given similar to this, nor does it revive challenges to any fees for which the Statute of Limitations has previously expired.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY APPROVES** Resolution No. 2014-02 and thereby:

1. **RECOGNIZES** that an Addendum to the original West Ridge Commerce Center project Environmental Impact Report was prepared for Amended Plot Plan P13-111. The Addendum concludes that implementation and operation of the amended plot plan will not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified EIR. See copy of the attached Addendum included as Exhibit A; and

2. **APPROVES** P13-111 (Amended Plot Plan), subject to the attached conditions of approval included as Exhibit B.

APPROVED this 16th day of January, 2014.

_____
Meli Van Natta
Chair, Planning Commission

ATTEST:

_____
Chris Ormsby, Interim Planning Official
Secretary to the Planning Commission

APPROVED AS TO FORM:

_____
City Attorney

Attached: Addendum to the Certified EIR
Conditions of Approval

Project Orion Distribution Center

Addendum to the Westridge Commerce Center Certified Environmental Impact Report (SCH No. 2009101008)

Prepared for:
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92552

Prepared by:

applied planning inc

November 2013

Project Orion Distribution Center
Addendum to the Westridge Commerce Center
Certified Environmental Impact Report
(SCH No. 2009101008)

Prepared for:

The City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92552

Prepared By:

Applied Planning, Inc.
5817 Pine Avenue, Suite A
Chino Hills, CA 91709

November 2013

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1.0 Introduction

SECTION 1.0
INTRODUCTION

1.1 PROJECT SUMMARY

The Project Orion considered herein proposes development of up to 825,430 square feet of distribution warehouse uses, including office uses of up to 50,000 square feet within an approximately 52-acre site located within the easterly portion of the City of Moreno Valley.

The Project site is currently entitled pursuant to the Westridge Commerce Center Certified EIR (State Clearinghouse No. 2009101008) approved by the City on September 6, 2011. At the time of the Project approval, no specific tenant for the industrial building had been identified; however, since that time, Project Orion has entered into agreements to construct and operate the facilities previously entitled as the Westridge Commerce Center.

1.2 BACKGROUND

The Project site is currently approved for development subject to the 2011 Westridge Commerce Center development plan (Plot Plan PA08-0097/0098). The 2011 development plan included up to 937,260 square feet of light industrial warehouse/distribution uses, including approximately 14,000 square feet of office uses. The remainder of the 54.66-acre site was planned to provide right-of-way dedications, including Caltrans right-of-way dedications on the south side of State Route 60 (SR-60); and additional easements for local streets, including the future Eucalyptus Avenue to the south, and "Street A" to the east.

For purposes of comparison, development scenarios envisioned under the 2011 Westridge Commerce Center development plan and the Project Orion Distribution Center development plan are summarized in Table 1.2-1.

Table 1.2-1
Certified EIR and Addendum Project Development Comparison

Development Scenario	Acreage[1]	Building Area		
		Warehouse/ Distribution	Office	Total
2011 Westridge Commerce Center (Certified EIR Project)	54.66 acres gross (51.68 acres net)	923,260 SF (173 dock doors)	14,000 SF	937,260 SF
Project Orion Distribution Center (Addendum Project)	52 acres gross (49 acres net)	775,430 SF (134 dock doors)	50,000 SF	825,430 SF

Sources: *Westridge Commerce Center Draft EIR* (Applied Planning, Inc.) October 2010; Project Orion Conceptual Development Plans and Tabulations, September 2013.
Note:
[1] The difference in overall acreage between the 2011 Certified EIR and the Addendum Project are due to property line adjustments based on the dedication of public rights-of-way.

1.3 ADDENDUM OVERVIEW AND PURPOSE

Potential environmental impacts of the 2011 Westridge Commerce Center Project were evaluated in the *Westridge Commerce Center EIR*, SCH No. 2009101008, which was certified by the City of Moreno Valley in 2011. The Certified EIR is considered to establish an upper limit, or maximum potential impact scenario for development of the subject site. As substantiated herein, when compared to development contemplated under the 2011 Certified EIR Project, the development proposed under Project Orion (the Addendum Project) would not increase, and in certain instances would reduce, environmental impacts resulting from the currently approved development of the Project site.

The purpose of this Addendum is to define, describe, compare, and contrast potential environmental impacts of the Project Orion Distribution Center in the context of the environmental impacts associated with the 2011 Westridge Commerce Center Development Plan as assessed in the Certified EIR. In so doing, this Addendum substantiates consistency with applicable California Environmental Quality Act (CEQA) *Guidelines* requirements.

More specifically, Section 15164 of the CEQA Guidelines states that an Addendum to an EIR shall be prepared "if some changes or additions [to a Certified EIR] are necessary, but none of the conditions described in Section 15162 calling for preparation of an EIR have occurred." Section 15162 of the CEQA Guidelines identifies the conditions that require preparation of a subsequent EIR (as opposed to an Addendum or other CEQA documentation), as discussed below.

As presented at Section 15162 of the CEQA Guidelines, when an EIR has been certified for a project, no subsequent EIR shall be prepared for a project unless the lead agency determines, on the basis of substantial evidence, that one or more of the following conditions are met:

- Substantial changes are proposed in the project that would require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects;

- Substantial changes have occurred with respect to the circumstances under which the project is undertaken that will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; or

- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified, shows any of the following:

    - The project will have one or more significant effects not discussed in the previous EIR;

    - Significant effects previously examined will be substantially more severe than identified in the previous EIR;

- Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt the mitigation measures or alternatives;

- Mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measures or alternatives.

1.4 DOCUMENT ORGANIZATION

This Addendum is presented in five sections, as follows:

- **Section 1.0, "Introduction,"** provides an overview of the Addendum Project, its context, and environmental documentation applicable to the proposed development.

- **Section 2.0, "Project Description,"** presents the Addendum Project in greater detail.

- **Section 3.0, "Environmental Analysis Summary,"** summarizes the analysis of potential environmental impacts of the Addendum Project. The analysis considers potential effects of the Project for all environmental topics addressed in the Certified EIR. CEQA Guidelines topical issues incorporated pursuant recent Guidelines amendments are also addressed. Please refer also to the Environmental Checklist Form presented at Addendum Appendix A.

- **Section 4.0, "Determination,"** presents the determination regarding the appropriate environmental document for the Project.

- **Section 5.0, "Mitigation Summary,"** contains a table summarizing impacts and mitigation from the 2011 Certified EIR. Unless otherwise noted, mitigation

previously required under the 2011 EIR is also required of the Addendum Project.

1.5 CONCLUSIONS

This Addendum substantiates that the analysis presented in the Certified EIR is sufficient to satisfy CEQA requirements for the adoption of the Project Orion Distribution Center. That is, implementation and operation of the Project Orion development plan described and evaluated herein will not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified EIR.

The environmental assessment of the Addendum Project does not require any major revision of the Certified EIR, nor will the Addendum Project result in conditions that would require preparation of a Subsequent or Supplemental EIR as described in the CEQA Guidelines.

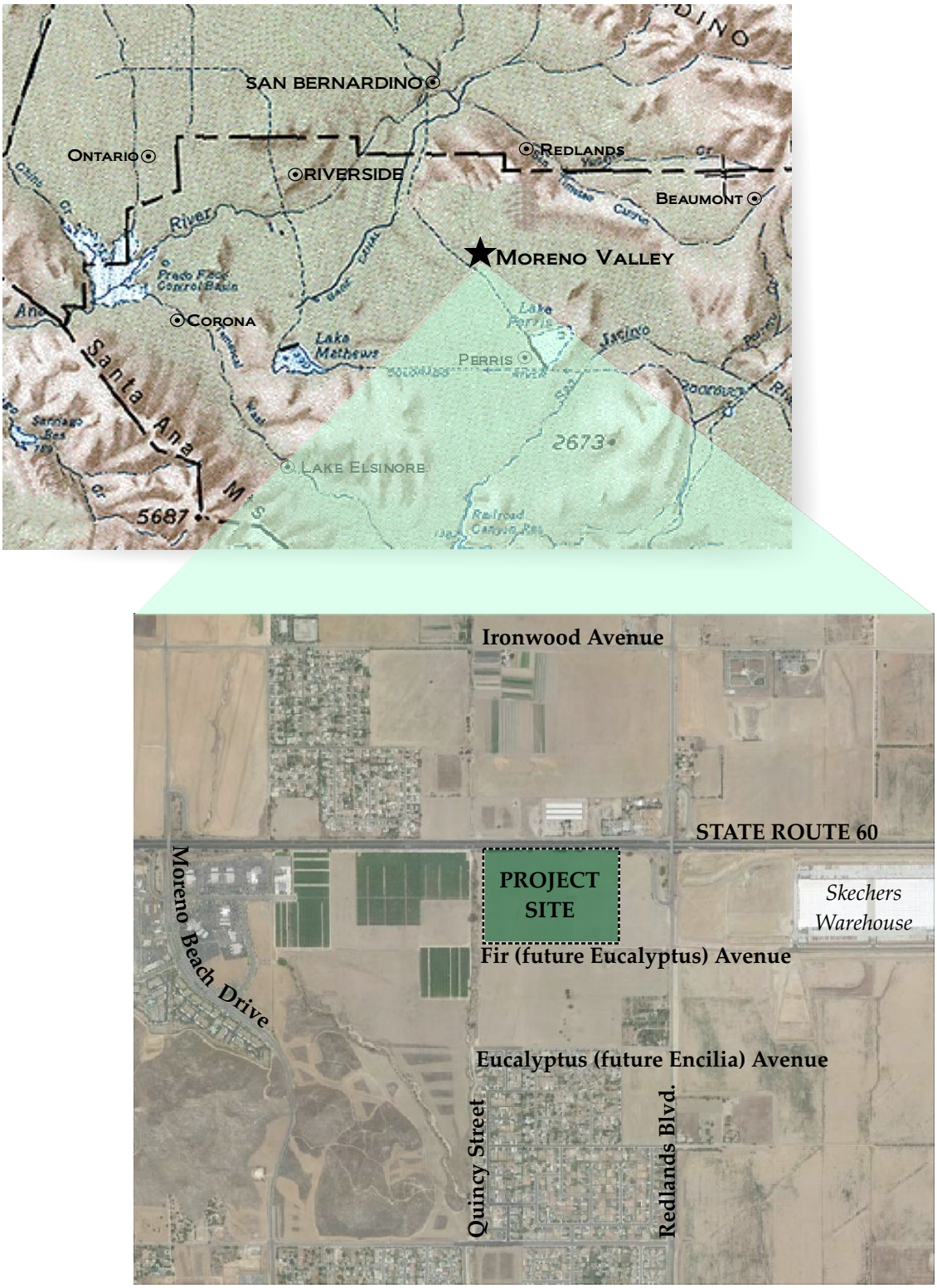
2.0 Project Description

SECTION 2.0
PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The approximately 52-acre Project site is located in the eastern portion of the City of Moreno Valley, near the State Route 60 (SR-60)/Redlands Boulevard interchange. The site is bounded by SR-60 to the north, Fir (future Eucalyptus) Avenue to the south, the Quincy Channel to the west, and vacant land designated for commercial use between the Project's east boundary and Redlands Boulevard.

The City of Moreno Valley is located in the north-central portion of Riverside County, and in the central portion of the "Inland Empire" region, which is comprised of the metropolitan Riverside/San Bernardino County area to the west, and the Pass Area and Coachella Valley to the east. Interstate 215 transects the City from north to south, and intersects with SR-60 approximately 7.5 miles to the west of the Project site. To the east of the Project site, SR-60 connects with Interstate 10. Regional and vicinity locations of the Project site are presented in Figure 2.1-1.



Source: Google Earth; Applied Planning, Inc.

Figure 2.1-1
Project Location

2.2 PROJECT CHARACTERISTICS

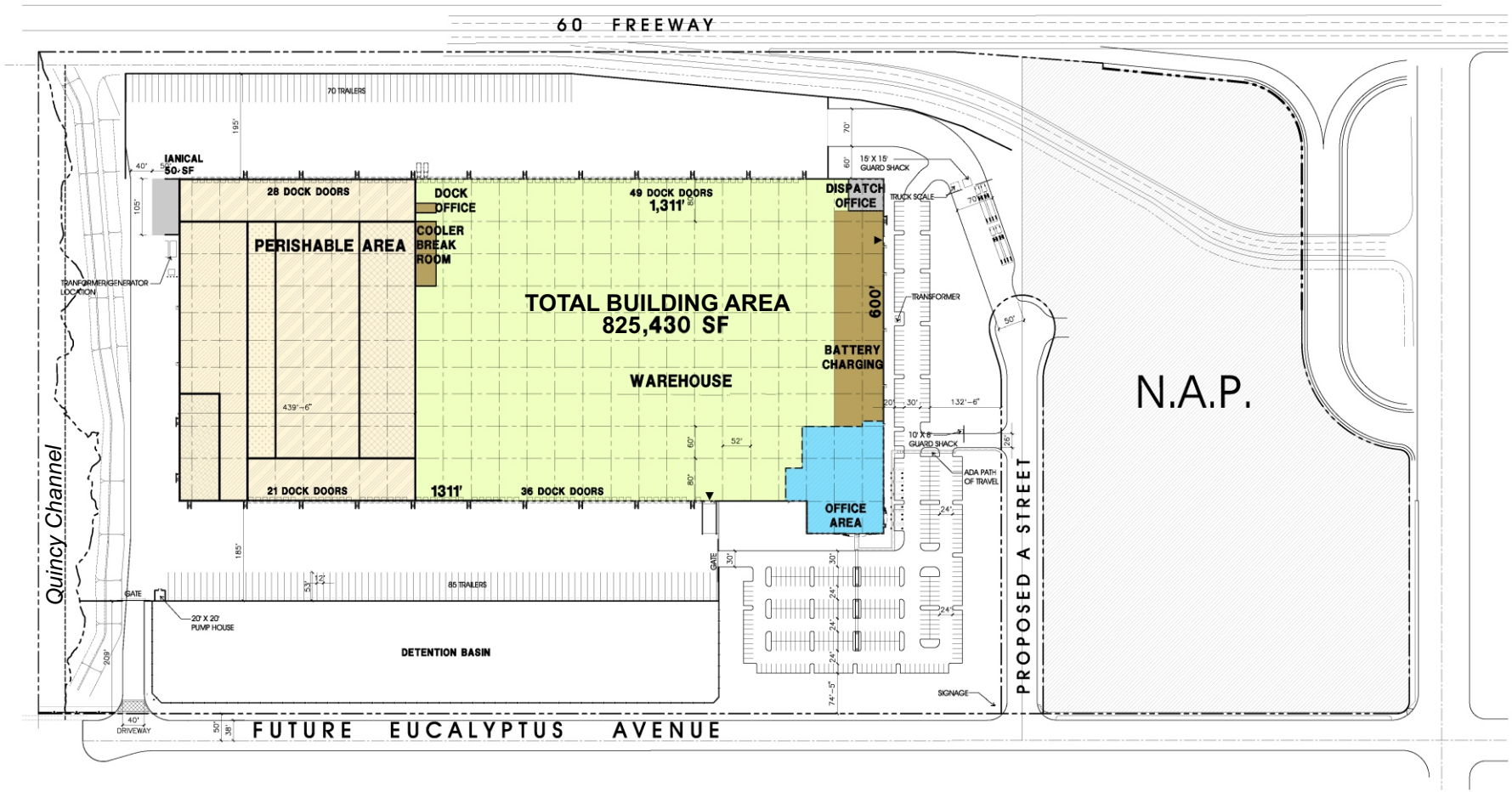
The Project Orion Distribution Center is proposed by Aldi, Inc., a worldwide grocery retailer. The Project would involve the construction of 825,430 square feet of distribution warehouse uses to support up to 150 future grocery stores within the southern California region. Approximately 50,000 square feet of office area would be provided, the majority of which would be constructed in a two-story configuration at the southeastern corner of the building.

The western portion of the building, containing 263,800 square feet and 49 dock doors, would accommodate storage and distribution of refrigerated and frozen perishable food products, while the remainder of the warehouse area and an additional 85 dock doors would be devoted to the storage and distribution of non-refrigerated goods. Maintenance and operational activities will also be housed within the eastern portion of the building. Electrical outlets will be provided adjacent to every dock door, in order to ensure that truck auxiliary power units and/or refrigeration mechanisms are able to continue operations without excessive idling, in compliance with current restrictions on diesel delivery truck idling mandated by the California Air Review Board (CARB).[1]

The majority of the facility's operations would occur between 6:00 a.m. and 11:00 p.m., seven days a week. A limited maintenance and operations staff would be at work onsite 24 hours a day.

Figure 2.2-1 presents the conceptual site plan for the Project Orion Distribution Center development. It should be noted that, similar to the Certified EIR Project, the Project Orion development has been configured to avoid sensitive biological areas associated with the Quincy Channel to the west, and to accommodate necessary supporting on-site improvements, including but not limited to: roadways, parking, landscaping, and stormwater management features, as discussed subsequently within this Section.

[1] CARB requirements specify that diesel delivery trucks shall not idle for more than three (3) minutes. This requirement has been incorporated in Certified EIR Mitigation Measure 4.3.10, which would be fully applicable to the Addendum Project. Please refer also to Addendum Section 5, "Mitigation Summary."



Source: HPA, Inc.; Applied Planning, Inc.

Figure 2.2-1
Conceptual Project Site Plan

2.3 CIRCULATION/ACCESS/PARKING CONCEPT

2.3.1 Project Site Access

Access to the Project Orion Distribution Center will be provided from Fir (future Eucalyptus) Avenue, which forms the site's southerly boundary. Regional access to the Project is provided via the SR-60/Redlands Boulevard interchange, located approximately one-quarter mile northeasterly of the site. The Addendum Project has been designed to accommodate future interchange improvements planned by Caltrans. As with the Certified EIR project, interchange improvements will be constructed by Caltrans, and are not a part of the Addendum Project.

Circulation system improvements to be implemented by the Addendum Project prior to issuance of the first Certificate of Occupancy, as required under the 2011 Certified EIR, are summarized below:

- Fir (future Eucalyptus) Avenue will be constructed to its ultimate half-section width (one-half of 104-foot right-of-way section improvements pursuant to City Standard No. 104B) as an arterial roadway in the vicinity of the westerly Project boundary, extending to Redlands Boulevard to the east. Signalization and turn lane improvements will be provided at the intersection of Fir (future Eucalyptus) Avenue at Redlands Boulevard consistent with City standards and requirements. At the westerly terminus of Fir (future Eucalyptus) Avenue, modified cul-de-sac design improvements will be provided to allow for vehicle turnaround.

- An auxiliary lane along the westerly side of Redlands Boulevard will be constructed between Fir (future Eucalyptus) Avenue and the SR-60 eastbound off-ramps.

- The proposed public street (Street "A") at the Project's easterly boundary will be constructed to its full width (78-foot right-of-way section improvements pursuant to City Standard No. 106) as an industrial collector roadway from the proposed northern terminus of the road to Fir (future Eucalyptus) Avenue in

conjunction with development. Full improvements will also be provided at the cul-de-sac "bulb" to allow for vehicle turnaround.

- Driveway access will be provided consistent with City of Moreno Valley design standards. All driveway access points will remain open and accessible during business hours.

- Consistent with the City of Moreno Valley Master Plan of Trails, a proposed trail is shown along the Project frontage on the north side of Fir (future Eucalyptus) Avenue which will join with the proposed future trail on Redlands Boulevard. Pursuant to the City of Moreno Valley Bikeway Plan, a Class I bikeway is planned on the east side of Redlands Boulevard within the vicinity of the Addendum Project.

2.3.2 Internal Circulation

The on-site circulation system concept is designed to provide safe and efficient access, including appropriate emergency response access, to all building and Addendum Project site areas. Final design of the on-site circulation system will conform to City's Planning Department, Building and Safety Department, and Fire Services Department requirements.

2.3.3 Parking

The City of Moreno Valley Municipal Code specifies a parking ratio of one parking space for each 1,000 square feet of gross floor area in a warehouse/distribution building for the first 20,000 square feet, one additional space for each 2,000 square feet of floor area within the second 20,000 square feet, and one additional space for each 4,000 square feet of floor area for areas in excess of the initial 40,000 square feet. Additionally, for office uses, one parking space is required for every 250 square feet. Pursuant to City parking requirements, the Project would be required to provide an estimated 408 parking spaces. The Project Orion Site Plan Concept provides 546 parking spaces, including 392 standard and handicap parking spaces, and 154 trailer spaces. No off-site parking is proposed, nor would it be required. Final design of parking areas will be as

reviewed and approved by the City through the City's site plan and building permit review processes.

2.4 OTHER PRIMARY PROJECT SITE FEATURES

The Project Orion Distribution Center would be subject to the same development requirements as those identified by the Certified EIR, including those related to signage, lighting, utility connections, energy efficiency and pedestrian trail construction. The following paragraphs provide a summary of notable, site-specific development features of the Certified EIR project that would also be required of the Addendum Project.

2.4.1 Landscape Screening/Fencing

Perimeter and internal landscaping will be provided consistent with provisions of the 2011 Westridge Commerce Center Certified EIR and the City's Zoning Code Section 9.17, "Landscape Requirements." In general, the landscaping emphasizes perimeter screening of the Project site by providing substantial tree and vegetative cover and shrubs along the property edges. Internal to the Project site, landscaping elements act to enhance structures, provide shade and visual interest, and define entry/access points. Consistent with provisions of the Certified EIR, the use of invasive nonnative plant species within 150 feet of the Quincy Channel would be prohibited. All landscape elements will be provided consistent with water use efficiency requirements of the City, as required under Municipal Zoning Code Section 9.17.090.

The Addendum Project's loading areas will be screened from view on the north and the northernmost portion of the east side by 8-foot high masonry screenwalls; and on the south by a 14- foot high masonry screenwall. Walls will be painted to match the building, with adjacent planted vines that will ultimately cover the walls and provide a landscaped screen. Eight-foot high wrought iron fencing is proposed to secure the remainder of the site, including the Project's proposed stormwater detention areas. Vines will be planted adjacent to Project fencing, creating a landscaped screen at maturity.

2.4.2 Stormwater Management Detention Basin

Storm water runoff from the developed Project site will be detained in an on-site detention basin and directed in a controlled manner to improved storm drain systems currently under design at the intersection of Redlands Boulevard and Fir (future Eucalyptus) Avenue. The Project's detention basin will be designed consistent with City of Moreno Valley and Santa Ana Regional Water Quality Control Board requirements, acting to contain and control the volume and rate of stormwater discharges, provide infiltration to remove sediment and other pollutants, and allow for groundwater recharge.

2.4.3 Quincy Channel Improvements

The Quincy Channel, which runs in a north-south direction along the western boundary of the Project site, is currently an unimproved, ephemeral drainage area which enters the site through three five-foot diameter culverts located under SR-60. This natural stream bed is subject to the jurisdiction of the Army Corps of Engineers (Corps) and the California Department of Fish and Game (CDFG). As required under the 2011 Certified EIR, a scour wall will be constructed by the Project to prevent further erosion of the Quincy Channel. The scour wall will be constructed outside of Corps/CDFG jurisdictional areas.

2.4.4 Waterline Improvements

A waterline to serve the Project has been required by Eastern Municipal Water District (EMWD). The 24-inch waterline will extend westerly of the site boundaries to connect with an existing waterline in Fir (future Eucalyptus) Avenue. This connection is required to provide adequate fire flow water pressures to the Project site. Since Fir (future Eucalyptus) Avenue does not yet exist west of Quincy Channel, the property owner has granted an easement to EMWD for the purposes of installation. Construction will involve clearing the 40-foot easement, trenching, and installing the waterline. Ultimately, the easement will be within the dedicated right of way of Fir (future Eucalyptus) Avenue. East of Quincy Channel, the waterline would be installed concurrent with the other Fir (future Eucalyptus) Avenue improvements required for the Project.

The waterline would connect to an existing line located 30 feet east of the intersection of Redlands Boulevard and Fir (future Eucalyptus) Avenue and proceed westerly within the Fir (future Eucalyptus) Avenue right of way. Before reaching the Quincy Channel, the line would be constructed using "jack and bore" technology to completely avoid any impacts to the streambed area. A "jack and bore" operation involves digging two pits (approximately 20 feet deep) on opposite sides of the channel. An auger is then used to create a horizontal bore and a pipe sleeve is inserted into the bored hole. The 24-inch line is placed within the 32-inch sleeve. The entry pit would be dug 140 feet west of the centerline of Quincy Street and the receiving pit would be created 40 feet west of the centerline of Quincy Street. The pipe would be located approximately 9 feet below the Quincy Channel. Both pits will be located well beyond the limits of Quincy Channel. West of the receiving pit, the line will emerge within the Fir (future Eucalyptus) Avenue right-of-way and will follow the future right-of-way alignment until it connects to the existing 24-inch waterline that currently terminates approximately 300 feet east of Pettit Street.

2.5 PROJECT OBJECTIVES

Objectives of the Project Orion Distribution Center are coincidental with those identified for the Certified EIR. These objectives include:

- Transition the Project site from its currently undeveloped state to a productive use;
- Provide jobs-producing, light industrial uses to the City and local community; and
- Capitalize on the site's regional freeway access; and
- Increase economic benefits to the City through increased job creation.

2.6 DISCRETIONARY APPROVALS ASSOCIATED WITH PROJECT

CEQA Section 15124 states in pertinent part that if "a public agency must make more than one decision on a Project, all its decisions subject to CEQA should be listed . . ." Requested decisions, or discretionary actions, necessary to realize the Project include, but may not be limited to the following:

- Adoption of this Addendum to the 2011 Westridge Commerce Center Certified EIR (SCH No. 2009101008);

- Approval of an amended plot plan reflecting the Addendum Project;

- Issuance of various construction, grading, and encroachment permits allowing implementation of the Project facilities, including but not limited to the following:

  - Permitting and Consultation through the California Department of Fish and Game (CDFG), to include a Lake and Streambed Alteration Agreement (LSA) addressing potential CDFG jurisdictional area impacts resulting from the Project; and consultation regarding the possible relocation of resident burrowing owls (if burrowing owls are determined to be present on the subject site during required pre-construction surveys).

  - CWA Section 404 and Army Corps of Engineers (ACOE) permitting will be required for Project activities affecting off-site ACOE jurisdictional areas. CWA Section 404 may also be required should the Project riparian habitat mitigation plan involve or require use of off-site federal jurisdictional areas;

  - Permitting required by/through the CWA Section 401 and Santa Ana Regional Water Quality Control Board (SARWQCB) pursuant to requirements of the National Pollutant Discharge Elimination System (NPDES) Permit;

- Permitting by/through the Riverside County Flood Control and Water Conservation District in regard to water conservation and acceptance of various flood control facilities;

- Permitting required by/through the South Coast Air Quality Management District (SCAQMD) for certain equipment to be temporarily employed within the Project during construction, and/or permanently installed and used over the life of the Project; and

- Permitting by/through the California Department of Transportation (Caltrans) for improvements within or that may affect Caltrans rights-of-way.

2.7 INTENDED USE OF THIS ADDENDUM

This Addendum addresses the potential environmental effects of the implementation and operation of the Project Orion Distribution Center in relation to impacts identified in the Certified EIR. The City of Moreno Valley is the Lead Agency for the purposes of CEQA because it has the principal responsibility and authority for deciding whether or not to approve the Addendum Project, and how it would be implemented if approved. As the Lead Agency, the City is also responsible for preparing the environmental documentation needed for the adoption of the Project Orion Distribution Center in compliance with CEQA.

The Lead Agency will employ this Addendum in its evaluation of potential environmental impacts resulting from, or associated with, approval and implementation of the Project Orion Distribution Center, to include potential effects of the development allowed under the Project Orion's component elements. It is anticipated that this Addendum may also be employed by Responsible Agencies, e.g., the Air Quality Management District(s), Regional Water Quality Control Board(s), *et al.*, for their related or dependent environmental analyses.

It is acknowledged that Project plans and development concepts identified herein are subject to refinement as the Addendum Project is further defined. Recognizing the potential for these future minor alterations to the Project, this Addendum, in all instances, evaluates likely maximum impact scenarios that would account for these minor alterations. Refinements and/or minor revisions to development proposals do not typically warrant modified or revised environmental documentation. Notwithstanding, at the discretion and direction of the City, substantive modifications to the Addendum Project described herein may warrant additional environmental evaluation.

3.0 Environmental Analysis Summary

SECTION 3.0
ENVIRONMENTAL ANALYSIS SUMMARY

3.1 INTRODUCTION

The following discussions summarize the potentially significant environmental impacts of the development allowed under the Project Orion Distribution Center within the context of the environmental analysis presented in the Certified EIR for the 2011 Westridge Commerce Center.

Development of the Project site pursuant to the design guidelines, development standards, and performance standards of the City of Moreno Valley, together with the mitigation measures incorporated in the Certified EIR and carried forward in this Addendum, along with Conditions of Approval as may be imposed by the City, act to ensure that development of the Project Orion Distribution Center would not result in environmental impacts not previously identified and addressed in the Certified EIR, and further, that development plans and activities do not otherwise conflict with, or obstruct City goals and policies.

Included in this Section is a summary comparison of development and entitlements proposed by the Project Orion Distribution Center in relation to development previously approved under the 2011 Westridge Commerce Center Certified EIR. The environmental analysis summary is focused on the CEQA topics under which the Certified EIR found that potentially significant impacts requiring mitigation would occur. These include traffic, air quality, noise, water supply, cultural resources, biological resources, and aesthetics. All other environmental topics are addressed in the Environmental Checklist (Addendum Appendix A).

The discussions that follow support the determination that the approval of the Project Orion Distribution Center would not result in any new, different, or substantially increased impacts than those that were considered and addressed in the Certified EIR; and that substantive environmental analysis beyond that presented here is not required.

3.2 CERTIFIED EIR PROJECT, PROPOSED ADDENDUM PROJECT

For purposes of comparison, development scenarios envisioned under the 2011 Westridge Commerce Center development plan and the Project Orion Distribution Center development plan are discussed in the following paragraphs, and summarized in Table 3.2-1.

3.2.1 Certified EIR Project

The 2011 Certified EIR Project included up to 937,260 square feet of light industrial warehouse/distribution uses, including approximately 14,000 square feet of office uses. The remainder of the 54.66-acre site was planned to provide right-of-way dedications, onsite landscaping, parking, and stormwater detention areas.

3.2.2 Proposed Addendum Project

Under the Project Orion Distribution Center, the Project site will accommodate similar light industrial warehouse/distribution uses to those permitted under the 2011 Certified EIR. As seen in Table 3.2-1, the overall building area would be reduced by 111,830 square feet; however, the areas designated for office use within the warehouse would be increased by 36,000 square feet. Additionally, the western portion of the building (263,800 square feet and 49 dock doors) would be designed to accommodate the storage and distribution of refrigerated and frozen perishable food products. The remainder of the warehouse area (approximately 505,380 square feet and 85 dock doors) would accommodate non-refrigerated storage and distribution uses, similar to those considered by the 2011 Certified EIR.

Under either the Proposed Addendum Project or the Certified EIR, development would be appropriately set back from the Quincy Channel to avoid conflicts with sensitive biological resource/habitat areas. Development under the Project Orion Distribution

Center would require the construction of all off-site roadway and drainage-related improvements required under the 2011 Certified EIR. Additional detail regarding these improvements is provided in the preceding Section 2.0, "Project Description," and in Section 5.0, "Mitigation Summary."

This Addendum document defines, describes, compares, and contrasts potential environmental impacts of the Addendum Project in the context of the environmental impacts associated with the development plan assessed in the Certified EIR. For purposes of comparison, development scenarios envisioned under the 2011 Westridge Commerce Center project and the Project Orion Distribution Center are summarized at Table 3.2-1.

Table 3.2-1
Development Scenario Comparison

Development Scenario	Acreage[1]	Building Area		
		Warehouse/ Distribution	Office	Total
2011 Westridge Commerce Center (Certified EIR Project)	54.66 acres gross (51.68 acres net)	937,260 SF (173 dock doors)	14,000 SF	937,260 SF
Project Orion Distribution Center (Addendum Project)	52 acres gross (49 acres net)	775,430 SF (134 dock doors)	50,000	825,430 SF

Sources: *Westridge Commerce Center Draft EIR* (Applied Planning, Inc.) October 2010; Project Orion Conceptual Development Plans and Tabulations, September 2013.
Note:
[1] The difference in overall acreage between the 2011 Certified EIR and the Addendum Project are due to property line adjustments based on the dedication of public rights-of-way.

3.3 PREVIOUS ENVIRONMENTAL DOCUMENTATION, DOCUMENTS INCORPORATED BY REFERENCE

Section 15150 of the State *CEQA Guidelines* permits and encourages that an environmental document incorporate by reference other documents that provide relevant data. The documents outlined in this Section are hereby incorporated by reference, and the pertinent material is summarized throughout this Addendum. All documents incorporated by reference are available through the City of Moreno Valley Community Development Department, Planning Division.

- **Westridge Commerce Center Certified EIR (includes Draft EIR dated October 2010 and Final EIR dated April 2011), approved September 6, 2011 (State Clearinghouse No. 2009101008).** The core and substantive environmental analysis of the Westridge Commerce Center project is found in the 2011 Certified EIR. The Certified EIR comprehensively addressed potential environmental impacts resulting from the development of up 937,260 square feet of light industrial warehouse/distribution uses within the 54.66-acre project site. Mitigation measures were incorporated in the Draft EIR, and a Mitigation Monitoring Program was provided as part of the Final EIR.

- **City of Moreno Valley General Plan and General Plan EIR** The current City of Moreno Valley General Plan, initially adopted in 1988 and updated in 2006, provides a framework for the physical development of the City, and forms the basis of decisions concerning the development of property. To this end, the General Plan establishes City land use and development policies, identifies planned land uses, and supporting infrastructure systems. State-mandated Elements addressed in the General Plan include the Community Development Element; the Parks, Recreation and Open Space Element; the Circulation Element; Safety Element; Conservation Element; and Housing Element. Development within the General Plan Area will be shaped by the General Plan's Goals, Objectives, Policies and Programs, which are integral to each of the General Plan Elements. The 2006 General Plan and General Plan Update EIR documents contain background information employed in this Addendum.

3.4 CERTIFIED EIR AND ADDENDUM ENVIRONMENTAL CONCLUSIONS

3.4.1 Overview

The Certified EIR incorporated mitigation measures for potentially significant impacts that would result from the development allowed under the Westridge Commerce Center project. However, even after the application of all feasible mitigation measures, that development was found to result in significant residual impacts affecting traffic, air quality, noise and aesthetics.

Consistent with *CEQA Guidelines* Section 15093 requirements, as part of the approval process, the Westridge Commerce Center EIR was certified by the City, including the adoption of a statement of Facts, Findings, and Overriding Considerations which acknowledged the significant impacts that would result from the approval of the Westridge Commerce Center project. This same statement of Facts, Findings, and Overriding Considerations addresses significant impacts that could result from the development allowed by the Project Orion Distribution Center. That is, the analysis presented within this Addendum demonstrates that the approval of the Project Orion Distribution Center would not result in new significant impacts, or substantively increased or different impacts than would result from the development assessed under the Certified EIR.

3.4.2 Basis for Addendum

For each environmental topic presented in the Certified EIR, the following summary analyses (and the expanded discussions presented at Appendix A to this Addendum) substantiate that:

- No substantial changes are proposed which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

- No substantial changes in circumstances have occurred which will require major revisions to the Certified EIR due to the involvement of new significant

environmental effects or a substantial increase in the severity of previously identified significant effects;

- No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the EIR was certified, shows any of the following:

  - The approval of the Project Orion Distribution Center would result in any significant effects not discussed in the Certified EIR (it would not);

  - Significant effects previously examined would be substantially more severe than shown in the Certified EIR (they would not);

  - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the Project proponents decline to adopt the mitigation measure or alternative (no previous mitigation or alternatives are declined); and

  - Mitigation measures or alternatives which are considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but the Project proponents decline to adopt the mitigation measure or alternative (no new mitigation is declined) .

As provided for under *CEQA Guidelines* 15162, this Addendum has therefore been prepared, satisfying CEQA environmental analysis and documentation requirements for the approval of the Project Orion Distribution Center.

3.4.3 Environmental Issues-Comparative Summaries

The following discussions summarize comparative impacts of the 2011 Westridge Commerce Center project (Certified EIR project) and the Project Orion Distribution Center (Addendum Project). Sequencing of topical issues here parallels their presentation within the Certified EIR.

3.4.3.1 Traffic

The Certified EIR discussion of traffic and circulation (Certified EIR Section 4.2) indicates that even with the implementation of mitigation, certain traffic and circulation impacts of the development permitted by the Westridge Commerce Center project would remain cumulatively significant. Although the Project is required to construct or pay required fees toward the completion of all necessary Study Area circulation system improvements, at the significantly-impacted locations listed below, the Project cannot feasibly construct the required improvements. In these instances, because the payment of fees would not assure the timely completion of required improvements, impacts were determined significant and unavoidable. In approving the Westridge Commerce Center project, the City adopted a Statement of Overriding Considerations pursuant to CEQA Guidelines § 15091, et seq., recognizing these significant traffic and circulation impacts.

> ***Cumulatively Significant Traffic/Circulation Impacts***
> *Pending completion of required improvements, the Project's incremental contributions to cumulative traffic impacts at or affecting the following roadway facilities are considered cumulatively significant and unavoidable.*
>
> *Intersections Affected under Opening Year Conditions:*
>
> - *Moreno Beach Drive at SR-60 Eastbound Ramps;*
> - *Redlands Boulevard at SR-60 Westbound Ramps;*
> - *Redlands Boulevard at SR-60 Eastbound Ramps*
> - *Redlands Boulevard at Fir (future Eucalyptus) Avenue; and*
> - *Quincy Street at Fir (future Eucalyptus) Avenue (new intersection).*

Roadway Segments Affected under Opening Year Conditions:

- *Redlands Boulevard from north of the SR-60 Westbound ramps to south of Eucalyptus (future Encilia) Avenue;*
- *Quincy Street south of Fir (future Eucalyptus) Avenue (future street); and*
- *Fir (future Eucalyptus) Avenue from west of Quincy Street and east of Redlands Boulevard (future street).*

Intersections Affected under General Plan Buildout Conditions:

- *Moreno Beach Drive at SR-60 Eastbound Ramps;*
- *Redlands Boulevard at SR-60 Westbound Ramps;*
- *Redlands Boulevard at SR-60 Eastbound Ramps;*
- *Redlands Boulevard at Fir (future Eucalyptus) Avenue;*
- *Quincy Street at Fir (future Eucalyptus) Avenue (new intersection);*
- *Moreno Beach Drive at Fir (future Eucalyptus) Avenue (new intersection);*
- *Redlands Boulevard at Eucalyptus (future Encilia) Avenue (new intersection); and*
- *Redlands Boulevard at Cottonwood Avenue (new intersection).*

The Project will also contribute additional traffic to Study Area freeway mainline segments that under General Plan Buildout conditions (with or without the Project) are projected to operate under deficient (LOS "F") conditions. While it is foreseeable that improvements to SR-60 in the Project vicinity will be completed prior to General Plan Buildout, because timely completion of these improvements cannot be definitively assured, the contribution of additional Project traffic to existing freeway mainline segment deficiencies is recognized as cumulatively significant and unavoidable impact.

As indicated in the Traffic Impact Analysis prepared for the Project Orion Distribution Center (Addendum Appendix B), total average daily traffic (ADT) generated by the Project is anticipated to be approximately 25 percent less than that anticipated under the Certified EIR. Please refer to the following Table 3.4-1.

Table 3.4-1
Trip Generation Comparison
Certified EIR Project vs. Addendum Project

Development Scenario	Vehicle Type	AM Peak Hour	PM Peak Hour	Daily Total
2011 Certified EIR (Westridge Commerce Center)	Cars	47	57	729
	Trucks (PCE)	143	169	2,201
	Total (PCE)	191	226	2,930
Proposed Addendum Project (Project Orion Distribution Center)	Cars	37	39	400
	Trucks (PCE)	105	45	1,800
	Total (PCE)	142	84	2,200
Comparative Increase (Decrease)	Cars	**(10)**	**(18)**	**(329)**
	Trucks (PCE)	**(38)**	**(124)**	**(401)**
	Total (PCE)	**(49)**	**(142)**	**(730)**

Sources: *Westridge Commerce Center Draft EIR* (Applied Planning, Inc.) October 2010; *Westridge Commerce Center Traffic Impact Assessment Update* (Urban Crossroads, Inc.) September 13, 2013.

Under the development assessed by the Certified EIR or the proposed Addendum Project, traffic impact mitigation and Conditions of Approval require traffic improvements (constructed as part of the development and/or programmed and funded on a fair share basis) necessary to ensure circulation system operating efficiencies. On this basis, since the Project trip generation does not exceed the trip generation under the development allowed by the Certified EIR, and trip distribution characteristics under all scenarios are substantively unchanged, the traffic impacts of the Project would not be substantially greater, or different, than those identified for the development allowed by the Certified EIR.

Other CEQA transportation/traffic considerations (potential to result in inadequate emergency access; potential to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities; and potential to result in a change in air traffic patterns, resulting in substantial safety risks) were determined to be less-than-significant for the development permitted under the Certified EIR. That is, all circulation system designs and improvements would comply with City engineering requirements, and no transportation/traffic design hazards are proposed or are

anticipated. Similarly, emergency access will be provided and maintained consistent with City and Fire Department requirements, and was demonstrated to be adequate even under existing conditions, prior to the development of an overcrossing at Quincy Channel. Current Project design concepts provide appropriate pedestrian walkways and/or trails, and the Project will accommodate bike racks/secured bicycle storage consistent with City requirements and related air quality mitigation measures. Bus routes and transit facilities serving the Project site and surrounding areas will be implemented by transit service providers consistent with ridership demands. The Project does not propose elements or operations that would conflict with alternative transportation modes.

Conclusion:

The Project would not result in new, additional, or different traffic/transportation impacts than were considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary. Please refer also to the *Westridge Traffic Impact Assessment Update* (Urban Crossroads, Inc.) September 13, 2013 (Addendum Appendix B).

3.4.3.2 Air Quality

Overview

The Certified EIR in Section 4.3, "Air Quality," addresses regional and local air quality issues including construction-source and operational-source emissions resulting from, or generated by, the Westridge Commerce Center project. The Certified EIR analysis concluded that that even after the application of mitigation, implementation of the Westridge Commerce Center project would result in temporary exceedances of regional thresholds for volatile organic compounds (VOC) and nitrogen oxide (NOx) emissions, and localized significance threshold (LST) exceedances for particulate matter. Mitigated operational-source emissions of ROC and NOx would also exceed applicable SCAQMD thresholds. Mitigation measures incorporated in the Certified EIR which would act to reduce, but not eliminate, the significance of these impacts. In approving the Westridge Commerce Center project, the City adopted a Statement of Overriding Considerations

pursuant to CEQA Guidelines § 15091, et seq., recognizing these significant air quality impacts.

Construction-Source Emissions

The Certified EIR analysis found that maximum construction-source emissions of carbon monoxide (CO) and sulfur oxides (SOx) would not exceed applicable SCAQMD thresholds. However, even after the application of all feasible mitigation measures, construction of the Project will result in temporary exceedances of regional thresholds for VOC and NOx emissions and LST exceedances for PM_{10} (at receptor locations 71 meters [233 feet] or nearer to construction activities) and $PM_{2.5}$ (at receptor locations 35 meters [115 feet] or nearer to construction activities).

It is assumed that construction activities associated with development allowed by the Project Orion Distribution Center would parallel the scope of activities reflected in the Certified EIR analysis, and would result in comparable construction-source emissions impacts. It is more likely however, that based on the Addendum Project's reduction in building area and the implementation of current construction equipment emissions controls requirements, the Project would result in comparative reductions in construction-source emissions.

Conclusion:

Based on the preceding, construction-source emissions resulting from the Project would not result in new, additional, or different construction emissions impacts than were considered and addressed in the Certified EIR. As such, potential construction-source emissions impacts associated with the Project are adequately addressed within the Certified EIR, and no changes or additions to the analysis are necessary. The City's previous Statement of Overriding Considerations addresses any significant construction-source air quality impacts that could result from the Project Orion Distribution Center.

Operational-Source Emissions

Operational-source air quality impacts based on development allowed by the Westridge Commerce Center project were found to be significant within the Certified EIR, which concluded that even after mitigation, impacts for emissions of volatile organic compounds (VOC) and nitrogen oxides (NOx) would exceed applicable thresholds. Additionally, a significant cumulative impact was identified based on the Project's potential to contribute ozone precursors (VOC and NOx) in a region that is in non-attainment for ozone. Operational emissions would be generated from the following sources: vehicle trips, including tailpipe exhaust and fugitive dust related to vehicular travel; combustion associated with natural gas and electricity; landscape maintenance equipment; architectural coatings (e.g., paints); and emissions from consumer products (e.g., cleaning solutions).

As detailed in the updated Air Quality Impact Assessment (Addendum Appendix C), the development allowed by the Project Orion Distribution Center would result in an overall reduction in air pollutant emissions, greenhouse gas (GHG) emissions, and health risk impacts related to Diesel Particulate Matter when compared to emissions generated under the development assessed by the Certified EIR. A comparison of peak daily operational air pollutant emissions for the Certified EIR project and the Addendum Project is presented at Table 3.4-2. Commensurate reductions in health risk impacts related to the generation of Diesel Particulate Matter (DPM) and GHG emissions are reflected in Tables 3.4-3 and 3.4-4, respectively. Please refer also to the Environmental Checklist discussions presented at Appendix A to this Addendum (*See*: Checklist Items 3, "Air Quality," and 7, "Greenhouse Gas Emissions"); and the updated Westridge Commerce Center Air Quality, Greenhouse Gas and Health Risk Impact Assessment, presented at Addendum Appendix C.

Table 3.4-2

Peak Operational Emissions Comparison[1]

Certified EIR Project vs. Addendum Project (Pounds per Day)

Operational Activities	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
2011 Certified EIR Analysis (Westridge Commerce Center)						
Area Source Emissions[2]	24.60	0.54	0.55	3.35e-3	0.04	0.04
Mobile Emissions[3]	105.57	475.58	329.37	1.20	59.39	22.47
Maximum Daily Emissions	*130.16*	*476.12*	*329.92*	*1.20*	*59.43*	*22.51*
Proposed Addendum Project (Project Orion Distribution Center)						
Area Source Emissions[1]	25.75	3.99	3.49	0.02	0.30	0.30
Mobile Emissions[2]	81.00	439.31	262.43	1.02	42.16	16.89
Maximum Daily Emissions	*106.75*	*443.30*	*265.93*	*1.04*	*42.47*	*17.20*
Variance in Maximum Daily Emissions	***(23.41)***	***(32.82)***	***(63.99)***	***(0.16)***	***(16.96)***	***(5.31)***

Sources: *Westridge Commerce Center Air Quality, Greenhouse Gas, and Health Risk Impact Assessment* (Urban Crossroads, Inc.), September 16, 2013.
Notes:
[1] Reflects summer or winter (whichever greatest) scenarios using currently required CalEEMod 2013 methodologies.
[2] Includes emissions of natural gas consumption, emissions of landscape maintenance equipment, and architectural coatings emissions.
[3] Includes emissions from vehicles and fugitive dust related to vehicular travel.

Table 3.4-3

Summary of Health Risks[1]

Certified EIR Project vs. Addendum Project (Risk per Million)

Analysis Scenario	Certified EIR Project (Westridge Commerce Center)	Proposed Addendum Project (Project Orion Distribution Center)	Variance
Without Mitigation			
Maximum Exposed Sensitive Receptor	10.1	6.1	***(4.0)***
Maximum Exposed Worker Receptor	3.1	1.2	***(1.9)***
With Mitigation			
Maximum Exposed Sensitive Receptor	6.9	5.6	***(1.3)***
Maximum Exposed Worker Receptor	2.0	1.1	***(0.9)***

Source: *Westridge Commerce Center Air Quality, Greenhouse Gas, and Health Risk Impact Assessment* (Urban Crossroads, Inc.), September 16, 2013.
Notes:
[1] The SCAQMD CEQA Air Quality Handbook (1993) states that emissions of toxic air contaminants (TACs) are considered significant if a health risk assessment shows an increased risk of greater than ten in one million.

Table 3.4-4

GHG Emissions Summary Comparison

Certified EIR Project vs. Addendum Project (Metric Tons of CO_2e per Year)

Emission Source	CO_2	CH_4	N_{20}	CO_2e
2011 Certified EIR Project (Westridge Commerce Center)				
Annual construction-related emissions[1]	174.16	0.0104	0.522	338.32
Natural Gas	141.10	0.02	0.022	148.53
Landscaping	0.51	--	--	0.51
Mobile Sources	27,724.82	0.35	0.41	27,858.08
Electricity Energy	732.09	0.008	0.03	741.71
Solid Waste Generation	--	22.60	--	474.67
Water Usage	39.63	0.002	0.0005	39.81
Refrigerant Leakage	--	--	--	401.75
Subtotal Transportation Sources				*27,858.08*
Subtotal Non-Transportation Sources				*2,145.31*
Total CO_2e				*30,003.39*
Proposed Addendum Project (Project Orion Distribution Center)				
Annual construction-related emissions[2]	174.16	0.0104	0.522	338.32
Natural Gas	792.32	0.02	0.02	797.14
Landscaping	--	--	--	--
Mobile Sources	16,783.54	0.37	--	16,787.99
Electricity Energy	3,360.50	0.20	0.03	3,644.71
Solid Waste Generation	152.73	89.96	--	229.47
Water Usage	23.41	0.17	3.81e-3	27.83
Refrigerant Leakage	--	--	--	343.10
Subtotal Transportation Sources				*16,787.99*
Subtotal Non-Transportation Sources				*5,380.57*
Total CO_2e				*22,168.56*
Variance in Annual GHG Emissions				***(7,834.83)***

Sources: *Westridge Commerce Center Air Quality, Greenhouse Gas, and Health Risk Impact Assessment* (Urban Crossroads, Inc.) *September 16,* 2013.

Notes:

[1] Amortized over 30 years.

[2] Emissions previously quantified for the Westridge Commerce Center were utilized in this assessment, amortized over 30 years.

Conclusion:

Based on the preceding, the Addendum Project would not result in new significant operational-source air pollutant emissions, greenhouse gas emissions, or health risk impacts not considered and addressed within the Certified EIR. No changes or additions to the Certified EIR analysis are necessary. The City's previous Statement of Overriding Considerations addresses any significant construction-source air quality impacts that could result from the Project Orion Distribution Center.

3.4.3.3 Noise

Overview

The Certified EIR at Section 4.4, "Noise," addresses noise impacts in terms of the development allowed by the Westridge Commerce Center's compatibility with, and context within, existing and future noise environments. The Certified EIR also addressed the potential for noise from the construction and operation of the proposed uses to impact noise-sensitive receptors. The Certified EIR further considered the potential for off-site noise sources (primarily vehicular-source noise emanating from Fir (future Eucalyptus) Avenue, Redlands Boulevard, and SR-60) to affect land uses proposed under the Westridge Commerce Center. Comparative noise impacts of the Certified EIR project and the Addendum Project are summarized below.

Construction-Source Noise

Construction of the Project would employ similar equipment, operating under City Noise Ordinance constraints and limitations, also applicable to the development allowed by the Certified EIR. No new or additional sensitive receptors would be affected by the Project's construction activities, and noise levels received at off-site land uses would be consistent with noise levels considered in the Certified EIR. Construction-source noise impacts resulting from the Project are anticipated to be comparable to those considered and addressed in the Certified EIR. The Addendum Project would therefore not result in new, additional, or substantially different construction-source noise impacts than were considered and addressed in the Certified EIR.

Mobile-Source Noise

As identified in the Certified EIR, mobile-source noise generated by proximate vehicular traffic is the most significant noise source affecting the Project Area. In this regard, the Project site is bounded on the north by SR-60, a major regional connector between the Inland Empire area and the Los Angeles Basin to the west.

Further, traffic generated by either the Certified EIR project or the Addendum Project would incrementally contribute to area noise levels. However, total daily traffic volumes generated by the Addendum Project would be approximately 25 percent less than those described and analyzed in the Certified EIR.[1] Vehicle-related noise under the Project should be correspondingly reduced.

Area-Source Noise

Truck access/truck movements and loading dock activities associated with the warehouse uses proposed under the Addendum Project pose the greatest potential to result in noise that could adversely affect off-site land uses. However, the resulting noise levels received at off-site land uses would not be significant, and would not be substantively different than would otherwise occur from the development allowed under the Certified EIR project. In this regard, the warehouse uses allowed under the Project Orion Distribution Center will be implemented and operated consistent with the site plan design, development standards, design guidelines, and performance standards established under the proposed Westridge Commerce Center project, and in conformance with City ordinances, acting to reduce the potential for the Project to generate adverse noise levels.

Moreover, similar to the Certified EIR project, the Addendum Project orients the majority of loading dock activities toward the SR-60 freeway, and away from potentially affected residential land uses. In those instances where loading dock activities parallel potential off-site residential land uses (i.e., future residentially designated parcels south of Fir (future Eucalyptus) Avenue), the off-site land uses are at

[1] Please refer also to the discussion of comparative traffic volumes presented at Checklist Item 16,"Transportation/Traffic."

present undeveloped, and are separated by a minimum of approximately 400 feet from the nearest loading dock activities. This physical separation between noise sources and noise receptors acts to substantially reduce noise levels received at off-site properties. Moreover, under Project buildout conditions, and as is now the case, the noise environment in the Project area would be defined by mobile sources travelling along area roadways; in this instance, traffic along Fir (future Eucalyptus) Avenue.

Empirical noise levels observed for similar distribution warehouse loading dock and truck delivery activities approximate 73 decibels (dBA) when measured at a distance of 60 feet. For each doubling of distance between noise source and receptor, the received noise level decreases by approximately 6.0 dBA. At the nearest off-site receptor residential land uses (approximately 400 feet from the nearest loading dock areas), noise levels generated by the Project's loading dock activities would be less than 60 dBA. This noise level is consistent with the City General Plan and State of California Land Use/Noise compatibility guidelines, which indicate that residential land uses are considered generally acceptable in noise environments between 55 and 60 dBA, and conditionally acceptable in noise environments of 70 dBA or less. The Project is further required to conform to City Noise Ordinance performance standards to ensure that operational noise received at off-site land uses does not disturb the peace and quiet of adjacent residential zones.

Based on the preceding, the Addendum Project would not result in new, additional, or substantially different operational noise impacts than were considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Other CEQA Noise Considerations

Other CEQA noise considerations (potential exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels; potential exposure of people residing or working in the project area to excessive noise levels from airports/airstrips or airport operations) were determined to be less-than-significant for the Certified EIR project, and would remain less-than-significant under the Addendum Project.

Conclusion:

Because the scope and character of potential noise impacts resulting from the Project are within the parameters considered in the Certified EIR, no new, additional, or different construction-source or operational-source noise impacts than were considered and addressed in the Certified EIR are anticipated. No changes or additions to the Certified EIR analysis are necessary.

3.4.3.4 Water Supply

The Certified EIR at Section 4.5, "Water Supply," addressed the Westridge Commerce Center's potential to substantially deplete groundwater supplies or 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; or to require new or expanded water supplies. The analysis included in the Certified EIR was supported by a Water Services Assessment prepared by the Eastern Municipal Water District (EMWD), and by EMWD's Urban Water Management Plan, along with the Metropolitan Water District's Regional Urban Water Management Plan. Mitigation was identified to require the contribution of funding toward the acquisition of new water supplies, treatment or recycled water facilities; the use of water-efficient devices and landscaping; development of a plan of services (POS) for the Project; and ongoing review of the Project WSA prior to construction. The Certified EIR found that with the implementation of mitigation, no adverse effects on water supplies or water resources, including groundwater, would result from Project implementation.

For planning purposes, EMWD uses a per-acre factor to estimate water demand based on land use type. The Westridge Commerce Center Project, as a light industrial land use, was estimated to require 700 gallons per day (GPD) per acre, or a total of 38,857 GPD, which is equivalent to approximately 44 acre-feet per year.[2] Acreage under the Project Orion site plan concept totals 52.095 acres, with no change in land use. On this basis, the Project Orion Distribution Center would require approximately 36,467 GPD,

[2] Water demand estimates are from Certified EIR Table 4.5-8. It should be noted that the acreage reflected in the Westridge Commerce Center WSA was based on a preliminary project estimate of 55.51 acres, rather than the 54.66 acre site area that is utilized in Project concepts within the remainder of the Certified EIR. On this basis, the WSA and Certified EIR provide an appropriately conservative estimate reflecting the Project's maximum water demand.

or approximately 41 acre-feet per year. Thus, the Addendum Project would have a slightly reduced demand for water when compared to the Certified EIR project, and any potential impacts associated with the Project Orion Distribution Center would be adequately addressed within the scope of the Certified EIR mitigation measures, which would all carry forward to be implemented by the Addendum Project.

Conclusion:
The Project would not result in new, additional, or different water supply impacts than were considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

3.4.3.5 Cultural Resources

As discussed at Certified EIR Section 4.7, "Cultural Resources," the Project site does not contain any known cultural resources. Notwithstanding, it is possible that previously-unidentified cultural resources could be encountered during earth moving operations. Accordingly, the Certified EIR required that grading activities be halted should such resources be unearthed. Additionally, the geological formations underlying the Project site are considered to have a moderate potential to yield fossils. To this end, the Certified EIR incorporated mitigation measures which require paleontological monitoring for excavations that exceed approximately ten feet in depth. Mitigation measures also specify reporting, recovery, cataloguing and preservation procedures, should resources be encountered within the subject site.

Revised entitlements requested under the Project Orion Distribution Center would not alter or otherwise affect the scope and location of cultural resources considered in the Certified EIR. As with the Certified EIR project, development allowed by the Addendum Project would be required to mitigate potential impacts to cultural resources by conducting archaeological and paleontological resources monitoring during construction activities, with accompanying reporting, recovery, cataloguing and preservation procedures for resources that might be encountered within the subject site.

In regards to the waterline improvements to be constructed west of the Project site, the Cultural Resources Assessment prepared for the Certified EIR (*Phase I Cultural Resources Investigation of the Proposed Westridge Commerce Center at Redlands Blvd. and the Moreno Valley Freeway and in the City of Moreno Valley, Riverside County, California,* McKenna et al., September 18, 2008) included a records search of previously reviewed resources within one mile radius of the Westridge project site, which included the waterline construction area. Additionally, a Cultural Resources Assessment was conducted for the Prologis Industrial Development, located westerly of the Project site and also included the area where the waterline will be installed. The proposed waterline will be located entirely within the future right of way of Fir (future) Eucalyptus Avenue. The right of way transverses the northern portion of the Prologis site on an east/west alignment. As previously stated, this area was studied as part of the Prologis cultural assessment. This Cultural Resources Assessment (*Cultural Resource Survey, Eucalyptus Industrial Park, City of Moreno Valley, Riverside California,* LSA, September 2011) concluded that no cultural resources are likely to be impacted by the entire development of the Prologis site. This conclusion was based on a comprehensive field survey and records search. Based on this study, it can be concluded that the impacts associated with the construction of the installation of the waterline are also considered to be less-than-significant.

Conclusion:

The Project would not result in cultural resources impacts not considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

3.4.3.6 Biological Resources

As discussed at Certified EIR Section 4.8, "Biological Resources," the Certified EIR relied on biological assessments performed between 2008 and 2010, including a general biological reconnaissance survey, a burrowing owl survey, surveys of off-site areas involved in project development, and a jurisdictional delineation. Mitigation was incorporated to ensure the protection and preservation of riparian areas associated with the Quincy Channel, which is adjacent to the site's westerly boundary. In addition, a streambed alteration agreement or permit, along with the implementation of a Habitat

Mitigation and Monitoring Plan (HMMP) to restore impacted riparian (mulefat) habitat would be required prior to the issuance of Project building permits. Mitigation measures designed to protect nesting birds in general, and specifically the burrowing owl, which is a California Species of Concern with the potential to occur onsite, were also incorporated in the Certified EIR. With the implementation of these mitigation measures, potential impacts to biological resources and habitat areas were determined less-than-significant. As with the Certified EIR project, development allowed by the Project Orion Distribution Center would be required to implement each of these mitigation measures to ensure the protection of biological resources onsite.

The proposed construction west of Quincy Channel will primarily affect an abandoned citrus grove and a band of non-native grassland. The abandoned citrus grove can be described as containing unmaintained orange and grapefruit trees. The non-native grassland is primarily comprised of numerous weedy species and some native forbs such as wildflowers that emerge, especially during rainy periods. Dominate species typically found within non-native grassland include brome, wild oats, fescues and barleys.

According to the Biological Report prepared for the proposed Prologis project, these areas are not considered to have any significant biological values. (*MSHCP Consistency Analysis and Burrowing Owl Habitat Assessment and Focused Survey for the Eucalyptus Industrial Development (PA07-0083), City of Moreno Valley, County of Riverside, July 2011; ICF International*). The conclusions of the 2011 Biological Report were verified by Harmsworth and Associates during a field review on November 7, 2013. The results of the field review indicate the biological conditions on the Prologis project site are similar to those originally presented in the 2011 Biological Report. A copy of the original 2011 report and the Harmsworth field review are presented at Appendix D of this Addendum.

Conclusion:

With the application of mitigation summarized above, the Addendum Project would not result in, or cause, new significant, substantively increased, or substantively

different, biological resources impacts than those previously addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

3.4.3.7 Aesthetics

Potential aesthetic impacts of the development analyzed in the Certified EIR in Section 4.9, "Aesthetics." The Certified EIR concluded that development of the Project site with light industrial warehouse/distribution uses as proposed by the Westridge Commerce Center project would restrict and/or obstruct views of offsite scenic resources within an established view corridor, and would therefore have a substantial adverse effect on a scenic vista. No mitigation to reduce this potentially significant aesthetic impact was identified, and, the Lead Agency determined that the Project's impacts in regard to scenic resources were significant and unavoidable. All other potential aesthetic impacts were determined less-than-significant.

The distribution/warehouse uses proposed by the Project Orion Distribution Center do not differ substantially in character or scale when compared to project assessed within the Certified EIR. Potential visual and aesthetic impacts of the distribution/warehouse project would be minimized through mandated conformance with the design guidelines, development standards, and performance standards articulated within the City of Moreno Valley Municipal Code. In this regard, development would, at a minimum, comply with design and development standards stipulated at Municipal Code Chapter 9.05, "Industrial Districts." Additionally, the Project will implement lighting and signage in conformance with applicable City standards, and will incorporate perimeter and internal landscaping/screening acting to reduce its potential visual/aesthetic impacts.

Conclusion:

Based on the preceding, the Addendum Project would not result in visual, aesthetic or light/glare impacts not considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

3.4.3.8 Cumulative Impacts

Potential cumulative impacts of the development allowed by the Westridge Commerce Center project are evaluated at Certified EIR Section 5.1, "Cumulative Impacts." The Certified EIR concluded that impacts of the development assessed under the Westridge Commerce Center project proposal would be cumulatively considerable relative to traffic (level of service exceedances); air quality (construction- and operational-source emissions exceedances); noise (for the duration of construction); and aesthetics (impacts to scenic resources).

As discussed within this Addendum, the Project Orion Distribution Center would not result in or cause new or substantively different significant impacts not already addressed within the Certified EIR. Under the specific topics of cumulative traffic impacts, cumulative construction- and operational-source air quality impacts, and cumulative construction-source noise impacts, the Addendum Project's effects would be diminished when compared to the development assessed under the Certified EIR, due primarily to the Addendum Project's reductions in building size and decreased vehicular trip generation. Cumulative aesthetic impacts would be incrementally reduced due to the Project's reduced overall building area, but would not be substantially different from those assessed under the Certified EIR project. No greater impact in regard to any potential cumulative impact has been identified in association with the Addendum Project.

3.4.3.9 Alternatives

Potential impacts of the development allowed by the proposed Westridge Commerce Center would not be substantively different in character and would not substantially exceed impacts that would otherwise result from the development assessed under the Certified EIR that would require new or different alternative analyses from the alternatives considered in the Certified EIR. That is, the Addendum Project would not result in any new significant impacts not already considered and addressed in the Certified EIR, including the Certified EIR's consideration of Alternatives to the Westridge Commerce Center project.

Conclusion:

The Alternatives Analysis presented in the Certified EIR would apply equally to the Addendum Project, with no substantive alteration in conclusions regarding the implementation of alternatives or their potential environmental impacts. As such, implementation of the Addendum Project would have no discernible effect on analyses or conclusions regarding development alternatives considered in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

4.0 Determination

SECTION 4.0
DETERMINATION

As supported by the analysis presented in this Addendum, the potential environmental effects of the development allowed by the proposed Project Orion Distribution Center, and associated required discretionary actions, have been adequately addressed in the Certified EIR for the Westridge Commerce Center project. This Addendum to the Certified EIR provides minor technical changes to the Certified EIR analysis. As such, the development of any further information and analysis (e.g., preparation of a Subsequent or Supplemental EIR) is not warranted. Pursuant to the requirements of *CEQA Guidelines* Section 15162 and 15164, the following determinations have been made:

Major Revisions to the Certified EIR Not Required

Based on the preceding analysis and information, there is no evidence that substantive changes to the Certified EIR are required. Comparison of the previous project with the Project described in this Addendum indicates that there is no new significant or more severe environmental impact, and that the development of the Project described herein would have the same impacts as those described in the Certified EIR prepared for the Westridge Commerce Center project.

No Substantial Change in Circumstances Requiring Major Revisions to the Certified EIR

No information exists in the record, or is otherwise available that indicates that there are substantial changes in circumstances that would require major changes to the Certified EIR.

No New Information Showing Greater Significant Effects than Identified in the Certified EIR

This Addendum has considered all available relevant information to determine whether there is new information, which was not available at the time the 2011 Westridge Commerce Center EIR was certified, that may indicate that a new significant effect may occur that was not reported in the Certified EIR. As supported by the analysis presented in this Addendum, there is no substantial new information that was not available at the time the 2011 EIR was certified, indicating that there will be a new, significant impact requiring major revisions of the Certified EIR.

No New Information Showing Ability to Reduce Significant Effects Identified in the Certified EIR

The Addendum analysis substantiates that there are no significant impacts requiring identification of new or additional alternatives to the project, or consideration of new or additional mitigation measures, in order to reduce one or more of the significant effects identified in the Certified EIR.

Summary

The analysis presented in this document substantiates that the analysis presented in the Certified EIR is sufficient to satisfy CEQA requirements for the proposed Project. That is, implementation of the Project Orion Distribution Center described and evaluated herein will not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified EIR. As such, environmental assessment of the Project does not require any major revision of the Certified EIR, nor will the development allowed by the Project Orion Distribution Center result in conditions that would require preparation of a Subsequent or Supplemental EIR as described in the *CEQA Guidelines*.

5.0 Mitigation Summary

SECTION 5.0
MITIGATION SUMMARY

5.1 CERTIFIED EIR MITIGATION AND IMPLEMENTATION

The following Table 5.1-1, "Mitigation and Implementation Summary Matrix," presents all of the mitigation measures that were incorporated in the Certified EIR. Unless otherwise noted, each of these measures will be implemented through conditions of approval of the development allowed by the Project Orion Distribution Center.

Interim actions which may have occurred in regard to the implementation of mitigation measures are indicated in the "Remarks," column of this Table. At the discretion of the City Planning Director, the mitigation measures identified at Table 5.1-1 may be modified to respond to conditions as they may apply to the development allowed by the Project Orion Distribution Center. Any such discretionary modifications cannot result in any new significant environmental impacts; rather, modifications would ensure compliance and consistency with current policies, regulations, and conservation programs.

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
Traffic and Circulation
4.2.1 Redlands Boulevard at SR-60 Westbound Ramps Improvements: • *Install a traffic signal.* *This improvement is currently approved, programmed, and permitted by Caltrans. If not otherwise completed prior to Project opening, the required traffic signal shall be constructed by the Applicant prior to issuance of the first Certificate of Occupancy.*
4.2.2 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements: *Prior to issuance of the first Certificate of Occupancy, the Applicant shall construct the following improvements:* • *Install a traffic signal;* • *Construct a southbound right turn auxiliary lane which extends the full length of the segment of Redlands Boulevard between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue for a southbound lane configuration of one shared left-through lane and one right turn lane; and* *Construct an eastbound left-turn lane with 300 feet of storage for an eastbound lane configuration of one left-turn lane and one shared through-or-right-turn-lane.*
4.2.3 Moreno Beach Drive at SR-60 Eastbound Ramps Improvements: • *Construct an eastbound right-turn lane and re-stripe the shared left-or-right-turn lane as an exclusive left-turn lane, for an eastbound lane configuration of one left-turn lane and one right-turn lane. These improvements would require the dedication of right-of-way from the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps.*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.2.4 Moreno Beach Drive at SR-60 Westbound Ramps Improvements: • *Coordinate traffic signal timing with the signal at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps. These improvements would be funded through Project participation in the TUMF Program. Although the intersection of Moreno Beach Drive at SR-60 Westbound Ramps is anticipated to operate at an acceptable LOS, the coordination of traffic signal timing with the signal at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps would ensure continued satisfactory operations.* *The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Moreno Beach Drive at SR-60 Westbound Ramps.*
4.2.5 Redlands Boulevard at SR-60 Westbound Ramps Improvements: • *Install a traffic signal (a TUMF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.1);* • *Construct a second northbound through lane and a right-turn lane with overlap phasing, for a northbound lane configuration of one left-turn lane, two through lanes and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way on the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection; and* • *Construct a second southbound through lane, for a southbound lane configuration of one left-turn lane and two through lanes. These improvements would require the dedication of right-of-way on the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection.* *The traffic signal noted above will be constructed by the Project pursuant to Mitigation Measure 4.2.1. The remaining improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Redlands Boulevard at SR-60 Westbound Ramps.*
4.2.6 Redlands Boulevard at SR-60 Eastbound Ramps Improvements: • *Construct a second northbound through lane for a northbound lane configuration of one left turn lane and two through lanes. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and restriping of all lanes on the south leg of the intersection;*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.2.6 Redlands Boulevard at SR-60 Eastbound Ramps Improvements (continued) • *Construct a second southbound through lane, for a southbound lane configuration of one left-turn lane and two through lanes. These improvements would require the dedication of right-of-way on the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and* • *Construct an eastbound right-turn lane and re-stripe the shared left-or-right turn lane as an exclusive left-turn lane, for an eastbound lane configuration of one left-turn lane and one right-turn lane. These improvements would require the dedication of right-of-way on the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts at the intersection of Redlands Boulevard at SR-60 Eastbound Ramps.*
4.2.7 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements: • *Install a traffic signal (a DIF[1] improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.2);* • *Construct a northbound left-turn lane with 200 feet of storage and a second through lane, for a northbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and restriping of all lanes on the south leg of the intersection. Construction of the northbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF Program.*

[1] With specific regard to Project payment of Development Impact Fees (DIF), it is recognized that the City, as an interim and temporary measure, has reduced required DIF payments by 50%. Notwithstanding, the reduced DIF payment program is considered to have sufficient funds to construct prioritized improvements necessary to alleviate traffic impacts. That is, over time, the City's DIF structure, allocation of fees, and prioritization of improvements is able to flexibly respond to traffic demands within the City such that funding for all necessary improvements is available in a timely manner. It is further noted that should supplemental funds be required, the City is able to secure these funds through other sources including but not limited to: state and federal grants, redevelopment funds and Measure A gas tax funds.

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.2.7 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements (continued) • *Construct a southbound left-turn lane with 250 feet of storage, a second left-turn lane that extends back to the SR-60 Eastbound Ramps, a second through lane, and a right-turn lane with overlap phasing and a pocket length that is the full length of the segment, for a southbound lane configuration of two left-turn lanes, two through lanes, and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF program. Construction of one southbound left-turn lane would be funded through participation in the DIF program. The noted right-turn southbound lane would be constructed by the Project pursuant to Mitigation Measure 4.2.2. Overlap phasing to this right-turn lane will be added when determined appropriate by the City Traffic Engineer, and will be funded through fair share fee participation. Remaining improvements would also be funded through fair share fee contributions.* • *Construct dual eastbound left-turn lanes with 300 feet of storage and a second through lane, for an eastbound lane configuration of two left-turn lanes, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the west leg of the intersection. A single eastbound turn with 300 feet of storage will be constructed by the Project under Opening Year Ambient Conditions pursuant to Mitigation Measure 4.2.2. The remaining improvements would be funded through participation in the DIF Program.* • *Construct a westbound left-turn lane, a second through lane, and a right-turn lane with overlap phasing, providing 200 feet of storage for both the left-turn and right-turn lanes, for a westbound lane configuration of one left-turn lane, two through lanes, and one right-turn lane with overlap phasing.* *These improvements would require the dedication of right-of-way from the north side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the east leg of the intersection. Construction of the westbound left and through lanes would be funded through participation in the DIF Program; remaining improvements would be funded through fair share fee participation.*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.2.8 Quincy Street at Fir (future Eucalyptus) Avenue Improvements: • *Install a stop-control on the south leg of the intersection;* • *Construct a northbound shared left-or-right-turn lane. Quincy Street should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction;* • *Construct an eastbound shared through-or-right-turn lane. The Fir (future Eucalyptus) Avenue extension should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction; and* • *Construct a westbound left-turn lane and through lane. The Fir (future Eucalyptus) Avenue extension should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction.* *These improvements would be funded through participation in the DIF Program. The Project will pay required DIF, facilitating construction of new intersection improvements at Quincy Street at Fir (future Eucalyptus) Avenue.*
4.2.9 Moreno Beach Drive at SR-60 Eastbound Ramps Improvements: • *Construct the SR-60 eastbound on- and off-ramps, designed as a standard diamond and consistent with the proposed SR-60 Freeway/Moreno Beach Drive interchange design, and install a traffic signal at the new intersection;* • *Construct a third northbound through lane, for a northbound lane configuration of three through lanes and a right-turn lane. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection;* • *Construct the SR-60 eastbound off-ramp with an eastbound lane configuration of one left-turn lane and dual right-turn lanes; and* • *Construct the SR-60 eastbound on-ramp on Moreno Beach Drive with a minimum of two travel lanes.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps.*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.2.10 Moreno Beach Drive at SR-60 Westbound Ramps Improvements: • *Construct a second northbound through lane, for a northbound lane configuration of two through lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection;* • *In addition to the planned on-ramp for southbound vehicles which is part of the future SR-60/Moreno Beach Drive interchange design, a second southbound through lane and a right-turn lane, for a southbound lane configuration of two through lanes and a right-turn lane. These improvements would require dedication on the west side of Moreno Beach Drive and re-striping of all lanes on the north leg of the intersection;* • *Construct the SR-60 westbound on-ramp for vehicles traveling southbound on Moreno Beach Drive with a minimum of one travel lane; and* • *Construct a second westbound left-turn lane, for a westbound lane configuration of two left-turn lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the north side of the SR-60 Westbound Ramps and re-striping of all lanes on the east leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at SR-60 Westbound Ramps.*
4.2.11 Moreno Beach Drive at Fir (future Eucalyptus) Avenue Improvements: • *Construct dual northbound left-turn lanes and re-stripe the northbound right-turn lane as a shared through-or-right turn lane for a northbound lane configuration of two left-turn lanes, two through lanes and a shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection. Restriping of the northbound right-turn lane as a shared through-or-right turn lane would be funded through participation in the DIF Program. Remaining improvements would be funded through fair share fee participation;* • *Construct a southbound left-turn lane and a right-turn lane with overlap phasing, for a southbound lane configuration of two left-turn lanes, three through lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the west side of Moreno Beach Drive and re-striping of all lanes on the north leg of the intersection, and would be funded through fair share fee participation;*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.2.11 Moreno Beach Drive at Fir (future Eucalyptus) Avenue Improvements (continued): • *Construct the new eastbound leg of this intersection with dual left-turn lanes, a through lane, and a shared through-or-right-turn lane. Construction of one eastbound left-turn lane, the eastbound through lane, and the eastbound shared through-or-right-turn lane would be funded through participation in the DIF Program. Remaining improvements would be funded through fair share fee participation; and* • *Construct a westbound through lane and implement overlap phasing on the right-turn movement, for a westbound lane configuration of one left-turn lane, two through lanes, and a right-turn lane with overlap phasing. This improvement would be funded through fair share fee participation.* *The Project will pay required DIF and fair share fees, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at Fir (future Eucalyptus) Avenue.*
4.2.12 Quincy Street at Fir (future Eucalyptus) Avenue Improvements: • *Install a stop-control on the south leg of the intersection;* • *Construct a northbound shared left-or-right-turn lane;* • *Construct the eastbound approach of the Fir (future Eucalyptus) Avenue extension with a through lane and a shared through-or-right-turn lane; and* • *Construct the westbound approach of the Fir (future Eucalyptus) Avenue extension with a left-turn lane, a through lane, and a shared through-or-right-turn lane.* *These improvements would be funded through participation in the DIF Program. The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Quincy Street at Fir (future Eucalyptus) Avenue.*
4.2.13 Redlands Boulevard at SR-60 Westbound Ramps Improvements: • *Install a traffic signal (a TUMF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.1);* • *Construct a northbound through lane and a right-turn lane with overlap phasing, for a northbound lane configuration of one left-turn lane, two through lanes and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection;*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.2.13 Redlands Boulevard at SR-60 Westbound Ramps Improvements (continued): • *Construct a southbound left-turn lane and a through lane, for a southbound lane configuration of two left-turn lanes and a through lane, and a shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and* • *Construct a westbound left-turn lane and a right-turn lane, for a westbound lane configuration of one left-turn lane, one shared left-through lane and a right-turn lane. These improvements would require the dedication of right-of-way from the north side of the SR-60 Westbound Ramps and re-striping of all lanes on the east leg of the intersection.* *The traffic signal noted above will be constructed by the Project pursuant to Mitigation Measure 4.2.1. The remaining improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at Redlands Boulevard at SR-60 Westbound Ramps.*
4.2.14 Redlands Boulevard at SR-60 Eastbound Ramps Improvements: • *Construct two northbound through lanes, for a northbound lane configuration of one left-turn lane and three through lanes, with the pocket length for the northbound left-turn lane at the full length of the segment. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and restriping of all lanes on the south leg of the intersection;* • *Construct two southbound through lanes, for a southbound lane configuration of two through lanes and a shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and* • *Re-stripe the shared eastbound left-or-right-turn lane as an exclusive left-turn lane, for an eastbound lane configuration of two left-turn lanes and one right-turn lane. These improvements would require the dedication of right-of-way on the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at SR-60 Eastbound Ramps.*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.2.15 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements: • *Install a traffic signal (a DIF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.2);* • *Construct a left-turn lane with 200 feet of storage and a second through lane for a northbound lane configuration of one left-turn lane, one through lane and one shared through right-turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard. Restriping of all lanes on the south leg of the intersection, and construction of the northbound through lane would be funded through participation in the TUMF Program. Remaining improvements would be funded through participation in the DIF Program;* • *Construct a southbound left turn lane with 250 feet of storage, a second left-turn lane that extends back to the SR-60 Eastbound ramps, a second through lane and a right turn lane with overlap phasing for a southbound lane configuration of two left turn lanes, two through lanes and one right turn lane with overlap phasing, with a right turn pocket length that extends the full length of the segment. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program. Construction of one southbound left-turn lane would be funded through participation in the DIF program. The noted right-turn southbound lane would be constructed by the Project pursuant to Mitigation Measure 4.2.2. Overlap phasing for this right-turn lane will be added when determined appropriate by the City Traffic Engineer, and will be funded through fair share fee participation. Remaining improvements would also be funded through fair share fees;* • *Construct dual eastbound left-turn lanes with 300 feet of storage and a second through lane, for an eastbound lane configuration of two left-turn lanes, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the west leg of the intersection. A single eastbound turn lane with 300 feet of storage will be constructed by the Project under Opening Year Ambient Conditions pursuant to Mitigation Measure 4.2.2. The remaining improvements would be funded through participation in the DIF Program; and*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.2.15 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements (continued): • *Construct a westbound left-turn lane, one through lane, and a right-turn lane with overlap phasing, for a westbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane with overlap phasing [these improvements would require the dedication of right-of-way from the north side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the east leg of the intersection]. Construction of the westbound left and through lanes would be funded through participation in the DIF Program; remaining improvements would be funded through participation in the fair share fee assessments.* *The Project will pay required TUMF, DIF and fair share fees, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Fir (future Eucalyptus) Avenue.*
4.2.16 Redlands Boulevard at Eucalyptus (future Encilia) Avenue Improvements: • *Install a traffic signal. This improvement would be funded through participation in the DIF Program;* • *Construct a northbound left-turn lane and a shared through-or-right-turn lane, for a northbound lane configuration of one left-turn lane, one through lane and one shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection. Construction of the northbound left-turn lane would be funded through participation in the DIF Program; remaining improvements would be funded through participation in the TUMF Program;* • *Construct a southbound left-turn lane, a through lane, and a right-turn lane, for a southbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF program;* • *Re-stripe the eastbound right-turn lane as a through lane and construct an additional shared through-or-right-turn lane, for an eastbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Eucalyptus (future Encilia) Avenue and the re-striping of all lanes on the west leg of the intersection, and would be funded through participation in the DIF Program; and*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.2.16 Redlands Boulevard at Eucalyptus (future Encilia) Avenue Improvements (continued): • *Construct the westbound approach with one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the north side of Eucalyptus (future Encilia) Avenue, and the re-striping of all lanes on the east leg of the intersection, and would be funded through participation in the DIF Program.* *The Project will pay required TUMF and DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Eucalyptus (future Encilia) Avenue.*
4.2.17 Redlands Boulevard at Cottonwood Avenue Improvements: • *Construct a northbound through lane, for a northbound lane configuration of one left-turn lane, one through lane and one shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and the re-striping of all lanes on the south leg of the intersection, and would be funded through participation in the TUMF Program;* • *Construct a southbound left-turn lane and a through lane, for a southbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and the restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF Program;* • *Re-stripe the eastbound right-turn lane as a through lane, and construct an additional through-or-right-turn lane, for an eastbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Cottonwood Avenue, and the re-striping of all lanes on the west leg of the intersection, and would be funded through participation in the DIF Program; and* • *Construct the westbound approach with one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the north side of Cottonwood Avenue, and the re-striping of all lanes on the east leg of the intersection, and would be funded through participation in the DIF Program.* *The Project will pay required TUMF and DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Cottonwood Avenue.*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.2.18 Quincy Street south of Fir (future Eucalyptus) Avenue Improvements: • *Construct Quincy Street south of Eucalyptus Avenue as a two-lane undivided roadway with a minimum of one travel lane in each direction.* *The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts at the segment of Quincy Street south of Fir (future Eucalyptus) Avenue.*
4.2.19 Fir (future Eucalyptus) Avenue west of Quincy Street to the westerly Project boundary and Fir (future Eucalyptus) east of Redlands Boulevard Improvements: • *Construct the Fir (future Eucalyptus) Avenue extension from the current terminus near the Auto Mall to Quincy Street, and connecting to Fir (future Eucalyptus) Avenue at the westerly project boundary. Continue Fir (future Eucalyptus) Avenue east of Redlands Boulevard. Fir (future Eucalyptus) Avenue is to be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction.* *The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts affecting the segment of Fir (future Eucalyptus) Avenue between the Auto Mall and the westerly Project Boundary, and Fir (future Eucalyptus) Avenue east of Redlands Boulevard.*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
Air Quality
To facilitate monitoring and compliance, applicable SCAQMD and CARB regulatory requirements are restated as Mitigation Measures 4.3.1 through 4.3.3 below, and shall be incorporated in all Project plans, specifications and contract documents.
4.3.1 Consistent with URBEMIS modeling inputs and to effect implementation of SCAQMD Rule 403, the following measures shall be incorporated: • *All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.* • *The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.* • *The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less to reduce PM10 and PM2.5 fugitive dust haul road emissions.* • *Site disturbance during mass grading and fine grading activities shall not exceed 13.66 acres per day.* • *Ground cover shall be replaced, and/or non-toxic soil stabilizers shall be applied (according to manufacturers' specifications) to any inactive construction areas (previously graded areas inactive for ten days or more).* *In support of Project plan specifications and contract document language; and as means of controlling on-site construction vehicle speeds, for the duration of Project construction activities, speed limit signs (15 mph maximum) shall be posted at entry points to the Project site, and along any unpaved roads providing access to or within the Project site and/or any unpaved designated on-site travel routes.*
4.3.2 The contractor shall minimize pollutant emissions by maintaining equipment engines in good condition and in proper tune according to manufacturer's specifications and during smog season (May through October) by not allowing construction equipment to be left idling for more than five minutes (per California law).
4.3.3 The contractor shall ensure use of low-sulfur diesel fuel in construction equipment as required by the California Air Resources Board (CARB) (diesel fuel with sulfur content of 15 ppm by weight or less).

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
Additional mitigation required of the Project is identified below, and shall be shall be incorporated in all Project plans, specifications and contract documents.
4.3.4 Contractor(s) shall ensure that all off-road heavy-duty construction equipment utilized during construction activity shall be CARB Tier 2 Certified or better.
4.3.5 In order to reduce localized Project impacts to sensitive receptors in the Project vicinity during construction, construction equipment staging areas shall be located at least 300 feet away from sensitive receptors.
4.3.6 During Project construction, existing electrical power sources (e.g., power poles) shall be utilized to power electric construction tools including saws, drills and compressors, to minimize the need for diesel or gasoline powered electric generators.
4.3.7 The Applicant shall use "Zero-Volatile Organic Compounds" paints, coatings, and solvents with a VOC content lower than required under Rule 1113 (not to exceed 150 grams/liter; 1.25 pounds/gallon). High Pressure Low Volume (HPLV) applications of paints, coatings, and solvents shall be consistent with South Coast Air Quality Management District Rule 1113. Alternatively, the Applicant shall use materials that do not require painting or are pre-painted.
4.3.8 Grading plans, construction specifications and bid documents shall also include the following notations: • *Off-road construction equipment shall utilize alternative fuels e.g., biodiesel fuel (a minimum of B20), natural gas (CNG), liquefied natural gas (LNG), propane, except for equipment where use of such fuels would void the equipment warranty;* • *Gravel pads shall be provided at all access points to prevent tracking of mud onto public roads;* • *Install and maintain trackout control devices at all access points where paved and unpaved access or travel routes intersect;* • *The contractor or builder shall designate a person or person(s) to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite;* • *The contractor or builder shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The contact person shall take corrective action within 24 hours;* • *High pressure injectors shall be provided on diesel construction equipment where feasible;* • *Engine size of construction equipment shall be limited to the minimum practical size;*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.3.8 Grading plans, construction specifications and bid documents shall also include the following notations (continued): • *Substitute gasoline-powered for diesel powered construction equipment where feasible;* • *Use electric construction equipment where feasible;* • *Install catalytic converters on gasoline-powered equipment where feasible;* • *Ride-sharing program for the construction crew shall be encouraged and shall be supported by contractor(s) via incentives or other inducement;* • *Documentation shall be provided to the City of Moreno Valley indicating that construction workers have been encouraged to carpool or otherwise reduce VMT to the greatest extent practical, including providing information on available park and ride programs;* • *Lunch services shall be provided onsite during construction to minimize the need for offsite vehicle trips;* • *All forklifts used during construction and in subsequent operation of the Project shall be electric or natural gas powered.*
4.3.9 Throughout Project construction, a construction relations officer/community liaison, appointed by the Applicant, shall be retained on-site. In coordination and cooperation with the City, the construction relations officer/community liaison shall respond to any concerns related to PM10 (fugitive dust) generation or other construction-related air quality issues.
4.3.10 All Project entrances shall be posted with signs which state: • *Truck drivers shall turn off engines when not in use;* • *Diesel delivery trucks servicing the Project shall not idle for more than three (3) minutes; and* • *Telephone numbers of the building facilities manager and CARB, to report violations.* *These measures shall be enforced by the on-site facilities manager (or equivalent).*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
Although potential Project-related Global Climate Change (GCC) impacts would be less-than-significant, the following Mitigation Measures 4.3.11 through 4.3.14 are provided to reduce Project related operational source air pollutants and greenhouse gas emissions to the extent feasible, and to promote sustainability through conservation of energy and other natural resources.
4.3.11 Buildings shall surpass incumbent California Title 24 Energy Efficiency performance standards by a minimum of 20 percent for water heating and space heating and cooling. Verification of increased energy efficiencies shall be documented in Title 24 Compliance Reports provided by the Applicant, and reviewed and approved by the City prior to the issuance of the first building permit. Any combination of the following design features may be used to fulfill this mitigation measure provided that the total increase in efficiency meets or exceeds 20 percent. • *Increase in insulation such that heat transfer and thermal bridging is minimized;* • *Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption;* • *Incorporate dual-paned or other energy efficient windows;* • *Incorporate energy efficient space heating and cooling equipment;* • *Interior and exterior energy efficient lighting which exceeds the California Title 24 Energy Efficiency performance standards shall be installed, as deemed acceptable by the City of Moreno Valley. Automatic devices to turn off lights when they are not needed shall be implemented;* • *To the extent that they are compatible with landscaping guidelines established by the City of Moreno Valley, shade producing trees, particularly those that shade buildings and paved surfaces such as streets and parking lots and buildings shall be planted at the Project site.* • *Paint and surface color palette for the Project shall emphasize light and off-white colors which will reflect heat away from the buildings.* *All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design.*
4.3.12 The Project shall be designed to facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills by providing easily accessible areas that are dedicated to the collection and storage of recyclable materials including: paper, cardboard, glass, plastics, and metals. Locations of proposed recyclable materials collection areas are subject to review and approval by the City. Prior to Final Site Plan approval, locations of proposed recyclable materials collection areas shall be delineated on the Project Site Plan.

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures

4.3.13 GHG emissions reductions measures shall also include the following:
• *The Project shall provide secure, weather-protected on-site bicycle storage/parking consistent with City of Moreno Valley requirements;*
• *The Project shall provide pedestrian and bicycle connections to surrounding areas, consistent with provisions of the City of Moreno Valley General Plan. Location and configurations of proposed pedestrian and bicycle connections are subject to review and approval by the City. Prior to Final Site Plan approval, pedestrian and bicycle connections shall be indicated on the Project Site Plan;*
• *The Project shall provide onsite showers (one for males and one for females). Lockers for employees shall be provided.*
• *Any traffic signals installed as part of the Project will utilize light emitting diodes (LEDs);*
• *The Project will establish a Transportation Management Association (TMA). The TMA will coordinate with other TMAs within the City to encourage and coordinate carpooling among building occupants. The TMA will advertise its services to building occupants, and offer transit and/or other incentives to reduce GHG emissions. Additionally, a shuttle will be provided during any one hour period where more than 20 employees or construction workers utilize public transit. A plan will be submitted by the TMA to the City within two months of Project completion that outlines the measures implemented by the TMA, as well as contact information; The Project shall provide preferential parking for carpools and vanpool. Locations and configurations of proposed preferential parking for carpools and vanpools are subject to review and approval by the City. Prior to Final Site Plan approval, preferential parking for carpools and vanpools shall be delineated on the Project Site Plan;*
• *The Project shall provide at least two electric vehicle charging stations. Locations and configurations of proposed charging stations are subject to review and approval by the City. Prior to issuance of the first building permit, stub outs for charging stations shall be indicated on the Project building plans.*
• *Lease/purchase documents shall identify that tenants are encouraged to provide incentives to realize the following:*
  o *Implementation of compressed workweek schedules;*
  o *SmartWay partnership;*
  o *Achievement of at least 20% per year (as a percentage of previous percentage, not total trips) increase in percentage of consolidated trips carried by SmartWay carriers until it reaches a minimum of 90% of all long haul trips carried by SmartWay 1.0 or greater carriers.*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.3.13 (continued) o *Achievement of at least 15% per year (as a percentage of previous percentage, not total trips) increase in percentage of long haul trips carried by SmartWay carriers until it reaches a minimum of 85% of all consolidator trips carried by SmartWay 1.0 or greater carriers.* o *Use of fleet vehicles conforming to 2010 air quality standards or better.* o *Installation of catalytic converters on gasoline-powered equipment.* o *Inclusion of electric powered and/or compressed natural gas fueled trucks and/or vehicles in fleets;* o *Establishment and use of carpool/vanpool programs, complemented by parking fees for single-occupancy vehicles;* o *Provision of preferential parking for EV and CNG vehicles;* o *Use of electrical equipment (instead of gasoline-powered equipment) for landscape maintenance;* o *Use of electric (instead of diesel or gasoline-powered) yard trucks;* o *Use of SmartWay 1.25 rated trucks.*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures	
4.4	**Noise**
4.4.1	*Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that during all Project site construction, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. And further that the construction contractor shall place all stationary construction equipment so that emitted noise is directed away from off-site receptors nearest the Project site. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.*
4.4.2	*Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that the construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and off-site receptors nearest the Project site during all Project construction. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.*
4.4.3	*Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that construction activities, including haul truck operations, shall be limited to the hours between 7:00 a.m. and 8:00 p.m. Monday through Friday. No Project-related construction activities shall occur on weekends or Federal holidays. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.*
4.4.4	*Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that for the duration of grading and site preparation activities, temporary construction noise curtains or similar line-of-sight noise reduction measures shall be installed along the Project's southerly boundary. Noise curtains shall be installed so as to provide maximum reduction for noise sensitive uses (at present a single residence located southerly of the Project site) and shown on the grading plans prepared for the Project.*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures
4.5 Water Supply
To further minimize the Project's overall water use, ensure on-going availability and reliability of water supplies within the EMWD service area, and provide for timely, monitored compliance with requirements stipulated in the Project WSA, the following EMWD Conditions of Approval are incorporated as EIR Mitigation Measures. Prior to building permit issuance, the developer shall provide a will-serve letter from EMWD demonstrating compliance with the following Conditions of Approval.
4.5.1 Prior to the issuance of building permits, the Project Applicant shall contribute funding toward the acquisition of new water supplies, new treatment or recycled water facilities, and water efficiency measures for existing customers to develop new water supplies. The extent of additional funding shall be determined by the EMWD and may take the form of a new component of connection fees or a separate charge.
4.5.2 The Applicant shall install water efficient devices and landscaping according to the requirements of EMWD's water use efficiency ordinance(s) effective at the time of Project construction.
4.5.3 The Applicant shall meet with EMWD staff at the earliest feasible date to develop a Plan of Service (POS) for the Project. The POS shall detail water, wastewater and recycled water facilities requirements to serve the Project, to be constructed by the Applicant.
4.5.4 Until the Project begins construction, the Project Water Supply Assessment shall be reviewed for its continued accuracy and adequacy every three (3) years, commencing on the WSA approval date of June 4, 2008. The Project Applicant shall maintain communication with EMWD on the status of the Project, and the lead agency shall request the referenced three-year periodic review and update of the WSA. If neither the Project applicant nor the lead agency contacts EMWD within three (3) years of approval of this WSA, it shall be assumed that the Project no longer requires the estimated water demand as calculated in the WSA. The demand for the Project will not be considered in assessments for future projects, and the assessment provided within the Project WSA shall be considered invalid.[2]

2 Pursuant to this measure, in 2011 the Lead Agency requested an extension of the Westridge WSA for an additional three years. EMWD's response (dated April 12, 2011) indicates that the District would "continue to consider the demand for the Westridge Project in future assessments."

Table 5.1-1
Mitigation and Implementation Summary Matrix

	Mitigation Measures
4.7	**Cultural Resources**
4.7.1	*A professional cultural resources monitor (Project Paleontological Monitor) shall conduct full-time monitoring throughout site excavation and grading activities. The monitor shall be equipped to salvage and/or record the location of historic and/or archaeological resources as they may be unearthed to avoid construction delays, consistent with the requirements of California Public Resources Code Section 21083.2. The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens or finds and to allow the preparation of recovered resources to a point of identification. One monitor for both archaeological and paleontological resources is sufficient if the monitor is qualified in both disciplines to the satisfaction of the City of Moreno Valley.*
4.7.2	*Should historic or prehistoric resources of potential significance be identified, a qualified archaeologist shall be contacted to assess the find(s) and make recommendations in regard to further monitoring. Resources shall be left in an undisturbed state where feasible. Where preservation in place is infeasible, all recovered resources shall then be curated in an established, accredited museum repository with permanent retrievable archaeological/historic resource storage. A report of findings shall also be prepared by a qualified archaeologist, and shall include an itemized inventory of any specimens recovered. The report and confirmation of curation of any recovered resources from an accredited museum repository shall signify completion of the program to mitigate impacts to archaeological/ historic resources. If disturbed resources are required to be collected and preserved, the applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2.*
4.7.3	*Prior to the issuance of a grading permit, a City-approved Project Paleontologist shall be retained to initiate and supervise paleontological mitigation-monitoring in all areas of the Project site, subject to the following certain constraints:* • *Once excavations reach ten (10) feet in depth, monitoring of excavation in areas identified as likely to contain paleontological resources by a qualified paleontological monitor or his/her representative must take place;* • *A paleontological mitigation-monitoring plan shall be developed before grading begins;* • *Paleontological monitors shall be equipped to salvage and/or record the location of 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; and* *Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.*

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures	
4.8	**Biological Resources**[3]
4.8.1	*Prior to the issuance of a grading permit, a "no touch" area shall be staked along the westerly limit of Project development as defined by the alignment of the scour wall proposed along the Quincy Channel. Importantly, the westerly limits of development shall be established so as to preclude potential permanent impacts to CDFW and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Prior to the issuance of a grading permit, a City-approved Project biologist shall be retained to initiate and supervise monitoring of construction activities to ensure protection and preservation of adjacent Channel areas.*
4.8.2	*Prior to issuance of a grading permit, the proposed scour wall to be located between the developed Project site and the Quincy Channel shall be shown on the grading plans. Alignment of the scour wall shall be field-determined and physically delineated by the Project biologist in consultation with the City. Importantly, the scour wall alignment shall be established so as to preclude potential impacts to CDFW and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Ongoing monitoring of construction activities shall be maintained throughout implementation of the scour wall to ensure protection and preservation of adjacent Channel areas.*
4.8.3	*Prior to issuance of a building permit, landscape and irrigation plans shall be approved which demonstrate that no invasive, non-native plants will be planted or seeded within 150 feet of the avoided riparian habitat along the Quincy Channel.*
4.8.4	*Prior to the issuance of <u>any</u> grading permits and prior to any physical disturbance of any jurisdictional areas, 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 Wildlife and the U.S. Army Corps of Engineers. Written verification of such a permit or waiver shall be provided to the Community Development Department - Planning Division and the Public Works Department - Land Development Division.*
4.8.5	*Prior to issuance of a grading permit, the Applicant shall develop and implement a Habitat Mitigation and Monitoring Plan (HMMP) to restore impacted riparian (mulefat) habitat. Prior to implementation, the HMMP shall be reviewed and approved by the CDFW. If in its final design, the CDFW-approved HMMP involves use or restoration of USACE or RWQCB jurisdictional areas, USACE and/or RWQCB approval shall also be obtained. The HMMP shall, at a minimum, meet the following requirements:* • *A habitat replacement and/or enhancement ratio of at least 1:1 for temporary impact;*

3 The former California Department of Fish and Game (CDFG) is now called the California Department of Fish and Wildlife, or CDFW. References to this agency in Mitigation Measures 4.8.1 through 4.8.7 have been updated accordingly.

Table 5.1-1
Mitigation and Implementation Summary Matrix

Mitigation Measures	
4.8.5 (continued) • *A success criterion of at least 80 percent cover of native riparian vegetation for replaced habitat; and* • *Additional requirements, including a 3-year establishment period for the replacement habitat, regular trash removal, native plant re-vegetation for areas temporarily disturbed by construction and regular maintenance and monitoring activities to ensure the success of the mitigation plan; and* • *Prior to the issuance of a grading permit, as part of the Project HMMP, appropriate maintenance and monitoring protocols will be developed in concert with CDFW based on final Project designs, and the ultimate scope, location, and type of mitigation reflected in the HMMP as approved by CDFW.*	
4.8.6	*If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season (February 15 – July 31), all suitable habitat will be thoroughly surveyed for the presence of nesting birds within 72 hours prior to clearing. All surveys shall be performed by a qualified Project biologist to be retained by the Applicant and vetted by the City. The survey results shall be submitted by the Project Applicant to the Planning Division. If any active nests are detected, the nest(s) shall be flagged in the field and mapped on the construction plans along with a minimum 50-foot buffer and up to 300 feet for raptors, with the final buffer distance to be determined by the Project biologist. The buffer area shall be avoided until the nesting cycle is complete or it is determined that the nest has failed. In addition, the Project biologist will be present on the site to monitor vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.*
4.8.7	*Within 30 days of site clearing activities, a pre-construction burrowing owl survey shall be conducted to document the presence/absence of any occupied owl burrows. Any owls present shall be passively or actively relocated following CDFW approved protocols, and with CDFW permission, prior to commencement of clearing. The survey shall be submitted to the Planning Division prior to issuance of a grading permit.*

ENVIRONMENTAL CHECKLIST

Project Orion Distribution Center

Addendum to the Westridge Commerce Center Certified EIR

1. AESTHETICS

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Have a substantial adverse effect on a scenic vista?					X	
b) Substantially damage visible scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?					X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?					X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?					X	

Summary

Potential aesthetic/visual impacts associated with the development of the subject site were previously analyzed within the 2011 Westridge Commerce Center Certified EIR, in Section 4.9, "Aesthetics."

The Certified EIR concluded that development of the subject site with the light industrial warehouse/distribution uses proposed by the Westridge Commerce Center project would result in a substantial adverse impact on a scenic vista, due to the Project's restriction and/or obstruction of scenic vistas. No mitigation was identified that would address this impact, which was determined significant and cumulatively considerable. All other aesthetic impacts were determined less-than-significant proximate to the Project site. Specifically, the visual

and aesthetic impacts of the distribution/warehouse project would be minimized through mandated conformance with the design guidelines, development standards, and performance standards articulated within the City of Moreno Valley Municipal Code. In this regard, development would, at a minimum, comply with design and development standards stipulated at Municipal Code Chapter 9.05, "Industrial Districts." Additionally, the Project will implement lighting and signage in conformance with applicable City standards, and will incorporate perimeter and internal landscaping/screening acting to reduce its potential visual/aesthetic impacts. Lighting would be implemented consistent with the City's Municipal Code, as well as Riverside County Ordinance 655, which regulates lighting of development proposals within 45 miles of the Mt. Palomar Observatory.

Industrial uses proposed by the Project Orion Distribution Center are similar in character and in scale when compared to Certified EIR project. As with the Certified EIR project, the Addendum Project would result in a substantial adverse impact on scenic vistas, which would remain significant and unavoidable. In approving the Westridge Commerce Center project, the City adopted a Statement of Overriding Considerations pursuant to CEQA Guidelines § 15091, et seq., recognizing this significant impact on scenic vistas. The Project Orion Distribution Center would not result in new significant impacts, or substantively increased or different impacts than would result from the development assessed under the Certified EIR.

Conformance with the City's existing design guidelines, development standards, and performance standards would ensure that the Addendum Project's potential to degrade the existing visual character or quality of the site and its surrounding, substantially damage visible scenic resources, or create potential light and glare impacts would be reduced to levels that are less-than-significant.

Previous conclusions of the Certified EIR regarding potential impacts related to: substantial adverse effects on scenic vistas; and substantial damage to visible scenic resources are not affected by the entitlements requested under the Addendum Project, and these impacts would remain less-than-significant. Based on the preceding, the Addendum Project would

not result in visual, aesthetic or light/glare impacts not considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010); *Westridge Commerce Center Final EIR* (April 2011); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

2. AGRICULTURE AND FOREST RESOURCES

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?						X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?						X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?						X
d) Result in the loss of forest land or conversion of forest land to non-forest use?						X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, or conversion of forest land to non-forest use?						X

Summary

Potential agricultural impacts associated with the development of the Westridge Commerce Center were previously addressed within the Initial Study for the Certified EIR project, under Section 2, "Agricultural Resources." The Initial Study was included as Appendix A of the Westridge Commerce Center Draft EIR. Discussions of forest resources were not required at the time the 2009 Initial Study was prepared; however, revisions to the CEQA checklist that included additional environmental categories of review became effective in March 2010, prior to the publication of the Draft EIR. For this reason, potential impacts to forest lands or other forest resources were addressed as part of the Draft EIR's Section 1, "Executive Summary."

The Certified EIR Initial Study indicates that the Project site is designated as Farmland of Local Importance due to the high-quality, prime soils present at the site. Despite this designation by the Department of Conservation, the City of Moreno Valley has envisioned urban buildout of the site, as evidenced by the site's existing "Business Park" General Plan designation. Project site is not designated as Prime Farmland, Unique Farmland or Farmland of Statewide Importance by the California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP). Proposed development activities would not affect any agriculturally-zoned properties (the Project site's zoning designation is currently "Light Industrial"), or any lands where a Williamson Act contract is currently in place. On this basis, the Certified EIR project was determined to have an insignificant impact on agricultural resources.

Similarly, the Project site does not contain forest lands or forest resources, and development of the site would not have the potential to convert forest land to non-forest uses. No changed or new information has been identified to indicate that any potential agriculture and/or forest resources impacts resulting from the Addendum Project would be different from those previously analyzed within the Certified EIR. That is, the subject site is not agriculturally-zoned, is not designated as forest land, is not forested or proposed for forestation, and is not subject to a Williamson Act contract. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

3. AIR QUALITY

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?					X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?					X	
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?					X	
d) Expose sensitive receptors to substantial pollutant concentrations?					X	
e) Create objectionable odors affecting a substantial number of people?					X	

Summary

The Certified EIR (in Section 4.2, "Air Quality," and Appendix C, "Air Quality Impact Analysis") addresses regional and local air quality issues including construction-source and operational-source emissions resulting from, or generated by, the Westridge Commerce Center development. The Certified EIR acknowledges that the Westridge Commerce Center would likely result in construction-source and operational exceedances of applicable South Coast Air Quality Management District (SCAQMD) thresholds, and a cumulatively considerable net increase in the emission of ozone-precursors within a designated non-attainment area.

In order to reduce construction and operational-source emissions of oxides of nitrogen (NOx), carbon monoxide (CO), volatile organic compounds (VOC), and particulate matter (PM_{10} and $PM_{2.5}$) to the maximum extent feasible, mitigation measures 4.3.1 through 4.3.13 were incorporated in the Certified EIR. These measures have been carried forward within the Mitigation Summary of this Addendum (please refer to Addendum Section 3). Nonetheless, the Project's construction- and operational-source air quality impacts remained individually significant and cumulatively considerable.

An update to the Certified EIR's Air Quality Impact Analysis that provides a comparative analysis of the Addendum Project's potential to result in air quality impacts was prepared by Urban Crossroads, Inc. The purpose of this analysis was to determine whether the proposed changes in the Westridge Commerce Center project's building design to support the operations of the Project Orion Distribution Center would result in substantial changes to the air quality, greenhouse gas, or health risk assessment findings previously evaluated in the Certified EIR. A copy of the updated *Westridge Commerce Center Air Quality, Greenhouse Gas, and Health Risk Impact Assessment*, dated July 25, 2013, is included as Addendum Appendix C.

Construction-Source Emissions

The Certified EIR found that localized thresholds of significance would not be exceeded by the construction-source emissions from the Westridge Commerce Center project; however, emissions of CO and NOx were found to exceed regional SCAQMD thresholds. It is conservatively assumed that construction activities associated with development of the Project Orion Distribution Center would parallel the scope of activities reflected in the Certified EIR analysis, and would result in comparable construction-source air quality emissions impacts. Based on the Addendum Project's reductions in building area, along with the implementation of current construction equipment emissions controls, it is likely that the Addendum Project would actually result in slight reductions in construction-source emissions when compared to the Certified EIR project. Even so, construction-source exceedances of CO and NOx would likely persist under the Addendum Project, although they would not exceed levels identified under the Certified EIR project.

Operational-Source Air Quality Emissions

The Addendum Project's operational emissions would be generated from the following sources: vehicle trips, including tailpipe exhaust and fugitive dust related to vehicular travel; combustion associated with natural gas and electricity, including the power required to operate the facility's cold storage component; emissions from landscape maintenance equipment, consumer products (e.g., cleaning solutions); and architectural coatings (e.g., paints used for building maintenance). However, it is important to note that for any new development project, the largest source of air pollutant emissions (more than 95 percent by weight) is typically vehicular traffic. VOC, NOx, and CO emissions are all byproducts of fuel combustion. Similarly, particulate matter emissions are a byproduct of fuel combustion; and also result from road and tire wear and generation of fugitive dust as vehicles travel along the road.

The following Table A-1 provides a summary comparing the operational emissions of the Certified EIR project with the emissions anticipated to be generated by the Addendum Project.

Table A-1
Peak Operational Emissions Comparison Using CalEEMod 2013 Methodology
Certified EIR Project vs. Addendum Project (Pounds per Day)

Operational Activities	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Certified EIR Analysis (Westridge Commerce Center)						
Area Source Emissions[1]	24.60	0.54	0.55	3.35e-3	0.04	0.04
Mobile Emissions[2]	105.57	475.58	329.37	1.20	59.39	22.47
Maximum Daily Emissions	*130.16*	*476.12*	*329.92*	*1.20*	*59.43*	*22.51*
Addendum Project (Project Orion Distribution Center)						
Area Source Emissions[1]	25.75	3.99	3.49	0.02	0.30	0.30
Mobile Emissions[2]	81.00	439.31	262.43	1.02	42.16	16.89
Maximum Daily Emissions	*106.75*	*443.30*	*265.93*	*1.04*	*42.47*	*17.20*
SCAQMD Threshold Emission Levels	***55***	***55***	***550***	***150***	***150***	***55***
Variance in Maximum Daily Emissions	***(23.41)***	***(32.82)***	***(63.99)***	***(0.16)***	***(16.96)***	***(5.31)***

Sources: *Westridge Commerce Center Air Quality, Greenhouse Gas, and Health Risk Impact Assessment* (Urban Crossroads, Inc.), Sept. 16, 2013.
Notes:
[1] Includes emissions of natural gas consumption, emissions of landscape maintenance equipment, and architectural coatings emissions.
[2] Includes emissions from vehicles and fugitive dust related to vehicular travel.

The peak operational emission levels included in Table A-1 reflect estimates of peak summer and winter emissions, utilizing whichever was highest. As seen in Table A-1, the Addendum Project would result in decreases in VOC, NO_x, CO, SO_x, PM_{10} and $PM_{2.5}$ emissions when compared to the Certified EIR project. Although emissions of VOCs and NOx would not be reduced to levels that are below SCAQMD regional thresholds, they would be diminished in intensity. All mitigation measures identified in the Certified EIR would continue to be applicable to the Addendum Project. Significant operational air quality impacts identified as part of the Certified EIR would persist, but would not be exceeded with implementation of the Addendum Project.

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, child care centers, and athletic facilities can also be considered as sensitive receptors. The Certified EIR found that with mitigation, no sensitive receptors or off-site workers would be exposed to DPM-source cancer risks exceeding the SCAQMD's significance criteria.

Vehicular Diesel Particulate Matter (DPM) emissions from the Project Orion Distribution Center were estimated as part of the Air Quality Update Analysis (provided in Addendum Appendix C). As seen in the following Table A-2, under the Addendum Project, potential health risks would be reduced to levels that are below the SCAQMD's threshold of 10 in one million even without the implementation of mitigation measures. Regardless, all Certified EIR mitigation measures will be required as part of the Addendum Project's implementation, thus ensuring maximum reductions in DPM emissions and related health risks.

Table A-2

Summary of Health Risks[1]

Certified EIR Project vs. Addendum Project (Risk per Million)

Analysis Scenario	Certified EIR Project (Westridge Commerce Center)	Addendum Project (Project Orion Distribution Center)	Variance
Without Mitigation			
Maximum Exposed Sensitive Receptor	10.1	6.1	***(4.0)***
Maximum Exposed Worker Receptor	3.1	1.2	***(1.9)***
With Mitigation			
Maximum Exposed Sensitive Receptor	6.9	5.6	***(1.3)***
Maximum Exposed Worker Receptor	2.0	1.1	***(0.9)***

Source: *Westridge Commerce Center Air Quality, Greenhouse Gas, and Health Risk Impact Assessment* (Urban Crossroads, Inc.), September 16, 2013.
Notes:
[1] The SCAQMD CEQA Air Quality Handbook (1993) states that emissions of toxic air contaminants (TACs) are considered significant if a health risk assessment shows an increased risk of greater than ten in one million.

Conclusions

Based on the preceding discussions, the Addendum Project would not cause new significant, substantively increased or substantively different air quality impacts than those previously addressed in the Certified EIR. Potential air quality impacts associated with the Addendum Project are therefore adequately addressed within the Certified EIR.

Sources: *Westridge Commerce Center Draft EIR* (October 2010); *Westridge Commerce Center Final EIR* (April 2011); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013); *Westridge Commerce Center Air Quality, Greenhouse Gas, and Health Risk Impact Assessment* (Urban Crossroads, Inc., July 2013).

4. BIOLOGICAL RESOURCES

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Have a substantial adverse effect, either directly or through habitat modification, 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?					X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies and regulations; or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?					X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?					X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?					X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?					X	

Summary

As discussed at Certified EIR Section 4.8, "Biological Resources," the Certified EIR relied on biological assessments performed between 2008 and 2010, including a general biological reconnaissance survey, a burrowing owl survey, surveys of off-site areas involved in project development, and a jurisdictional delineation. Mitigation was incorporated to ensure the protection and preservation of riparian areas associated with the Quincy Channel, which is adjacent to the site's westerly boundary. In addition, a streambed alteration agreement or permit, along with the implementation of a Habitat Mitigation and Monitoring Plan (HMMP) to restore impacted riparian (mulefat) habitat would be required prior to the issuance of Project building permits. Mitigation measures designed to protect nesting birds in general, and specifically the burrowing owl, which is a California Species of Concern with the potential to occur onsite, were also incorporated in the Certified EIR. With the implementation of these mitigation measures, potential impacts to biological resources and habitat areas were determined less-than-significant. As with the Certified EIR project, development allowed by the Project Orion Distribution Center would be required to implement each of these mitigation measures to ensure the protection of biological resources and riparian habitat and/or wetland within areas affected by the Project. The text of each mitigation measure is provided in Addendum Section 5, "Mitigation Summary."

Based on the preceding discussion, with the application of mitigation summarized above, development of the Project Orion Distribution Center would not result in or cause new significant, substantively increased, or substantively different biological resources impacts than those previously addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010); *Westridge Commerce Center Final EIR* (April 2011); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

5. CULTURAL RESOURCES

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in Section 15064.5?					X	
b) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?					X	
c) Disturb any human remains, including those interred outside of formal cemeteries?					X	

Summary

As discussed in the Certified EIR (Section 4.7, "Cultural Resources"), the site does not contain any known archaeological, paleontological, or historical resources. Notwithstanding, it is possible that such resources could be discovered as part of a cultural resources survey, or during earth moving operations on-site. Accordingly, mitigation incorporated in the Certified EIR required that archaeological and paleontological monitoring be conducted during earthmoving activities associated with Project construction. These same measures would be implemented pursuant to development permits issued for, or in support of the Addendum Project.

Revised entitlements requested under the Addendum Project would not alter or otherwise affect the scope of and location cultural resources considered in the Certified EIR. As with the Certified EIR project, the Addendum Project is required to mitigate potential impacts to cultural resources by conducting monitoring during construction activities, with accompanying reporting, recovery, cataloguing and preservation procedures for resources that might be encountered within the subject site. On the basis of the preceding discussions, the Addendum Project would not result in cultural resources impacts not considered and

addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010); *Westridge Commerce Center Final EIR* (April 2011); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

6. GEOLOGY AND SOILS

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) rupture of a known earthquake fault; (ii) strong seismic ground shaking; (iii) seismic-related ground failure, including liquefaction; or (iv) landslides?					X	
b) Result in substantial soil erosion or the loss of topsoil?					X	
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?					X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?					X	
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?						X

Summary

Potential geology and soils impacts associated with the development of the Westridge Commerce Center were previously addressed within the Initial Study for the Certified EIR project (Draft EIR Appendix A), under Checklist Item 6, "Geology and Soils." A site-specific Geotechnical Investigation was prepared and included as Initial Study Appendix C. This study indicates that no known or potentially active earthquake faults have been identified within the Project site, and that the site is not located within an Earthquake Special Studies zone (formerly referred to as an Alquist-Priolo earthquake fault zone), nor are liquefaction or landsliding of substantial concern. The Initial Study analysis acknowledges that, like all of southern California, the site is considered generally susceptible to seismic events; however, the application of established Uniform Building Code seismic design, engineering, and construction standards would ensure that, short of a catastrophic event, Project structures and infrastructure utilize appropriate measures to withstand anticipated seismic activity. Potential erosion impacts incurred during Project construction activities would be reduced below the level of significance through preparation of, and compliance with, a Storm Water Pollution Prevention Plan (SWPPP), as required by the City's NPDES permit. Additionally, based on the recommendations of the Geotechnical Investigation, engineered fill soils would be placed under habitable building areas as part of Project construction, serving to minimize the potential for soil instability, including lateral spreading, subsidence and collapse, as a result of Project implementation.

As with the Certified EIR project, design and construction of the Project Orion Distribution Center will be realized consistent with recommendations and requirements of a site-specific Geotechnical Investigation, as well as application of established Uniform Building Code seismic design, engineering, and construction standards. The Project proponent would be required to file and comply with a City-approved SWPPP prior to initiation of construction activities, to address construction-related erosion. It is anticipated that any problematic soils encountered on-site will be replaced with engineered fill as part of Project construction, pursuant to the Project's Geotechnical Investigation, thereby minimizing the potential for soil instability. Additionally, the Project will be connected to the City's existing municipal sewer system. Septic tanks or other alternative wastewater disposal systems are not proposed.

Based on the preceding, the Addendum Project would not result in geology and soils impacts not considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010); *Westridge Commerce Center Final EIR* (April 2011); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

7. GREENHOUSE GAS EMISSIONS

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?					X	
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purposed of reducing the emissions of greenhouse gases?					X	

Summary

Consideration of greenhouse gases (GHGs) and potential effects of GHGs on global climate change were addressed as part of the Certified EIR's Section 4.3, "Air Quality." Although potential GHG impacts were determined to be less-than-significant, mitigation measures 4.3-11 through 4.3-13 were identified to reduce Project related operational source air pollutants and GHG emissions to the extent feasible, and to promote sustainability through conservation of energy and other natural resources.. The Project Orion Distribution Center would be required to comply with these measures, in addition to all applicable mandatory regulatory requirements imposed by the State of California and the South Coast Air Quality Management District aimed at the reduction of air quality and GHG emissions. Regulatory

requirements that are applicable to the Project and that would assist in the reduction of GHG emissions include the following:

- Global Warming Solutions Act of 2006 (AB 32), establishes a comprehensive program to reduce greenhouse gas emissions from all sources throughout the State;
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (SB 375), provides GHG emissions reductions strategies at regional and community tiers;
- Pavely Fuel Efficiency Standards (AB 1493), establishes fuel efficiency ratings for new vehicles;
- Title 24 California Code of Regulations (California Building Code), establishes energy efficiency requirements for new construction;
- Title 20 California Code of Regulations (Appliance Energy Efficiency Standards), establishes energy efficiency requirements for appliances;
- Title 17 California Code of Regulations (Low Carbon Fuel Standard), requires carbon content of fuel sold in California to be 10 percent less by 2020;
- 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;
- Statewide Retail Provider Emissions Performance Standards (SB 1368), requires energy generators to achieve performance standards for GHG emissions; and
- Renewable Portfolio Standards (SB 1078), requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20 percent by 2010 and 33 percent by 2020.

It is acknowledged that development of the subject site under either of the considered development scenarios (2011 Certified EIR or Project Orion Distribution Center) would generate GHG emissions. GHG emissions would result directly from the use of energy (based on combustion associated with natural gas and electricity generation); water supply, treatment and distribution; and vehicle use. Additional GHG emissions are the indirect result of the anaerobic breakdown of waste materials in landfills. The following Table A-3 compares the operational greenhouse gas (GHG) emissions of the Certified EIR project with the GHG

emissions anticipated to be generated by the Addendum Project, and converting emissions to their carbon dioxide equivalents (CO_2e) where applicable.

Table A-3
GHG Emissions Summary Comparison
Certified EIR Project vs. Addendum Project (Metric Tons of CO_2e per Year)

Emission Source	CO_2	CH_4	N_{20}	CO_2e
Certified EIR Project (Westridge Commerce Center)				
Annual construction-related emissions[1]	174.16	0.0104	0.522	338.32
Natural Gas	141.10	0.02	0.022	148.53
Landscaping	0.51	--	--	0.51
Mobile Sources	27,724.82	0.35	0.41	27,858.08
Electricity Energy	732.09	0.08	0.03	741.71
Solid Waste Generation	--	22.60	--	474.67
Water Usage	39.63	0.002	0.0005	39.81
Refrigerant Leakage	--	--	--	401.75
Subtotal Transportation Sources				*27,858.08*
Subtotal Non-Transportation Sources				*2,145.31*
Total CO_2e				*30,003.39*
Addendum Project (Project Orion Distribution Center)				
Annual construction-related emissions[2]	174.16	0.0104	0.522	338.32
Natural Gas	792.32	0.02	0.02	797.14
Landscaping	--	--	--	--
Mobile Sources	16,783.54	0.37	--	16,787.99
Electricity Energy	3,360.50	0.20	0.03	3,644.71
Solid Waste Generation	152.73	89.96	--	229.47
Water Usage	23.41	0.17	3.81e-3	27.83
Refrigerant Leakage	--	--	--	343.10
Subtotal Transportation Sources				*16,787.99*
Subtotal Non-Transportation Sources				*5,380.57*
Total CO_2e				*22,168.56*
Variance in Annual GHG Emissions				***(7,834.83)***

Sources: *Westridge Commerce Center Air Quality, Greenhouse Gas, and Health Risk Impact Assessment* (Urban Crossroads, Inc.), Sept. 16, 2013.
Notes:
[1] Amortized over 30 years.
[2] Emissions previously quantified for the Westridge Commerce Center were utilized in this assessment, amortized over 30 years.

As seen in Table A-3, the Addendum Project would generate a total of approximately 27,400 metric tons of GHG emissions (CO_2e) annually, which is approximately 2,595 metric tons less than was estimated to be generated by the Certified EIR project. As with the Certified EIR project, mitigation measures identified to further GHG emissions would be applied to the Addendum Project, in order to achieve the maximum feasible reductions. On this basis, the Addendum Project would not cause new significant, substantively increased or substantively different greenhouse gas emission impacts than those previously addressed in the Certified EIR.

Sources: *Westridge Commerce Center Draft EIR* (October 2010); *Westridge Commerce Center Final EIR* (April 2011); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013); *Westridge Commerce Center Air Quality, Greenhouse Gas, and Health Risk Impact Assessment* (Urban Crossroads Inc., July 2013).

8. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					X	
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?					X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?						X

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
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?					X	
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 for people residing or working in the project area?						X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?						X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?					X	
h) 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?					X	

Summary

Potential hazards and hazardous material impacts resulting from, or affecting the Westridge Commerce Center are discussed in the Certified EIR Initial Study (Draft EIR Appendix A), under Item 7, "Hazards and Hazardous Materials." As discussed in the Initial Study, based on information provided by the California Department of Toxic Substances Control (DTSC), the site is not identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. It was acknowledged that the Certified EIR project would

require limited transportation and use of potentially hazardous materials (e.g., paints, solvents, fertilizer, etc.) as part of construction and ongoing maintenance activities onsite. However, this type of storage, transfer, use and disposal of potentially hazardous materials is extensively regulated at the local, State and federal levels. The Project's potential impacts based on the routine transport, use, or disposal of hazardous materials, and the likelihood of accidental release of hazardous materials were determined to be less-than-significant.

There are no airports or air strips within two miles of the Project site; thus there is no potential for air safety impacts to affect the site. Nor are any schools located within one-quarter mile of the Project site. On this basis, the Project was found to have no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The Project site is not identified as being located within or adjacent to an area of high fire risk, and no potential impacts relative to wildland fire hazards were anticipated.

An assessment of the Project's emergency response times and routing for fire protection services was included in the Certified EIR's analysis of traffic impacts, to ensure that adequate emergency access to the Project site and surrounding areas could be provided. As noted in the Certified EIR, "Until Fir (future Eucalyptus) Avenue is improved to its ultimate General Plan configuration, which would involve the construction of a Quincy Channel overcrossing, no direct access to the Project site from Station 58 [the fire station located nearest the Project site, approximately one-quarter mile to the west] is available." An addendum to the Project's Traffic Impact Analysis (TIA) was prepared, which demonstrated that emergency response times for fire protection vehicles would range from 2.8 to 4.2 minutes. These response times are well within the City's existing General Plan objective for emergency fire response, which uses a standard requiring "the first unit arriving on the scene of a fire [to arrive] within five minutes of dispatch … 90 percent of the time." (Certified EIR, p. 4.2-87).

As with the Certified EIR project, the Addendum Project does not propose the handling of acutely hazardous materials. There is potential limited use of potentially toxic or hazardous materials such as gasoline, paint, cleaners/solvents, pesticides/herbicides, that would be

employed during construction activities and during ongoing operations and maintenance of the developed site. Transportation, use, storage and disposal of these substances are extensively addressed through local, regional, state, and federal regulations. In this latter regard, pursuant to Chapter 6.95 of the State Health and Safety Code, the Project is required to develop and file a Hazardous Materials Business Plan (HMBP). The HMBP contains basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the course of Project operations. The HMBP as implemented ensures an accurate inventory of materials on-site, establishes an emergency response plan and owner/operator identification, and mandates employee training that acts to preclude or minimize the potential for misuse, release, or improper disposal of hazardous materials.

As demonstrated in the Certified EIR, development within the Project site would not be adversely affected by increased emergency fire response times; nor would emergency evacuation routes, or emergency evacuation plans be affected by Project development.

Based on the preceding, no changed or new information has been identified to indicate that any potential hazards/hazardous materials impacts of the Addendum Project would be substantively different from those previously analyzed within the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010); *Westridge Commerce Center Final EIR* (April 2011); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

9. HYDROLOGY AND WATER QUALITY

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Violate any water quality standards or waste discharge requirements?					X	
b) Substantially deplete groundwater supplies or 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 (for example, the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?					X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?					X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?					X	
e) 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?					X	
f) Otherwise substantially degrade water quality?					X	

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?						X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?						X
g) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?						X
h) Inundation by seiche, tsunami, or mudflow?						X

Summary

As discussed in Certified EIR Section 4.6, "Hydrology and Water Quality," the proposed implementation of the Westridge Commerce Center project was found to have a less-than-significant effect in regard to flooding and storm water management. The site is not located within an identified 100-year floodplain; nor is the site subject to inundation by seiche, tsunami, or mudflow. On this basis, the Project was not found to have the potential to expose people or structures to a significant risk of loss, injury or death involving flooding.

In regard to water quality, compliance with applicable regulations of the Regional Water Quality Control Board (RWQCB) pursuant to federal water quality standards, and criteria established under the Clean Water Act is mandatory for new development projects. In combination, requirements and procedures established under these regulations effectively mitigate any potentially adverse water quality impacts of new development.

More specifically, stormwater management systems servicing either the Certified EIR project or the Addendum Project are required to be completed in accordance with the City of

Moreno Valley and County of Riverside standards. All new development projects are required to develop and implement a City-mandated Stormwater Pollution Prevention Plan (SWPPP) during construction, and a Water Quality Management Plan (WQMP) for on-site operations. New development is also required to comply with applicable provisions of the National Pollutant Discharge Elimination System (NPDES) permit, to which the City is a participant party. In aggregate, implementation of the approved stormwater management system, Certified EIR mitigation measures, and compliance with provisions of the SWPPP, WQMP, and NPDES permit would adequately address potential impacts related to:

- Violation of any water quality standards or waste discharge requirements;
- Alteration of existing drainage patterns resulting in substantial erosion or siltation;
- Alteration of existing drainage patterns in a manner which would result in flooding;
- Creation or contribution of runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Violation of any water quality standards or waste discharge requirements; or
- Other substantial degradation of water quality.

The scope and character of entitlements proposed under the Project Orion Distribution Center are not substantially different from those considered in the Certified EIR. As such, implementation of the Addendum Project would not result in new, additional, or different hydrology impacts than were considered and addressed in the Certified EIR. That is, under either of the potential development scenarios, flooding risks would remain less-than-significant. Consistent with established City and Riverside County regulations, and prior to the issuance of building permits, the developer will prepare and submit a site-specific study reflecting precise pad locations, proposed drainage structures, and other measures, which

include a planned on-site retention area, to ensure that stormwater discharges are adequately managed and appropriately conveyed.

Additionally, a City-approved SWPPP would be required for development under either the Certified EIR or the Addendum Project. This plan would act to mitigate potential erosion and associated potential adverse altering of drainage patterns during construction. A City-approved WQMP was included in the Certified EIR (please refer to Draft EIR Appendix F), which provided detailed structural and operational BMPs to be implemented in order to avoid potential erosion impacts, drainage alteration, or contribution of stormwater pollutants over the life of the development. NPDES permit compliance is mandated irrespective of the proposed development scheme.

Further, under all potential development scenarios, payment of fees to fund construction of areawide drainage improvements, and implement site-specific stormwater management systems is required. All drainage plans and improvements would be designed and implemented consistent with City, County, and Regional Water Quality Control Board standards. With regard to potential impacts to groundwater and water supplies, no direct groundwater withdrawals are proposed under the Certified EIR project or the Addendum Project.

Based on the preceding, potential hydrology, water quality, and water supply impacts associated with the Addendum Project are adequately addressed within the Certified EIR. No substantive changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010); *Westridge Commerce Center Final EIR* (April 2011); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

10. LAND USE AND PLANNING

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Physically divide an established community?						X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?					X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?					X	

Summary

An analysis of potential land use impacts is included in the Certified EIR at Section 4.1, "Land Use and Planning." In summary, the analysis characterizes the subject site's existing condition as vacant undeveloped property, surrounded by new industrial warehouse/distribution uses, agricultural uses and vacant land. No established communities would be divided by the Certified EIR project.

The subject site remains vacant and undeveloped and as such, there remains no potential to physically divide an established community. Development of the Addendum Project would, as with the Certified EIR project, result in the transition of undeveloped vacant properties to urban uses. Similar to the Certified EIR project, all development within the subject site would be governed by City-approved development regulations, thereby precluding or minimizing potential land use impacts. These potential impacts include the potential to conflict with any applicable land use plan, policy, or regulation.

With the approval of the Westridge Commerce Center, a change in zoning was processed, establishing a zoning designation of "Light Industrial" for the subject site. This zoning designation permits the uses proposed by the Addendum Project, and no additional revisions to land use or zoning designations are necessary or proposed.

The Addendum Project proposes the development of light industrial warehouse/distribution uses similar to those assessed by the Certified EIR, and as such, the Addendum Project would not result in or cause, additional, or substantially different significant land use impacts than those assessed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010), SCH 2009101008; Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

11. MINERAL RESOURCES

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
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?						X
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?						X

Summary

The topic of minerals was addressed within the Initial Study prepared for the Westridge Commerce Center at Item 10, "Mineral Resources." Based on information presented in the Moreno Valley General Plan (page 7-14), the Westridge Commerce Center was found to have no impact on mineral resources. More specifically, mineral resources within the City of Moreno Valley are comprised primarily of common materials, such as sand, gravel, and rock.

There are no rare or limited mineral such resources known to exist on the Project site that would be of specific value to residents of the region or State.

The Addendum Project would similarly not affect any mineral resources of local, regional, or statewide importance. Neither would implementation and/or operations of the Addendum Project affect mineral resources otherwise of local, regional, or statewide importance. No changed or new information has been identified to indicate that the Addendum Project would result in any potential impacts not previously considered and addressed within the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010), SCH 2009101008; *Westridge Initial Study* (September 2009); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

12. NOISE

Would the project result in:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?					X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?					X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?					X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?					X	

Would the project result in:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
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 expose people residing or working in the project area to excessive noise levels?						X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?						X

Summary

The Certified EIR addresses noise impacts at Section 4.4, "Noise," considering the project's compatibility with, and context within, existing and future noise environments. The Certified EIR also addressed the potential for noise from the construction and operation of the proposed uses to impact existing and proposed noise-sensitive receptors. The Certified EIR concluded that even with application of mitigation measures, temporary construction-source noise received at proximate residential properties would be significant and unavoidable. In approving the Certifying the EIR for the Westridge Commerce Center Project, the City adopted a Statement of Overriding Considerations pursuant to CEQA Guidelines § 15091, et seq., recognizing the Project's temporary but significant construction-source noise impact. All other potential noise-related impacts were deemed either less-than-significant, or could be reduced to less-than-significant levels with the application of mitigation.

The scope and character of entitlements proposed under the Project Orion Distribution Center are similar to those considered in the Certified EIR. As such, implementation of the Addendum Project would not result in new, additional, or different construction noise impacts than were considered and addressed in the Certified EIR. Construction of the Addendum Project would employ similar equipment, operating under City Noise Ordinance constraints and limitations, also applicable to the Certified EIR project. No new or additional

sensitive receptors would be affected by the Addendum Project construction activities, and noise levels received at off-site land uses would be consistent with noise levels considered in the Certified EIR. These noise levels are expected to exceed City thresholds when construction equipment is operating near the Project's boundaries. All mitigation measures required of the Certified EIR project (presented within Section 5 of this Addendum) would also be applicable to the Addendum Project, which would reduce construction-related noise to the extent feasible, However, as with the Certified EIR Project, construction noise threshold exceedances associated with the Addendum Project would be considered a significant temporary impact, which would be cumulatively considerable for the duration of construction, but which would cease entirely upon the completion of construction activities.

In regard to operational noise, the Certified EIR determined that noise from the Westridge Commerce Center's operations would not exceed the City's most restrictive nighttime noise threshold of 55 dBA at the nearest sensitive receptor. The Project Orion Distribution Center proposes uses of similar to those assessed within the Certified EIR, and as such, is expected to generate the same types of operational noise, resulting in less-than-significant operational noise levels for the Addendum Project.

More specifically, based on the analysis contained within the Certified EIR, operational mobile source noise generated by the Westridge Commerce Center would not substantially increase noise levels (greater than 3 dBA) or exceed City standards in this regard. As presented in the Traffic Impact Assessment prepared to compare the Addendum Project to the Westridge Commerce Center project (included in Addendum Appendix B), the total daily traffic volumes generated by the Addendum Project would be approximately 25 percent less than those described and considered in the Certified EIR.[1] As such, the areawide effects of mobile-source related noise under the Addendum Project would be commensurately reduced.

All other CEQA noise considerations, including groundborne noise or vibration and airport-related noise, were determined to be less-than-significant for the Certified EIR project, and would remain less-than-significant under the Addendum Project. Based on the preceding, the Addendum Project would not result in new, additional, or substantially different operational

[1] Please refer also to the discussion of comparative traffic volumes presented at Checklist Item 16,"Transportation/Traffic."

noise impacts than were considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010), SCH 2009101008; Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013); *Westridge Commerce Center Traffic Impact Assessment* (Urban Crossroads Inc., July 2013).

13. POPULATION AND HOUSING

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Induce substantial growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?					X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?						X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?						X

Summary

Potential population and housing impacts of the Certified EIR project were analyzed within the Initial Study prepared for the project (Checklist Item 12, "Population and Housing"). The discussion determined that the project would not result in population growth exceeding that anticipated under the City's General Plan. Because the Project site is comprised of vacant land, development of the proposed industrial uses would not result in the displacement of housing or persons, necessitating the construction of replacement housing elsewhere. Nor would the project otherwise adversely affect the availability of housing, or the availability of supporting services and facilities. The potential for the project to induce substantial growth

in the area; displace substantial numbers of existing housing units; or displace substantial numbers of people was therefore determined to be less-than-significant.

Industrial uses proposed by the Project Orion Distribution Center are similar in character and scale to the Westridge Commerce Center, and as such the Addendum Project would not result in new, additional, or substantially different population and housing impacts than were considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010), SCH 2009101008; *Westridge Commerce Center Initial Study* (September 2009); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

14. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of 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 public service:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Fire protection?					X	
b) Police protection?					X	
c) Schools?					X	
d) Parks?					X	
e) Other public facilities?					X	

Summary

The Initial Study prepared for the Westridge Commerce Center (Item 13, "Public Services") addressed potential impacts to public services, including fire and police protection services, schools, recreation facilities, and other public services. Potential impacts were determined to be less-than-significant.

In general terms, the most substantial demands for fire protection services, police protection services, school services, parks and "other" governmental services are based on residential populations, and increased demand is derived largely from new residential construction. The Addendum Project does not propose new or additional residential development. Further, as with the Certified EIR project, applicable development fees that are used, in part, to fund public services for new development are also broadly applicable to the Addendum Project, and would reduce any of the Addendum Project's potential public facilities and utilities impacts to levels that are less-than-significant.

Based on the preceding discussions, the Addendum Project would not result in new, additional, or different public services impacts than were considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010), SCH 2009101008; *Westridge Commerce Center Initial Study* (September 2009); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

15. RECREATION

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) 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?					X	
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?						X

Summary

The Initial Study prepared for the Westridge Commerce Center addressed potential impacts to recreational facilities at Checklist Item 14. No significant impacts were identified.

The Addendum Project's proposed distribution warehouse uses will not directly result in resident population increases, which typically act as principal drivers for recreational facilities. No direct increased demand for recreational facilities would be anticipated under the Addendum Project, and demands for recreational facilities and services would be similar to those of the Certified EIR project. Requisite development fees required of the Certified EIR project are also applicable to the Addendum Project, and would reduce the Addendum Project's potential parks and recreation facilities impacts to levels that are less-than-significant.

Based on the preceding discussion, the Addendum Project would not result in new, additional, or different recreation impacts than were considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010), SCH 2009101008; *Westridge Commerce Center Initial Study* (September 2009); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

16. TRANSPORTATION/TRAFFIC

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?					X	
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads and highways?					X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?						X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?					X	
e) Result in inadequate emergency access?					X	
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?					X	

Summary

The Certified EIR discussion of traffic and circulation (Certified EIR Section 4.2) indicates that even with the implementation of mitigation, certain traffic and circulation impacts of the Certified EIR Project would remain significant. In these instances, because the timely completion of required improvements cannot be assured, impacts were determined significant and unavoidable, and cumulatively considerable. In Certifying the EIR for the Westridge Commerce Center Project, the City adopted a Statement of Overriding Considerations pursuant to CEQA Guidelines § 15091, et seq., recognizing these significant traffic and circulation impacts.

Traffic impacts of the Addendum Project as compared to impacts of the Certified EIR Project presented in *Westridge Commerce Center – Traffic Impact Assessment Update* (Urban Crossroads, Inc.) September 13, 2013 (TIA Update). The TIA Update in its entirety is provided at Addendum Appendix B.

Without replicating the TIA Update in detail here, relative traffic impacts of the Addendum Project and the Certified EIR Project can be approximated by comparing trip generation characteristics of the two development scenarios. To this end, trip generation characteristics of the Addendum Project are compared with the Certified EIR Project at Table A-4. Please refer to the TIA for details regarding the Addendum Project trip generation characteristics.

Table A-4
Trip Generation Comparison
Certified EIR Project vs. Addendum Project

Vehicle Types[1]	Certified EIR Project (Westridge Commerce Center)			Addendum Project (Project Orion Distribution Center)		
	AM Peak Hour	PM Peak Hour	Daily Total	AM Peak Hour	PM Peak Hour	Daily Total
Passenger Cars[2]	47	56	729	37	39	400
Truck Trips (PCE)[3]						
2-axle (1.5 PCE)	9	11	145	0	0	0
3-axle (2.0 PCE)	29	34	440	0	0	0
4+-axle (3.0 PCE)	105	124	1,616	105	45	1,800
Net truck trips (PCE)	143	169	2,201	105	45	1,800
Total Trips (PCE)	191	225	2,930	142	84	2200
Percent Change	NA	NA	NA	(25%)	(63%)	(25%)

Sources: *Westridge Commerce Center Traffic Impact Assessment* (Urban Crossroads, Inc., July 2013); *Westridge Commerce Center Draft EIR (*Applied Planning, Inc.)October 2010.

Notes:

[1] For the Certified EIR project, the vehicle mix was consistent with the City of Fontana Truck Trip Generation Study for LU030; PCE rates were per SANBAG; and High Cube Warehouse Trip Generation source data was from NAIOP-City of Moreno Valley Hybrid Rates, September 14, 2007. For the Addendum Project, daily passenger car and truck trips are based on information provided by the Project applicant.

[2] For the Addendum Project, passenger car trips are based on the anticipated peak hour trips produced by corporate office employees only, as identified by the Project applicant. Warehouse and maintenance employees were not included as they are anticipated to arrive and depart outside of peak periods.

[3] Truck trips are based on the anticipated future warehouse trips, as identified by the Project Applicant.

As indicated at Table A-4, the Addendum Project would incrementally reduce total daily and peak hour traffic volumes when compared to trip estimates developed for Certified EIR project. More specifically, the Addendum Project would generate a total of 2,200 trips daily,[2] of which 142 trips would occur during the morning peak hour period (7 a.m. to 9 a.m.), and 84 trips would occur during the evening peak hour period (4 p.m. to 6 p.m.). In contrast, the Certified EIR project was estimated to generate 2,930 trips daily, of which 191 would have occurred during the morning peak hour period and 225 of which would have occurred during the evening peak hour. It is further noted that trip distribution characteristics of the Certified EIR project and the Addendum Project are anticipated to be comparable.

Since the Addendum Project trip generation would not exceed the trip generation under the Certified EIR project, and trip distribution characteristics are substantively unchanged, it is

[2] All trip volumes are expressed in terms of Passenger Car Equivalents (PCEs).

inferred that traffic impacts of the Addendum Project would not be significantly greater than, or different than those identified by the Certified EIR. However, under either the Certified EIR project or the Addendum Project, even with the implementation of mitigation, certain significant traffic and circulation impacts identified previously in the Certified EIR would remain significant. The Addendum Project would not, however, increase the severity of these impacts, or result in or cause new potentially significant impacts, or result in or cause new significant and unavoidable impacts. In point of fact, because peak hour and total daily trip generation would be comparatively reduced under the Addendum Project, the Addendum Project's traffic impacts at individual intersections and in aggregate would likely be reduced when compared to impacts of the Certified EIR Project.

Other CEQA transportation/traffic considerations (potential to result in a change in air traffic patterns, resulting in substantial safety risks; potential to substantially increase hazards due to a design feature; potential to result in inadequate emergency access; potential to conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities) were determined to be less-than-significant for the Certified EIR project, and would remain less-than-significant under the Addendum Project. That is, all circulation system designs and improvements would comply with City engineering requirements, and no transportation/traffic design hazards are proposed or are anticipated. Similarly, emergency access will be provided and maintained consistent with City and Fire Department requirements. Emergency response times identified as part of the Certified EIR's analysis would remain substantially the same with development of the Addendum Project.

Current design concepts identify appropriate provision of pedestrian/bicycle paths and connections, including a pedestrian/bike trail segment along Fir (future Eucalyptus) Avenue, and the Project will be required to accommodate bike racks and/or secured bicycle storage consistent with City requirements. Bus routes and transit facilities serving the Project site and surrounding areas would be implemented by transit service providers consistent with ridership demands. On this basis, the Addendum Project would not propose elements or operations that would conflict with alternative transportation modes.

Based on the preceding discussions, the Addendum Project would not result in new, additional, or different traffic/transportation impacts than were considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010); *Westridge Commerce Center Final EIR* (April 2011); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013); *Westridge Commerce Center Traffic Impact Assessment Update* (Urban Crossroads Inc., July 17, 2013).

17. UTILITIES AND SERVICE SYSTEMS

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?					X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significance environmental effects?					X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?					X	

Would the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
e) 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?					X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?					X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?					X	

Summary

The Initial Study prepared for the Westridge Commerce Center addressed potential impacts to water and sewer facilities, wastewater treatment facilities, other utilities systems, solid waste disposal services at Checklist Item 16, "Utilities and Service Systems." Potential impacts were determined to be less-than-significant. Notwithstanding, the topic of water supply was discussed further in the Certified EIR at Section 4.5, "Water Supply."

Water supply and wastewater treatment are provided to the Project site by the Eastern Municipal Water District (EMWD). As presented within the Certified EIR, subject to conditions stipulated in the project Water Supply Assessment (WSA) and reflected in EIR mitigation measures, water demands of the Project can be met with no adverse effects on water supplies or water resources, including groundwater. It is noted that, for planning purposes, EMWD uses a per-acre factor to estimate water demand based on land use type. The Westridge Commerce Center Project, as a light industrial land use, was estimated to require 700 gallons per day (GPD) per acre, or a total of 38,857 GPD, which is equivalent to approximately 44 acre-feet per year. Acreage under the Project Orion site plan concept totals 52.095 acres, with no change in land use. On this basis, the Project Orion Distribution Center

would require approximately 36,467 GPD, or approximately 41 acre-feet per year. Thus, the Addendum Project would have a slightly reduced demand for water when compared to the Certified EIR project, and any potential impacts associated with the Project Orion Distribution Center would be adequately addressed within the scope of the Certified EIR mitigation measures, which are included in Addendum Section 5, "Mitigation Summary."

EMWD would provide wastewater treatment services for the Project site through the Moreno Valley Regional Water Reclamation Facility. Although this treatment facility has typical daily flows of approximately 11 million gallons per day (mgd), it has a capacity of 16 mgd, and plans to ultimately expand to accommodate 41 mgd. Wastewater generation of the Westridge Commerce Center was estimated to be approximately 31,000 gallons per day (gpd). This represents 0.1 percent of the treatment facility's existing capacity and 0.07 percent of the plants ultimate capacity. Since the Addendum Project proposes slightly less square footage than the Certified EIR project, wastewater generation is considered comparable. As with the Certified EIR project, the Addendum Project would comply with all applicable regulations of the City, County, State and Regional Water Quality Control Boards, and will be required to pay water and sewer connection fees established by EMWD to support the maintenance and planned improvement of existing infrastructure.

In regard to solid waste, the Project site would be served by Waste Management of the Inland Empire, which utilizes three (3) local landfills. According to the California Integrated Waste Management Board, estimated disposal rates are 0.0108 tons of solid waste per square feet per year for warehouse and office uses. Using this generation factor, the Certified EIR project would generate 10,193 tons of solid waste per year, or 28 tons per day. Based on the slight reduction in size, the Addendum Project would generate approximately 10,080 tons of solid waste per year.

As with the Certified EIR project, the Addendum Project would design, implement, operate, and maintain all utilities systems and system connections consistent with City and purveyor requirements. Additionally, all mitigation incorporated in the Certified EIR would be carried forward as part of the Addendum Project. The text of each mitigation measure is provided in Addendum Section 5, "Mitigation Summary." Based on the preceding, the Addendum

Project would not result in new, additional, or different impacts than were considered and addressed in the Certified EIR. No changes or additions to the Certified EIR analysis are necessary.

Sources: *Westridge Commerce Center Draft EIR* (October 2010), SCH 2009101008; *Westridge Commerce Center Initial Study* (September 2009); Preliminary plans for the Project Orion Distribution Center (ALDI, June 2013).

18. MANDATORY FINDINGS OF SIGNIFICANCE

Does the project:	Substantial Change in Project Requiring Major MND Revisions	Substantial Change in Circumstances Requiring Major MND Revisions	New Information Showing Greater Significant Effects than Previous MND	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous MND	No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Have the potential to 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, 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?					X	
b) 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 the past projects, the effects of other current projects, and the effects of probable future projects.)					X	
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?					X	

Summary

As supported by the discussions presented herein, the Addendum Project would not result in or cause new significant impacts, substantively increased impacts, or substantively different environmental impacts than those previously addressed in the Certified EIR prepared for the Westridge Commerce Center project. There are no changes or new information requiring preparation of an EIR based on the Addendum Project's potential to 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, 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; result in impacts that are individually limited, but cumulatively considerable; or have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. No amendments or additions to the Certified EIR analysis are necessary.

URBAN CROSSROADS

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September 13, 2013

Mr. Ross Geller
Applied Planning, Inc.
5817 Pine Avenue, Suite A
Chino Hills, CA 91709

Subject: Westridge Commerce Center – Traffic Impact Assessment Update

Dear Mr. Geller:

Urban Crossroads, Inc. is pleased to submit this updated traffic impact assessment for the Westridge Commerce Center (referred to as "Project"), which is located west of Redlands Boulevard and South of State Route 60 in the City of Moreno Valley. The purpose of this traffic assessment is to determine if proposed changes to the Project's building design to support an identified future tenant operations would result in substantial changes to the findings previously reported for the proposed Project in the *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads, Inc., Rev. May 20, 2010, referred to as the "2010 Traffic Study"). Specifically, the Project is anticipated to serve as a distribution center for Aldi, a worldwide grocery retailer that is anticipated to support approximately 150 future stores in the southern California region. In addition to the reduction in overall building square footage, Aldi operations will require a portion of the warehouse area for cold storage, and will require an increase in the amount of office use from the entitled 14,000 square feet to 50,000 square feet. The Project is anticipated to have an opening year of 2014. The current site plan is shown on Exhibit 1.

Consistent with the 2010 Traffic Study analysis methodology and reflecting the current site plan and currently anticipated opening year (2014), the following ten (10) intersections will be evaluated for Existing plus Ambient Growth plus Project (EAP) 2014 traffic conditions, and Existing plus Ambient Growth plus Project plus Cumulative (EAPC) 2014 traffic conditions:

ID	Intersection Location
1	Moreno Beach Drive & SR-60 Freeway Westbound Ramps
2	Moreno Beach Drive & SR-60 Freeway Eastbound Ramps
3	Quincy Street & Eucalyptus Avenue (EAPC Conditions Only)
4	Driveway 1 & Eucalyptus Avenue / Fir Avenue
5	Street "A" & Eucalyptus Avenue / Fir Avenue
6	Redlands Boulevard & Spruce Avenue / SR-60 Freeway Westbound Ramps
7	Redlands Boulevard & SR-60 Freeway Eastbound Ramps
8	Redlands Boulevard & Eucalyptus Avenue / Fir Avenue
9	Redlands Boulevard & Eucalyptus Avenue / Encilia Avenue
10	Redlands Boulevard & Cottonwood Avenue

SUMMARY OF FINDINGS

The Project is anticipated to generate a net total of 2,200 passenger car equivalent (PCE) average daily trips (ADT), 142 PCE AM peak hour trips, and 84 PCE PM peak hour trips. When compared to the trip generation estimates previously presented in the 2010 Traffic Study, there is a net decrease of 730 PCE ADT, 49 PCE AM peak hour trips and 142 PCE PM peak hour trips.

Analysis of Opening Year traffic conditions for EAP (2014) and EAPC (2014) at each of the study area intersections resulted in findings consistent with those previously reported in the 2010 Traffic Study for EAP (2013) and EAPC (2013) scenarios. In other words, as a result of proposed changes to the Project, there were no additional intersections found to operate at an unacceptable level of service (LOS) beyond those previously identified in the 2010 Traffic Study; nor would the proposed changes to the Project result in substantively worse LOS conditions at any of the study area intersections.

PROJECT TRIP GENERATION

Unlike many industrial projects where future project-related trips are estimated based on empirical data collected and compiled by the Institute of Transportation Engineers (ITE), the trip generation rates used for this traffic assessment have been derived from specific employment and operational characteristics as identified by the future tenant (Aldi).

The Project is anticipated to operate two primary shifts from 6 AM to 4 PM and 3 PM to 11 PM with partial maintenance and operations staff on site twenty-four hours a day. Based on information provided to Urban Crossroads by the applicant, it is anticipated that the Project will employ approximately 50 office employees and 200 warehouse employees resulting in 400 daily automobile trips and 600 daily truck trips.

Passenger car trips have been based from the anticipated peak hour trips produced by corporate office employees only. Based on typical operations of other warehouse sites for Aldi, warehouse and maintenance employees typically arrive and depart outside of the typical morning (7am-9am) and evening (4pm-6pm) peak periods. There are anticipated to be 35 corporate office employees arriving during the morning peak hour, and leaving during the evening peak hour. A reduction for carpooling was not applied to the corporate office employee trips in an effort to conservatively estimate that each corporate office employee will generate 1 inbound trip for the morning peak hour and 1 outbound trip for the evening peak hour. It has been conservatively estimated that potentially up to 5% of employees may be dropped off by family members or by vanpool which results in an estimated 2 outbound passenger car trips in the morning peak hour and 2 inbound passenger car trips in the evening peak hour. An additional passenger car trip during the evening peak hour has been included in anticipation of a delivery (package) pick-up or drop-off.

Opening Year truck trips have been conservatively based on future operational characteristics in which the Project would support up to 150 stores throughout the region. This was done to ensure that potential impacts were assessed for full buildout of the project site. Based on empirical data provided by Aldi, this level of activity is anticipated to generate a total of 175 inbound trucks (100 receiving goods and 75 delivery) between the hours of 4 AM to 6 AM, and 75 outbound delivery trucks between the hours of 7 PM to 9 PM. As noted above, the scheduling of truck traffic is anticipated to occur outside of the "typical" morning and evening peak periods, however, in an effort to overstate as opposed to understate potential impacts, up to 20% of the trucks identified to occur prior to the morning peak hours, or after the evening peak hours were conservatively assumed to overlap with the other project-related trips occurring in the

peak hours. This would result in 35 inbound truck trips in the morning peak hour and 15 outbound truck trips in the evening peak hour. These estimates were made to allow for descrepancies in scheduling with actual arrival and departure times. Finally, it has been conservatively assumed that all truck trips are 4+ Axle trucks, and accordingly are evaluated at a PCE factor of 3.0.

Operations data from which project-related trip generation data has been based is included in Attachment "A".

As shown on Table 1, the Project is estimated to generate a total of 2,200 PCE average daily trips (ADT), 142 PCE AM peak hour trips, and 84 PCE PM peak hour trips. As compared to the 2010 Traffic Study, the current Project results in a net decrease of 730 PCE ADT, 49 PCE AM peak hour trips and 142 PCE PM peak hour trips. A comparison of the proposed Project's trip generation and the 2010 Traffic Study's trip generation is also presented in Table 1.

OPENING YEAR (2014) CONDITIONS

Peak hour traffic operations have been evaluated for each of the study area intersections for EAP (2014) conditions in an effort to evaluate any potential impacts caused by the additional year of ambient growth and/or the change in Project traffic. ADT, AM and PM peak hour intersection turning movement volumes for EAP (2014) traffic conditions are shown on Exhibit 2. It should be noted that the volumes shown on the exhibit are represented in PCE.

INTERSECTION OPERATIONS ANALYSIS

EAP (2014) intersection levels of service for both without and with improvements are shown on Table 2. Consistent with the results previously reported in the 2010 Traffic Study, the following two (2) study area intersections are projected to operate at unacceptable levels of service during the peak hours:

ID	Intersection Location
6	Redlands Boulevard & Spruce Avenue / SR-60 Freeway Westbound Ramps
7	Redlands Boulevard & SR-60 Eastbound Ramps

As a result of the net reduction in Project trips, the intersection of Redlands Boulevard at Fir Avenue is no longer anticipated to operate at an unacceptable LOS without improvements. EAP (2014) conditions intersection analysis worksheets have been included in Attachment "B" of this letter.

Improvements needed to address LOS deficiencies for EAP (2014) conditions are consistent with those previously recommended in the 2010 Traffic Study. Intersection analysis worksheets for EAP (2014) conditions, with improvements, have been included in Attachment "C" of this letter.

TRAFFIC SIGNAL WARRANT ANALYSIS

For EAP (2014) conditions, a traffic signal appears to be warranted at the following study area intersection:

ID	Intersection Location
8	Redlands Boulevard & Eucalyptus Avenue / Fir Avenue

This is consistent with the traffic signal warrant analysis results for EAP (2013) conditions presented in the 2010 Traffic Study. Traffic signal warrant analysis worksheets for EAP (2014) conditions can be found in Attachment "D" of this letter.

OPENING YEAR (2014) WITH CUMULATIVE DEVELOPMENTS

EAPC (2014) peak hour traffic operations have been evaluated for the intersections analyzed previously under EAPC (2013) conditions in the 2010 Traffic Study. The EAPC 2014 analysis specifically accounts for the additional year of ambient traffic growth that would occur between the 2013 and 2014 EAPC scenarios. ADT, AM and PM peak hour intersection turning movement volumes for EAPC (2014) traffic conditions are shown on Exhibit 3. It should be noted that the volumes shown on the exhibits are represented in PCE.

INTERSECTION OPERATIONS ANALYSIS

EAPC (2014) intersection levels of service for both without and with improvements scenarios are shown on Table 3. For EAPC (2014) conditions, the following four (4) study area intersections are projected to operate at unacceptable levels of service during the peak hours:

ID	Intersection Location
2	Moreno Beach Drive & SR-60 Freeway Eastbound Ramps
6	Redlands Boulevard & Spruce Avenue / SR-60 Freeway Westbound Ramps
7	Redlands Boulevard & SR-60 Freeway Eastbound Ramps
8	Redlands Boulevard & Eucalyptus Avenue / Fir Avenue

The resulting EAPC (2014) intersection operations analysis results are consistent with those presented in the 2010 Traffic Study for EAPC (2013) conditions. EAPC (2014) conditions intersection analysis worksheets have been included in Attachment "E" of this letter.

The implementation of improvements at deficient intersections for EAPC (2014) conditions consistent with those recommended for EAPC (2013) conditions by the 2010 Traffic Study results in acceptable LOS at affected study area intersections.[1] Intersection analysis worksheets for EAPC (2014) conditions, with improvements, have been included in Attachment "F" of this letter.

TRAFFIC SIGNAL WARRANT ANALYSIS

For EAPC (2014) conditions, a traffic signal appears to be warranted at the following study area intersection in addition to the location previously warranted under EAP (2014) conditions:

ID	Intersection Location
6	Street "A" & Eucalyptus Avenue / Fir Avenue

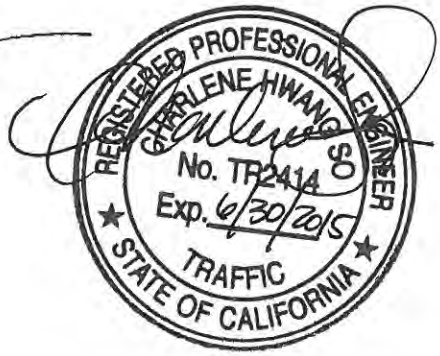
[1] Additionally, and consistent with the Opening Year Traffic Impact Mitigation Measures identified in the EIR the Project as revised herein will pay required Development Impact Fees (DIF), facilitating construction of new intersection improvements at Quincy Street at Fir (future Eucalyptus) Avenue. The new intersection of Quincy Street at Fir (future Eucalyptus) Avenue is a General Plan Circulation Element improvement that would be required irrespective of the Project. The Project will, however, contribute traffic to this new intersection and will be responsible for fee payments applied to its improvements. Please refer to MM 4.2.8, DEIR page 4.2-42.

Consistent with the recommendations in the 2010 Traffic Study, the intersection of Street "A" at Eucalyptus Avenue/Fir Avenue is anticipated to operate at acceptable levels of service under EAPC (2014) traffic conditions during the peak hours and does not present safety issues as a cross-street stop controlled intersection. As such, the installation of a traffic signal is not necessary for EAPC (2014) traffic conditions. However, the 2010 Traffic Study and the EIR both indicate that the installation of a traffic signal was needed under General Plan Buildout traffic conditions in order to maintain acceptable peak hour operations at the intersection of Street "A" at Eucalyptus Avenue/Fir Avenue. Traffic signal warrant analysis worksheets for EAPC (2014) conditions can be found in Attachment "G" of this letter.

If you have any questions regarding this analysis, please give me a call at (949) 660-1994 ext. 204.

Respectfully submitted,

URBAN CROSSROADS, INC.



Aric Evatt, PTP
Principal

Charlene So, PE
Senior Transportation Engineer

AE:CH:DL

JN:08721-05 Letter
Attachments

EXHIBIT 1

PRELIMINARY SITE PLAN

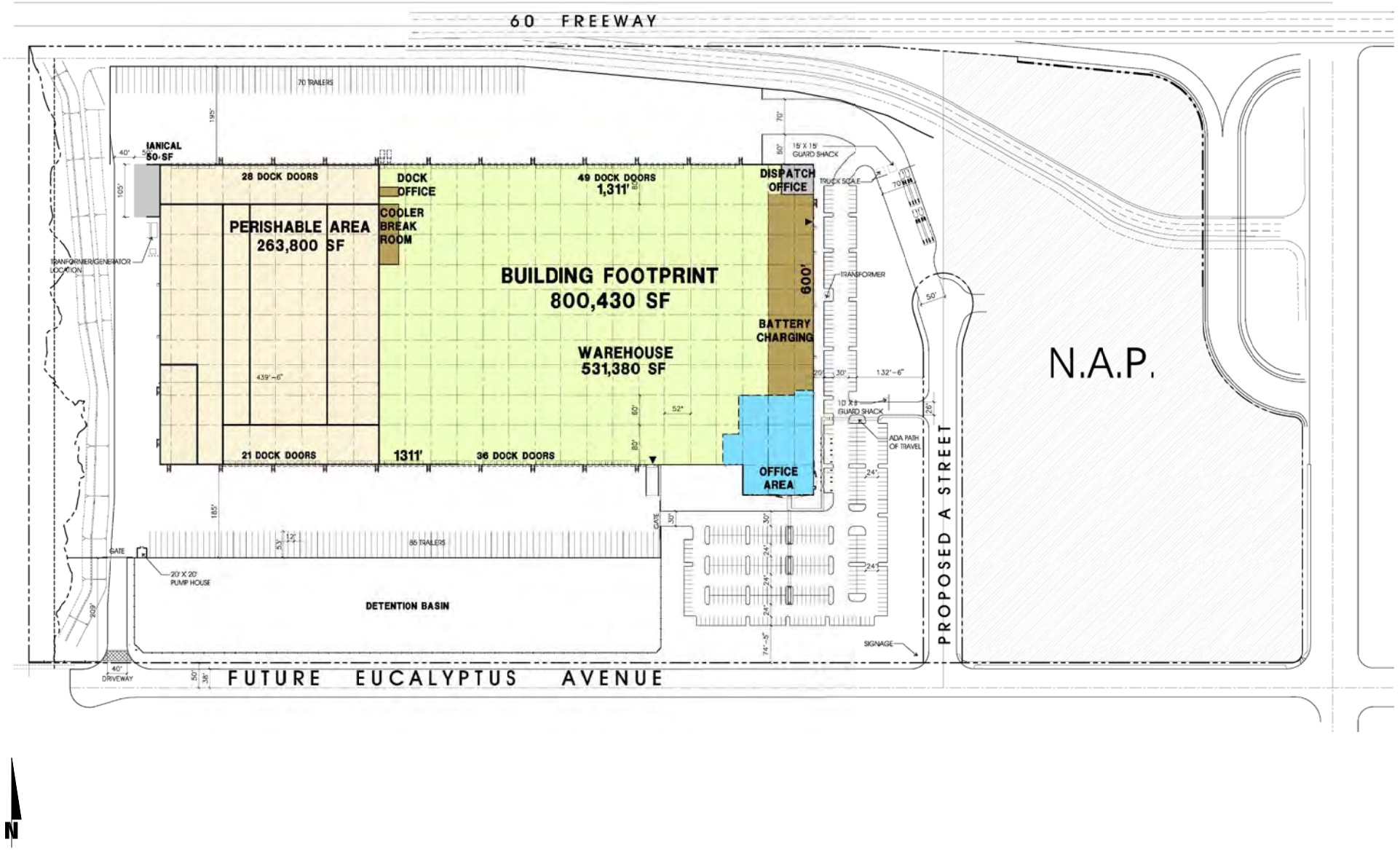
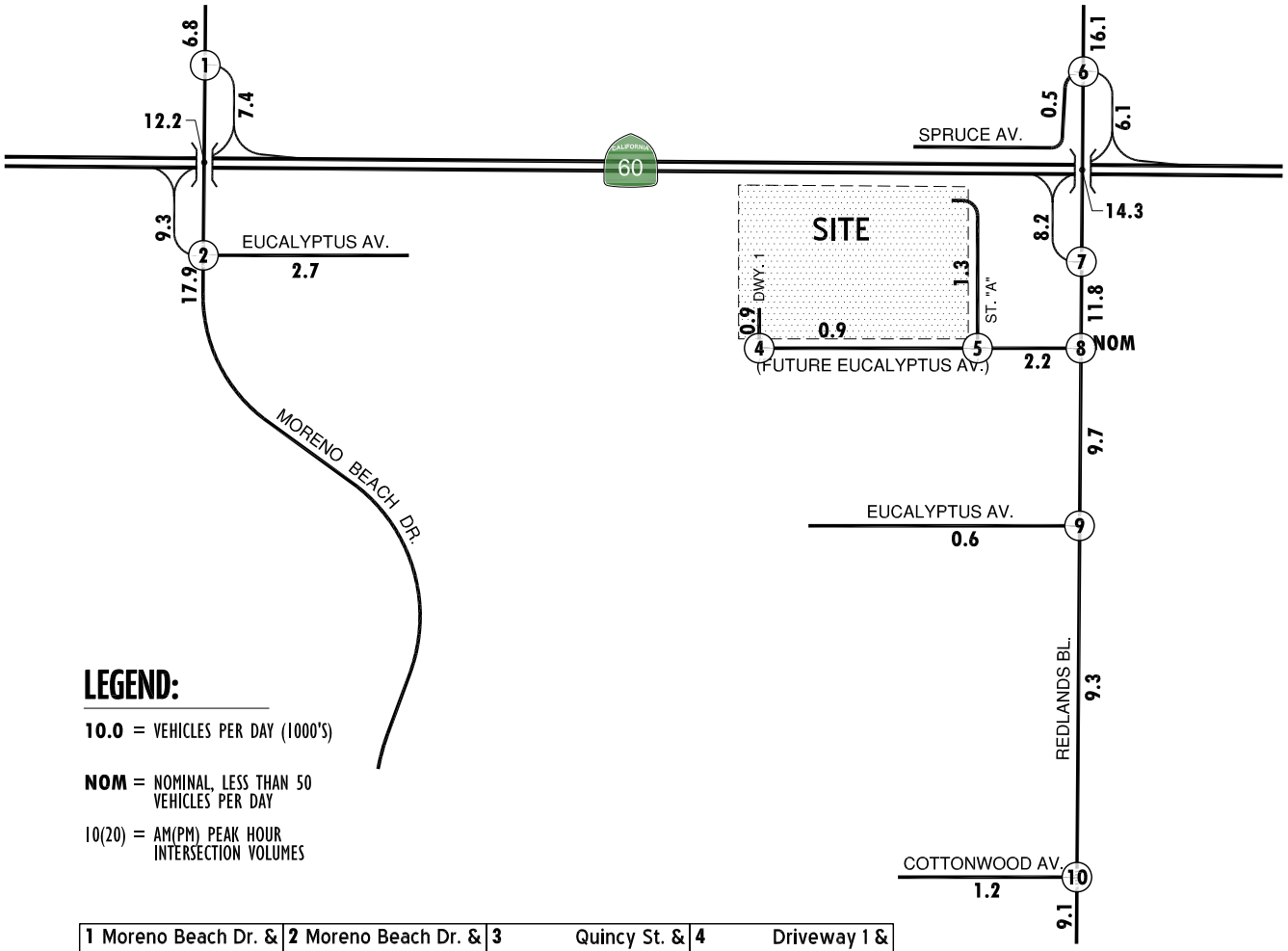


EXHIBIT 2

EXISTING PLUS AMBIENT GROWTH PLUS PROJECT (2014) AVERAGE DAILY TRAFFIC (ADT) AND PEAK HOUR INTERSECTION VOLUMES

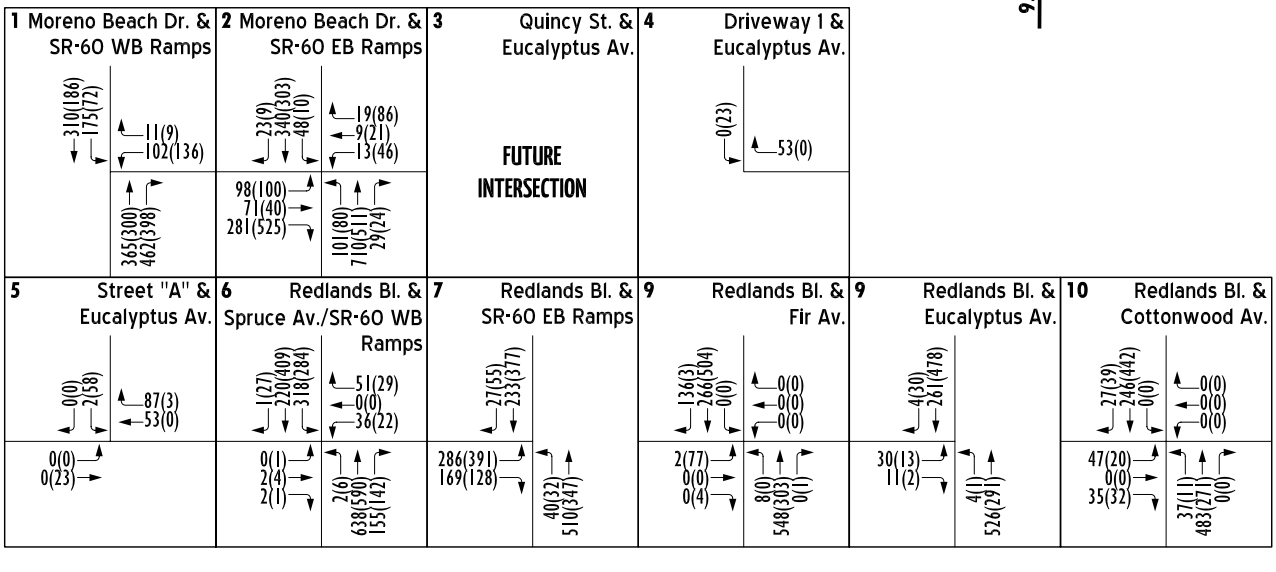


LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

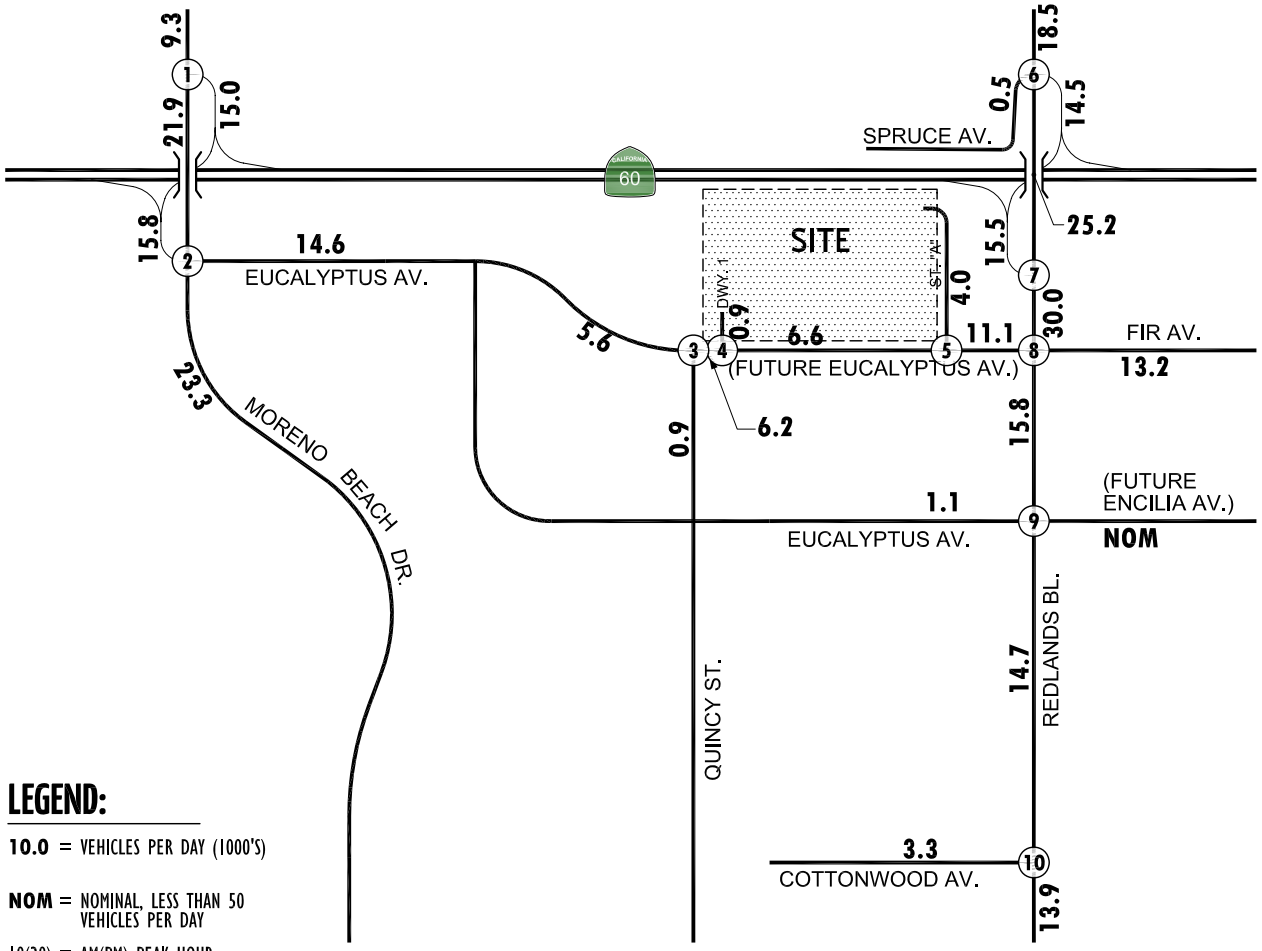
10(20) = AM(PM) PEAK HOUR INTERSECTION VOLUMES



N

EXHIBIT 3

EXISTING PLUS AMBIENT GROWTH PLUS PROJECT PLUS CUMULATIVE DEVELOPMENT (2014) AVERAGE DAILY TRAFFIC (ADT) AND PEAK HOUR INTERSECTION VOLUMES



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

10(20) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

1 Moreno Beach Dr. & SR-60 WB Ramps	**2** Moreno Beach Dr. & SR-60 EB Ramps	**3** Quincy St. & Eucalyptus Av.	**4** Driveway 1 & Eucalyptus Av.	**5** Street "A" & Eucalyptus Av.
380(281) → 175(72) ← ← 14(26) ← 187(248) 414(398) → 747(896) ←	28(25) → 379(392) → 158(111) ← ← 238(546) ← 39(113) ← 33(87) 98(100) → 381(294) → 328(650) → 131(120) ← 826(647) ← 55(46) ←	← 172(187) ← 10(35) 169(247) → 5(8) → 6(4) → 21(27) →	0(7) → 0(16) ← ← 37(0) ← 182(215) 16(0) → 174(274) →	1(15) → 24(160) ← ← 112(103) ← 218(200) 14(6) → 160(284) →
6 Redlands Bl. & Spruce Av./SR-60 WB Ramps	**7** Redlands Bl. & SR-60 EB Ramps	**8** Redlands Bl. & Eucalyptus Av./Fir Av.	**9** Redlands Bl. & Eucalyptus Av./ Encilia Av.	**10** Redlands Bl. & Cottonwood Av.
1(27) → 291(504) → 318(284) ← ← 51(29) ← 0(0) ← 183(193) 0(1) → 2(4) → 2(1) → 2(6) → 696(700) → 430(660) →	27(55) → 450(644) → 286(391) → 480(548) → 184(247) ← 842(975) ←	279(236) → 302(625) → 349(332) → ← 236(479) ← 27(56) ← 37(102) 136(369) → 37(50) → 18(78) → 47(57) → 654(374) → 72(78) →	11(57) → 345(747) → 0(1) → ← 1(0) ← 0(0) ← 0(0) 46(33) → 0(0) → 11(2) → 4(1) → 726(475) → 0(0) →	44(105) → 313(644) → 0(0) → ← 0(0) ← 0(0) ← 0(0) 91(67) → 0(0) → 47(72) → 72(34) → 639(408) → 0(0) →

Table 1

Trip Generation Summary for the proposed Aldi Southern California Distribution Center

Project	TSF	EMP	AM Peak Hour			PM Peak Hour			Daily[1]
			In	Out	Total	In	Out	Total	
Aldi Dist. Warehouse (MV, CA)	800.430	250							
Passenger Cars[2]:			35	2	37	3	36	39	400
Trucks (PCE)[3]:			105	0	105	0	45	45	1,800
TOTAL (PCE, based on Aldi Project Info):			140	2	142	3	81	84	2,200
TOTAL (PCE, 2010 Westridge Commerce Center):			104	87	191	87	139	226	2,930
Variance:			**36**	**-85**	**-49**	**-84**	**-58**	**-142**	**-730**

1 Daily Passenger and Truck trips are based on the Project Orion Design Criteria RFP - Exhibit A (January 14, 2013) which anticipates 400 daily passenger car and 600 daily truck trips. A Passenger Car Equivalent (PCE) factor of 3.0 was utilized to translate every 1 truck trip to 3 passenger car equivalent trips (assumes all trucks are 4+ Axle).

2 Passenger car trips are based from the anticipated peak hour trips produced by corporate office employees only as shown on the Employee Shift & Truck Delivery Breakdown Worksheet provided by the Project. Warehouse and maintenance employees were not included as they are anticipated to arrive and depart outside of the AM and PM peak periods. Based on information provided there are anticipated to be 35 corporate office employees arriving before 8 AM and leaving before 5 PM. A carpool reduction has not been applied to the corporate office employee trips in an effort to conservatively estimate that each corporate office employee will generate 1 trip for each peak hour. It has been conservatively estimated that 5% of employees may be dropped off by family members or by vanpool which results in an estimated 2 outbound passenger car trips in the AM peak hour and 2 inbound passenger car trips in the PM peak hour. An additional passenger car trip during the PM peak hour is included in anticipation of an office or warehouse operation related trip such as a FedEx or UPS delivery/pick-up.

3 Truck trips are based from the anticipated future warehouse peak hour trips shown on the Employee Shift & Truck Delivery Breakdown Worksheet which show 175 inbound (100 receiving goods and 75 delivery) trucks between the hours of 4 AM to 6 AM and 75 Aldi outbound delivery trucks between the hours of 7 PM to 9 PM. As the scheduling of truck traffic occurs outside of the "typical" AM and PM peak periods of 7 AM to 9 AM and 4 PM to 6 PM, 20% of truck trips were assigned to the AM and PM peak hours in the event that a portion of the trucks are leaving after the scheduled AM and before the scheduled PM truck activity periods. 20% of truck trips occuring outside of their scheduled activity periods results in an estimated 35 inbound AM peak hour truck trips and 15 outbound PM peak hour truck trips associated with the proposed Project. These estimates were made to allow for descrepancies in scheduling with actual arrival and departure times. As an anticipated truck mix has not been provided, it has been conservatively assumed that every truck associated with the Project site is a 4+ Axle truck and a PCE factor of 3.0 has been applied to these truck trips.

Table 2

Intersection Analysis for Existing Plus Ambient Growth Plus Project (2014) Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Moreno Beach Drive (NS) at:																	
• SR-60 Westbound Ramps (EW)																	
- Without Improvements	TS	0	1	1>	1	1	0	0	0	0	1	0	1>	15.8	19.7	B	B
• SR-60 Eastbound Ramps (EW)																	
- Without Improvements	TS	1	2	1	1	3	0	0	1	0	1	1	1	41.6	46.1	D	D
Driveway 1 (NS) at:																	
• Eucalyptus Avenue (EW)																	
- Without Improvements		INTERSECTION DOES NOT EXIST															
- With Improvements	**CSS**	0	0	0	**1**	0	0	0	0	0	0	0	**1**	8.5	8.6	A	A
Street A (NS) at:																	
• Eucalyptus Avenue (EW)																	
- Without Improvements		INTERSECTION DOES NOT EXIST															
- With Improvements	**CSS**	0	0	0	**1**	0	**1**	**1**	**1**	0	0	**1**	0	9.0	8.8	A	A
Redlands Boulevard (NS) at:																	
• SR-60 Westbound Ramps (EW)																	
- Without Improvements	CSS	1	1	0	1	1	0	0	1	0	0	1	0	--[4]	94.3	F	F
- With Improvements	**TS**	1	1	0	1	1	0	0	1	0	0	1	0	35.2	24.2	D	C
• SR-60 Eastbound Ramps (EW)																	
- Without Improvements	AWS	0	1	0	0	1	0	0	1	0	0	0	0	56.6	43.2	F	E
- With Improvements	**TS**	**1**	1	0	0	1	0	0	1	0	0	0	0	29.1	28.8	C	C
• Fir Avenue (EW)																	
- Without Improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	20.2	22.9	C	C
Redlands Boulevard (NS) at:																	
• Eucalyptus Avenue (EW)																	
- Without Improvements	CSS	0	1	0	0	1	0	1	0	1	0	0	0	16.9	16.1	C	C
• Cottonwood Avenue (EW)																	
- Without Improvements	TS	1	1	0	0	1	1	1	0	1	0	0	0	7.0	5.6	A	A

[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; > = Right-Turn Overlap Phasing; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software:
HCS+ Version 5.21 (2005) for unsignalized intersections and SYNCHRO Version 8 (2012) for signalized intersections.
Per the 2000 Highway Capacity Manual, 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] CSS = Cross-Street Stop; AWS = All Way Stop; TS = Traffic Signal

[4] -- = Delay High (greater than 100.0 seconds); Level of Service "F".

Intersection Analysis for
Existing Plus Ambient Growth Plus Project Plus Cumulative (2014) Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Moreno Beach Drive (NS) at:																	
• SR-60 Westbound Ramps (EW)																	
- Without Improvements	TS	0	1	1>	1	1	0	0	0	0	1	0	1>	17.2	19.8	B	B
- With Improvements[5]	TS	0	1	1>	1	1	0	0	0	0	1	0	1>	17.5	17.0	B	B
• SR-60 Eastbound Ramps (EW)																	
- Without Improvements	TS	1	2	1	1	3	0	0	1	0	1	1	1	--[4]	--[4]	F	F
- With Improvements	TS	1	2	1	1	3	0	0	1	**1**	1	1	1	45.7	50.5	D	D
Quincy Street (NS) at:																	
• Eucalyptus Avenue (EW)																	
- Without Improvements		INTERSECTION DOES NOT EXIST															
- With Improvements	**CSS**	0	**1**	0	0	0	0	0	**1**	0	**1**	**1**	0	9.6	10.1	A	B
Driveway 1 (NS) at:																	
• Eucalyptus Avenue (EW)																	
- Without Improvements		INTERSECTION DOES NOT EXIST															
- With Improvements	**CSS**	0	0	0	0	**1**	0	**1**	**1**	0	0	**1**	**1**	7.7	11.2	A	B
Street A (NS) at:																	
• Eucalyptus Avenue (EW)																	
- Without Improvements		INTERSECTION DOES NOT EXIST															
- With Improvements	**CSS**	0	0	0	**1**	0	**1**	**1**	**1**	0	0	**1**	0	11.8	15.6	B	C
Redlands Boulevard (NS) at:																	
• SR-60 Westbound Ramps (EW)																	
- Without Improvements	CSS	1	1	0	1	1	0	0	1	0	0	1	0	--[4]	--[4]	F	F
- With Improvements	**TS**	1	**2**	**1>**	1	**2**	0	0	1	0	0	1	0	19.4	21.3	B	C
• SR-60 Eastbound Ramps (EW)																	
- Without Improvements	AWS	0	1	0	0	1	0	0	1	0	0	0	0	--[4]	--[4]	F	F
- With Improvements	**TS**	**1**	**2**	0	0	**2**	0	**1**	**0**	**1**	0	0	0	23.6	26.8	C	C
• Eucalyptus Avenue (EW)																	
- Without Improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	--[4]	--[4]	F	F
- With Improvements	**TS**	**1**	**2**	0	**2**	**2**	**1>**	**2**	**2**	0	**1**	**2**	**1>**	24.5	29.8	C	C

Intersection Analysis for
Existing Plus Ambient Growth Plus Project Plus Cumulative (2014) Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
• Encilia Avenue (EW)																	
- Without Improvements	CSS	0	1	0	0	1	0	1	0	1	0	0	0	22.7	29.9	C	D
• Cottonwood Avenue (EW)																	
- Without Improvements	TS	1	1	0	0	1	1	1	0	1	0	0	0	8.5	8.6	A	A

[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; > = Right-Turn Overlap Phasing; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software:
HCS+ Version 5.21 (2005) for unsignalized intersections and SYNCHRO Version 8 (2012) for signalized intersections.
Per the 2000 Highway Capacity Manual, 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] CSS = Cross-Street Stop; AWS = All Way Stop; TS = Traffic Signal

[4] -- = Delay High (greater than 100.0 seconds); Level of Service "F".

[5] No physical geometric improvements have been recommended, but coordination (timing) between ramps on Moreno Beach Drive has been altered.

ATTACHMENT "A"

Project Employee Shift & Truck Delivery Breakdown Worksheet and Project Trip Information

Project Orion
New Southern California Distribution Center

EMPLOYEE SHIFT & TRUCK DELIVERY BREAKDOWN WORKSHEET

	Corporate Office Hours			
	8 AM to 5 PM *Arriving before 8 AM* *Leaving before 5 PM*	9 AM to 7 PM *Arriving after 9 AM* *Leaving after 6 PM*		
Employees				
Corporate Offices	35 employees	15 employees		50 employees
				50 employees

	Warehouse Operating Shifts			
	6 AM to 4 PM *Arriving before 6 AM* *Leaving before 4 PM*	3 PM to 11 PM *Arriving before 3 PM* *Leaving before 11 PM*	10 PM to 7 AM *Arriving before 10 PM* *Leaving before 7 AM*	
Employees				
Warehousing	140 employees			140 employees
Maint. & Operations		5 employees	5 employees	10 employees
Total Employees				150 employees

	FUTURE Warehouse Operating Shifts			
	6 AM to 4 PM *Arriving before 6 AM* *Leaving before 4 PM*	3 PM to 11 PM *Arriving before 3 PM* *Leaving before 11 PM*	10 PM to 7 AM	
Employees				
Warehousing	140 employees	50 employees		190 employees
Maint. & Operations		5 employees	5 employees	10 employees
Total Employees				200 employees

	Warehouse Truck Delivery			
	4 AM to 6 AM *Deliveries End*	7 PM to 9 PM *Deliveries Begin*	1 AM to 4 AM *Deliveries*	
Delivery Trucks				
ALDI Delivery				
Outbound Delivery		40 trucks	40 trucks	80 trucks
Inbound Delivery	40 trucks		40 trucks	80 trucks
	4 AM to 6 AM *Deliveries Begin*	10 AM to 12 PM *Empties Depart*		
Receiving Goods	150 trucks	150 trucks		300 trucks
Total Trucks				460 trucks

	FUTURE Warehouse Truck Delivery			
	4 AM to 6 AM *Deliveries End*	7 PM to 9 PM *Deliveries Begin*	1 AM to 4 AM *Deliveries*	
Delivery Trucks				
ALDI Delivery				
Outbound Delivery		75 trucks	75 trucks	150 trucks
Inbound Delivery	75 trucks		75 trucks	150 trucks
	4 AM to 6 AM *Deliveries Begin*	10 AM to 12 PM *Empties Depart*		
Receiving Goods	100 trucks	100 trucks	100 trucks	300 trucks
Total Trucks				600 trucks

General Site and Building Information

Distribution Center Description

Client is a worldwide grocery retailer. The Distribution Center will receive product from primarily third party manufacturing or wholesale locations and distribute to local stores in the southern California region. No food processing or packaging operations will take place in this facility.

Initially the Distribution Center will support approximately 80 stores. Future facility expansion is planned to support approximately 150 stores.

The Distribution will operate on 1 shift operating from approximately 6 am to 4 pm, 7 days a week. Partial maintenance and operations staff will be on site 24 hours/7 days a week. A future 2nd shift operating from 3 pm to 11pm may be added to the facility in the future.

Number of employees for the initial facility and future expansion is as follows:

	80 Stores	150 Stores (Future)
Office	50	50
Warehouse	150	200

Receiving of goods will be primarily by truck. All goods will be shipped by truck. The following are average Truck and Automobile trips per day anticipated for the facility.

	80 Stores	150 Stores (Future)
Trucks	460	600
Automobile	300	400
Total (in & out) trips / day	760	1000

The distribution process will incorporate both static racking and floor stacking of goods. No conveyor systems are planned to move goods and packing materials throughout the building.

The Distribution Center will warehouse dry and perishable food type commodities with the top of product in racks reaching 30'. For the most part product in the Warehouse is classified as Class IV commodities and product in the Perishables area is classified as Class II & III commodities.

ATTACHMENT "B"

Existing plus Ambient Growth plus Project (2014) Conditions
Intersection Operations Analysis Worksheets

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	102	11	365	462	175	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1805	1615	1900	1615	1805	1900
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1805	1615	1900	1615	1805	1900
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	132	14	474	600	227	403
RTOR Reduction (vph)	0	10	0	84	0	0
Lane Group Flow (vph)	132	4	474	516	227	403
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Actuated Green, G (s)	14.5	34.8	71.2	85.7	20.3	95.5
Effective Green, g (s)	14.5	34.8	71.2	85.7	20.3	95.5
Actuated g/C Ratio	0.12	0.29	0.59	0.71	0.17	0.80
Clearance Time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	218	468	1127	1220	305	1512
v/s Ratio Prot	c0.07	0.00	0.25	c0.05	c0.13	0.21
v/s Ratio Perm		0.00		0.27		
v/c Ratio	0.61	0.01	0.42	0.42	0.74	0.27
Uniform Delay, d1	50.0	30.3	13.2	7.0	47.4	3.2
Progression Factor	1.00	1.00	0.36	1.06	1.00	1.00
Incremental Delay, d2	4.7	0.0	1.0	0.2	9.5	0.4
Delay (s)	54.7	30.3	5.7	7.6	56.8	3.6
Level of Service	D	C	A	A	E	A
Approach Delay (s)	52.4		6.8			22.8
Approach LOS	D		A			C

Intersection Summary			
HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	46.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	71	281	13	9	19	101	710	29	48	340	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0		5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor		1.00		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.92		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.99		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1701		1805	1900	1566	1805	3610	1583	1805	5137	
Flt Permitted		0.99		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1701		1805	1900	1566	1805	3610	1583	1805	5137	
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	118	86	339	16	11	23	122	855	35	58	410	28
RTOR Reduction (vph)	0	49	0	0	0	21	0	0	20	0	5	0
Lane Group Flow (vph)	0	494	0	16	11	2	122	855	15	58	433	0
Confl. Peds. (#/hr)			5			5			5			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)		35.7		8.5	8.5	8.5	14.4	51.2	51.2	5.6	42.4	
Effective Green, g (s)		35.7		8.5	8.5	8.5	14.4	51.2	51.2	5.6	42.4	
Actuated g/C Ratio		0.30		0.07	0.07	0.07	0.12	0.43	0.43	0.05	0.35	
Clearance Time (s)		5.0		5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		506		127	134	110	216	1540	675	84	1815	
v/s Ratio Prot		c0.29		c0.01	0.01		c0.07	c0.24		0.03	0.08	
v/s Ratio Perm						0.00			0.01			
v/c Ratio		0.98		0.13	0.08	0.01	0.56	0.56	0.02	0.69	0.24	
Uniform Delay, d1		41.7		52.3	52.1	51.9	49.8	25.8	19.9	56.3	27.4	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.75	
Incremental Delay, d2		33.5		0.4	0.3	0.1	3.4	1.4	0.1	21.2	0.3	
Delay (s)		75.3		52.7	52.4	51.9	53.2	27.3	20.0	73.8	20.8	
Level of Service		E		D	D	D	D	C	B	E	C	
Approach Delay (s)		75.3			52.3			30.2			27.0	
Approach LOS		E			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Dwy. 1/Eucalyptus*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*7/10/2013*	Analysis Year	*EAP (2014) Conditions*
Analysis Time Period	*AM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Ave. (EW)* | North/South Street: *Driveway 1 (NS)*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)						*53*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*53*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*1*
Configuration						*R*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*0*		
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*1*	*0*	*0*
Configuration				*L*		

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration						*L*		
v (veh/h)						*0*		
C (m) (veh/h)						*1029*		
v/c						*0.00*		
95% queue length						*0.00*		
Control Delay (s/veh)						*8.5*		
LOS						*A*		
Approach Delay (s/veh)	--	--						
Approach LOS	--	--						

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*9/13/2013*
Analysis Time Period	*AM PEAK HOUR*

Site Information

Intersection	*Street A/Eucalyptus*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAP (2014) Conditions*

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Ave. (EW)* North/South Street: *Street A (NS)*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*0*	*0*			*53*	*87*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*53*	*87*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*0*
Configuration	*L*	*T*				*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*2*		*0*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*2*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*1*	*0*	*1*
Configuration				*L*		*R*

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*					*L*		*R*
v (veh/h)	*0*					*2*		*0*
C (m) (veh/h)	*1456*					*908*		*966*
v/c	*0.00*					*0.00*		*0.00*
95% queue length	*0.00*					*0.01*		*0.00*
Control Delay (s/veh)	*7.5*					*9.0*		*8.7*
LOS	*A*					*A*		*A*
Approach Delay (s/veh)	--	--				*9.0*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Redlands/Spruce/SR-60 WB*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*7/9/2013*	Analysis Year	*EAP (2014) Conditions*
Analysis Time Period	*AM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Spruce St./SR-60 WB (EW)* North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*2*	*638*	*155*	*318*	*220*	*1*
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR (veh/h)	*2*	*678*	*164*	*338*	*234*	*1*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*1*	*1*	*0*
Configuration	*L*		*TR*	*L*		*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*0*	*2*	*2*	*36*	*0*	*51*
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR (veh/h)	*0*	*2*	*2*	*38*	*0*	*54*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*		*LTR*			*LTR*	
v (veh/h)	*2*	*338*		*92*			*4*	
C (m) (veh/h)	*1344*	*802*		*101*			*94*	
v/c	*0.00*	*0.42*		*0.91*			*0.04*	
95% queue length	*0.00*	*2.11*		*5.34*			*0.13*	
Control Delay (s/veh)	*7.7*	*12.7*		*143.1*			*45.0*	
LOS	*A*	*B*		*F*			*E*	
Approach Delay (s/veh)	--	--	*143.1*			*45.0*		
Approach LOS	--	--	*F*			*E*		

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*7/9/2013*
Analysis Time Period	*AM PEAK HOUR*

Site Information

Intersection	*Redlands/SR-60 EB Ramps*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAP (2014) Conditions*

Project ID *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *SR-60 EB Ramps (EW)* North/South Street: *Redlands Blvd. (NS)*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*286*	*0*	*169*	*0*	*0*	*0*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*40*	*510*	*0*	*0*	*233*	*27*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*LTR*				*LT*		*TR*	
PHF	*0.90*				*0.90*		*0.90*	
Flow Rate (veh/h)	*504*				*610*		*288*	
% Heavy Vehicles	*0*				*0*			
No. Lanes	*1*		*0*		*1*		*1*	
Geometry Group	*1*				*1*		*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*0.6*				*0.1*		*0.0*	
Prop. Right-Turns	*0.4*				*0.0*		*0.1*	
Prop. Heavy Vehicle	*0.0*				*0.0*		*0.1*	
hLT-adj	*0.2*	*0.2*			*0.2*	*0.2*	*0.2*	*0.2*
hRT-adj	*-0.6*	*-0.6*			*-0.6*	*-0.6*	*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*			*1.7*	*1.7*	*1.7*	*1.7*
hadj, computed	*-0.1*				*0.0*		*0.1*	

Departure Headway and Service Time

hd, initial value (s)	*3.20*				*3.20*		*3.20*	
x, initial	*0.45*				*0.54*		*0.26*	
hd, final value (s)	*6.45*				*6.37*		*6.96*	
x, final value	*0.90*				*1.08*		*0.56*	
Move-up time, m (s)	*2.0*				*2.0*		*2.0*	
Service Time, t_s (s)	*4.4*				*4.4*		*5.0*	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*557*				*610*		*503*	
Delay (s/veh)	*43.15*				*85.87*		*18.37*	
LOS	*E*				*F*		*C*	
Approach: Delay (s/veh)	*43.15*				*85.87*		*18.37*	
LOS	*E*				*F*		*C*	
Intersection Delay (s/veh)	*56.64*							
Intersection LOS	*F*							

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*7/9/2013*
Analysis Time Period	*AM PEAK HOUR*

Site Information

Intersection	*Redlands/Fir*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAP (2014) Conditions*

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Fir Av./Eucalyptus Av. (EW)* North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*8*	*548*	*0*	*0*	*266*	*136*
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR (veh/h)	*8*	*582*	*0*	*0*	*282*	*144*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LTR*			*LTR*		
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*2*	*0*	*0*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR (veh/h)	*2*	*0*	*0*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LTR*	*LTR*		*LTR*			*LTR*	
v (veh/h)	*8*	*0*		*0*			*2*	
C (m) (veh/h)	*1144*	*1002*					*239*	
v/c	*0.01*	*0.00*					*0.01*	
95% queue length	*0.02*	*0.00*					*0.03*	
Control Delay (s/veh)	*8.2*	*8.6*					*20.2*	
LOS	*A*	*A*					*C*	
Approach Delay (s/veh)	--	--					*20.2*	
Approach LOS	--	--					*C*	

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*7/9/2013*
Analysis Time Period	*AM PEAK HOUR*

Site Information

Intersection	*Redlands/Eucalyptus*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAP (2014) Conditions*

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Av/Encilia Av (EW)* | North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*4*	*526*			*261*	*4*
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR (veh/h)	*4*	*559*	*0*	*0*	*277*	*4*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*30*		*11*			
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR (veh/h)	*31*	*0*	*11*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*					*L*		*R*
v (veh/h)	*4*					*31*		*11*
C (m) (veh/h)	*1293*					*334*		*765*
v/c	*0.00*					*0.09*		*0.01*
95% queue length	*0.01*					*0.30*		*0.04*
Control Delay (s/veh)	*7.8*					*16.9*		*9.8*
LOS	*A*					*C*		*A*
Approach Delay (s/veh)	--	--				*15.0*		
Approach LOS	--	--				*C*		

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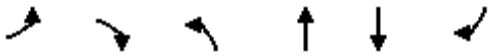

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	47	35	37	483	246	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1805	1615	1805	1900	1900	1591
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1805	1615	1805	1900	1900	1591
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	54	40	43	555	283	31
RTOR Reduction (vph)	0	35	0	0	0	16
Lane Group Flow (vph)	54	5	43	555	283	16
Confl. Peds. (#/hr)						5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)	5.6	5.6	2.6	28.8	22.2	22.2
Effective Green, g (s)	5.6	5.6	2.6	28.8	22.2	22.2
Actuated g/C Ratio	0.13	0.13	0.06	0.65	0.50	0.50
Clearance Time (s)	5.0	5.0	4.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	227	203	105	1232	950	795
v/s Ratio Prot	c0.03		0.02	c0.29	0.15	
v/s Ratio Perm		0.00				0.01
v/c Ratio	0.24	0.02	0.41	0.45	0.30	0.02
Uniform Delay, d1	17.5	17.0	20.2	3.9	6.5	5.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.0	2.6	0.3	0.2	0.0
Delay (s)	18.0	17.1	22.7	4.1	6.7	5.6
Level of Service	B	B	C	A	A	A
Approach Delay (s)	17.6			5.5	6.6	
Approach LOS	B			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	44.4	Sum of lost time (s)	14.0
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	136	9	300	398	72	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1805	1615	1900	1615	1805	1900
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1805	1615	1900	1615	1805	1900
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	142	9	312	415	75	194
RTOR Reduction (vph)	0	7	0	95	0	0
Lane Group Flow (vph)	142	2	312	320	75	194
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Actuated Green, G (s)	15.0	28.6	77.4	92.4	13.6	95.0
Effective Green, g (s)	15.0	28.6	77.4	92.4	13.6	95.0
Actuated g/C Ratio	0.12	0.24	0.65	0.77	0.11	0.79
Clearance Time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	225	438	1225	1310	204	1504
v/s Ratio Prot	c0.08	0.00	c0.16	0.03	c0.04	0.10
v/s Ratio Perm		0.00		0.17		
v/c Ratio	0.63	0.00	0.25	0.24	0.37	0.13
Uniform Delay, d1	49.9	34.8	9.0	3.9	49.2	2.9
Progression Factor	1.00	1.00	0.38	5.43	1.00	1.00
Incremental Delay, d2	5.7	0.0	0.5	0.1	1.1	0.2
Delay (s)	55.5	34.9	3.9	21.3	50.3	3.1
Level of Service	E	C	A	C	D	A
Approach Delay (s)	54.3		13.8			16.3
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	40	525	46	21	86	80	511	24	10	303	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0		5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor		1.00		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.89		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1661		1805	1900	1566	1805	3610	1583	1805	5164	
Flt Permitted		0.99		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1661		1805	1900	1566	1805	3610	1583	1805	5164	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	106	43	559	49	22	91	85	544	26	11	322	10
RTOR Reduction (vph)	0	113	0	0	0	82	0	0	17	0	2	0
Lane Group Flow (vph)	0	595	0	49	22	9	85	544	9	11	330	0
Confl. Peds. (#/hr)			5			5			5			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)		43.9		12.2	12.2	12.2	9.0	43.5	43.5	1.4	35.9	
Effective Green, g (s)		43.9		12.2	12.2	12.2	9.0	43.5	43.5	1.4	35.9	
Actuated g/C Ratio		0.37		0.10	0.10	0.10	0.08	0.36	0.36	0.01	0.30	
Clearance Time (s)		5.0		5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		607		183	193	159	135	1308	573	21	1544	
v/s Ratio Prot		c0.36		c0.03	0.01		c0.05	c0.15		c0.01	0.06	
v/s Ratio Perm						0.01			0.01			
v/c Ratio		0.98		0.27	0.11	0.06	0.63	0.42	0.02	0.52	0.21	
Uniform Delay, d1		37.6		49.8	49.0	48.7	53.9	28.7	24.5	59.0	31.5	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.60	
Incremental Delay, d2		31.5		0.8	0.3	0.2	8.9	1.0	0.1	21.4	0.3	
Delay (s)		69.1		50.6	49.3	48.9	62.7	29.7	24.6	63.7	19.3	
Level of Service		E		D	D	D	E	C	C	E	B	
Approach Delay (s)		69.1			49.4			33.8			20.7	
Approach LOS		E			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	46.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Dwy. 1/Eucalyptus*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*7/10/2013*	Analysis Year	*EAP (2014) Conditions*
Analysis Time Period	*PM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Ave. (EW)* | North/South Street: *Driveway 1 (NS)*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)						*0*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*1*
Configuration						*R*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*23*		
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*23*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*1*	*0*	*0*
Configuration				*L*		

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration						*L*		
v (veh/h)						*23*		
C (m) (veh/h)						*1029*		
v/c						*0.02*		
95% queue length						*0.07*		
Control Delay (s/veh)						*8.6*		
LOS						*A*		
Approach Delay (s/veh)	--	--				*8.6*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Street A/Eucalyptus*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*9/13/2013*	Analysis Year	*EAP (2014) Conditions*
Analysis Time Period	*PM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Ave. (EW)* North/South Street: *Street A (NS)*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*0*	*23*			*0*	*3*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*23*	*0*	*0*	*0*	*3*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*0*
Configuration	*L*	*T*				*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*58*		*0*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*58*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*1*	*0*	*1*
Configuration				*L*		*R*

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*					*L*		*R*
v (veh/h)	*0*					*58*		*0*
C (m) (veh/h)	*1632*					*996*		*1088*
v/c	*0.00*					*0.06*		*0.00*
95% queue length	*0.00*					*0.19*		*0.00*
Control Delay (s/veh)	*7.2*					*8.8*		*8.3*
LOS	*A*					*A*		*A*
Approach Delay (s/veh)	--	--				*8.8*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Redlands/Spruce/SR-60 WB*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*7/9/2013*	Analysis Year	*EAP (2014) Conditions*
Analysis Time Period	*PM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Spruce St./SR-60 WB (EW)* North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*6*	*590*	*142*	*284*	*409*	*27*
Peak-Hour Factor, PHF	*0.93*	*0.93*	*0.93*	*0.93*	*0.93*	*0.93*
Hourly Flow Rate, HFR (veh/h)	*6*	*634*	*152*	*305*	*439*	*29*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*1*	*1*	*0*
Configuration	*L*		*TR*	*L*		*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*1*	*4*	*1*	*22*	*0*	*29*
Peak-Hour Factor, PHF	*0.93*	*0.93*	*0.93*	*0.93*	*0.93*	*0.93*
Hourly Flow Rate, HFR (veh/h)	*1*	*4*	*1*	*23*	*0*	*31*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*		*LTR*			*LTR*	
v (veh/h)	*6*	*305*		*54*			*6*	
C (m) (veh/h)	*1104*	*842*		*89*			*54*	
v/c	*0.01*	*0.36*		*0.61*			*0.11*	
95% queue length	*0.02*	*1.66*		*2.82*			*0.35*	
Control Delay (s/veh)	*8.3*	*11.7*		*94.3*			*79.8*	
LOS	*A*	*B*		*F*			*F*	
Approach Delay (s/veh)	--	--	*94.3*			*79.8*		
Approach LOS	--	--	*F*			*F*		

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*7/9/2013*
Analysis Time Period	*PM PEAK HOUR*

Site Information

Intersection	*Redlands/SR-60 EB Ramps*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAP (2014) Conditions*

Project ID *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *SR-60 EB Ramps (EW)* North/South Street: *Redlands Blvd. (NS)*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*391*	*0*	*128*	*0*	*0*	*0*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*32*	*347*	*0*	*0*	*377*	*55*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*LTR*				*LT*		*TR*	
PHF	*0.96*				*0.96*		*0.96*	
Flow Rate (veh/h)	*540*				*394*		*449*	
% Heavy Vehicles	*0*				*0*		*0*	
No. Lanes	*1*		*0*		*1*		*1*	
Geometry Group	*1*				*1*		*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*0.8*				*0.1*		*0.0*	
Prop. Right-Turns	*0.2*				*0.0*		*0.1*	
Prop. Heavy Vehicle	*0.0*				*0.0*		*0.0*	
hLT-adj	*0.2*	*0.2*			*0.2*	*0.2*	*0.2*	*0.2*
hRT-adj	*-0.6*	*-0.6*			*-0.6*	*-0.6*	*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*			*1.7*	*1.7*	*1.7*	*1.7*
hadj, computed	*0.0*				*0.0*		*-0.1*	

Departure Headway and Service Time

hd, initial value (s)	*3.20*				*3.20*		*3.20*	
x, initial	*0.48*				*0.35*		*0.40*	
hd, final value (s)	*6.57*				*6.92*		*6.72*	
x, final value	*0.99*				*0.76*		*0.84*	
Move-up time, m (s)	*2.0*				*2.0*		*2.0*	
Service Time, t_s (s)	*4.6*				*4.9*		*4.7*	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*547*				*514*		*531*	
Delay (s/veh)	*60.41*				*28.35*		*35.39*	
LOS	*F*				*D*		*E*	
Approach: Delay (s/veh)	*60.41*				*28.35*		*35.39*	
LOS	*F*				*D*		*E*	
Intersection Delay (s/veh)	*43.15*							
Intersection LOS	*E*							

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*7/9/2013*
Analysis Time Period	*PM PEAK HOUR*

Site Information

Intersection	*Redlands/Fir*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAP (2014) Conditions*

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Fir Av./Eucalyptus Av. (EW)* North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*0*	*303*	*1*	*0*	*504*	*3*
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR (veh/h)	*0*	*322*	*1*	*0*	*536*	*3*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LTR*			*LTR*		
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*77*	*0*	*4*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR (veh/h)	*81*	*0*	*4*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LTR*	*LTR*		*LTR*			*LTR*	
v (veh/h)	*0*	*0*		*0*			*85*	
C (m) (veh/h)	*1040*	*1248*					*285*	
v/c	*0.00*	*0.00*					*0.30*	
95% queue length	*0.00*	*0.00*					*1.22*	
Control Delay (s/veh)	*8.5*	*7.9*					*22.9*	
LOS	*A*	*A*					*C*	
Approach Delay (s/veh)	--	--					*22.9*	
Approach LOS	--	--					*C*	

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*7/9/2013*
Analysis Time Period	*PM PEAK HOUR*

Site Information

Intersection	*Redlands/Eucalyptus*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAP (2014) Conditions*

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Av/Encilia Av (EW)* | North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*1*	*291*			*478*	*30*
Peak-Hour Factor, PHF	*0.93*	*0.93*	*0.93*	*0.93*	*0.93*	*0.93*
Hourly Flow Rate, HFR (veh/h)	*1*	*312*	*0*	*0*	*513*	*32*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*13*		*2*			
Peak-Hour Factor, PHF	*0.93*	*0.93*	*0.93*	*0.93*	*0.93*	*0.93*
Hourly Flow Rate, HFR (veh/h)	*13*	*0*	*2*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*					*L*		*R*
v (veh/h)	*1*					*13*		*2*
C (m) (veh/h)	*1034*					*337*		*554*
v/c	*0.00*					*0.04*		*0.00*
95% queue length	*0.00*					*0.12*		*0.01*
Control Delay (s/veh)	*8.5*					*16.1*		*11.5*
LOS	*A*					*C*		*B*
Approach Delay (s/veh)	--	--				*15.5*		
Approach LOS	--	--				*C*		

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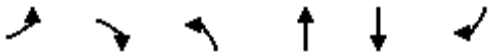


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	20	32	11	271	442	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1805	1615	1805	1900	1900	1591
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1805	1615	1805	1900	1900	1591
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	22	36	12	304	497	44
RTOR Reduction (vph)	0	33	0	0	0	18
Lane Group Flow (vph)	22	3	12	304	497	26
Confl. Peds. (#/hr)						5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)	3.6	3.6	1.1	31.5	26.4	26.4
Effective Green, g (s)	3.6	3.6	1.1	31.5	26.4	26.4
Actuated g/C Ratio	0.08	0.08	0.02	0.70	0.59	0.59
Clearance Time (s)	5.0	5.0	4.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	144	128	44	1327	1112	931
v/s Ratio Prot	c0.01		0.01	c0.16	c0.26	
v/s Ratio Perm		0.00				0.02
v/c Ratio	0.15	0.02	0.27	0.23	0.45	0.03
Uniform Delay, d1	19.3	19.1	21.6	2.4	5.3	3.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.1	3.3	0.1	0.3	0.0
Delay (s)	19.8	19.2	24.9	2.5	5.5	4.0
Level of Service	B	B	C	A	A	A
Approach Delay (s)	19.4			3.4	5.4	
Approach LOS	B			A	A	

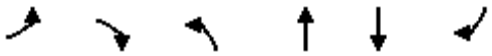
Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	45.1	Sum of lost time (s)	14.0
Intersection Capacity Utilization	37.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

ATTACHMENT "C"

Existing plus Ambient Growth plus Project (2014) Conditions, With Improvements
Intersection Operations Analysis Worksheets

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2	2	36	0	51	2	638	155	318	220	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0		4.0	5.0		4.0	5.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.93			0.92		1.00	0.97		1.00	1.00	
Flt Protected		1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1772			1683		1805	1844		1805	1899	
Flt Permitted		1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1772			1683		1805	1844		1805	1899	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2	2	38	0	54	2	679	165	338	234	1
RTOR Reduction (vph)	0	2	0	0	83	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	2	0	0	9	0	2	839	0	338	235	0
Confl. Peds. (#/hr)						5						5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		1.4			11.2		1.4	58.9		29.5	87.0	
Effective Green, g (s)		1.4			11.2		1.4	58.9		29.5	87.0	
Actuated g/C Ratio		0.01			0.09		0.01	0.49		0.25	0.72	
Clearance Time (s)		5.0			5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		20			157		21	905		443	1376	
v/s Ratio Prot		c0.00			c0.01		0.00	c0.45		c0.19	0.12	
v/s Ratio Perm												
v/c Ratio		0.10			0.05		0.10	0.93		0.76	0.17	
Uniform Delay, d1		58.7			49.6		58.7	28.5		42.0	5.2	
Progression Factor		1.00			1.00		1.13	0.75		1.00	1.00	
Incremental Delay, d2		2.2			0.1		1.6	14.5		7.6	0.3	
Delay (s)		60.9			49.7		68.0	35.9		49.6	5.4	
Level of Service		E			D		E	D		D	A	
Approach Delay (s)		60.9			49.7			36.0			31.5	
Approach LOS		E			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



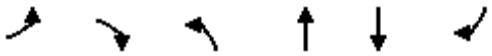
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	286	169	40	510	233	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		4.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.95		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1738		1805	1900	1873	
Flt Permitted	0.97		0.95	1.00	1.00	
Satd. Flow (perm)	1738		1805	1900	1873	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	318	188	44	567	259	30
RTOR Reduction (vph)	20	0	0	0	3	0
Lane Group Flow (vph)	486	0	44	567	286	0
Confl. Peds. (#/hr)		5				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA		Prot	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases						
Actuated Green, G (s)	39.2		7.2	70.8	59.6	
Effective Green, g (s)	39.2		7.2	70.8	59.6	
Actuated g/C Ratio	0.33		0.06	0.59	0.50	
Clearance Time (s)	5.0		4.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	567		108	1121	930	
v/s Ratio Prot	c0.28		0.02	c0.30	0.15	
v/s Ratio Perm						
v/c Ratio	0.86		0.41	0.51	0.31	
Uniform Delay, d1	37.8		54.3	14.4	17.9	
Progression Factor	1.00		1.07	0.93	0.81	
Incremental Delay, d2	12.1		2.4	1.6	0.9	
Delay (s)	49.9		60.4	15.0	15.5	
Level of Service	D		E	B	B	
Approach Delay (s)	49.9			18.2	15.5	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	4	1	22	0	29	6	590	142	284	409	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0		4.0	5.0		4.0	5.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.92		1.00	0.97		1.00	0.99	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1842			1686		1805	1845		1805	1878	
Flt Permitted		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1842			1686		1805	1845		1805	1878	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1	4	1	23	0	31	6	628	151	302	435	29
RTOR Reduction (vph)	0	1	0	0	50	0	0	5	0	0	1	0
Lane Group Flow (vph)	0	5	0	0	4	0	6	774	0	302	463	0
Confl. Peds. (#/hr)						5						5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		1.4			9.8		1.4	62.1		27.7	88.4	
Effective Green, g (s)		1.4			9.8		1.4	62.1		27.7	88.4	
Actuated g/C Ratio		0.01			0.08		0.01	0.52		0.23	0.74	
Clearance Time (s)		5.0			5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		21			137		21	954		416	1383	
v/s Ratio Prot		c0.00			c0.00		0.00	c0.42		c0.17	0.25	
v/s Ratio Perm												
v/c Ratio		0.24			0.03		0.29	0.81		0.73	0.33	
Uniform Delay, d1		58.8			50.7		58.8	24.1		42.6	5.5	
Progression Factor		1.00			1.00		1.29	0.67		1.00	1.00	
Incremental Delay, d2		5.8			0.1		6.6	6.7		6.2	0.7	
Delay (s)		64.6			50.8		82.7	22.9		48.8	6.2	
Level of Service		E			D		F	C		D	A	
Approach Delay (s)		64.6			50.8			23.3			23.0	
Approach LOS		E			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	391	128	32	347	377	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		4.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.98	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1762		1805	1900	1868	
Flt Permitted	0.96		0.95	1.00	1.00	
Satd. Flow (perm)	1762		1805	1900	1868	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	407	133	33	361	393	57
RTOR Reduction (vph)	12	0	0	0	4	0
Lane Group Flow (vph)	528	0	33	361	446	0
Confl. Peds. (#/hr)		5				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA		Prot	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases						
Actuated Green, G (s)	43.0		5.3	67.0	57.7	
Effective Green, g (s)	43.0		5.3	67.0	57.7	
Actuated g/C Ratio	0.36		0.04	0.56	0.48	
Clearance Time (s)	5.0		4.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	631		79	1060	898	
v/s Ratio Prot	c0.30		0.02	c0.19	c0.24	
v/s Ratio Perm						
v/c Ratio	0.84		0.42	0.34	0.50	
Uniform Delay, d1	35.3		55.8	14.5	21.3	
Progression Factor	1.00		0.99	0.90	0.83	
Incremental Delay, d2	9.4		3.5	0.9	1.9	
Delay (s)	44.7		58.7	13.8	19.4	
Level of Service	D		E	B	B	
Approach Delay (s)	44.7			17.6	19.4	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

ATTACHMENT "D"

Existing plus Ambient Growth plus Project (2014) Conditions
Traffic Signal Warrant Analysis Worksheets

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

___ DIST	___ CO	___ RTE	___ PM		TRAFFIC CONDITIONS		EAP (2014)
				CALC	DL	DATE	07/11/13
Jurisdiction:	City of Moreno Valley			CHK	DL	DATE	07/11/13
Major Street:	Eucalyptus Avenue				Critical Approach Speed (Major)		45 mph
Minor Street:	Driveway 1				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **450** vpd Minor Street Future ADT = **450** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ……..

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **450** / *1* **450**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **450** / *1* **450**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX				
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 8% B: 5%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	EAP (2014)
				CALC DL	DATE 09/13/13
				CHK DL	DATE 09/13/13

Jurisdiction: **City of Moreno Valley**
Major Street: **Eucalyptus Avenue**
Minor Street: **Street "A"**
Critical Approach Speed (Major) 45 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **1,550** vpd
Minor Street Future ADT = **650** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……... [√]
or
In built up area of isolated community of < 10,000 population …… [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,550**	*1* **650**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,550**	*1* **650**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 28% **B** 18%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		EAP (2014)
				CALC DL	DATE	07/11/13
Jurisdiction: City of Moreno Valley				CHK DL	DATE	07/11/13
Major Street: **Redlands Boulevard**				Critical Approach Speed (Major)		55 mph
Minor Street: **Fir Avenue**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **10,750** vpd Minor Street Future ADT = **1,100** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ……..

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX / XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **10,750** / *1* **1,100**	8,000	5,600 *	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied: XX / Not Satisfied	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **10,750** / *1* **1,100**	12,000	8,400 *	1,200	850 *
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 65% / B: 100%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		EAP (2014)
				CALC DL	DATE	07/11/13
Jurisdiction: City of Moreno Valley				CHK DL	DATE	07/11/13
Major Street: **Redlands Boulevard**				Critical Approach Speed (Major)		55 mph
Minor Street: **Eucalyptus Avenue**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **9,500** vpd Minor Street Future ADT = **300** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or

In built up area of isolated community of < 10,000 population ……

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **9,500** / *1* **300**	8,000	5,600 *	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **9,500** / *1* **300**	12,000	8,400 *	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX				
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 18% B: 35%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

ATTACHMENT "E"

Existing plus Ambient plus Project plus Cumulative Development (2014) Conditions
Intersection Operations Analysis Worksheets

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	187	14	414	747	175	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1805	1615	1900	1615	1805	1900
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1805	1615	1900	1615	1805	1900
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	197	15	436	786	184	400
RTOR Reduction (vph)	0	10	0	63	0	0
Lane Group Flow (vph)	197	5	436	723	184	400
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Actuated Green, G (s)	22.4	39.8	66.2	88.6	17.4	87.6
Effective Green, g (s)	22.4	39.8	66.2	88.6	17.4	87.6
Actuated g/C Ratio	0.19	0.33	0.55	0.74	0.14	0.73
Clearance Time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	336	535	1048	1259	261	1387
v/s Ratio Prot	0.11	0.00	0.23	c0.11	c0.10	0.21
v/s Ratio Perm		0.00		0.34		
v/c Ratio	0.59	0.01	0.42	0.57	0.70	0.29
Uniform Delay, d1	44.6	26.9	15.7	7.1	48.9	5.5
Progression Factor	1.00	1.00	0.29	1.68	1.00	1.00
Incremental Delay, d2	2.6	0.0	0.8	0.4	8.4	0.5
Delay (s)	47.2	26.9	5.4	12.4	57.2	6.1
Level of Service	D	C	A	B	E	A
Approach Delay (s)	45.7		9.9			22.2
Approach LOS	D		A			C

Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	381	328	33	39	238	131	826	55	158	379	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0		5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor		1.00		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.99		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1772		1805	1900	1566	1805	3610	1583	1805	5134	
Flt Permitted		0.99		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1772		1805	1900	1566	1805	3610	1583	1805	5134	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	103	401	345	35	41	251	138	869	58	166	399	29
RTOR Reduction (vph)	0	21	0	0	0	226	0	0	38	0	6	0
Lane Group Flow (vph)	0	828	0	35	41	25	138	869	20	166	422	0
Confl. Peds. (#/hr)			5			5			5			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)		40.0		11.9	11.9	11.9	13.4	41.1	41.1	8.0	35.7	
Effective Green, g (s)		40.0		11.9	11.9	11.9	13.4	41.1	41.1	8.0	35.7	
Actuated g/C Ratio		0.33		0.10	0.10	0.10	0.11	0.34	0.34	0.07	0.30	
Clearance Time (s)		5.0		5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		590		178	188	155	201	1236	542	120	1527	
v/s Ratio Prot		c0.47		0.02	c0.02		0.08	c0.24		c0.09	0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio		1.40		0.20	0.22	0.16	0.69	0.70	0.04	1.38	0.28	
Uniform Delay, d1		40.0		49.7	49.8	49.5	51.3	34.2	26.3	56.0	32.3	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.89	
Incremental Delay, d2		191.8		0.5	0.6	0.5	9.3	3.4	0.1	214.8	0.4	
Delay (s)		231.8		50.2	50.4	50.0	60.6	37.5	26.4	269.0	29.0	
Level of Service		F		D	D	D	E	D	C	F	C	
Approach Delay (s)		231.8			50.0			39.9			96.1	
Approach LOS		F			D			D			F	

Intersection Summary			
HCM 2000 Control Delay	110.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Quincy/Eucalyptus*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*7/11/2013*	Analysis Year	*EAPC (2014) Conditions*
Analysis Time Period	*AM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Ave. (EW)* North/South Street: *Quincy St. (NS)*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*169*	*5*	*10*	*172*	
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*169*	*5*	*10*	*172*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*6*	*0*	*21*			
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*6*	*0*	*21*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*		*LTR*				
v (veh/h)		*10*		*27*				
C (m) (veh/h)		*1415*		*808*				
v/c		*0.01*		*0.03*				
95% queue length		*0.02*		*0.10*				
Control Delay (s/veh)		*7.6*		*9.6*				
LOS		*A*		*A*				
Approach Delay (s/veh)	--	--	*9.6*					
Approach LOS	--	--	*A*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Dwy. 1/Eucalyptus*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*7/11/2013*	Analysis Year	*EAPC (2014) Conditions*
Analysis Time Period	*AM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Ave. (EW)* North/South Street: *Driveway 1 (NS)*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*16*	*174*			*182*	*37*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*16*	*174*	*0*	*0*	*182*	*37*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*1*
Configuration	*L*	*T*			*T*	*R*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*0*	*0*	*0*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*1*	*0*
Configuration					*LTR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*						*LTR*	
v (veh/h)	*16*						*0*	
C (m) (veh/h)	*1362*							
v/c	*0.01*							
95% queue length	*0.04*							
Control Delay (s/veh)	*7.7*							
LOS	*A*							
Approach Delay (s/veh)	--	--						
Approach LOS	--	--						

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Street A/Eucalyptus*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*9/13/2013*	Analysis Year	*EAPC (2014) Conditions*
Analysis Time Period	*AM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Ave. (EW)* North/South Street: *Street A (NS)*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*14*	*160*			*218*	*112*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*14*	*160*	*0*	*0*	*218*	*112*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*0*
Configuration	*L*	*T*				*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*24*		*1*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*24*	*0*	*1*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*1*	*0*	*1*
Configuration				*L*		*R*

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*					*L*		*R*
v (veh/h)	*14*					*24*		*1*
C (m) (veh/h)	*1241*					*556*		*770*
v/c	*0.01*					*0.04*		*0.00*
95% queue length	*0.03*					*0.14*		*0.00*
Control Delay (s/veh)	*7.9*					*11.8*		*9.7*
LOS	*A*					*B*		*A*
Approach Delay (s/veh)	--	--				*11.7*		
Approach LOS	--	--				*B*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Redlands/Spruce/SR-60 WB*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*7/11/2013*	Analysis Year	*EAPC (2014) Conditions*
Analysis Time Period	*AM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Spruce St./SR-60 WB (EW)* North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*2*	*696*	*430*	*318*	*291*	*1*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*2*	*732*	*452*	*334*	*306*	*1*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*1*	*1*	*0*
Configuration	*L*		*TR*	*L*		*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*0*	*2*	*2*	*183*	*0*	*51*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*0*	*2*	*2*	*192*	*0*	*53*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*		*LTR*			*LTR*	
v (veh/h)	*2*	*334*		*245*			*4*	
C (m) (veh/h)	*1265*	*597*		*32*			*41*	
v/c	*0.00*	*0.56*		*7.66*			*0.10*	
95% queue length	*0.00*	*3.45*		*29.72*			*0.30*	
Control Delay (s/veh)	*7.9*	*18.4*		*3237*			*102.1*	
LOS	*A*	*C*		*F*			*F*	
Approach Delay (s/veh)	--	--	*3237*			*102.1*		
Approach LOS	--	--	*F*			*F*		

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*7/11/2013*
Analysis Time Period	*AM PEAK HOUR*

Site Information

Intersection	*Redlands/SR-60 EB Ramps*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAPC (2014) Conditions*

Project ID *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *SR-60 EB Ramps (EW)* North/South Street: *Redlands Blvd. (NS)*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*286*	*0*	*480*	*0*	*0*	*0*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*184*	*842*	*0*	*0*	*450*	*27*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*LTR*				*LT*		*TR*	
PHF	*0.95*				*0.95*		*0.95*	
Flow Rate (veh/h)	*806*				*1079*		*501*	
% Heavy Vehicles	*0*				*0*		*0*	
No. Lanes	*1*		*0*		*1*		*1*	
Geometry Group	*1*				*1*		*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*0.4*				*0.2*		*0.0*	
Prop. Right-Turns	*0.6*				*0.0*		*0.1*	
Prop. Heavy Vehicle	*0.0*				*0.0*		*0.0*	
hLT-adj	*0.2*	*0.2*			*0.2*	*0.2*	*0.2*	*0.2*
hRT-adj	*-0.6*	*-0.6*			*-0.6*	*-0.6*	*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*			*1.7*	*1.7*	*1.7*	*1.7*
hadj, computed	*-0.3*				*0.0*		*-0.0*	

Departure Headway and Service Time

hd, initial value (s)	*3.20*				*3.20*		*3.20*	
x, initial	*0.72*				*0.96*		*0.45*	
hd, final value (s)	*6.80*				*7.17*		*7.11*	
x, final value	*1.52*				*2.15*		*0.99*	
Move-up time, m (s)	*2.0*				*2.0*		*2.0*	
Service Time, t_s (s)	*4.8*				*5.2*		*5.1*	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*806*				*1079*		*507*	
Delay (s/veh)	*262.89*				*539.71*		*63.97*	
LOS	*F*				*F*		*F*	
Approach: Delay (s/veh)	*262.89*				*539.71*		*63.97*	
LOS	*F*				*F*		*F*	
Intersection Delay (s/veh)	*346.31*							
Intersection LOS	*F*							

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*7/11/2013*
Analysis Time Period	*AM PEAK HOUR*

Site Information

Intersection	*Redlands/Fir*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAPC (2014) Conditions*

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Fir Av./Eucalyptus Av. (EW)* North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*47*	*654*	*72*	*349*	*302*	*279*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*49*	*688*	*75*	*367*	*317*	*293*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LTR*			*LTR*		
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*136*	*37*	*18*	*37*	*27*	*236*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*143*	*38*	*18*	*38*	*28*	*248*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LTR*	*LTR*		*LTR*			*LTR*	
v (veh/h)	*49*	*367*		*314*			*199*	
C (m) (veh/h)	*979*	*859*		*0*			*0*	
v/c	*0.05*	*0.43*						
95% queue length	*0.16*	*2.16*						
Control Delay (s/veh)	*8.9*	*12.3*						
LOS	*A*	*B*		*F*			*F*	
Approach Delay (s/veh)	--	--						
Approach LOS	--	--						

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*7/11/2013*
Analysis Time Period	*AM PEAK HOUR*

Site Information

Intersection	*Redlands/Eucalyptus*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAPC (2014) Conditions*

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Av/Encilia Av (EW)* North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*4*	*726*			*345*	*11*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*4*	*764*	*0*	*0*	*363*	*11*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*46*		*11*			
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*48*	*0*	*11*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*					*L*		*R*
v (veh/h)	*4*					*48*		*11*
C (m) (veh/h)	*1196*					*223*		*682*
v/c	*0.00*					*0.22*		*0.02*
95% queue length	*0.01*					*0.79*		*0.05*
Control Delay (s/veh)	*8.0*					*25.5*		*10.4*
LOS	*A*					*D*		*B*
Approach Delay (s/veh)	--	--				*22.7*		
Approach LOS	--	--				*C*		

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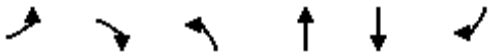

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	91	47	72	639	313	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1805	1615	1805	1900	1900	1591
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1805	1615	1805	1900	1900	1591
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	96	49	76	673	329	46
RTOR Reduction (vph)	0	42	0	0	0	25
Lane Group Flow (vph)	96	7	76	673	329	21
Confl. Peds. (#/hr)						5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)	6.5	6.5	4.6	29.4	20.8	20.8
Effective Green, g (s)	6.5	6.5	4.6	29.4	20.8	20.8
Actuated g/C Ratio	0.14	0.14	0.10	0.64	0.45	0.45
Clearance Time (s)	5.0	5.0	4.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	228	180	1216	861	720
v/s Ratio Prot	c0.05		0.04	c0.35	0.17	
v/s Ratio Perm		0.00				0.01
v/c Ratio	0.38	0.03	0.42	0.55	0.38	0.03
Uniform Delay, d1	17.9	17.0	19.4	4.6	8.3	7.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.1	1.6	0.5	0.3	0.0
Delay (s)	18.8	17.0	21.0	5.1	8.6	7.0
Level of Service	B	B	C	A	A	A
Approach Delay (s)	18.2			6.8	8.4	
Approach LOS	B			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	45.9	Sum of lost time (s)	14.0
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	248	26	398	896	72	281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1805	1615	1900	1615	1805	1900
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1805	1615	1900	1615	1805	1900
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	258	27	415	933	75	293
RTOR Reduction (vph)	0	18	0	43	0	0
Lane Group Flow (vph)	258	9	415	890	75	293
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Actuated Green, G (s)	35.0	41.4	64.6	99.6	6.4	75.0
Effective Green, g (s)	35.0	41.4	64.6	99.6	6.4	75.0
Actuated g/C Ratio	0.29	0.34	0.54	0.83	0.05	0.62
Clearance Time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	526	611	1022	1407	96	1187
v/s Ratio Prot	0.14	0.00	0.22	c0.18	c0.04	0.15
v/s Ratio Perm		0.00		0.37		
v/c Ratio	0.49	0.02	0.41	0.63	0.78	0.25
Uniform Delay, d1	35.1	25.9	16.4	3.7	56.1	10.0
Progression Factor	1.00	1.00	1.01	3.56	1.00	1.00
Incremental Delay, d2	0.7	0.0	0.8	0.6	32.8	0.5
Delay (s)	35.9	25.9	17.3	13.6	88.9	10.5
Level of Service	D	C	B	B	F	B
Approach Delay (s)	34.9		14.7			26.5
Approach LOS	C		B			C

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	294	650	87	113	546	120	647	46	111	392	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0		5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor		1.00		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.92		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1712		1805	1900	1566	1805	3610	1583	1805	5141	
Flt Permitted		1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1712		1805	1900	1566	1805	3610	1583	1805	5141	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	105	309	684	92	119	575	126	681	48	117	413	26
RTOR Reduction (vph)	0	49	0	0	0	498	0	0	34	0	5	0
Lane Group Flow (vph)	0	1049	0	92	119	77	126	681	14	117	434	0
Confl. Peds. (#/hr)			5			5			5			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)		44.0		16.0	16.0	16.0	11.0	34.0	34.0	7.0	30.0	
Effective Green, g (s)		44.0		16.0	16.0	16.0	11.0	34.0	34.0	7.0	30.0	
Actuated g/C Ratio		0.37		0.13	0.13	0.13	0.09	0.28	0.28	0.06	0.25	
Clearance Time (s)		5.0		5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		627		240	253	208	165	1022	448	105	1285	
v/s Ratio Prot		c0.61		0.05	c0.06		c0.07	c0.19		c0.06	0.08	
v/s Ratio Perm						0.05			0.01			
v/c Ratio		1.67		0.38	0.47	0.37	0.76	0.67	0.03	1.11	0.34	
Uniform Delay, d1		38.0		47.5	48.1	47.4	53.2	38.0	31.1	56.5	36.9	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.82	1.36	
Incremental Delay, d2		309.6		1.0	1.4	1.1	18.7	3.4	0.1	121.0	0.7	
Delay (s)		347.6		48.5	49.5	48.5	71.9	41.4	31.2	167.5	50.7	
Level of Service		F		D	D	D	E	D	C	F	D	
Approach Delay (s)		347.6			48.7			45.3			75.2	
Approach LOS		F			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	151.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	126.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Quincy/Eucalyptus*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*7/11/2013*	Analysis Year	*EAPC (2014) Conditions*
Analysis Time Period	*PM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Ave. (EW)* North/South Street: *Quincy St. (NS)*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*247*	*8*	*35*	*187*	
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*247*	*8*	*35*	*187*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*4*	*0*	*27*			
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*4*	*0*	*27*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*		*LTR*				
v (veh/h)		*35*		*31*				
C (m) (veh/h)		*1322*		*741*				
v/c		*0.03*		*0.04*				
95% queue length		*0.08*		*0.13*				
Control Delay (s/veh)		*7.8*		*10.1*				
LOS		*A*		*B*				
Approach Delay (s/veh)	--	--	*10.1*					
Approach LOS	--	--	*B*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Dwy. 1/Eucalyptus*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*7/11/2013*	Analysis Year	*EAPC (2014) Conditions*
Analysis Time Period	*PM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Ave. (EW)* North/South Street: *Driveway 1 (NS)*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*0*	*274*			*215*	*0*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*274*	*0*	*0*	*215*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*1*
Configuration	*L*	*T*			*T*	*R*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*16*	*0*	*7*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*16*	*0*	*7*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*1*	*0*
Configuration					*LTR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*						*LTR*	
v (veh/h)	*0*						*23*	
C (m) (veh/h)	*1367*						*606*	
v/c	*0.00*						*0.04*	
95% queue length	*0.00*						*0.12*	
Control Delay (s/veh)	*7.6*						*11.2*	
LOS	*A*						*B*	
Approach Delay (s/veh)	--	--					*11.2*	
Approach LOS	--	--					*B*	

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Street A/Eucalyptus*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*9/13/2013*	Analysis Year	*EAPC (2014) Conditions*
Analysis Time Period	*PM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Ave. (EW)* North/South Street: *Street A (NS)*

Intersection Orientation: *East-West* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*6*	*284*			*200*	*103*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*6*	*284*	*0*	*0*	*200*	*103*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*0*
Configuration	*L*	*T*				*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*160*		*15*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*160*	*0*	*15*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*1*	*0*	*1*
Configuration				*L*		*R*

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*					*L*		*R*
v (veh/h)	*6*					*160*		*15*
C (m) (veh/h)	*1269*					*499*		*792*
v/c	*0.00*					*0.32*		*0.02*
95% queue length	*0.01*					*1.37*		*0.06*
Control Delay (s/veh)	*7.9*					*15.6*		*9.6*
LOS	*A*					*C*		*A*
Approach Delay (s/veh)	--	--				*15.1*		
Approach LOS	--	--				*C*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Redlands/Spruce/SR-60 WB*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*7/11/2013*	Analysis Year	*EAPC (2014) Conditions*
Analysis Time Period	*PM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Spruce St./SR-60 WB (EW)* North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*6*	*700*	*660*	*284*	*504*	*27*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*6*	*736*	*694*	*298*	*530*	*28*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*1*	*1*	*0*
Configuration	*L*		*TR*	*L*		*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*1*	*4*	*1*	*193*	*0*	*29*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*1*	*4*	*1*	*203*	*0*	*30*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*		*LTR*			*LTR*	
v (veh/h)	*6*	*298*		*233*			*6*	
C (m) (veh/h)	*1023*	*482*		*13*			*13*	
v/c	*0.01*	*0.62*		*17.92*			*0.46*	
95% queue length	*0.02*	*4.12*		*30.38*			*1.13*	
Control Delay (s/veh)	*8.5*	*23.8*		*8180*			*429.5*	
LOS	*A*	*C*		*F*			*F*	
Approach Delay (s/veh)	--	--	*8180*			*429.5*		
Approach LOS	--	--	*F*			*F*		

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*7/11/2013*
Analysis Time Period	*PM PEAK HOUR*

Site Information

Intersection	*Redlands/SR-60 EB Ramps*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAPC (2014) Conditions*

Project ID *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *SR-60 EB Ramps (EW)* North/South Street: *Redlands Blvd. (NS)*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*391*	*0*	*548*	*0*	*0*	*0*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*247*	*975*	*0*	*0*	*644*	*55*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*LTR*				*LT*		*TR*	
PHF	*0.96*				*0.96*		*0.96*	
Flow Rate (veh/h)	*977*				*1272*		*727*	
% Heavy Vehicles	*0*				*0*		*0*	
No. Lanes	*1*		*0*		*1*		*1*	
Geometry Group	*1*				*1*		*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*0.4*				*0.2*		*0.0*	
Prop. Right-Turns	*0.6*				*0.0*		*0.1*	
Prop. Heavy Vehicle	*0.0*				*0.0*		*0.0*	
hLT-adj	*0.2*	*0.2*			*0.2*	*0.2*	*0.2*	*0.2*
hRT-adj	*-0.6*	*-0.6*			*-0.6*	*-0.6*	*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*			*1.7*	*1.7*	*1.7*	*1.7*
hadj, computed	*-0.3*				*0.0*		*-0.0*	

Departure Headway and Service Time

hd, initial value (s)	*3.20*				*3.20*		*3.20*	
x, initial	*0.87*				*1.13*		*0.65*	
hd, final value (s)	*6.85*				*7.18*		*7.09*	
x, final value	*1.86*				*2.54*		*1.43*	
Move-up time, m (s)	*2.0*				*2.0*		*2.0*	
Service Time, t_s (s)	*4.8*				*5.2*		*5.1*	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*977*				*1272*		*727*	
Delay (s/veh)	*410.18*				*714.15*		*225.92*	
LOS	*F*				*F*		*F*	
Approach: Delay (s/veh)	*410.18*				*714.15*		*225.92*	
LOS	*F*				*F*		*F*	
Intersection Delay (s/veh)	*495.09*							
Intersection LOS	*F*							

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Donson Liu*	Intersection	*Redlands/Fir*
Agency/Co.	*Urban Crossroads, Inc.*	Jurisdiction	*City of Moreno Valley*
Date Performed	*7/11/2013*	Analysis Year	*EAPC (2014) Conditions*
Analysis Time Period	*PM PEAK HOUR*		

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Fir Av./Eucalyptus Av. (EW)* North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*57*	*374*	*78*	*332*	*625*	*236*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*60*	*393*	*82*	*349*	*657*	*248*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LTR*			*LTR*		
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*369*	*50*	*78*	*102*	*56*	*479*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*388*	*52*	*82*	*107*	*58*	*504*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LTR*	*LTR*		*LTR*			*LTR*	
v (veh/h)	*60*	*349*		*669*			*522*	
C (m) (veh/h)	*760*	*1098*		*0*			*0*	
v/c	*0.08*	*0.32*						
95% queue length	*0.26*	*1.38*						
Control Delay (s/veh)	*10.1*	*9.8*						
LOS	*B*	*A*		*F*			*F*	
Approach Delay (s/veh)	--	--						
Approach LOS	--	--						

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Donson Liu*
Agency/Co.	*Urban Crossroads, Inc.*
Date Performed	*7/11/2013*
Analysis Time Period	*PM PEAK HOUR*

Site Information

Intersection	*Redlands/Eucalyptus*
Jurisdiction	*City of Moreno Valley*
Analysis Year	*EAPC (2014) Conditions*

Project Description *WESTRIDGE COMMERCE CENTER TRAFFIC IMPACT ANALYSIS (JN 08721)*

East/West Street: *Eucalyptus Av/Encilia Av (EW)* North/South Street: *Redlands Blvd. (NS)*

Intersection Orientation: *North-South* Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*1*	*475*		*1*	*747*	*57*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*1*	*500*	*0*	*1*	*786*	*60*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*			*LTR*		
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*33*	*0*	*2*			
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*34*	*0*	*2*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*	*LTR*					*LTR*	
v (veh/h)	*1*	*1*					*36*	
C (m) (veh/h)	*800*	*1075*					*180*	
v/c	*0.00*	*0.00*					*0.20*	
95% queue length	*0.00*	*0.00*					*0.72*	
Control Delay (s/veh)	*9.5*	*8.4*					*29.9*	
LOS	*A*	*A*					*D*	
Approach Delay (s/veh)	--	--				*29.9*		
Approach LOS	--	--				*D*		

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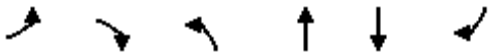


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	67	72	34	408	644	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1805	1615	1805	1900	1900	1590
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1805	1615	1805	1900	1900	1590
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	71	76	36	429	678	111
RTOR Reduction (vph)	0	67	0	0	0	47
Lane Group Flow (vph)	71	9	36	429	678	64
Confl. Peds. (#/hr)						5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)	6.5	6.5	2.4	37.8	31.4	31.4
Effective Green, g (s)	6.5	6.5	2.4	37.8	31.4	31.4
Actuated g/C Ratio	0.12	0.12	0.04	0.70	0.58	0.58
Clearance Time (s)	5.0	5.0	4.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	216	193	79	1322	1098	919
v/s Ratio Prot	c0.04		0.02	c0.23	c0.36	
v/s Ratio Perm		0.01				0.04
v/c Ratio	0.33	0.05	0.46	0.32	0.62	0.07
Uniform Delay, d1	21.9	21.2	25.3	3.2	7.5	5.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.1	4.1	0.1	1.0	0.0
Delay (s)	22.8	21.3	29.4	3.4	8.6	5.1
Level of Service	C	C	C	A	A	A
Approach Delay (s)	22.0			5.4	8.1	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	54.3	Sum of lost time (s)	14.0
Intersection Capacity Utilization	48.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

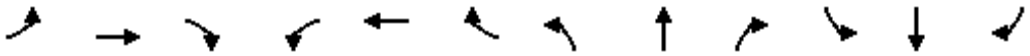
ATTACHMENT "F"

Existing plus Ambient plus Project plus Cumulative Development (2014) Conditions, With Improvements
Intersection Operations Analysis Worksheets

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	187	14	414	747	175	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1805	1615	1900	1615	1805	1900
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1805	1615	1900	1615	1805	1900
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	197	15	436	786	184	400
RTOR Reduction (vph)	0	10	0	63	0	0
Lane Group Flow (vph)	197	5	436	723	184	400
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Actuated Green, G (s)	22.4	39.8	66.2	88.6	17.4	87.6
Effective Green, g (s)	22.4	39.8	66.2	88.6	17.4	87.6
Actuated g/C Ratio	0.19	0.33	0.55	0.74	0.14	0.73
Clearance Time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	336	535	1048	1259	261	1387
v/s Ratio Prot	0.11	0.00	0.23	c0.11	c0.10	0.21
v/s Ratio Perm		0.00		0.34		
v/c Ratio	0.59	0.01	0.42	0.57	0.70	0.29
Uniform Delay, d1	44.6	26.9	15.7	7.1	48.9	5.5
Progression Factor	1.00	1.00	0.33	1.72	1.00	1.00
Incremental Delay, d2	2.6	0.0	0.9	0.5	8.4	0.5
Delay (s)	47.2	26.9	6.1	12.7	57.2	6.1
Level of Service	D	C	A	B	E	A
Approach Delay (s)	45.7		10.4			22.2
Approach LOS	D		B			C

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



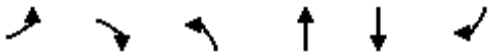
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	381	328	33	39	238	131	826	55	158	379	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	
Frpb, ped/bikes		1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1881	1585	1805	1900	1566	1805	3610	1583	1805	5134	
Flt Permitted		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1881	1585	1805	1900	1566	1805	3610	1583	1805	5134	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	103	401	345	35	41	251	138	869	58	166	399	29
RTOR Reduction (vph)	0	0	243	0	0	226	0	0	38	0	5	0
Lane Group Flow (vph)	0	504	102	35	41	25	138	869	20	166	423	0
Confl. Peds. (#/hr)			5			5			5			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)		35.6	35.6	11.9	11.9	11.9	13.7	42.4	42.4	11.1	39.8	
Effective Green, g (s)		35.6	35.6	11.9	11.9	11.9	13.7	42.4	42.4	11.1	39.8	
Actuated g/C Ratio		0.30	0.30	0.10	0.10	0.10	0.11	0.35	0.35	0.09	0.33	
Clearance Time (s)		5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		558	470	178	188	155	206	1275	559	166	1702	
v/s Ratio Prot		c0.27		0.02	c0.02		0.08	c0.24		c0.09	0.08	
v/s Ratio Perm			0.06			0.02			0.01			
v/c Ratio		0.90	0.22	0.20	0.22	0.16	0.67	0.68	0.04	1.00	0.25	
Uniform Delay, d1		40.5	31.7	49.7	49.8	49.5	51.0	33.0	25.4	54.5	29.2	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.90	
Incremental Delay, d2		17.9	0.2	0.5	0.6	0.5	8.0	3.0	0.1	68.9	0.3	
Delay (s)		58.5	32.0	50.2	50.4	50.0	59.0	36.0	25.5	122.2	26.6	
Level of Service		E	C	D	D	D	E	D	C	F	C	
Approach Delay (s)		47.7			50.0			38.4			53.3	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	45.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2	2	183	0	51	2	696	430	318	291	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0		4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	
Frt		0.93			0.97		1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00			0.96		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1772			1767		1805	3610	1615	1805	3608	
Flt Permitted		1.00			0.96		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1772			1767		1805	3610	1615	1805	3608	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2	2	193	0	54	2	733	453	335	306	1
RTOR Reduction (vph)	0	2	0	0	126	0	0	0	154	0	0	0
Lane Group Flow (vph)	0	2	0	0	121	0	2	733	299	335	307	0
Confl. Peds. (#/hr)						5						5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		8	8		5	2	8	1	6	
Permitted Phases									2			
Actuated Green, G (s)		1.4			15.5		1.4	55.0	70.5	29.1	82.7	
Effective Green, g (s)		1.4			15.5		1.4	55.0	70.5	29.1	82.7	
Actuated g/C Ratio		0.01			0.13		0.01	0.46	0.59	0.24	0.69	
Clearance Time (s)		5.0			5.0		4.0	5.0	5.0	4.0	5.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		20			228		21	1654	1016	437	2486	
v/s Ratio Prot		c0.00			c0.07		0.00	c0.20	0.04	c0.19	0.09	
v/s Ratio Perm									0.15			
v/c Ratio		0.10			0.53		0.10	0.44	0.29	0.77	0.12	
Uniform Delay, d1		58.7			48.8		58.7	22.1	12.3	42.3	6.3	
Progression Factor		1.00			1.00		1.12	0.48	0.04	1.00	1.00	
Incremental Delay, d2		2.2			2.2		1.9	0.8	0.2	7.9	0.1	
Delay (s)		60.9			51.1		67.6	11.4	0.6	50.1	6.4	
Level of Service		E			D		E	B	A	D	A	
Approach Delay (s)		60.9			51.1			7.4			29.2	
Approach LOS		E			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	286	480	184	842	450	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1805	1585	1805	3610	3580	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1805	1585	1805	3610	3580	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	301	505	194	886	474	28
RTOR Reduction (vph)	0	394	0	0	2	0
Lane Group Flow (vph)	301	111	194	886	500	0
Confl. Peds. (#/hr)		5				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	Perm	Prot	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4				
Actuated Green, G (s)	26.3	26.3	18.2	83.7	61.5	
Effective Green, g (s)	26.3	26.3	18.2	83.7	61.5	
Actuated g/C Ratio	0.22	0.22	0.15	0.70	0.51	
Clearance Time (s)	5.0	5.0	4.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	395	347	273	2517	1834	
v/s Ratio Prot	c0.17		c0.11	c0.25	0.14	
v/s Ratio Perm		0.07				
v/c Ratio	0.76	0.32	0.71	0.35	0.27	
Uniform Delay, d1	43.9	39.3	48.4	7.3	16.6	
Progression Factor	1.00	1.00	0.72	0.74	0.83	
Incremental Delay, d2	8.4	0.5	7.8	0.4	0.4	
Delay (s)	52.4	39.9	42.8	5.7	14.1	
Level of Service	D	D	D	A	B	
Approach Delay (s)	44.5			12.4	14.1	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	136	37	18	37	27	236	47	654	72	349	302	279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0	4.0	4.0	5.0		4.0	5.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.95		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3502	3410		1805	3610	1612	1805	3551		3502	3610	1587
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3502	3410		1805	3610	1612	1805	3551		3502	3610	1587
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	143	39	19	39	28	248	49	688	76	367	318	294
RTOR Reduction (vph)	0	17	0	0	0	124	0	6	0	0	0	72
Lane Group Flow (vph)	143	41	0	39	28	124	49	758	0	367	318	222
Confl. Peds. (#/hr)			5			5			5			5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases						8						6
Actuated Green, G (s)	12.0	12.1		4.2	4.3	37.1	7.0	52.9		32.8	78.7	90.7
Effective Green, g (s)	12.0	12.1		4.2	4.3	37.1	7.0	52.9		32.8	78.7	90.7
Actuated g/C Ratio	0.10	0.10		0.04	0.04	0.31	0.06	0.44		0.27	0.66	0.76
Clearance Time (s)	4.0	5.0		4.0	5.0	4.0	4.0	5.0		4.0	5.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	350	343		63	129	552	105	1565		957	2367	1199
v/s Ratio Prot	c0.04	0.01		c0.02	0.01	0.06	0.03	c0.21		c0.10	0.09	0.02
v/s Ratio Perm						0.02						0.12
v/c Ratio	0.41	0.12		0.62	0.22	0.23	0.47	0.48		0.38	0.13	0.19
Uniform Delay, d1	50.7	49.1		57.1	56.2	30.8	54.7	23.9		35.4	7.8	4.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.79	0.73	0.09
Incremental Delay, d2	0.8	0.2		16.7	0.8	0.2	3.3	1.1		0.2	0.1	0.1
Delay (s)	51.4	49.3		73.9	57.1	31.0	57.9	24.9		28.4	5.8	0.4
Level of Service	D	D		E	E	C	E	C		C	A	A
Approach Delay (s)		50.8			38.6			26.9			12.6	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	248	26	398	896	72	281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1805	1615	1900	1615	1805	1900
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1805	1615	1900	1615	1805	1900
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	258	27	415	933	75	293
RTOR Reduction (vph)	0	16	0	46	0	0
Lane Group Flow (vph)	258	11	415	887	75	293
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Actuated Green, G (s)	39.0	47.0	59.0	98.0	8.0	71.0
Effective Green, g (s)	39.0	47.0	59.0	98.0	8.0	71.0
Actuated g/C Ratio	0.32	0.39	0.49	0.82	0.07	0.59
Clearance Time (s)	5.0	4.0	5.0	5.0	4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	586	632	934	1386	120	1124
v/s Ratio Prot	0.14	0.00	0.22	c0.21	c0.04	0.15
v/s Ratio Perm		0.01		0.34		
v/c Ratio	0.44	0.02	0.44	0.64	0.62	0.26
Uniform Delay, d1	31.9	22.4	19.8	4.2	54.5	11.8
Progression Factor	1.00	1.00	0.60	2.69	1.00	1.00
Incremental Delay, d2	0.5	0.0	1.0	0.6	9.7	0.6
Delay (s)	32.4	22.4	12.9	12.0	64.3	12.4
Level of Service	C	C	B	B	E	B
Approach Delay (s)	31.5		12.3			23.0
Approach LOS	C		B			C

Intersection Summary			
HCM 2000 Control Delay	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

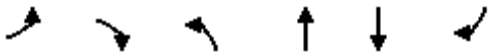
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	97	307	633	85	112	554	117	633	47	110	383	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	
Frpb, ped/bikes		1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1446	1570	1787	1881	1186	1770	3574	1583	1787	5092	
Flt Permitted		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1446	1570	1787	1881	1186	1770	3574	1583	1787	5092	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	102	323	666	89	118	583	123	666	49	116	403	26
RTOR Reduction (vph)	0	0	432	0	0	428	0	0	34	0	5	0
Lane Group Flow (vph)	0	425	234	89	118	155	123	666	15	116	424	0
Confl. Peds. (#/hr)			5			5			5			
Heavy Vehicles (%)	1%	39%	1%	1%	1%	32%	2%	1%	0%	1%	1%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)		36.8	36.8	20.2	20.2	20.2	12.7	36.0	36.0	8.0	31.3	
Effective Green, g (s)		36.8	36.8	20.2	20.2	20.2	12.7	36.0	36.0	8.0	31.3	
Actuated g/C Ratio		0.31	0.31	0.17	0.17	0.17	0.11	0.30	0.30	0.07	0.26	
Clearance Time (s)		5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		443	481	300	316	199	187	1072	474	119	1328	
v/s Ratio Prot		c0.29		0.05	0.06		0.07	c0.19		c0.06	0.08	
v/s Ratio Perm			0.15			c0.13			0.01			
v/c Ratio		0.96	0.49	0.30	0.37	0.78	0.66	0.62	0.03	0.97	0.32	
Uniform Delay, d1		40.9	33.9	43.7	44.3	47.7	51.6	36.1	29.7	55.9	35.8	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2		32.1	0.8	0.6	0.7	17.2	8.1	2.7	0.1	73.1	0.6	
Delay (s)		72.9	34.7	44.2	45.0	64.9	59.6	38.8	29.8	126.6	33.5	
Level of Service		E	C	D	D	E	E	D	C	F	C	
Approach Delay (s)		49.6			59.6			41.4			53.3	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	50.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	4	1	193	0	29	6	700	660	284	504	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0		4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	
Frt		0.98			0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.99			0.96		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1842			1784		1805	3610	1615	1805	3577	
Flt Permitted		0.99			0.96		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1842			1784		1805	3610	1615	1805	3577	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1	4	1	203	0	31	6	737	695	299	531	28
RTOR Reduction (vph)	0	1	0	0	119	0	0	0	155	0	2	0
Lane Group Flow (vph)	0	5	0	0	115	0	6	737	540	299	557	0
Confl. Peds. (#/hr)						5						5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		8	8		5	2	8	1	6	
Permitted Phases									2			
Actuated Green, G (s)		1.4			21.5		1.4	50.9	72.4	27.2	76.7	
Effective Green, g (s)		1.4			21.5		1.4	50.9	72.4	27.2	76.7	
Actuated g/C Ratio		0.01			0.18		0.01	0.42	0.60	0.23	0.64	
Clearance Time (s)		5.0			5.0		4.0	5.0	5.0	4.0	5.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		21			319		21	1531	1041	409	2286	
v/s Ratio Prot		c0.00			0.06		0.00	0.20	c0.09	c0.17	0.16	
v/s Ratio Perm									0.24			
v/c Ratio		0.24			0.36		0.29	0.48	0.52	0.73	0.24	
Uniform Delay, d1		58.8			43.2		58.8	25.0	13.7	43.0	9.3	
Progression Factor		1.00			1.00		1.01	0.82	0.69	1.00	1.00	
Incremental Delay, d2		5.8			0.7		6.4	0.9	0.4	6.6	0.3	
Delay (s)		64.6			43.9		66.1	21.5	9.8	49.6	9.5	
Level of Service		E			D		E	C	A	D	A	
Approach Delay (s)		64.6			43.9			16.1			23.5	
Approach LOS		E			D			B			C	

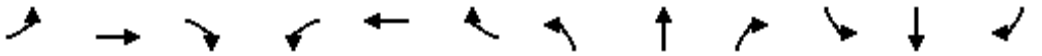
Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	391	548	247	975	644	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1805	1585	1805	3610	3568	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1805	1585	1805	3610	3568	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	407	571	257	1016	671	57
RTOR Reduction (vph)	0	421	0	0	4	0
Lane Group Flow (vph)	407	150	257	1016	724	0
Confl. Peds. (#/hr)		5				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA	Perm	Prot	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4				
Actuated Green, G (s)	31.5	31.5	22.5	78.5	52.0	
Effective Green, g (s)	31.5	31.5	22.5	78.5	52.0	
Actuated g/C Ratio	0.26	0.26	0.19	0.65	0.43	
Clearance Time (s)	5.0	5.0	4.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	473	416	338	2361	1546	
v/s Ratio Prot	c0.23		c0.14	0.28	c0.20	
v/s Ratio Perm		0.09				
v/c Ratio	0.86	0.36	0.76	0.43	0.47	
Uniform Delay, d1	42.2	36.0	46.2	10.0	24.2	
Progression Factor	1.00	1.00	0.99	0.70	0.78	
Incremental Delay, d2	14.7	0.5	8.2	0.5	1.0	
Delay (s)	56.9	36.6	53.8	7.5	19.9	
Level of Service	E	D	D	A	B	
Approach Delay (s)	45.0			16.8	19.9	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	369	50	78	102	56	479	57	374	78	332	625	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0	4.0	4.0	5.0		4.0	5.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.91		1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3502	3241		1805	3610	1612	1805	3506		3502	3610	1590
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3502	3241		1805	3610	1612	1805	3506		3502	3610	1590
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	388	53	82	107	59	504	60	394	82	349	658	248
RTOR Reduction (vph)	0	75	0	0	0	46	0	13	0	0	0	65
Lane Group Flow (vph)	388	60	0	107	59	458	60	463	0	349	658	183
Confl. Peds. (#/hr)			5			5			5			5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases						8						6
Actuated Green, G (s)	19.9	10.4		15.8	6.3	51.3	7.0	30.8		45.0	68.8	88.7
Effective Green, g (s)	19.9	10.4		15.8	6.3	51.3	7.0	30.8		45.0	68.8	88.7
Actuated g/C Ratio	0.17	0.09		0.13	0.05	0.43	0.06	0.26		0.38	0.57	0.74
Clearance Time (s)	4.0	5.0		4.0	5.0	4.0	4.0	5.0		4.0	5.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	580	280		237	189	689	105	899		1313	2069	1175
v/s Ratio Prot	c0.11	0.02		c0.06	0.02	c0.25	0.03	c0.13		0.10	0.18	0.03
v/s Ratio Perm						0.03						0.09
v/c Ratio	0.67	0.21		0.45	0.31	0.67	0.57	0.51		0.27	0.32	0.16
Uniform Delay, d1	47.0	51.0		48.1	54.8	27.5	55.0	38.2		26.0	13.4	4.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.03	0.54	1.43
Incremental Delay, d2	2.9	0.4		1.4	0.9	2.4	7.3	2.1		0.1	0.3	0.1
Delay (s)	49.9	51.4		49.5	55.7	29.9	62.4	40.3		27.0	7.6	6.6
Level of Service	D	D		D	E	C	E	D		C	A	A
Approach Delay (s)		50.3			35.3			42.8			12.8	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM 2000 Control Delay	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

ATTACHMENT "G"

Existing plus Ambient plus Project plus Cumulative Development (2014) Conditions
Traffic Signal Warrant Analysis Worksheets

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	EAPC (2014)
				CALC DL	DATE 07/11/13
Jurisdiction: City of Moreno Valley				CHK DL	DATE 07/11/13
Major Street: Eucalyptus Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Quincy Street				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **5,900** vpd Minor Street Future ADT = **450** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ……..

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **5,900** / *1* **450**	8,000	5,600 *	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **5,900** / *1* **450**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 27% B: 53%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	EAPC (2014)
				CALC DL	DATE 07/11/13
Jurisdiction: **City of Moreno Valley**				CHK DL	DATE 07/11/13
Major Street: **Eucalyptus Avenue**				Critical Approach Speed (Major)	45 mph
Minor Street: **Driveway 1**				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **6,400** vpd Minor Street Future ADT = **450** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ……..

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **6,400** / *1* **450**	8,000	5,600 *	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **6,400** / *1* **450**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)				
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 27% **B** 53%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	EAPC (2014)
				CALC DL	DATE 09/13/13
				CHK DL	DATE 09/13/13

Jurisdiction: **City of Moreno Valley**
Major Street: **Eucalyptus Avenue**
Minor Street: **Street "A"**
Critical Approach Speed (Major) 45 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **8,850** vpd
Minor Street Future ADT = **2,000** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √
or
In built up area of isolated community of < 10,000 population ..... **RURAL (R)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume				
Satisfied: XX (RURAL)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **8,850** / *1* **2,000**	8,000	5,600 *	2,400	1,680 *
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **8,850** / *1* **2,000**	12,000	8,400 *	1,200	850 *
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: 100% B: 100%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		**EAPC (2014)**
				CALC DL	DATE	07/11/13
Jurisdiction: **City of Moreno Valley**				CHK DL	DATE	07/11/13
Major Street: **Redlands Boulevard**				Critical Approach Speed (Major)		55 mph
Minor Street: **Eucalyptus Avenue/Encilia Avenue**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **15,250** vpd Minor Street Future ADT = **550** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ……..

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT			
			Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied: XX / XX						
	1 **15,250**	*1* **550**	8,000	5,600 *	2,400	1,680
	2 +	*1*	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied: XX						
	1 **15,250**	*1* **550**	12,000	8,400 *	1,200	850
	2 +	*1*	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied: XX			2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 33%	**B** 65%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

URBAN CROSSROADS
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www.urbanXroads.com

September 16, 2013

Mr. Ross Geller
Applied Planning, Inc.
5817 Pine Avenue, Suite A
Chino Hills, CA 91709

Subject: Westridge Commerce Center – Air Quality, Greenhouse Gas, and Health Risk Impact Assessment

Dear Mr. Geller:

Urban Crossroads, Inc. is pleased to submit this Air Quality, Greenhouse Gas, and Health impact assessment for the Westridge Commerce Center (referred to as "Project"), which is located west of Redlands Boulevard and South of State Route 60 in the City of Moreno Valley. Specifically, the Project is anticipated to serve as a distribution center for Aldi, a worldwide grocery retailer that is anticipated to support approximately 150 future stores in the southern California region. In addition to the slight reduction in overall building square footage, Aldi operations will require a portion of the warehouse area for cold storage, and will require an increase in the amount of office use from the entitled 14,000 square feet to 50,000 square feet. The Project is anticipated to have an opening year of 2014. The current site plan is shown on Exhibit 1.

The purpose of this air quality, greenhouse gas, and health risk impact assessment is to determine if proposed changes to the project's building design to support the future tenant operations would result in substantial changes to the air quality, greenhouse gas, or health risk assessment findings previously reported for the proposed Project in the *2010 Westridge Commerce Center EIR.*

PROJECT AIR QUALITY IMPACT

Construction-Source Emissions

Under the proposed scope of the Project, construction-source emissions would be generally consistent with the impacts identified in the *2010 Westridge Commerce Center EIR* for Project construction-source emissions. No new impacts beyond those identified in the *2010 Westridge Commerce Center EIR* would occur for construction-source emissions.

Operation-Source Emissions

Operational activities associated with the Project will result in emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. Operational emissions would be expected from the following primary sources:

- Vehicles

- Combustion Emissions Associated with Natural Gas and Electricity
- Fugitive dust related to vehicular travel
- Consumer Products
- Architectural coatings

VEHICLES

Project operational (vehicular) impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations. It should be noted that the Project's traffic impact assessment presents the total Project vehicle trips in terms of Passenger Car Equivalents (PCEs) in an effort to recognize and acknowledge the effects of heavy vehicles at the study area intersections. Notwithstanding, for purposes of this analysis, the PCE trips were not used. Rather, to more accurately estimate and model vehicular-source emissions, the actual number of vehicles, by vehicle classification (e.g., passenger cars (including light trucks) and heavy trucks) were used in the analysis. The vehicle fleet mix, in terms of actual vehicles, as derived from the traffic assessment for the Project is comprised of approximately 40% passenger cars (400 passenger cars) and approximately 60% total trucks (600 trucks). The total traffic generation in vehicles is 1,000 per day. The Project was input as a dual category or dual type of land-use (Refrigerated Warehouse – No Rail / Unrefrigerated Warehouse – No Rail) in the CalEEMod™ emissions inventory model. The resulting estimated vehicle-source emissions in comparison to the findings in the *2010 Westridge Commerce Center EIR* are summarized at Tables 1 and 2.

TRIP LENGTH

A technical deficiency inherent in calculating the projected vehicle emissions associated with any project is related to the estimation of trip length and vehicle miles traveled (VMT). VMT for a given project is calculated by the total number of vehicle trips to/from the Project x average trip length. This method of estimating VMT for use in calculating vehicle emissions likely results in the over-estimation and double-counting of emissions because, for a distribution warehouse center such as the Project, the land use is likely to attract (divert) existing vehicle trips that are already on the circulation system as opposed to generating new trips. In this regard, the Project would, to a large extent, redistribute existing mobile-source emissions rather than generate additional emissions within the Basin. As such, the estimation of the Westridge Commerce Center Project's vehicular-source emissions is likely overstated in that no credit for, or reduction in, emissions is assumed based on diversion of existing trips.

Since proposed store locations are unknown, trip lengths consistent with the *2010 Westridge Commerce Center EIR* are utilized as a conservative measure. For passenger car trips, a one-way trip length of 17 miles was assumed as contained in the SCAQMD CEQA Handbook (SCAQMD 1993) for Riverside County for the year 2010 (this trip length was used in lieu of the CalEEMod™ model defaults because it is more conservative). For heavy duty trucks, an average trip length was derived from distances between the Project site and the far edges of the South Coast Air Basin (SCAB), consistent with

professional industry practice. While it is acknowledged that deliveries to Aldi stores located outside SCAB boundaries may be required, the calculation of these distances would be speculative. The following trip distances were utilized in this analysis:

- Project site to the Port of Los Angeles/Long Beach: 78 miles;
- Project site to Banning Pass: 27 miles;
- Project site to San Diego County line: 46 miles;
- Project site to Cajon Pass: 42 miles;
- Project site to downtown Los Angeles: 64 miles.

Assuming that 50 percent of all delivery trips will travel to and from the Project and the Port of Los Angeles/Long Beach, and the remainder as distribution trips to all other locations, the average truck trip length is calculated as 61 miles. An overall weighted-average trip length for the Project was calculated using the percentage of trips associated with passenger cars (including light duty trucks) versus heavy trucks, the passenger car trip length of 17 miles and truck trip length of 61 miles was utilized. The resulting weighted average trip length of 43.76 miles was entered into the CalEEMod™ model calculations.

For Trucks: 61 one-way miles x 60% trucks = 39.96 one-way VMT

For Passenger Cars: 17 one-way miles x 40% passenger cars = 6.8 one-way VMT

Weighted average for input into CalEEMod™ is therefore, 39.96 + 6.8 = 43.76 one-way miles. The estimated emissions resulting from vehicle operations are summarized in Tables 1 and 2.

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. The emissions estimates for travel on paved roads were calculated using CalEEMod. The estimated PM_{10} and $PM_{2.5}$ emissions from vehicles for fugitive dust are summarized in Attachment A and B (Summer and Winter conditions).

HEATING, VENTILATION AND AIR CONDITION (HVAC) SYSTEMS EMISSIONS

Combustion emissions would be generated by the use of natural gas to power heating, HVAC systems in the development. The emissions associated with natural gas use were calculated based on assumptions from CalEEMod. The estimated combustion emissions are provided in Attachment A and B (Summer and Winter conditions).

CONSUMER PRODUCTS

Consumer products are various solvents used in non-industrial applications which emit VOCs during their product use. These typically include cleaning supplies, kitchen aerosols, cosmetics and toiletries. SCAQMD has developed an emission factor based on the total of all the building square footage for both residential and non-residential buildings. The emissions associated with consumer products were calculated using CalEEMod. The estimated consumer product emissions are provided in Attachment A and B (Summer and Winter conditions).

ARCHITECTURAL COATINGS

Over a period of time the buildings that are part of this Project will be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of Project maintenance. The emissions associated with architectural coatings were calculated using CalEEMod. The estimated architectural coating emissions are provided in Attachment A and B (Summer and Winter conditions).

OPERATIONS EMISSIONS SUMMARY

In order to provide an "apples-to-apples" comparison for the previously-approved *2010 Westridge Commerce Center EIR* and the proposed *Aldi Distribution Center Warehouse,* the assessment includes a comparison of total operational emissions for both scenarios based on the URBEMIS 2007 model, which is the model that was in place at the time the *2010 Westridge Commerce Center EIR* was adopted these emission totals and comparisons are shown on Tables 1 and 2. Similarly, both the *2010 Westridge Commerce Center EIR project* and the proposed *Aldi Distribution Center Warehouse* were modeled using the 2013 CalEEMod emissions inventory model, which is the latest available and currently recommended version for use and are shown on Tables 3 and 4.

This approach resolves discrepancies that would arise in trying to compare emissions estimates for the *2010 Westridge Commerce Center EIR* which were developed with the URBEMIS model which is no longer employed and the emissions estimated for the *Aldi Distribution Center Warehouse* developed using the current CalEEMod 2013.

The Project-related summer and winter operations emissions summary, along with a comparison of the 2010 Westridge Commerce Center EIR is presented in Tables 1 through 4. Additionally, detailed emissions calculations are provided in Appendix "A". The proposed changes to the Project would result in a decrease in emissions of VOCs, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ emissions in comparison to the *2010 Westridge Commerce Center EIR*. As indicated at Tables 1 through 4, the Project will not result in any new impacts substantially greater than those previously identified in the *2010 Westridge Commerce Center EIR.*

Table 1
COMPARISON OF PEAK OPERATIONAL EMISSIONS (URBEMIS Model)
2010 Westridge Commerce Center EIR
vs. Aldi Distribution Center Warehouse
(Pounds per Day, maximum summer emissions)

2010 Westridge Commerce Center EIR						
Operational Activities	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emissions [a]	5.66	0.66	2.09	--	0.01	0.01
Mobile Emissions [b]	62.14	738.86	449.58	1.46	139.21	45.70
Maximum Daily Emissions	**67.80**	**739.52**	**451.67**	**1.46**	**139.22**	**45.71**
Aldi Distribution Center Warehouse						
Operational Activities	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emissions [a]	4.86	0.83	2.23	0.00	0.01	0.01
Mobile Emissions [b]	49.07	510.92	282.02	1.19	95.49	31.56
Maximum Daily Emissions	**53.93**	**511.75**	**284.25**	**1.19**	**95.50**	**31.57**
Variance	***-13.87***	***-227.77***	***-167.42***	***-0.27***	***-43.72***	***-14.14***

[a] Includes emissions of natural gas consumption, emissions of landscape maintenance equipment and architectural coatings emissions

[b] Includes emissions of vehicle emissions and fugitive dust related to vehicular travel

Table 2
COMPARISON OF PEAK OPERATIONAL EMISSIONS (URBEMIS Model)
2010 Westridge Commerce Center EIR
vs. Aldi Distribution Center Warehouse
(Pounds per Day, maximum winter emissions)

2010 Westridge Commerce Center EIR						
Operational Activities	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emissions [a]	5.54	0.64	0.54	--	--	--
Mobile Emissions [b]	64.24	818.29	426.44	1.39	139.21	45.70
Maximum Daily Emissions	***69.78***	***818.93***	***426.98***	***1.39***	***139.21***	***45.70***
Aldi Distribution Center Warehouse						
Operational Activities	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emissions [a]	4.74	0.81	0.68	0.00	0.00	0.00
Mobile Emissions [b]	49.60	565.35	270.65	1.16	95.49	31.56
Maximum Daily Emissions	**54.34**	**566.16**	**271.33**	**1.16**	**95.49**	**31.56**
Variance	***-15.44***	***-252.77***	***-155.65***	***-0.23***	***-43.72***	***-14.14***

Note: Please refer to Appendix B for the URBEMIS output files and additional supporting information for the estimated emissions.

[a] Includes emissions of natural gas consumption, emissions of landscape maintenance equipment and architectural coatings emissions

[b] Includes emissions of vehicle emissions and fugitive dust related to vehicular travel

Table 3
COMPARISON OF PEAK OPERATIONAL EMISSIONS (CalEEMod 2013)
2010 Westridge Commerce Center EIR
vs. Aldi Distribution Center Warehouse
(Pounds per Day, maximum summer emissions)

2010 Westridge Commerce Center EIR						
Operational Activities	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emissions [a]	24.60	0.54	0.55	3.35e-3	0.04	0.04
Mobile Emissions [b]	100.19	456.19	329.37	1.20	59.37	22.45
Maximum Daily Emissions	**124.78**	**456.73**	**329.92**	**1.20**	**59.41**	**22.50**
Aldi Distribution Center Warehouse						
Operational Activities	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emissions [a]	25.75	3.99	3.49	0.02	0.30	0.30
Mobile Emissions [b]	77.36	421.45	262.43	1.02	42.15	16.88
Maximum Daily Emissions	**103.11**	**425.44**	**265.93**	**1.04**	**42.45**	**17.18**
Variance	***-21.67***	***-31.29***	***-63.99***	***-0.16***	***-16.96***	***-5.32***

[a] Includes emissions of natural gas consumption, emissions of landscape maintenance equipment and architectural coatings emissions

[b] Includes emissions of vehicle emissions and fugitive dust related to vehicular travel

Table 4
COMPARISON OF PEAK OPERATIONAL EMISSIONS (CalEEMod 2013)
2010 Westridge Commerce Center EIR
vs. Aldi Distribution Center Warehouse
(Pounds per Day, maximum winter emissions)

2010 Westridge Commerce Center EIR						
Operational Activities	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emissions [a]	24.60	0.54	0.55	3.25e-3	0.04	0.04
Mobile Emissions [b]	105.57	475.58	321.93	1.18	59.39	22.47
Maximum Daily Emissions	**130.16**	**476.12**	**322.49**	**1.18**	**59.43**	**22.51**
Aldi Distribution Center Warehouse						
Operational Activities	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emissions [a]	25.75	3.99	3.49	0.02	0.30	0.30
Mobile Emissions [b]	81.00	439.31	262.22	1.00	42.16	16.89
Maximum Daily Emissions	**106.75**	**443.30**	**265.71**	**1.03**	**42.47**	**17.20**
Variance	***-23.41***	***-32.82***	***-56.78***	***-0.15***	***-16.96***	***-5.31***

Note: Please refer to Appendix B for the CalEEMod™ output files and additional supporting information for the estimated emissions.

[a] Includes emissions of natural gas consumption, emissions of landscape maintenance equipment and architectural coatings emissions

[b] Includes emissions of vehicle emissions and fugitive dust related to vehicular travel

PROJECT GREENHOUSE GAS IMPACT

PROJECT RELATED GREENHOUSE GAS EMISSIONS

CEQA Guidelines 15064.4 (a) states in pertinent part:

A lead agency shall have the discretion to determine, in the context of a particular project whether to: (1) Use a model or methodology to quantify greenhouse gas emissions from a project, and which model or methodology to use. . . .

On July 26, 2013, the SCAQMD released the latest version of the California Emissions Estimator Model (CalEEMod) Emissions Inventory Model™. The purpose of this model is to more accurately calculate air quality and greenhouse gas (GHG) emissions from direct and indirect sources and quantify applicable air quality and GHG reductions achieved from mitigation measures. The July 2013 CalEEMod™ was employed to quantify GHG emissions for this Project. The CalEEMod™ model includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water.

LIFE-CYCLE ANALYSIS

A full life-cycle analysis (LCA) is not included in this analysis due to the lack of consensus guidance on CA methodology at this time.[1] 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 and infrastructure) depends on emission factors or econometric factors that are not well established for all processes. At this time a LCA would be extremely speculative and thus has not been prepared.

CONSTRUCTION EMISSIONS

GHG emissions resulting from Project construction activity are assumed to be generally consistent with construction-related GHG emissions previously quantified in the *2010 Westridge Commerce Center EIR*. As such, for analysis purposes the previously quantified GHG emissions were utilized in this assessment.

OPERATIONAL EMISSIONS

Operational activities associated with the proposed Project will result in emissions of CO_2, CH_4, and N_2O from the following primary sources:

[1] California Natural Resources Agency, *Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97,* December 2009.

- Building Energy Use (Combustion Emissions Associated with Natural Gas and Electricity)
- Water Supply, Treatment and Distribution
- Solid Waste
- Vehicles

BUILDING ENERGY USE

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 CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the off-site generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Unless otherwise noted, CalEEMod™ default parameters were used.

WATER SUPPLY, TREATMENT AND DISTRIBUTION

Indirect GHG emissions result from the off-site production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water depends on the volume of water as well as the sources of the water.

Water usage based on 700 gallons per day x acres of building space and landscaped area for indoor/outdoor water usage. The Project is estimated to result in a demand for approximately 16,678 gallons of water per day (~19 acre-feet per year) which includes 12,866 gallons per day of domestic (indoor) water use and 3,812 gallons per day of irrigation (outdoor) water use.

SOLID WASTE

The Project will result in the generation and disposal of solid waste. A large 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 the CalEEMod model using model defaults.

VEHICLES

Project-related GHG emissions resulting from vehicles accessing the site have been included in this assessment. A detailed discussion on how vehicle emissions were calculated can be found under the "Air Quality" section of this assessment.

EMISSIONS SUMMARY

As presented in Table 3, the Project would generate GHG emissions from a variety of sources which would all emit CO2, CH4 and N2O. GHGs could also be indirectly generated by incremental electricity

consumption and waste generation from the Project. The total amount of Project-related GHG emissions would total 22,168.56 $MTCO_2e$ as shown on Table 3. The total amount of Project-related GHG emissions is 7,834.83 $MTCO_2e$ less than the *2010 Westridge Commerce Center EIR.* Thus, the proposed Project will not result in a greater impact than previously identified and disclosed in the *2010 Westridge Commerce Center EIR*. The estimated project GHG emissions outputs are provided in Attachment C.

TABLE 5

GHG EMISSIONS SUMMARY (metric tons CO2e / year)

2010 Westridge Commerce Center EIR vs. Aldi Distribution Center Warehouse

2010 Westridge Commerce Center EIR				
Emission Source	**CO2**	**CH4**	**N20**	**CO2e**
Annual construction related emissions amortized over 30 years	174.16	0.0104	0.522	338.32
Natural Gas	141.10	0.02	0.022	148.53
Landscaping	0.51	--	--	0.51
Mobile Sources	27,724.82	0.35	0.41	27,858.08
Electricity Energy	732.09	0.008	0.03	741.71
Solid Waste Generation	--	22.60	--	474.67
Water Usage	39.63	0.002	0.0005	39.81
Refrigerant Leakage	--	--	--	401.75
Subtotal Transportation Sources				**27,858.08**
Subtotal Non-Transportation Sources				**2,145.31**
Total CO2e				**30,003.39**
Aldi Distribution Center Warehouse				
Emission Source	**CO2**	**CH4**	**N20**	**CO2e**
Annual construction related emissions amortized over 30 years	174.16	0.0104	0.522	338.32
Natural Gas	792.32	0.02	0.02	797.14
Landscaping	--	--	--	--
Mobile Sources	16,783.54	0.21	--	16,787.99
Electricity Energy	3,360.50	0.17	0.03	3,644.71
Solid Waste Generation	152.73	9.03	--	229.47
Water Usage	23.41	0.15	3.81e-3	27.83
Refrigerant Leakage	--	--	--	343.10
Subtotal Transportation Sources				**16,787.99**
Subtotal Non-Transportation Sources				**5,380.57**
Total CO2e				**22,168.56**
Variance Total CO2e				***-7,834.83***

PROJECT HEALTH RISK ASSESSMENT IMPACT

Vehicle DPM emissions were estimated using emission factors for particulate matter less than 10µm in diameter (PM_{10}) generated with the 2011 version of the Emission FACtor model (EMFAC) developed by the ARB. EMFAC 2011 is a mathematical model that was 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. The most recent version of this model, EMFAC 2011, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day.

The most important improvement in EMFAC 2011 is the integration of the new data and methods to estimate emissions from diesel trucks and buses. EMFAC 2011 uses the same diesel truck and bus vehicle populations, miles traveled and other emissions-related factors developed for the Truck and Bus Rule approved by the Air Resources Board in 2010. The model includes the emissions benefits of the truck and bus rule and the previously adopted rules for other on-road diesel equipment. Finally, the impacts of the recession on emissions that were quantified as part of the truck and bus rulemaking are included.

Several distinct emission processes are included in EMFAC 2011. Emission factors calculated using EMFAC 2011 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 2011 in EMFAC Mode for vehicles in the SCAQMD district. 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. 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.

The average PM_{10} emission factors for each type of vehicle were calculated based on the annual average emission factors from different model years for the residential exposure period: 70-year exposure: 2014 through 2083 (Residential Exposure Scenario).

Calculated emission factors for each of these scenarios are shown in Table 4. The emission factors for model years beyond 2035 were assumed to be the same as emission factors in 2035 due to the fact that EMFAC 2011 only contains emission factors for the model year from 1990 through 2035. This is a conservative measure as it assumes no fleet turnover or cleaner technology with lower emissions could be incorporated after 2035.

The vehicle DPM exhaust emissions were calculated for running exhaust emissions. The running exhaust emissions were calculated by applying the running exhaust PM_{10} 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:

$Emissions_{speedA}$ (g/s) = $EF_{RunExhaust}$ (g/VMT) * Distance (VMT/trip) * Number of Trips (trips/day) / seconds per day

Where:

$Emissions_{speedA}$ (g/s): Vehicle emissions at a given speed A;

$EF_{RunExhaust}$ (g/VMT): EMFAC running exhaust PM_{10} 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 PM_{10} 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 PM_{10} emission factor (g/idle-hr) from EMFAC and the total truck trip over the total idle time (15 minutes). The following equation was used to estimate the on-site vehicle idling emissions for each of the different vehicle classes:

$Emissions_{idle}$ (g/s) = EF_{idle} (g/hr) * Number of Trips (trips/day) * Idling Time (min/trip) * 60 minutes per hour / seconds per day
Where:
$Emissions_{idle}$ (g/s): Vehicle emissions during idling;
EF_{idle}(g/s): EMFAC idle exhaust PM_{10} emission factor.

TABLE 6

WEIGHTED AVERAGE DPM EMISSION FACTORS

2014-2083 – 70 Year Residential Exposure Scenario	
Speed	Weighted Average
0 (idling)	0.22997 (g/idle-hr)
5	0.07871 (g/s)
25	0.04805 (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 Attachment "D". 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. The modeled emission sources are illustrated on Exhibit 1. The modeled truck travel routes included in the HRA are based on the truck trip distributions (inbound and outbound) available from the Project's Traffic Impact Analysis (TIA). Exhibit 2 illustrates the point of maximum impact at the nearest residential receptor.

On-site truck idling was estimated to occur as trucks enter and travel through the facility. Although the Project is required to comply with CARB's idling limit of 5 minutes[2], staff at SCAQMD recommends that the on-site idling emissions should be estimated for 15 minutes of truck idling (personal communication, phone call, with James Koizumi, May 6, 2009), 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 estimated truck idling at 15 minutes, consistent with SCAQMD's recommendation.

Additionally, the Project would generate diesel emissions related to trucks and trailers equipped with transportation refrigeration units (TRUs). The TRU operating emission factors were determined from CARB's *2011 Amendments for Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities where TRUs Operate* (August 2011).

TRU emissions are based on emission factors for 2014 (0.26 grams per hp-hour) and 2020 (0.02 grams per hp-hour), the TRU horsepower is assumed to be 35 horsepower with a 46 percent load factor consistent with CARB guidance. For analysis purposes it is estimated that every TRU that accesses the

[2] Requirements to Reduce Idling Emissions from New and In-Use Trucks: http://www.arb.ca.gov/regact/hdvidle/hdvidle.htm

site will idle for 15 minutes. Based on discussion with the applicant, it is expected that 200 truck trips per day (one-way) will require TRUs and have the potential to idle on-site.

Table 5 and 6 provide a comparison of the Project-related DPM impacts to the DPM impacts previously identified in the *2010 Westridge Commerce Center EIR.* As shown, the Project would result in fewer DPM emissions and thus a lesser risk to adjacent sensitive land uses. The Project would still be required to comply with Mitigation Measure 4.3.10 which limits on-site idling to three minutes. Furthermore, it should be noted that the proposed Project will result in DPM impacts that will not exceed the SCAQMD's threshold of 10 in one million both before and after implementation of the recommended mitigation measures.

TABLE 7

SUMMARY OF CANCER RISKS (WITHOUT MITIGATION)
(RISK PER MILLION)

Location	2010 Westridge Commerce Center EIR	Proposed Project	Variance
Maximum Exposed Sensitive Receptor	10.1	6.1	***-4.0***
Maximum Exposed Worker Receptor	3.1	1.2	***-1.9***

TABLE 8

SUMMARY OF CANCER RISKS (WITH MITIGATION)
(RISK PER MILLION)

Location	2010 Westridge Commerce Center EIR	Proposed Project	Variance
Maximum Exposed Sensitive Receptor	6.9	5.6	***-1.3***
Maximum Exposed Worker Receptor	2.0	1.1	***-0.9***

If you have any questions regarding this analysis, please give me a call at (949) 660-1994 ext. 217.

Respectfully submitted,

URBAN CROSSROADS, INC.

Haseeb Qureshi, MES
Senior Air Quality Specialist

Stephen Abille
Assistant Analyst

ATTACHMENT "A"

Summer Operational Impacts

URBEMIS 2007

Summer Operational Impacts

9/16/2013 11:31:26 AM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name:

Project Name: Westridge Commerce Center - Aldi

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	4.86	0.83	2.23	0.00	0.01	0.01	969.25

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	49.07	510.92	282.02	1.19	95.49	31.56	125,965.93

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	53.93	511.75	284.25	1.19	95.50	31.57	126,935.18

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.06	0.81	0.68	0.00	0.00	0.00	966.44
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	4.68						
TOTALS (lbs/day, unmitigated)	4.86	0.83	2.23	0.00	0.01	0.01	969.25

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Warehouse	49.07	510.92	282.02	1.19	95.49	31.56	125,965.93
TOTALS (lbs/day, unmitigated)	49.07	510.92	282.02	1.19	95.49	31.56	125,965.93

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2014 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Warehouse		1.25	1000 sq ft	800.43	1,000.54	43,723.49
					1,000.54	43,723.49

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	40.0	0.4	99.4	0.2
Light Truck < 3750 lbs	0.0	1.4	95.9	2.7
Light Truck 3751-5750 lbs	0.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	0.0	0.9	99.1	0.0
Lit avy Truck 8501-10,000 lbs	0.0	0.0	82.4	17.6
Lit avy Truck 10,001-14,000 lbs	0.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	60.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	50.0	50.0	0.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	0.0	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	43.7	43.7	43.7	43.7	43.7	43.7

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Warehouse				2.0	1.0	97.0

CalEEMod 2013

Summer Operational Impacts

2010 Westridge EIR

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	938.00	1000sqft	21.53	938,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2014
lity Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction emissions modeled

Off-road Equipment - No construction emissions modeled

Vehicle Trips - Based on the 2010 Westridge EIR URBEMIS inputs

Vechicle Emission Factors - Based on the 2010 Westridge EIR URBEMIS inputs

Vechicle Emission Factors - Based on the 2010 Westridge EIR URBEMIS inputs

Vechicle Emission Factors - Based on the 2010 Westridge EIR URBEMIS inputs

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleEF	HHD	0.04	0.34
tblVehicleEF	HHD	0.04	0.34
tblVehicleEF	HHD	0.04	0.34
tblVehicleEF	LDA	0.48	0.46
tblVehicleEF	LDA	0.48	0.46
tblVehicleEF	LDA	0.48	0.46
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MDV	0.16	0.00

tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleTrips	CC_TL	8.40	40.80
tblVehicleTrips	CC_TTP	0.00	97.00
tblVehicleTrips	CNW_TL	6.90	40.80
tblVehicleTrips	CNW_TTP	41.00	1.00
tblVehicleTrips	CW_TL	16.60	40.80
tblVehicleTrips	CW_TTP	59.00	2.00
tblVehicleTrips	ST_TR	2.59	1.69
tblVehicleTrips	SU_TR	2.59	1.69
tblVehicleTrips	WD_TR	2.59	1.69

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					
2014	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**						

tigated 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					
2014	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**						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	24.5382	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						
Energy	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						
Mobile	100.1870	456.1873	329.3709	1.2000	49.7398	9.6303	59.3702	13.5972	8.8575	22.4547						
Total	**124.7844**	**456.7274**	**329.9240**	**1.2033**	**49.7398**	**9.6717**	**59.4115**	**13.5972**	**8.8989**	**22.4961**						

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	24.5382	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						
Energy	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						
Mobile	100.1870	456.1873	329.3709	1.2000	49.7398	9.6303	59.3702	13.5972	8.8575	22.4547						
Total	**124.7844**	**456.7274**	**329.9240**	**1.2033**	**49.7398**	**9.6717**	**59.4115**	**13.5972**	**8.8989**	**22.4961**						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	1/1/2014	1/1/2014	5	1	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
molition	Excavators	0	8.00	162	0.38
molition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	255	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

3.2 Demolition - 2014

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive 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						
Total	**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						
Vendor	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						
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						

3.2 Demolition - 2014

Mitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive 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						
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

tigated 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						
Vendor	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						
Total	**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

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	100.1870	456.1873	329.3709	1.2000	49.7398	9.6303	59.3702	13.5972	8.8575	22.4547						
Unmitigated	100.1870	456.1873	329.3709	1.2000	49.7398	9.6303	59.3702	13.5972	8.8575	22.4547						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	1,585.22	1,585.22	1585.22	21,955,037	21,955,037
Total	1,585.22	1,585.22	1,585.22	21,955,037	21,955,037

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Unrefrigerated Warehouse-No	40.80	40.80	40.80	2.00	97.00	1.00	92	5	3

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.460000	0.000000	0.000000	0.000000	0.061000	0.000000	0.139000	0.340000	0.000000	0.000000	0.000000	0.000000	0.000000

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	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						
NaturalGas Unmitigated	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						

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					
Unrefrigerated Warehouse-No Rail	5499.51	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						
Total		**0.0593**	**0.5392**	**0.4529**	**3.2400e-003**		**0.0410**	**0.0410**		**0.0410**	**0.0410**						

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					
Unrefrigerated Warehouse-No Rail	5.49951	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						
Total		**0.0593**	**0.5392**	**0.4529**	**3.2400e-003**		**0.0410**	**0.0410**		**0.0410**	**0.0410**						

6.0 Area Detail

L Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive 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	24.5382	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						
Unmitigated	24.5382	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						

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					
Consumer Products	18.5724					0.0000	0.0000		0.0000	0.0000						
Landscaping	0.0101	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						
Architectural Coating	5.9557					0.0000	0.0000		0.0000	0.0000						
Total	**24.5382**	**9.8000e-004**	**0.1001**	**1.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**						

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					
Consumer Products	18.5724					0.0000	0.0000		0.0000	0.0000						
Landscaping	0.0101	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						
Architectural Coating	5.9557					0.0000	0.0000		0.0000	0.0000						
Total	**24.5382**	**9.8000e-004**	**0.1001**	**1.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**						

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

10.0 Vegetation

Westridge Commerce Center

San Bernardino-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	263.80	1000sqft	6.06	263,800.00	0
Unrefrigerated Warehouse-No Rail	536.63	1000sqft	12.32	536,630.00	0
Parking Lot	546.00	Space	4.91	218,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction emissions modeled

Off-road Equipment - No construction emissions modeled

Vehicle Trips - TG Rate from Project Traffic Study. Overall TL was calculated using the % trips asscoaited with PC vs. Trucks (weighted average).

Vechicle Emission Factors - Fleet mix is based on the traffic study

Vechicle Emission Factors - Fleet mix is based on the traffic study

Vechicle Emission Factors - Fleet mix is based on the traffic study

Consumer Products -

Water And Wastewater - Water usage based on 700 gallons per day x acres of building space and landscaped area for indoor/outdoor water usage.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	LDA	0.48	0.40
tblVehicleEF	LDA	0.48	0.40
tblVehicleEF	LDA	0.48	0.40
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LHD1	0.06	0.00

tblVehicleEF	LHD1	0.06	0.00
tblVehicleEF	LHD1	0.06	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleTrips	CNW_TL	6.90	43.76
tblVehicleTrips	CNW_TL	6.90	43.76

tblVehicleTrips	CW_TL	16.60	43.76
tblVehicleTrips	CW_TL	16.60	43.76
tblVehicleTrips	ST_TR	2.59	1.25
tblVehicleTrips	ST_TR	2.59	1.25
tblVehicleTrips	SU_TR	2.59	1.25
tblVehicleTrips	SU_TR	2.59	1.25
tblVehicleTrips	WD_TR	2.59	1.25
tblVehicleTrips	WD_TR	2.59	1.25
tblWater	IndoorWaterUseRate	61,003,750.00	1,548,330.00
tblWater	IndoorWaterUseRate	124,095,687.50	3,147,760.00
tblWater	OutdoorWaterUseRate	0.00	1,391,453.00

3.0 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					
2014	0.0000	0.0000	0.0000	0.0000	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**

tigated 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					
2014	0.0000	0.0000	0.0000	0.0000	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**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	25.3111	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132
Energy	0.4387	3.9881	3.3500	0.0239		0.3031	0.3031		0.3031	0.3031		4,785.6639	4,785.6639	0.0917	0.0877	4,814.7886
Mobile	77.3605	421.4480	262.4322	1.0170	33.7167	8.4345	42.1512	9.1214	7.7581	16.8794		102,746.5166	102,746.5166	1.2840		102,773.4814
Total	**103.1103**	**425.4374**	**265.9259**	**1.0410**	**33.7167**	**8.7381**	**42.4548**	**9.1214**	**8.0617**	**17.1830**		**107,532.4752**	**107,532.4752**	**1.3767**	**0.0877**	**107,588.5832**

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	25.3111	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132
Energy	0.4387	3.9881	3.3500	0.0239		0.3031	0.3031		0.3031	0.3031		4,785.6639	4,785.6639	0.0917	0.0877	4,814.7886
Mobile	77.3605	421.4480	262.4322	1.0170	33.7167	8.4345	42.1512	9.1214	7.7581	16.8794		102,746.5166	102,746.5166	1.2840		102,773.4814
Total	**103.1103**	**425.4374**	**265.9259**	**1.0410**	**33.7167**	**8.7381**	**42.4548**	**9.1214**	**8.0617**	**17.1830**		**107,532.4752**	**107,532.4752**	**1.3767**	**0.0877**	**107,588.5832**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	1/29/2014	1/29/2014	5	1	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
e Preparation	Rubber Tired Dozers	0	8.00	255	0.40
e Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
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**	**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**

3.2 Site Preparation - 2014

Mitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
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**	**0.0000**		**0.0000**

tigated 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

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	77.3605	421.4480	262.4322	1.0170	33.7167	8.4345	42.1512	9.1214	7.7581	16.8794		102,746.5166	102,746.5166	1.2840		102,773.4814
Unmitigated	77.3605	421.4480	262.4322	1.0170	33.7167	8.4345	42.1512	9.1214	7.7581	16.8794		102,746.5166	102,746.5166	1.2840		102,773.4814

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	329.75	329.75	329.75	4,898,287	4,898,287
Unrefrigerated Warehouse-No Rail	670.79	670.79	670.79	9,964,246	9,964,246
Total	1,000.54	1,000.54	1,000.54	14,862,533	14,862,533

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	43.76	8.40	43.76	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	43.76	8.40	43.76	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.400000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.600000	0.000000	0.000000	0.000000	0.000000	0.000000

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	0.4387	3.9881	3.3500	0.0239		0.3031	0.3031		0.3031	0.3031		4,785.6639	4,785.6639	0.0917	0.0877	4,814.7886
NaturalGas Unmitigated	0.4387	3.9881	3.3500	0.0239		0.3031	0.3031		0.3031	0.3031		4,785.6639	4,785.6639	0.0917	0.0877	4,814.7886

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					
Refrigerated Warehouse-No Rail	37531.9	0.4048	3.6796	3.0909	0.0221		0.2797	0.2797		0.2797	0.2797		4,415.5146	4,415.5146	0.0846	0.0810	4,442.3867
Unrefrigerated Warehouse-No Rail	3146.27	0.0339	0.3085	0.2591	1.8500e-003		0.0234	0.0234		0.0234	0.0234		370.1493	370.1493	7.0900e-003	6.7900e-003	372.4020
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
Total		**0.4387**	**3.9881**	**3.3500**	**0.0239**		**0.3031**	**0.3031**		**0.3031**	**0.3031**		**4,785.6639**	**4,785.6639**	**0.0917**	**0.0877**	**4,814.7886**

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					
Refrigerated Warehouse-No Rail	37.5319	0.4048	3.6796	3.0909	0.0221		0.2797	0.2797		0.2797	0.2797		4,415.5146	4,415.5146	0.0846	0.0810	4,442.3867
Unrefrigerated Warehouse-No Rail	3.14627	0.0339	0.3085	0.2591	1.8500e-003		0.0234	0.0234		0.0234	0.0234		370.1493	370.1493	7.0900e-003	6.7900e-003	372.4020
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
Total		**0.4387**	**3.9881**	**3.3500**	**0.0239**		**0.3031**	**0.3031**		**0.3031**	**0.3031**		**4,785.6639**	**4,785.6639**	**0.0917**	**0.0877**	**4,814.7886**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive 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	25.3111	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132
Unmitigated	25.3111	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132

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	5.1238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	20.1728					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0145	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132
Total	**25.3111**	**1.4000e-003**	**0.1437**	**1.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**		**0.2947**	**0.2947**	**8.8000e-004**		**0.3132**

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	5.1238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	20.1728					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0145	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132
Total	**25.3111**	**1.4000e-003**	**0.1437**	**1.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**		**0.2947**	**0.2947**	**8.8000e-004**		**0.3132**

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

10.0 Vegetation

ATTACHMENT "B"

Winter Operational Impacts

URBEMIS 2007

Winter Operational Impacts

9/16/2013 11:32:03 AM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name:

Project Name: Westridge Commerce Center - Aldi

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	4.74	0.81	0.68	0.00	0.00	0.00	966.44

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	49.60	565.35	270.65	1.16	95.49	31.56	124,333.32

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	54.34	566.16	271.33	1.16	95.49	31.56	125,299.76

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.06	0.81	0.68	0.00	0.00	0.00	966.44
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	4.68						
TOTALS (lbs/day, unmitigated)	4.74	0.81	0.68	0.00	0.00	0.00	966.44

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Warehouse	49.60	565.35	270.65	1.16	95.49	31.56	124,333.32
TOTALS (lbs/day, unmitigated)	49.60	565.35	270.65	1.16	95.49	31.56	124,333.32

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2014 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Warehouse		1.25	1000 sq ft	800.43	1,000.54	43,723.49
					1,000.54	43,723.49

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	40.0	0.4	99.4	0.2
Light Truck < 3750 lbs	0.0	1.4	95.9	2.7
Light Truck 3751-5750 lbs	0.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	0.0	0.9	99.1	0.0
Lit avy Truck 8501-10,000 lbs	0.0	0.0	82.4	17.6
Lit avy Truck 10,001-14,000 lbs	0.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	60.0	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	50.0	50.0	0.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	0.0	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	43.7	43.7	43.7	43.7	43.7	43.7

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Warehouse				2.0	1.0	97.0

2010 Westridge EIR

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	938.00	1000sqft	21.53	938,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2014
lity Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction emissions modeled

Off-road Equipment - No construction emissions modeled

Vehicle Trips - Based on the 2010 Westridge EIR URBEMIS inputs

Vechicle Emission Factors - Based on the 2010 Westridge EIR URBEMIS inputs

Vechicle Emission Factors - Based on the 2010 Westridge EIR URBEMIS inputs

Vechicle Emission Factors - Based on the 2010 Westridge EIR URBEMIS inputs

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleEF	HHD	0.04	0.34
tblVehicleEF	HHD	0.04	0.34
tblVehicleEF	HHD	0.04	0.34
tblVehicleEF	LDA	0.48	0.46
tblVehicleEF	LDA	0.48	0.46
tblVehicleEF	LDA	0.48	0.46
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MDV	0.16	0.00

tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleTrips	CC_TL	8.40	40.80
tblVehicleTrips	CC_TTP	0.00	97.00
tblVehicleTrips	CNW_TL	6.90	40.80
tblVehicleTrips	CNW_TTP	41.00	1.00
tblVehicleTrips	CW_TL	16.60	40.80
tblVehicleTrips	CW_TTP	59.00	2.00
tblVehicleTrips	ST_TR	2.59	1.69
tblVehicleTrips	SU_TR	2.59	1.69
tblVehicleTrips	WD_TR	2.59	1.69

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					
2014	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**						

tigated 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					
2014	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**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	24.5382	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						
Energy	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						
Mobile	105.5655	475.5805	321.9348	1.1774	49.7398	9.6507	59.3905	13.5972	8.8763	22.4734						
Total	**130.1630**	**476.1206**	**322.4878**	**1.1806**	**49.7398**	**9.6920**	**59.4319**	**13.5972**	**8.9176**	**22.5148**						

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	24.5382	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						
Energy	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						
Mobile	105.5655	475.5805	321.9348	1.1774	49.7398	9.6507	59.3905	13.5972	8.8763	22.4734						
Total	**130.1630**	**476.1206**	**322.4878**	**1.1806**	**49.7398**	**9.6920**	**59.4319**	**13.5972**	**8.9176**	**22.5148**						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	1/1/2014	1/1/2014	5	1	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
molition	Excavators	0	8.00	162	0.38
molition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	255	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

3.2 Demolition - 2014

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive 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						
Total	**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						
Vendor	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						
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						

3.2 Demolition - 2014

Mitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive 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						
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

tigated 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						
Vendor	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						
Total	**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

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	105.5655	475.5805	321.9348	1.1774	49.7398	9.6507	59.3905	13.5972	8.8763	22.4734						
Unmitigated	105.5655	475.5805	321.9348	1.1774	49.7398	9.6507	59.3905	13.5972	8.8763	22.4734						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	1,585.22	1,585.22	1585.22	21,955,037	21,955,037
Total	1,585.22	1,585.22	1,585.22	21,955,037	21,955,037

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Unrefrigerated Warehouse-No	40.80	40.80	40.80	2.00	97.00	1.00	92	5	3

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.460000	0.000000	0.000000	0.000000	0.061000	0.000000	0.139000	0.340000	0.000000	0.000000	0.000000	0.000000	0.000000

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	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						
NaturalGas Unmitigated	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						

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					
Unrefrigerated Warehouse-No Rail	5499.51	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						
Total		**0.0593**	**0.5392**	**0.4529**	**3.2400e-003**		**0.0410**	**0.0410**		**0.0410**	**0.0410**						

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					
Unrefrigerated Warehouse-No Rail	5.49951	0.0593	0.5392	0.4529	3.2400e-003		0.0410	0.0410		0.0410	0.0410						
Total		**0.0593**	**0.5392**	**0.4529**	**3.2400e-003**		**0.0410**	**0.0410**		**0.0410**	**0.0410**						

6.0 Area Detail

L Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive 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	24.5382	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						
Unmitigated	24.5382	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						

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	5.9557					0.0000	0.0000		0.0000	0.0000						
Consumer Products	18.5724					0.0000	0.0000		0.0000	0.0000						
Landscaping	0.0101	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						
Total	**24.5382**	**9.8000e-004**	**0.1001**	**1.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**						

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					
Consumer Products	18.5724					0.0000	0.0000		0.0000	0.0000						
Landscaping	0.0101	9.8000e-004	0.1001	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004						
Architectural Coating	5.9557					0.0000	0.0000		0.0000	0.0000						
Total	**24.5382**	**9.8000e-004**	**0.1001**	**1.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**						

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

10.0 Vegetation

Westridge Commerce Center

San Bernardino-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	263.80	1000sqft	6.06	263,800.00	0
Unrefrigerated Warehouse-No Rail	536.63	1000sqft	12.32	536,630.00	0
Parking Lot	546.00	Space	4.91	218,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction emissions modeled

Off-road Equipment - No construction emissions modeled

Vehicle Trips - TG Rate from Project Traffic Study. Overall TL was calculated using the % trips asscoaited with PC vs. Trucks (weighted average).

Vechicle Emission Factors - Fleet mix is based on the traffic study

Vechicle Emission Factors - Fleet mix is based on the traffic study

Vechicle Emission Factors - Fleet mix is based on the traffic study

Consumer Products -

Water And Wastewater - Water usage based on 700 gallons per day x acres of building space and landscaped area for indoor/outdoor water usage.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	LDA	0.48	0.40
tblVehicleEF	LDA	0.48	0.40
tblVehicleEF	LDA	0.48	0.40
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LHD1	0.06	0.00

tblVehicleEF	LHD1	0.06	0.00
tblVehicleEF	LHD1	0.06	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleTrips	CNW_TL	6.90	43.76
tblVehicleTrips	CNW_TL	6.90	43.76

tblVehicleTrips	CW_TL	16.60	43.76
tblVehicleTrips	CW_TL	16.60	43.76
tblVehicleTrips	ST_TR	2.59	1.25
tblVehicleTrips	ST_TR	2.59	1.25
tblVehicleTrips	SU_TR	2.59	1.25
tblVehicleTrips	SU_TR	2.59	1.25
tblVehicleTrips	WD_TR	2.59	1.25
tblVehicleTrips	WD_TR	2.59	1.25
tblWater	IndoorWaterUseRate	61,003,750.00	1,548,330.00
tblWater	IndoorWaterUseRate	124,095,687.50	3,147,760.00
tblWater	OutdoorWaterUseRate	0.00	1,391,453.00

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					
2014	0.0000	0.0000	0.0000	0.0000	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**

tigated 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					
2014	0.0000	0.0000	0.0000	0.0000	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**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	25.3111	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132
Energy	0.4387	3.9881	3.3500	0.0239		0.3031	0.3031		0.3031	0.3031		4,785.6639	4,785.6639	0.0917	0.0877	4,814.7886
Mobile	81.0007	439.3110	262.2185	1.0035	33.7167	8.4482	42.1649	9.1214	7.7707	16.8921		101,536.6906	101,536.6906	1.2884		101,563.7478
Total	**106.7505**	**443.3004**	**265.7122**	**1.0275**	**33.7167**	**8.7518**	**42.4685**	**9.1214**	**8.0743**	**17.1957**		**106,322.6491**	**106,322.6491**	**1.3811**	**0.0877**	**106,378.8496**

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	25.3111	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132
Energy	0.4387	3.9881	3.3500	0.0239		0.3031	0.3031		0.3031	0.3031		4,785.6639	4,785.6639	0.0917	0.0877	4,814.7886
Mobile	81.0007	439.3110	262.2185	1.0035	33.7167	8.4482	42.1649	9.1214	7.7707	16.8921		101,536.6906	101,536.6906	1.2884		101,563.7478
Total	**106.7505**	**443.3004**	**265.7122**	**1.0275**	**33.7167**	**8.7518**	**42.4685**	**9.1214**	**8.0743**	**17.1957**		**106,322.6491**	**106,322.6491**	**1.3811**	**0.0877**	**106,378.8496**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	1/29/2014	1/29/2014	5	1	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
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**	**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**

3.2 Site Preparation - 2014

Mitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
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**	**0.0000**		**0.0000**

tigated 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

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	81.0007	439.3110	262.2185	1.0035	33.7167	8.4482	42.1649	9.1214	7.7707	16.8921		101,536.6906	101,536.6906	1.2884		101,563.7478
Unmitigated	81.0007	439.3110	262.2185	1.0035	33.7167	8.4482	42.1649	9.1214	7.7707	16.8921		101,536.6906	101,536.6906	1.2884		101,563.7478

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	329.75	329.75	329.75	4,898,287	4,898,287
Unrefrigerated Warehouse-No Rail	670.79	670.79	670.79	9,964,246	9,964,246
Total	1,000.54	1,000.54	1,000.54	14,862,533	14,862,533

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	43.76	8.40	43.76	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	43.76	8.40	43.76	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.400000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.600000	0.000000	0.000000	0.000000	0.000000	0.000000

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	0.4387	3.9881	3.3500	0.0239		0.3031	0.3031		0.3031	0.3031		4,785.6639	4,785.6639	0.0917	0.0877	4,814.7886
NaturalGas Unmitigated	0.4387	3.9881	3.3500	0.0239		0.3031	0.3031		0.3031	0.3031		4,785.6639	4,785.6639	0.0917	0.0877	4,814.7886

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					
Refrigerated Warehouse-No Rail	37531.9	0.4048	3.6796	3.0909	0.0221		0.2797	0.2797		0.2797	0.2797		4,415.5146	4,415.5146	0.0846	0.0810	4,442.3867
Unrefrigerated Warehouse-No Rail	3146.27	0.0339	0.3085	0.2591	1.8500e-003		0.0234	0.0234		0.0234	0.0234		370.1493	370.1493	7.0900e-003	6.7900e-003	372.4020
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
Total		**0.4387**	**3.9881**	**3.3500**	**0.0239**		**0.3031**	**0.3031**		**0.3031**	**0.3031**		**4,785.6639**	**4,785.6639**	**0.0917**	**0.0877**	**4,814.7886**

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					
Refrigerated Warehouse-No Rail	37.5319	0.4048	3.6796	3.0909	0.0221		0.2797	0.2797		0.2797	0.2797		4,415.5146	4,415.5146	0.0846	0.0810	4,442.3867
Unrefrigerated Warehouse-No Rail	3.14627	0.0339	0.3085	0.2591	1.8500e-003		0.0234	0.0234		0.0234	0.0234		370.1493	370.1493	7.0900e-003	6.7900e-003	372.4020
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
Total		**0.4387**	**3.9881**	**3.3500**	**0.0239**		**0.3031**	**0.3031**		**0.3031**	**0.3031**		**4,785.6639**	**4,785.6639**	**0.0917**	**0.0877**	**4,814.7886**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive 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	25.3111	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132
Unmitigated	25.3111	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132

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	5.1238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	20.1728					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0145	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132
Total	**25.3111**	**1.4000e-003**	**0.1437**	**1.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**		**0.2947**	**0.2947**	**8.8000e-004**		**0.3132**

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	5.1238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	20.1728					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0145	1.4000e-003	0.1437	1.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		0.2947	0.2947	8.8000e-004		0.3132
Total	**25.3111**	**1.4000e-003**	**0.1437**	**1.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**		**0.2947**	**0.2947**	**8.8000e-004**		**0.3132**

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

10.0 Vegetation

ATTACHMENT "C"

Annual Operational Impacts

Westridge Commerce Center

San Bernardino-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	263.80	1000sqft	6.06	263,800.00	0
Unrefrigerated Warehouse-No Rail	536.63	1000sqft	12.32	536,630.00	0
Parking Lot	546.00	Space	4.91	218,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction emissions modeled

Off-road Equipment - No construction emissions modeled

Vehicle Trips - TG Rate from Project Traffic Study. Overall TL was calculated using the % trips asscoaited with PC vs. Trucks (weighted average).

Vechicle Emission Factors - Fleet mix is based on the traffic study

Vechicle Emission Factors - Fleet mix is based on the traffic study

Vechicle Emission Factors - Fleet mix is based on the traffic study

Consumer Products -

Water And Wastewater - Water usage based on 700 gallons per day x acres of building space and landscaped area for indoor/outdoor water usage.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	LDA	0.48	0.40
tblVehicleEF	LDA	0.48	0.40
tblVehicleEF	LDA	0.48	0.40
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LHD1	0.06	0.00

tblVehicleEF	LHD1	0.06	0.00
tblVehicleEF	LHD1	0.06	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	LHD2	9.0620e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MCY	4.8310e-003	0.00
tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MDV	0.16	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MH	2.9060e-003	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	OBUS	1.1320e-003	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	SBUS	7.3600e-004	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleEF	UBUS	1.3460e-003	0.00
tblVehicleTrips	CNW_TL	6.90	43.76
tblVehicleTrips	CNW_TL	6.90	43.76

tblVehicleTrips	CW_TL	16.60	43.76
tblVehicleTrips	CW_TL	16.60	43.76
tblVehicleTrips	ST_TR	2.59	1.25
tblVehicleTrips	ST_TR	2.59	1.25
tblVehicleTrips	SU_TR	2.59	1.25
tblVehicleTrips	SU_TR	2.59	1.25
tblVehicleTrips	WD_TR	2.59	1.25
tblVehicleTrips	WD_TR	2.59	1.25
tblWater	IndoorWaterUseRate	61,003,750.00	1,548,330.00
tblWater	IndoorWaterUseRate	124,095,687.50	3,147,760.00
tblWater	OutdoorWaterUseRate	0.00	1,391,453.00

3.0 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					
2014	0.0000	0.0000	0.0000	0.0000	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**

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tigated 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					
2014	0.0000	0.0000	0.0000	0.0000	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**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	4.6185	1.8000e-004	0.0180	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0334	0.0334	1.0000e-004	0.0000	0.0355
Energy	0.0801	0.7278	0.6114	4.3700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	4,422.8197	4,422.8197	0.1821	0.0491	4,441.8496
Mobile	14.0481	81.0837	48.7109	0.1829	6.0288	1.5343	7.5631	1.6337	1.4113	3.0449	0.0000	16,783.5380	16,783.5380	0.2121	0.0000	16,787.9912
Waste						0.0000	0.0000		0.0000	0.0000	152.7304	0.0000	152.7304	9.0261	0.0000	342.2787
Water						0.0000	0.0000		0.0000	0.0000	1.4899	21.9223	23.4122	0.1540	3.8200e-003	27.8315
Total	**18.7466**	**81.8117**	**49.3402**	**0.1873**	**6.0288**	**1.5897**	**7.6184**	**1.6337**	**1.4666**	**3.1003**	**154.2203**	**21,228.3135**	**21,382.5337**	**9.5744**	**0.0529**	**21,599.9866**

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	4.6185	1.8000e-004	0.0180	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0334	0.0334	1.0000e-004	0.0000	0.0355
Energy	0.0801	0.7278	0.6114	4.3700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	4,422.8197	4,422.8197	0.1821	0.0491	4,441.8496
Mobile	14.0481	81.0837	48.7109	0.1829	6.0288	1.5343	7.5631	1.6337	1.4113	3.0449	0.0000	16,783.5380	16,783.5380	0.2121	0.0000	16,787.9912
Waste						0.0000	0.0000		0.0000	0.0000	152.7304	0.0000	152.7304	9.0261	0.0000	342.2787
Water						0.0000	0.0000		0.0000	0.0000	1.4899	21.9223	23.4122	0.1540	3.8200e-003	27.8292
Total	**18.7466**	**81.8117**	**49.3402**	**0.1873**	**6.0288**	**1.5897**	**7.6184**	**1.6337**	**1.4666**	**3.1003**	**154.2203**	**21,228.3135**	**21,382.5337**	**9.5743**	**0.0529**	**21,599.9842**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.1334e-004**	**0.0000**	**1.1019e-005**

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	1/29/2014	1/29/2014	5	1	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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**	**0.0000**	**0.0000**

3.2 Site Preparation - 2014

Unmitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive 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**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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**	**0.0000**	**0.0000**

3.2 Site Preparation - 2014

Mitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive 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

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	14.0481	81.0837	48.7109	0.1829	6.0288	1.5343	7.5631	1.6337	1.4113	3.0449	0.0000	16,783.5380	16,783.5380	0.2121	0.0000	16,787.9912
Unmitigated	14.0481	81.0837	48.7109	0.1829	6.0288	1.5343	7.5631	1.6337	1.4113	3.0449	0.0000	16,783.5380	16,783.5380	0.2121	0.0000	16,787.9912

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	329.75	329.75	329.75	4,898,287	4,898,287
Unrefrigerated Warehouse-No Rail	670.79	670.79	670.79	9,964,246	9,964,246
Total	1,000.54	1,000.54	1,000.54	14,862,533	14,862,533

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	43.76	8.40	43.76	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	43.76	8.40	43.76	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.400000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.600000	0.000000	0.000000	0.000000	0.000000	0.000000

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	3,630.4994	3,630.4994	0.1669	0.0345	3,644.7074
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,630.4994	3,630.4994	0.1669	0.0345	3,644.7074
NaturalGas Mitigated	0.0801	0.7278	0.6114	4.3700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	792.3203	792.3203	0.0152	0.0145	797.1423
NaturalGas Unmitigated	0.0801	0.7278	0.6114	4.3700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	792.3203	792.3203	0.0152	0.0145	797.1423

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					
Refrigerated Warehouse-No Rail	1.36991e+007	0.0739	0.6715	0.5641	4.0300e-003		0.0510	0.0510		0.0510	0.0510	0.0000	731.0380	731.0380	0.0140	0.0134	735.4869
Unrefrigerated Warehouse-No Rail	1.14839e+006	6.1900e-003	0.0563	0.0473	3.4000e-004		4.2800e-003	4.2800e-003		4.2800e-003	4.2800e-003	0.0000	61.2824	61.2824	1.1700e-003	1.1200e-003	61.6553
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
Total		**0.0801**	**0.7278**	**0.6114**	**4.3700e-003**		**0.0553**	**0.0553**		**0.0553**	**0.0553**	**0.0000**	**792.3203**	**792.3203**	**0.0152**	**0.0145**	**797.1423**

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					
Refrigerated Warehouse-No Rail	1.36991e+007	0.0739	0.6715	0.5641	4.0300e-003		0.0510	0.0510		0.0510	0.0510	0.0000	731.0380	731.0380	0.0140	0.0134	735.4869
Unrefrigerated Warehouse-No Rail	1.14839e+006	6.1900e-003	0.0563	0.0473	3.4000e-004		4.2800e-003	4.2800e-003		4.2800e-003	4.2800e-003	0.0000	61.2824	61.2824	1.1700e-003	1.1200e-003	61.6553
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
Total		**0.0801**	**0.7278**	**0.6114**	**4.3700e-003**		**0.0553**	**0.0553**		**0.0553**	**0.0553**	**0.0000**	**792.3203**	**792.3203**	**0.0152**	**0.0145**	**797.1423**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	192192	54.9990	2.5300e-003	5.2000e-004	55.2142
Refrigerated Warehouse-No Rail	1.08738e+007	3,111.7318	0.1430	0.0296	3,123.9097
Unrefrigerated Warehouse-No Rail	1.62062e+006	463.7685	0.0213	4.4100e-003	465.5835
Total		**3,630.4994**	**0.1669**	**0.0345**	**3,644.7074**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	192192	54.9990	2.5300e-003	5.2000e-004	55.2142
Refrigerated Warehouse-No Rail	1.08738e+007	3,111.7318	0.1430	0.0296	3,123.9097
Unrefrigerated Warehouse-No Rail	1.62062e+006	463.7685	0.0213	4.4100e-003	465.5835
Total		**3,630.4994**	**0.1669**	**0.0345**	**3,644.7074**

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0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive 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	4.6185	1.8000e-004	0.0180	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0334	0.0334	1.0000e-004	0.0000	0.0355
Unmitigated	4.6185	1.8000e-004	0.0180	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0334	0.0334	1.0000e-004	0.0000	0.0355

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	0.9351					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8100e-003	1.8000e-004	0.0180	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0334	0.0334	1.0000e-004	0.0000	0.0355
Total	**4.6184**	**1.8000e-004**	**0.0180**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0334**	**0.0334**	**1.0000e-004**	**0.0000**	**0.0355**

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	0.9351					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8100e-003	1.8000e-004	0.0180	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0334	0.0334	1.0000e-004	0.0000	0.0355
Total	**4.6184**	**1.8000e-004**	**0.0180**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0334**	**0.0334**	**1.0000e-004**	**0.0000**	**0.0355**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	23.4122	0.1540	3.8200e-003	27.8292
Unmitigated	23.4122	0.1540	3.8200e-003	27.8315

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.54833 / 0	6.2606	0.0507	1.2500e-003	7.7120
Unrefrigerated Warehouse-No Rail	3.14776 / 1.39145	17.1516	0.1033	2.5800e-003	20.1196
Total		**23.4122**	**0.1540**	**3.8300e-003**	**27.8315**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.54833 / 0	6.2606	0.0507	1.2400e-003	7.7112
Unrefrigerated Warehouse-No Rail	3.14776 / 1.39145	17.1516	0.1033	2.5700e-003	20.1180
Total		**23.4122**	**0.1540**	**3.8100e-003**	**27.8292**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	152.7304	9.0261	0.0000	342.2787
Mitigated	152.7304	9.0261	0.0000	342.2787

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	247.97	50.3357	2.9748	0.0000	112.8055
Unrefrigerated Warehouse-No Rail	504.43	102.3947	6.0514	0.0000	229.4732
Total		**152.7304**	**9.0261**	**0.0000**	**342.2787**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	247.97	50.3357	2.9748	0.0000	112.8055
Unrefrigerated Warehouse-No Rail	504.43	102.3947	6.0514	0.0000	229.4732
Total		**152.7304**	**9.0261**	**0.0000**	**342.2787**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

ATTACHMENT "D"

HRA Risk Calculations and AERMOD Output

```
**
**********************************************
**
** ISCST3 Input Produced by:
** AERMOD View Ver. 6.2.0
** Lakes Environmental Software Inc.
** Date: 10/8/2009
** File: C:\Documents and Settings\hqureshi\Desktop\06192 HRA\HRA.INP
**
**********************************************
**
**
**********************************************
** ISCST3 Control Pathway
**********************************************
**
**
CO STARTING
  TITLEONE C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc
  TITLETWO West Ridge HRA
  MODELOPT CONC NOCMPL  URBAN NOCALM
  AVERTIME ANNUAL
  POLLUTID DPM
  TERRHGTS FLAT
  FLAGPOLE 1.50
  RUNORNOT RUN
CO FINISHED
**
**********************************************
** ISCST3 Source Pathway
**********************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION NORTH AREAPOLY 484851.861 3755334.115
  LOCATION SOUTH AREAPOLY 484832.883 3755147.441
** Line Source represented by Separated Volume Sources
** ----------------------------------------------------------------------------
** LINE Source ID = RED
** DESCRSRC
** Length of Side = 14.00
** Emission Rate = 1.22E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 3
** 485514.05, 3755440.55, 0.00, 4.00, 0.0
** 485512.92, 3755025.40, 0.00, 4.00, 12.43
** 485281.77, 3755025.97, 0.00, 4.00, 11.94
** ----------------------------------------------------------------------------
  LOCATION L0001052 VOLUME 485514.043 3755433.500
  LOCATION L0001053 VOLUME 485513.969 3755406.767
  LOCATION L0001054 VOLUME 485513.894 3755380.033
  LOCATION L0001055 VOLUME 485513.820 3755353.300
  LOCATION L0001056 VOLUME 485513.745 3755326.567
  LOCATION L0001057 VOLUME 485513.671 3755299.833
  LOCATION L0001058 VOLUME 485513.596 3755273.100
  LOCATION L0001059 VOLUME 485513.522 3755246.367
  LOCATION L0001060 VOLUME 485513.447 3755219.633
  LOCATION L0001061 VOLUME 485513.373 3755192.900
  LOCATION L0001062 VOLUME 485513.298 3755166.167
  LOCATION L0001063 VOLUME 485513.224 3755139.433
  LOCATION L0001064 VOLUME 485513.149 3755112.700
  LOCATION L0001065 VOLUME 485513.075 3755085.967
  LOCATION L0001066 VOLUME 485513.000 3755059.233
  LOCATION L0001067 VOLUME 485512.926 3755032.500
  LOCATION L0001068 VOLUME 485494.226 3755025.540
  LOCATION L0001069 VOLUME 485468.545 3755025.596
  LOCATION L0001070 VOLUME 485442.865 3755025.652
  LOCATION L0001071 VOLUME 485417.184 3755025.707
  LOCATION L0001072 VOLUME 485391.503 3755025.763
  LOCATION L0001073 VOLUME 485365.823 3755025.818
  LOCATION L0001074 VOLUME 485340.142 3755025.874
  LOCATION L0001075 VOLUME 485314.462 3755025.929
  LOCATION L0001076 VOLUME 485288.781 3755025.985
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** Line Source represented by Separated Volume Sources
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** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 2.45E-06
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
** 485270.26, 3755112.67, 0.00, 4.00, 0.0
** 485198.77, 3755113.34, 0.00, 4.00, 7.15
** ----------------------------------------------------------------------------
  LOCATION L0001077 VOLUME 485265.250 3755112.785
  LOCATION L0001078 VOLUME 485249.883 3755112.892
  LOCATION L0001079 VOLUME 485234.516 3755113.000
  LOCATION L0001080 VOLUME 485219.148 3755113.108
  LOCATION L0001081 VOLUME 485203.781 3755113.215
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------------------------------------------------------------------------
** LINE Source ID = EDTOT
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 2.54E-06
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
** 485281.95, 3755038.82, 0.00, 4.00, 0.0
** 485280.98, 3755113.51, 0.00, 4.00, 7.53
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  LOCATION L0001082 VOLUME 485281.873 3755043.750
  LOCATION L0001083 VOLUME 485281.663 3755059.937
  LOCATION L0001084 VOLUME 485281.453 3755076.125
  LOCATION L0001085 VOLUME 485281.243 3755092.313
  LOCATION L0001086 VOLUME 485281.034 3755108.500
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------------------------------------------------------------------------
** LINE Source ID = EDN
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 1.13E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 4
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** 485257.73, 3755376.46, 0.00, 4.00, 6.41
** 485195.66, 3755376.08, 0.00, 4.00, 7.22
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  LOCATION L0001087 VOLUME 485280.823 3755119.746
  LOCATION L0001088 VOLUME 485280.033 3755138.689
  LOCATION L0001089 VOLUME 485279.243 3755157.632
  LOCATION L0001090 VOLUME 485278.453 3755176.575
  LOCATION L0001091 VOLUME 485277.663 3755195.518
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LOCATION L0001092 VOLUME 485276.873 3755214.461
LOCATION L0001093 VOLUME 485276.083 3755233.404
LOCATION L0001094 VOLUME 485275.292 3755252.346
LOCATION L0001095 VOLUME 485274.502 3755271.289
LOCATION L0001096 VOLUME 485273.712 3755290.232
LOCATION L0001097 VOLUME 485272.922 3755309.175
LOCATION L0001098 VOLUME 485272.132 3755328.118
LOCATION L0001099 VOLUME 485271.342 3755347.061
LOCATION L0001100 VOLUME 485270.552 3755366.004
LOCATION L0001101 VOLUME 485262.303 3755374.503
LOCATION L0001102 VOLUME 485247.203 3755376.415
LOCATION L0001103 VOLUME 485231.687 3755376.290
LOCATION L0001104 VOLUME 485216.172 3755376.165
LOCATION L0001105 VOLUME 485200.656 3755376.040
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------
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** DESCRSRC
** Length of Side = 14.00
** Emission Rate = 2.88E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 9
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** 483523.83, 3755223.52, 0.00, 4.00, 11.63
** 484153.63, 3755222.06, 0.00, 4.00, 12.74
** 484283.98, 3755186.90, 0.00, 4.00, 12.55
** 484370.40, 3755109.28, 0.00, 4.00, 10.81
** 484502.21, 3755038.97, 0.00, 4.00, 11.58
** 484588.63, 3755021.40, 0.00, 4.00, 10.25
** 484758.53, 3755019.93, 0.00, 4.00, 11.29
** 484782.82, 3755021.23, 0.00, 4.00, 11.31
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LOCATION L0001106 VOLUME 483513.899 3755430.258
LOCATION L0001107 VOLUME 483515.100 3755405.287
LOCATION L0001108 VOLUME 483516.301 3755380.317
LOCATION L0001109 VOLUME 483517.502 3755355.346
LOCATION L0001110 VOLUME 483518.703 3755330.375
LOCATION L0001111 VOLUME 483519.904 3755305.404
LOCATION L0001112 VOLUME 483521.105 3755280.433
LOCATION L0001113 VOLUME 483522.306 3755255.463
LOCATION L0001114 VOLUME 483523.507 3755230.492
LOCATION L0001115 VOLUME 483544.226 3755223.451
LOCATION L0001116 VOLUME 483571.607 3755223.386
LOCATION L0001117 VOLUME 483598.989 3755223.321
LOCATION L0001118 VOLUME 483626.371 3755223.256
LOCATION L0001119 VOLUME 483653.753 3755223.191
LOCATION L0001120 VOLUME 483681.135 3755223.125
LOCATION L0001121 VOLUME 483708.516 3755223.060
LOCATION L0001122 VOLUME 483735.898 3755222.995
LOCATION L0001123 VOLUME 483763.280 3755222.930
LOCATION L0001124 VOLUME 483790.662 3755222.864
LOCATION L0001125 VOLUME 483818.043 3755222.799
LOCATION L0001126 VOLUME 483845.425 3755222.734
LOCATION L0001127 VOLUME 483872.807 3755222.669
LOCATION L0001128 VOLUME 483900.189 3755222.604
LOCATION L0001129 VOLUME 483927.571 3755222.538
LOCATION L0001130 VOLUME 483954.952 3755222.473
LOCATION L0001131 VOLUME 483982.334 3755222.408
LOCATION L0001132 VOLUME 484009.716 3755222.343
LOCATION L0001133 VOLUME 484037.098 3755222.278
LOCATION L0001134 VOLUME 484064.480 3755222.212
LOCATION L0001135 VOLUME 484091.861 3755222.147
LOCATION L0001136 VOLUME 484119.243 3755222.082
LOCATION L0001137 VOLUME 484146.625 3755222.017
LOCATION L0001138 VOLUME 484172.933 3755216.815
LOCATION L0001139 VOLUME 484199.002 3755209.815
LOCATION L0001140 VOLUME 484225.071 3755202.815
LOCATION L0001141 VOLUME 484251.139 3755195.815
LOCATION L0001142 VOLUME 484277.208 3755188.815
LOCATION L0001143 VOLUME 484296.052 3755176.131
LOCATION L0001144 VOLUME 484313.339 3755160.581
LOCATION L0001145 VOLUME 484330.627 3755145.031
LOCATION L0001146 VOLUME 484347.914 3755129.481
LOCATION L0001147 VOLUME 484365.202 3755113.931
LOCATION L0001148 VOLUME 484386.198 3755100.834
LOCATION L0001149 VOLUME 484408.166 3755089.126
LOCATION L0001150 VOLUME 484430.135 3755077.417
LOCATION L0001151 VOLUME 484452.104 3755065.709
LOCATION L0001152 VOLUME 484474.073 3755054.001
LOCATION L0001153 VOLUME 484496.041 3755042.292
LOCATION L0001154 VOLUME 484516.960 3755036.015
LOCATION L0001155 VOLUME 484538.561 3755031.640
LOCATION L0001156 VOLUME 484560.163 3755027.265
LOCATION L0001157 VOLUME 484581.764 3755022.890
LOCATION L0001158 VOLUME 484605.898 3755021.348
LOCATION L0001159 VOLUME 484630.170 3755021.133
LOCATION L0001160 VOLUME 484654.442 3755020.919
LOCATION L0001161 VOLUME 484678.715 3755020.705
LOCATION L0001162 VOLUME 484702.987 3755020.490
LOCATION L0001163 VOLUME 484727.259 3755020.276
LOCATION L0001164 VOLUME 484751.532 3755020.062
LOCATION L0001165 VOLUME 484775.822 3755020.890
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------
** LINE Source ID = WDTOT
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 1.61E-06
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
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** 484780.87, 3755083.62, 0.00, 4.00, 8.84
** ----------
LOCATION L0001166 VOLUME 484781.435 3755040.500
LOCATION L0001167 VOLUME 484781.188 3755059.500
LOCATION L0001168 VOLUME 484780.940 3755078.500
** End of Line Source
** Line Source represented by Separated Volume Sources
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** LINE Source ID = WDN
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 1.07E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 3
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** 484777.62, 3755376.07, 0.00, 4.00, 8.78
** 484799.06, 3755375.42, 0.00, 4.00, 4.99
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LOCATION L0001170 VOLUME 484780.007 3755106.866
LOCATION L0001171 VOLUME 484779.840 3755125.733
LOCATION L0001172 VOLUME 484779.673 3755144.600
LOCATION L0001173 VOLUME 484779.506 3755163.467
LOCATION L0001174 VOLUME 484779.339 3755182.333
LOCATION L0001175 VOLUME 484779.172 3755201.200
LOCATION L0001176 VOLUME 484779.005 3755220.067

LOCATION L0001177 VOLUME 484778.838 3755238.933
LOCATION L0001178 VOLUME 484778.671 3755257.800
LOCATION L0001179 VOLUME 484778.504 3755276.667
LOCATION L0001180 VOLUME 484778.337 3755295.533
LOCATION L0001181 VOLUME 484778.170 3755314.400
LOCATION L0001182 VOLUME 484778.003 3755333.267
LOCATION L0001183 VOLUME 484777.836 3755352.134
LOCATION L0001184 VOLUME 484777.669 3755371.000
LOCATION L0001185 VOLUME 484783.345 3755375.867
LOCATION L0001186 VOLUME 484794.064 3755375.617
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------
** LINE Source ID = EACONN
** DESCRSRC
** Length of Side = 14.00
** Emission Rate = 9.27E-06
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
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** 484786.06, 3755019.93, 0.00, 4.00, 12.33
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LOCATION L0001188 VOLUME 485243.858 3755024.193
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LOCATION L0001190 VOLUME 485190.823 3755023.707
LOCATION L0001191 VOLUME 485164.306 3755023.464
LOCATION L0001192 VOLUME 485137.788 3755023.222
LOCATION L0001193 VOLUME 485111.271 3755022.979
LOCATION L0001194 VOLUME 485084.754 3755022.736
LOCATION L0001195 VOLUME 485058.236 3755022.493
LOCATION L0001196 VOLUME 485031.719 3755022.250
LOCATION L0001197 VOLUME 485005.201 3755022.007
LOCATION L0001198 VOLUME 484978.684 3755021.764
LOCATION L0001199 VOLUME 484952.167 3755021.521
LOCATION L0001200 VOLUME 484925.649 3755021.278
LOCATION L0001201 VOLUME 484899.132 3755021.036
LOCATION L0001202 VOLUME 484872.614 3755020.793
LOCATION L0001203 VOLUME 484846.097 3755020.550
LOCATION L0001204 VOLUME 484819.580 3755020.307
LOCATION L0001205 VOLUME 484793.062 3755020.064
** End of Line Source
** Source Parameters **
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AREAVERT NORTH 484851.861 3755334.115 484795.898 3755334.215
AREAVERT NORTH 484793.656 3755354.326 484789.516 3755391.010
AREAVERT NORTH 484791.656 3755391.005 485116.083 3755390.148
AREAVERT NORTH 485099.331 3755390.160 485136.349 3755386.791
AREAVERT NORTH 485222.754 3755374.982 485234.337 3755341.479
AREAVERT NORTH 485184.092 3755342.300
SRCPARAM SOUTH 1.614E-09 4.000 10 1.860
AREAVERT SOUTH 484832.883 3755147.441 484832.883 3755132.927
AREAVERT SOUTH 484832.775 3755132.927 484834.526 3755092.171
AREAVERT SOUTH 485198.157 3755095.373 485196.612 3755131.130
AREAVERT SOUTH 485196.184 3755149.677 485181.290 3755150.857
AREAVERT SOUTH 485176.151 3755150.296 485174.750 3755149.918
SRCPARAM L0001052 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001053 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001054 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001055 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001056 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001057 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001058 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001059 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001060 4.88E-07 4.00 12.43 1.86
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SRCPARAM L0001062 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001063 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001064 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001065 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001066 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001067 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001068 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001069 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001070 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001071 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001072 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001073 4.88E-07 4.00 11.94 1.86
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SRCPARAM L0001075 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001076 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001077 4.9E-07 4.00 7.15 1.86
SRCPARAM L0001078 4.9E-07 4.00 7.15 1.86
SRCPARAM L0001079 4.9E-07 4.00 7.15 1.86
SRCPARAM L0001080 4.9E-07 4.00 7.15 1.86
SRCPARAM L0001081 4.9E-07 4.00 7.15 1.86
SRCPARAM L0001082 5.08E-07 4.00 7.53 1.86
SRCPARAM L0001083 5.08E-07 4.00 7.53 1.86
SRCPARAM L0001084 5.08E-07 4.00 7.53 1.86
SRCPARAM L0001085 5.08E-07 4.00 7.53 1.86
SRCPARAM L0001086 5.08E-07 4.00 7.53 1.86
SRCPARAM L0001087 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001088 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001089 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001090 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001091 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001092 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001093 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001094 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001095 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001096 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001097 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001098 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001099 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001100 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001101 5.9474E-07 4.00 6.41 1.86
SRCPARAM L0001102 5.9474E-07 4.00 7.22 1.86
SRCPARAM L0001103 5.9474E-07 4.00 7.22 1.86
SRCPARAM L0001104 5.9474E-07 4.00 7.22 1.86
SRCPARAM L0001105 5.9474E-07 4.00 7.22 1.86
SRCPARAM L0001106 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001107 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001108 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001109 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001110 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001111 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001112 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001113 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001114 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001115 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001116 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001117 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001118 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001119 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001120 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001121 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001122 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001123 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001124 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001125 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001126 4.8E-07 4.00 12.74 1.86

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SRCPARAM L0001127 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001128 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001129 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001130 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001131 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001132 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001133 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001134 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001135 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001136 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001137 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001138 4.8E-07 4.00 12.55 1.86
SRCPARAM L0001139 4.8E-07 4.00 12.55 1.86
SRCPARAM L0001140 4.8E-07 4.00 12.55 1.86
SRCPARAM L0001141 4.8E-07 4.00 12.55 1.86
SRCPARAM L0001142 4.8E-07 4.00 12.55 1.86
SRCPARAM L0001143 4.8E-07 4.00 10.81 1.86
SRCPARAM L0001144 4.8E-07 4.00 10.81 1.86
SRCPARAM L0001145 4.8E-07 4.00 10.81 1.86
SRCPARAM L0001146 4.8E-07 4.00 10.81 1.86
SRCPARAM L0001147 4.8E-07 4.00 10.81 1.86
SRCPARAM L0001148 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001149 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001150 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001151 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001152 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001153 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001154 4.8E-07 4.00 10.25 1.86
SRCPARAM L0001155 4.8E-07 4.00 10.25 1.86
SRCPARAM L0001156 4.8E-07 4.00 10.25 1.86
SRCPARAM L0001157 4.8E-07 4.00 10.25 1.86
SRCPARAM L0001158 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001159 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001160 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001161 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001162 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001163 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001164 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001165 4.8E-07 4.00 11.31 1.86
SRCPARAM L0001166 5.3667E-07 4.00 8.84 1.86
SRCPARAM L0001167 5.3667E-07 4.00 8.84 1.86
SRCPARAM L0001168 5.3667E-07 4.00 8.84 1.86
SRCPARAM L0001169 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001170 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001171 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001172 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001173 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001174 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001175 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001176 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001177 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001178 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001179 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001180 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001181 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001182 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001183 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001184 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001185 5.9444E-07 4.00 4.99 1.86
SRCPARAM L0001186 5.9444E-07 4.00 4.99 1.86
SRCPARAM L0001187 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001188 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001189 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001190 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001191 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001192 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001193 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001194 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001195 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001196 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001197 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001198 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001199 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001200 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001201 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001202 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001203 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001204 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001205 4.8789E-07 4.00 12.33 1.86

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 1"
EMISFACT NORTH HROFDY 8 8 4 4 10 21
EMISFACT NORTH HROFDY 21 17 17 17 13 8
EMISFACT NORTH HROFDY 8 13 17 21 21 31
EMISFACT NORTH HROFDY 42 21 21 38 31 17
EMISFACT SOUTH HROFDY 8 8 4 4 10 21
EMISFACT SOUTH HROFDY 21 17 17 17 13 8
EMISFACT SOUTH HROFDY 8 13 17 21 21 31
EMISFACT SOUTH HROFDY 42 21 21 38 31 17

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 2"
EMISFACT L0001106 HROFDY 3 3 2 2 4 8
EMISFACT L0001106 HROFDY 8 7 7 7 5 3
EMISFACT L0001106 HROFDY 3 5 7 8 8 13
EMISFACT L0001106 HROFDY 17 8 8 15 13 7
EMISFACT L0001107 HROFDY 3 3 2 2 4 8
EMISFACT L0001107 HROFDY 8 7 7 7 5 3
EMISFACT L0001107 HROFDY 3 5 7 8 8 13
EMISFACT L0001107 HROFDY 17 8 8 15 13 7
EMISFACT L0001108 HROFDY 3 3 2 2 4 8
EMISFACT L0001108 HROFDY 8 7 7 7 5 3
EMISFACT L0001108 HROFDY 3 5 7 8 8 13
EMISFACT L0001108 HROFDY 17 8 8 15 13 7
EMISFACT L0001109 HROFDY 3 3 2 2 4 8
EMISFACT L0001109 HROFDY 8 7 7 7 5 3
EMISFACT L0001109 HROFDY 3 5 7 8 8 13
EMISFACT L0001109 HROFDY 17 8 8 15 13 7
EMISFACT L0001110 HROFDY 3 3 2 2 4 8
EMISFACT L0001110 HROFDY 8 7 7 7 5 3
EMISFACT L0001110 HROFDY 3 5 7 8 8 13
EMISFACT L0001110 HROFDY 17 8 8 15 13 7
EMISFACT L0001111 HROFDY 3 3 2 2 4 8
EMISFACT L0001111 HROFDY 8 7 7 7 5 3
EMISFACT L0001111 HROFDY 3 5 7 8 8 13
EMISFACT L0001111 HROFDY 17 8 8 15 13 7
EMISFACT L0001112 HROFDY 3 3 2 2 4 8
EMISFACT L0001112 HROFDY 8 7 7 7 5 3
EMISFACT L0001112 HROFDY 3 5 7 8 8 13
EMISFACT L0001112 HROFDY 17 8 8 15 13 7
EMISFACT L0001113 HROFDY 3 3 2 2 4 8
EMISFACT L0001113 HROFDY 8 7 7 7 5 3
EMISFACT L0001113 HROFDY 3 5 7 8 8 13
EMISFACT L0001113 HROFDY 17 8 8 15 13 7
EMISFACT L0001114 HROFDY 3 3 2 2 4 8
EMISFACT L0001114 HROFDY 8 7 7 7 5 3
EMISFACT L0001114 HROFDY 3 5 7 8 8 13
EMISFACT L0001114 HROFDY 17 8 8 15 13 7
EMISFACT L0001115 HROFDY 3 3 2 2 4 8
EMISFACT L0001115 HROFDY 8 7 7 7 5 3
EMISFACT L0001115 HROFDY 3 5 7 8 8 13
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EMISFACT L0001115 HROFDY 17 8 8 15 13 7
EMISFACT L0001116 HROFDY 3 3 2 2 4 8
EMISFACT L0001116 HROFDY 8 7 7 7 5 3
EMISFACT L0001116 HROFDY 3 5 7 8 8 13
EMISFACT L0001116 HROFDY 17 8 8 15 13 7
EMISFACT L0001117 HROFDY 3 3 2 2 4 8
EMISFACT L0001117 HROFDY 8 7 7 7 5 3
EMISFACT L0001117 HROFDY 3 5 7 8 8 13
EMISFACT L0001117 HROFDY 17 8 8 15 13 7
EMISFACT L0001118 HROFDY 3 3 2 2 4 8
EMISFACT L0001118 HROFDY 8 7 7 7 5 3
EMISFACT L0001118 HROFDY 3 5 7 8 8 13
EMISFACT L0001118 HROFDY 17 8 8 15 13 7
EMISFACT L0001119 HROFDY 3 3 2 2 4 8
EMISFACT L0001119 HROFDY 8 7 7 7 5 3
EMISFACT L0001119 HROFDY 3 5 7 8 8 13
EMISFACT L0001119 HROFDY 17 8 8 15 13 7
EMISFACT L0001120 HROFDY 3 3 2 2 4 8
EMISFACT L0001120 HROFDY 8 7 7 7 5 3
EMISFACT L0001120 HROFDY 3 5 7 8 8 13
EMISFACT L0001120 HROFDY 17 8 8 15 13 7
EMISFACT L0001121 HROFDY 3 3 2 2 4 8
EMISFACT L0001121 HROFDY 8 7 7 7 5 3
EMISFACT L0001121 HROFDY 3 5 7 8 8 13
EMISFACT L0001121 HROFDY 17 8 8 15 13 7
EMISFACT L0001122 HROFDY 3 3 2 2 4 8
EMISFACT L0001122 HROFDY 8 7 7 7 5 3
EMISFACT L0001122 HROFDY 3 5 7 8 8 13
EMISFACT L0001122 HROFDY 17 8 8 15 13 7
EMISFACT L0001123 HROFDY 3 3 2 2 4 8
EMISFACT L0001123 HROFDY 8 7 7 7 5 3
EMISFACT L0001123 HROFDY 3 5 7 8 8 13
EMISFACT L0001123 HROFDY 17 8 8 15 13 7
EMISFACT L0001124 HROFDY 3 3 2 2 4 8
EMISFACT L0001124 HROFDY 8 7 7 7 5 3
EMISFACT L0001124 HROFDY 3 5 7 8 8 13
EMISFACT L0001124 HROFDY 17 8 8 15 13 7
EMISFACT L0001125 HROFDY 3 3 2 2 4 8
EMISFACT L0001125 HROFDY 8 7 7 7 5 3
EMISFACT L0001125 HROFDY 3 5 7 8 8 13
EMISFACT L0001125 HROFDY 17 8 8 15 13 7
EMISFACT L0001126 HROFDY 3 3 2 2 4 8
EMISFACT L0001126 HROFDY 8 7 7 7 5 3
EMISFACT L0001126 HROFDY 3 5 7 8 8 13
EMISFACT L0001126 HROFDY 17 8 8 15 13 7
EMISFACT L0001127 HROFDY 3 3 2 2 4 8
EMISFACT L0001127 HROFDY 8 7 7 7 5 3
EMISFACT L0001127 HROFDY 3 5 7 8 8 13
EMISFACT L0001127 HROFDY 17 8 8 15 13 7
EMISFACT L0001128 HROFDY 3 3 2 2 4 8
EMISFACT L0001128 HROFDY 8 7 7 7 5 3
EMISFACT L0001128 HROFDY 3 5 7 8 8 13
EMISFACT L0001128 HROFDY 17 8 8 15 13 7
EMISFACT L0001129 HROFDY 3 3 2 2 4 8
EMISFACT L0001129 HROFDY 8 7 7 7 5 3
EMISFACT L0001129 HROFDY 3 5 7 8 8 13
EMISFACT L0001129 HROFDY 17 8 8 15 13 7
EMISFACT L0001130 HROFDY 3 3 2 2 4 8
EMISFACT L0001130 HROFDY 8 7 7 7 5 3
EMISFACT L0001130 HROFDY 3 5 7 8 8 13
EMISFACT L0001130 HROFDY 17 8 8 15 13 7
EMISFACT L0001131 HROFDY 3 3 2 2 4 8
EMISFACT L0001131 HROFDY 8 7 7 7 5 3
EMISFACT L0001131 HROFDY 3 5 7 8 8 13
EMISFACT L0001131 HROFDY 17 8 8 15 13 7
EMISFACT L0001132 HROFDY 3 3 2 2 4 8
EMISFACT L0001132 HROFDY 8 7 7 7 5 3
EMISFACT L0001132 HROFDY 3 5 7 8 8 13
EMISFACT L0001132 HROFDY 17 8 8 15 13 7
EMISFACT L0001133 HROFDY 3 3 2 2 4 8
EMISFACT L0001133 HROFDY 8 7 7 7 5 3
EMISFACT L0001133 HROFDY 3 5 7 8 8 13
EMISFACT L0001133 HROFDY 17 8 8 15 13 7
EMISFACT L0001134 HROFDY 3 3 2 2 4 8
EMISFACT L0001134 HROFDY 8 7 7 7 5 3
EMISFACT L0001134 HROFDY 3 5 7 8 8 13
EMISFACT L0001134 HROFDY 17 8 8 15 13 7
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EMISFACT L0001135 HROFDY 8 7 7 7 5 3
EMISFACT L0001135 HROFDY 3 5 7 8 8 13
EMISFACT L0001135 HROFDY 17 8 8 15 13 7
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EMISFACT L0001136 HROFDY 8 7 7 7 5 3
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EMISFACT L0001136 HROFDY 17 8 8 15 13 7
EMISFACT L0001137 HROFDY 3 3 2 2 4 8
EMISFACT L0001137 HROFDY 8 7 7 7 5 3
EMISFACT L0001137 HROFDY 3 5 7 8 8 13
EMISFACT L0001137 HROFDY 17 8 8 15 13 7
EMISFACT L0001138 HROFDY 3 3 2 2 4 8
EMISFACT L0001138 HROFDY 8 7 7 7 5 3
EMISFACT L0001138 HROFDY 3 5 7 8 8 13
EMISFACT L0001138 HROFDY 17 8 8 15 13 7
EMISFACT L0001139 HROFDY 3 3 2 2 4 8
EMISFACT L0001139 HROFDY 8 7 7 7 5 3
EMISFACT L0001139 HROFDY 3 5 7 8 8 13
EMISFACT L0001139 HROFDY 17 8 8 15 13 7
EMISFACT L0001140 HROFDY 3 3 2 2 4 8
EMISFACT L0001140 HROFDY 8 7 7 7 5 3
EMISFACT L0001140 HROFDY 3 5 7 8 8 13
EMISFACT L0001140 HROFDY 17 8 8 15 13 7
EMISFACT L0001141 HROFDY 3 3 2 2 4 8
EMISFACT L0001141 HROFDY 8 7 7 7 5 3
EMISFACT L0001141 HROFDY 3 5 7 8 8 13
EMISFACT L0001141 HROFDY 17 8 8 15 13 7
EMISFACT L0001142 HROFDY 3 3 2 2 4 8
EMISFACT L0001142 HROFDY 8 7 7 7 5 3
EMISFACT L0001142 HROFDY 3 5 7 8 8 13
EMISFACT L0001142 HROFDY 17 8 8 15 13 7
EMISFACT L0001143 HROFDY 3 3 2 2 4 8
EMISFACT L0001143 HROFDY 8 7 7 7 5 3
EMISFACT L0001143 HROFDY 3 5 7 8 8 13
EMISFACT L0001143 HROFDY 17 8 8 15 13 7
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EMISFACT L0001144 HROFDY 3 5 7 8 8 13
EMISFACT L0001144 HROFDY 17 8 8 15 13 7
EMISFACT L0001145 HROFDY 3 3 2 2 4 8
EMISFACT L0001145 HROFDY 8 7 7 7 5 3
EMISFACT L0001145 HROFDY 3 5 7 8 8 13
EMISFACT L0001145 HROFDY 17 8 8 15 13 7
EMISFACT L0001146 HROFDY 3 3 2 2 4 8
EMISFACT L0001146 HROFDY 8 7 7 7 5 3
EMISFACT L0001146 HROFDY 3 5 7 8 8 13
EMISFACT L0001146 HROFDY 17 8 8 15 13 7
EMISFACT L0001147 HROFDY 3 3 2 2 4 8
EMISFACT L0001147 HROFDY 8 7 7 7 5 3
EMISFACT L0001147 HROFDY 3 5 7 8 8 13
EMISFACT L0001147 HROFDY 17 8 8 15 13 7
EMISFACT L0001148 HROFDY 3 3 2 2 4 8
EMISFACT L0001148 HROFDY 8 7 7 7 5 3
EMISFACT L0001148 HROFDY 3 5 7 8 8 13

EMISFACT L0001148 HROFDY 17 8 8 15 13 7
EMISFACT L0001149 HROFDY 3 3 2 2 4 8
EMISFACT L0001149 HROFDY 8 7 7 7 5 3
EMISFACT L0001149 HROFDY 3 5 7 8 8 13
EMISFACT L0001149 HROFDY 17 8 8 15 13 7
EMISFACT L0001150 HROFDY 3 3 2 2 4 8
EMISFACT L0001150 HROFDY 8 7 7 7 5 3
EMISFACT L0001150 HROFDY 3 5 7 8 8 13
EMISFACT L0001150 HROFDY 17 8 8 15 13 7
EMISFACT L0001151 HROFDY 3 3 2 2 4 8
EMISFACT L0001151 HROFDY 8 7 7 7 5 3
EMISFACT L0001151 HROFDY 3 5 7 8 8 13
EMISFACT L0001151 HROFDY 17 8 8 15 13 7
EMISFACT L0001152 HROFDY 3 3 2 2 4 8
EMISFACT L0001152 HROFDY 8 7 7 7 5 3
EMISFACT L0001152 HROFDY 3 5 7 8 8 13
EMISFACT L0001152 HROFDY 17 8 8 15 13 7
EMISFACT L0001153 HROFDY 3 3 2 2 4 8
EMISFACT L0001153 HROFDY 8 7 7 7 5 3
EMISFACT L0001153 HROFDY 3 5 7 8 8 13
EMISFACT L0001153 HROFDY 17 8 8 15 13 7
EMISFACT L0001154 HROFDY 3 3 2 2 4 8
EMISFACT L0001154 HROFDY 8 7 7 7 5 3
EMISFACT L0001154 HROFDY 3 5 7 8 8 13
EMISFACT L0001154 HROFDY 17 8 8 15 13 7
EMISFACT L0001155 HROFDY 3 3 2 2 4 8
EMISFACT L0001155 HROFDY 8 7 7 7 5 3
EMISFACT L0001155 HROFDY 3 5 7 8 8 13
EMISFACT L0001155 HROFDY 17 8 8 15 13 7
EMISFACT L0001156 HROFDY 3 3 2 2 4 8
EMISFACT L0001156 HROFDY 8 7 7 7 5 3
EMISFACT L0001156 HROFDY 3 5 7 8 8 13
EMISFACT L0001156 HROFDY 17 8 8 15 13 7
EMISFACT L0001157 HROFDY 3 3 2 2 4 8
EMISFACT L0001157 HROFDY 8 7 7 7 5 3
EMISFACT L0001157 HROFDY 3 5 7 8 8 13
EMISFACT L0001157 HROFDY 17 8 8 15 13 7
EMISFACT L0001158 HROFDY 3 3 2 2 4 8
EMISFACT L0001158 HROFDY 8 7 7 7 5 3
EMISFACT L0001158 HROFDY 3 5 7 8 8 13
EMISFACT L0001158 HROFDY 17 8 8 15 13 7
EMISFACT L0001159 HROFDY 3 3 2 2 4 8
EMISFACT L0001159 HROFDY 8 7 7 7 5 3
EMISFACT L0001159 HROFDY 3 5 7 8 8 13
EMISFACT L0001159 HROFDY 17 8 8 15 13 7
EMISFACT L0001160 HROFDY 3 3 2 2 4 8
EMISFACT L0001160 HROFDY 8 7 7 7 5 3
EMISFACT L0001160 HROFDY 3 5 7 8 8 13
EMISFACT L0001160 HROFDY 17 8 8 15 13 7
EMISFACT L0001161 HROFDY 3 3 2 2 4 8
EMISFACT L0001161 HROFDY 8 7 7 7 5 3
EMISFACT L0001161 HROFDY 3 5 7 8 8 13
EMISFACT L0001161 HROFDY 17 8 8 15 13 7
EMISFACT L0001162 HROFDY 3 3 2 2 4 8
EMISFACT L0001162 HROFDY 8 7 7 7 5 3
EMISFACT L0001162 HROFDY 3 5 7 8 8 13
EMISFACT L0001162 HROFDY 17 8 8 15 13 7
EMISFACT L0001163 HROFDY 3 3 2 2 4 8
EMISFACT L0001163 HROFDY 8 7 7 7 5 3
EMISFACT L0001163 HROFDY 3 5 7 8 8 13
EMISFACT L0001163 HROFDY 17 8 8 15 13 7
EMISFACT L0001164 HROFDY 3 3 2 2 4 8
EMISFACT L0001164 HROFDY 8 7 7 7 5 3
EMISFACT L0001164 HROFDY 3 5 7 8 8 13
EMISFACT L0001164 HROFDY 17 8 8 15 13 7
EMISFACT L0001165 HROFDY 3 3 2 2 4 8
EMISFACT L0001165 HROFDY 8 7 7 7 5 3
EMISFACT L0001165 HROFDY 3 5 7 8 8 13
EMISFACT L0001165 HROFDY 17 8 8 15 13 7

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 3"
EMISFACT L0001166 HROFDY 8 8 4 4 10 21
EMISFACT L0001166 HROFDY 21 17 17 17 13 8
EMISFACT L0001166 HROFDY 8 13 17 21 21 31
EMISFACT L0001166 HROFDY 42 21 21 38 31 17
EMISFACT L0001167 HROFDY 8 8 4 4 10 21
EMISFACT L0001167 HROFDY 21 17 17 17 13 8
EMISFACT L0001167 HROFDY 8 13 17 21 21 31
EMISFACT L0001167 HROFDY 42 21 21 38 31 17
EMISFACT L0001168 HROFDY 8 8 4 4 10 21
EMISFACT L0001168 HROFDY 21 17 17 17 13 8
EMISFACT L0001168 HROFDY 8 13 17 21 21 31
EMISFACT L0001168 HROFDY 42 21 21 38 31 17
EMISFACT L0001082 HROFDY 8 8 4 4 10 21
EMISFACT L0001082 HROFDY 21 17 17 17 13 8
EMISFACT L0001082 HROFDY 8 13 17 21 21 31
EMISFACT L0001082 HROFDY 42 21 21 38 31 17
EMISFACT L0001083 HROFDY 8 8 4 4 10 21
EMISFACT L0001083 HROFDY 21 17 17 17 13 8
EMISFACT L0001083 HROFDY 8 13 17 21 21 31
EMISFACT L0001083 HROFDY 42 21 21 38 31 17
EMISFACT L0001084 HROFDY 8 8 4 4 10 21
EMISFACT L0001084 HROFDY 21 17 17 17 13 8
EMISFACT L0001084 HROFDY 8 13 17 21 21 31
EMISFACT L0001084 HROFDY 42 21 21 38 31 17
EMISFACT L0001085 HROFDY 8 8 4 4 10 21
EMISFACT L0001085 HROFDY 21 17 17 17 13 8
EMISFACT L0001085 HROFDY 8 13 17 21 21 31
EMISFACT L0001085 HROFDY 42 21 21 38 31 17
EMISFACT L0001086 HROFDY 8 8 4 4 10 21
EMISFACT L0001086 HROFDY 21 17 17 17 13 8
EMISFACT L0001086 HROFDY 8 13 17 21 21 31
EMISFACT L0001086 HROFDY 42 21 21 38 31 17

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 4"
EMISFACT L0001169 HROFDY 4 4 2 2 5 10
EMISFACT L0001169 HROFDY 10 8 8 8 6 4
EMISFACT L0001169 HROFDY 4 6 8 10 10 16
EMISFACT L0001169 HROFDY 21 10 10 19 16 8
EMISFACT L0001170 HROFDY 4 4 2 2 5 10
EMISFACT L0001170 HROFDY 10 8 8 8 6 4
EMISFACT L0001170 HROFDY 4 6 8 10 10 16
EMISFACT L0001170 HROFDY 21 10 10 19 16 8
EMISFACT L0001171 HROFDY 4 4 2 2 5 10
EMISFACT L0001171 HROFDY 10 8 8 8 6 4
EMISFACT L0001171 HROFDY 4 6 8 10 10 16
EMISFACT L0001171 HROFDY 21 10 10 19 16 8
EMISFACT L0001172 HROFDY 4 4 2 2 5 10
EMISFACT L0001172 HROFDY 10 8 8 8 6 4
EMISFACT L0001172 HROFDY 4 6 8 10 10 16
EMISFACT L0001172 HROFDY 21 10 10 19 16 8
EMISFACT L0001173 HROFDY 4 4 2 2 5 10
EMISFACT L0001173 HROFDY 10 8 8 8 6 4
EMISFACT L0001173 HROFDY 4 6 8 10 10 16
EMISFACT L0001173 HROFDY 21 10 10 19 16 8
EMISFACT L0001174 HROFDY 4 4 2 2 5 10
EMISFACT L0001174 HROFDY 10 8 8 8 6 4
EMISFACT L0001174 HROFDY 4 6 8 10 10 16
EMISFACT L0001174 HROFDY 21 10 10 19 16 8
EMISFACT L0001175 HROFDY 4 4 2 2 5 10

EMISFACT L0001175 HROFDY 10 8 8 8 6 4
EMISFACT L0001175 HROFDY 4 6 8 10 10 16
EMISFACT L0001175 HROFDY 21 10 10 19 16 8
EMISFACT L0001176 HROFDY 4 4 2 2 5 10
EMISFACT L0001176 HROFDY 10 8 8 8 6 4
EMISFACT L0001176 HROFDY 4 6 8 10 10 16
EMISFACT L0001176 HROFDY 21 10 10 19 16 8
EMISFACT L0001177 HROFDY 4 4 2 2 5 10
EMISFACT L0001177 HROFDY 10 8 8 8 6 4
EMISFACT L0001177 HROFDY 4 6 8 10 10 16
EMISFACT L0001177 HROFDY 21 10 10 19 16 8
EMISFACT L0001178 HROFDY 4 4 2 2 5 10
EMISFACT L0001178 HROFDY 10 8 8 8 6 4
EMISFACT L0001178 HROFDY 4 6 8 10 10 16
EMISFACT L0001178 HROFDY 21 10 10 19 16 8
EMISFACT L0001179 HROFDY 4 4 2 2 5 10
EMISFACT L0001179 HROFDY 10 8 8 8 6 4
EMISFACT L0001179 HROFDY 4 6 8 10 10 16
EMISFACT L0001179 HROFDY 21 10 10 19 16 8
EMISFACT L0001180 HROFDY 4 4 2 2 5 10
EMISFACT L0001180 HROFDY 10 8 8 8 6 4
EMISFACT L0001180 HROFDY 4 6 8 10 10 16
EMISFACT L0001180 HROFDY 21 10 10 19 16 8
EMISFACT L0001181 HROFDY 4 4 2 2 5 10
EMISFACT L0001181 HROFDY 10 8 8 8 6 4
EMISFACT L0001181 HROFDY 4 6 8 10 10 16
EMISFACT L0001181 HROFDY 21 10 10 19 16 8
EMISFACT L0001182 HROFDY 4 4 2 2 5 10
EMISFACT L0001182 HROFDY 10 8 8 8 6 4
EMISFACT L0001182 HROFDY 4 6 8 10 10 16
EMISFACT L0001182 HROFDY 21 10 10 19 16 8
EMISFACT L0001183 HROFDY 4 4 2 2 5 10
EMISFACT L0001183 HROFDY 10 8 8 8 6 4
EMISFACT L0001183 HROFDY 4 6 8 10 10 16
EMISFACT L0001183 HROFDY 21 10 10 19 16 8
EMISFACT L0001184 HROFDY 4 4 2 2 5 10
EMISFACT L0001184 HROFDY 10 8 8 8 6 4
EMISFACT L0001184 HROFDY 4 6 8 10 10 16
EMISFACT L0001184 HROFDY 21 10 10 19 16 8
EMISFACT L0001185 HROFDY 4 4 2 2 5 10
EMISFACT L0001185 HROFDY 10 8 8 8 6 4
EMISFACT L0001185 HROFDY 4 6 8 10 10 16
EMISFACT L0001185 HROFDY 21 10 10 19 16 8
EMISFACT L0001186 HROFDY 4 4 2 2 5 10
EMISFACT L0001186 HROFDY 10 8 8 8 6 4
EMISFACT L0001186 HROFDY 4 6 8 10 10 16
EMISFACT L0001186 HROFDY 21 10 10 19 16 8
EMISFACT L0001087 HROFDY 4 4 2 2 5 10
EMISFACT L0001087 HROFDY 10 8 8 8 6 4
EMISFACT L0001087 HROFDY 4 6 8 10 10 16
EMISFACT L0001087 HROFDY 21 10 10 19 16 8
EMISFACT L0001088 HROFDY 4 4 2 2 5 10
EMISFACT L0001088 HROFDY 10 8 8 8 6 4
EMISFACT L0001088 HROFDY 4 6 8 10 10 16
EMISFACT L0001088 HROFDY 21 10 10 19 16 8
EMISFACT L0001089 HROFDY 4 4 2 2 5 10
EMISFACT L0001089 HROFDY 10 8 8 8 6 4
EMISFACT L0001089 HROFDY 4 6 8 10 10 16
EMISFACT L0001089 HROFDY 21 10 10 19 16 8
EMISFACT L0001090 HROFDY 4 4 2 2 5 10
EMISFACT L0001090 HROFDY 10 8 8 8 6 4
EMISFACT L0001090 HROFDY 4 6 8 10 10 16
EMISFACT L0001090 HROFDY 21 10 10 19 16 8
EMISFACT L0001091 HROFDY 4 4 2 2 5 10
EMISFACT L0001091 HROFDY 10 8 8 8 6 4
EMISFACT L0001091 HROFDY 4 6 8 10 10 16

EMISFACT L0001091 HROFDY 21 10 10 19 16 8
EMISFACT L0001092 HROFDY 4 4 2 2 5 10
EMISFACT L0001092 HROFDY 10 8 8 8 6 4
EMISFACT L0001092 HROFDY 4 6 8 10 10 16
EMISFACT L0001092 HROFDY 21 10 10 19 16 8
EMISFACT L0001093 HROFDY 4 4 2 2 5 10
EMISFACT L0001093 HROFDY 10 8 8 8 6 4
EMISFACT L0001093 HROFDY 4 6 8 10 10 16
EMISFACT L0001093 HROFDY 21 10 10 19 16 8
EMISFACT L0001094 HROFDY 4 4 2 2 5 10
EMISFACT L0001094 HROFDY 10 8 8 8 6 4
EMISFACT L0001094 HROFDY 4 6 8 10 10 16
EMISFACT L0001094 HROFDY 21 10 10 19 16 8
EMISFACT L0001095 HROFDY 4 4 2 2 5 10
EMISFACT L0001095 HROFDY 10 8 8 8 6 4
EMISFACT L0001095 HROFDY 4 6 8 10 10 16
EMISFACT L0001095 HROFDY 21 10 10 19 16 8
EMISFACT L0001096 HROFDY 4 4 2 2 5 10
EMISFACT L0001096 HROFDY 10 8 8 8 6 4
EMISFACT L0001096 HROFDY 4 6 8 10 10 16
EMISFACT L0001096 HROFDY 21 10 10 19 16 8
EMISFACT L0001097 HROFDY 4 4 2 2 5 10
EMISFACT L0001097 HROFDY 10 8 8 8 6 4
EMISFACT L0001097 HROFDY 4 6 8 10 10 16
EMISFACT L0001097 HROFDY 21 10 10 19 16 8
EMISFACT L0001098 HROFDY 4 4 2 2 5 10
EMISFACT L0001098 HROFDY 10 8 8 8 6 4
EMISFACT L0001098 HROFDY 4 6 8 10 10 16
EMISFACT L0001098 HROFDY 21 10 10 19 16 8
EMISFACT L0001099 HROFDY 4 4 2 2 5 10
EMISFACT L0001099 HROFDY 10 8 8 8 6 4
EMISFACT L0001099 HROFDY 4 6 8 10 10 16
EMISFACT L0001099 HROFDY 21 10 10 19 16 8
EMISFACT L0001100 HROFDY 4 4 2 2 5 10
EMISFACT L0001100 HROFDY 10 8 8 8 6 4
EMISFACT L0001100 HROFDY 4 6 8 10 10 16
EMISFACT L0001100 HROFDY 21 10 10 19 16 8
EMISFACT L0001101 HROFDY 4 4 2 2 5 10
EMISFACT L0001101 HROFDY 10 8 8 8 6 4
EMISFACT L0001101 HROFDY 4 6 8 10 10 16
EMISFACT L0001101 HROFDY 21 10 10 19 16 8
EMISFACT L0001102 HROFDY 4 4 2 2 5 10
EMISFACT L0001102 HROFDY 10 8 8 8 6 4
EMISFACT L0001102 HROFDY 4 6 8 10 10 16
EMISFACT L0001102 HROFDY 21 10 10 19 16 8
EMISFACT L0001103 HROFDY 4 4 2 2 5 10
EMISFACT L0001103 HROFDY 10 8 8 8 6 4
EMISFACT L0001103 HROFDY 4 6 8 10 10 16
EMISFACT L0001103 HROFDY 21 10 10 19 16 8
EMISFACT L0001104 HROFDY 4 4 2 2 5 10
EMISFACT L0001104 HROFDY 10 8 8 8 6 4
EMISFACT L0001104 HROFDY 4 6 8 10 10 16
EMISFACT L0001104 HROFDY 21 10 10 19 16 8
EMISFACT L0001105 HROFDY 4 4 2 2 5 10
EMISFACT L0001105 HROFDY 10 8 8 8 6 4
EMISFACT L0001105 HROFDY 4 6 8 10 10 16
EMISFACT L0001105 HROFDY 21 10 10 19 16 8
EMISFACT L0001077 HROFDY 4 4 2 2 5 10
EMISFACT L0001077 HROFDY 10 8 8 8 6 4
EMISFACT L0001077 HROFDY 4 6 8 10 10 16
EMISFACT L0001077 HROFDY 21 10 10 19 16 8
EMISFACT L0001078 HROFDY 4 4 2 2 5 10
EMISFACT L0001078 HROFDY 10 8 8 8 6 4
EMISFACT L0001078 HROFDY 4 6 8 10 10 16
EMISFACT L0001078 HROFDY 21 10 10 19 16 8
EMISFACT L0001079 HROFDY 4 4 2 2 5 10

EMISFACT L0001079 HROFDY 10 8 8 8 6 4
EMISFACT L0001079 HROFDY 4 6 8 10 10 16
EMISFACT L0001079 HROFDY 21 10 10 19 16 8
EMISFACT L0001080 HROFDY 4 4 2 2 5 10
EMISFACT L0001080 HROFDY 10 8 8 8 6 4
EMISFACT L0001080 HROFDY 4 6 8 10 10 16
EMISFACT L0001080 HROFDY 21 10 10 19 16 8
EMISFACT L0001081 HROFDY 4 4 2 2 5 10
EMISFACT L0001081 HROFDY 10 8 8 8 6 4
EMISFACT L0001081 HROFDY 4 6 8 10 10 16
EMISFACT L0001081 HROFDY 21 10 10 19 16 8

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 5"
EMISFACT L0001052 HROFDY 13 13 7 7 17 33
EMISFACT L0001052 HROFDY 33 27 27 27 20 13
EMISFACT L0001052 HROFDY 13 20 27 33 33 50
EMISFACT L0001052 HROFDY 67 33 33 60 50 27
EMISFACT L0001053 HROFDY 13 13 7 7 17 33
EMISFACT L0001053 HROFDY 33 27 27 27 20 13
EMISFACT L0001053 HROFDY 13 20 27 33 33 50
EMISFACT L0001053 HROFDY 67 33 33 60 50 27
EMISFACT L0001054 HROFDY 13 13 7 7 17 33
EMISFACT L0001054 HROFDY 33 27 27 27 20 13
EMISFACT L0001054 HROFDY 13 20 27 33 33 50
EMISFACT L0001054 HROFDY 67 33 33 60 50 27
EMISFACT L0001055 HROFDY 13 13 7 7 17 33
EMISFACT L0001055 HROFDY 33 27 27 27 20 13
EMISFACT L0001055 HROFDY 13 20 27 33 33 50
EMISFACT L0001055 HROFDY 67 33 33 60 50 27
EMISFACT L0001056 HROFDY 13 13 7 7 17 33
EMISFACT L0001056 HROFDY 33 27 27 27 20 13
EMISFACT L0001056 HROFDY 13 20 27 33 33 50
EMISFACT L0001056 HROFDY 67 33 33 60 50 27
EMISFACT L0001057 HROFDY 13 13 7 7 17 33
EMISFACT L0001057 HROFDY 33 27 27 27 20 13
EMISFACT L0001057 HROFDY 13 20 27 33 33 50
EMISFACT L0001057 HROFDY 67 33 33 60 50 27
EMISFACT L0001058 HROFDY 13 13 7 7 17 33
EMISFACT L0001058 HROFDY 33 27 27 27 20 13
EMISFACT L0001058 HROFDY 13 20 27 33 33 50
EMISFACT L0001058 HROFDY 67 33 33 60 50 27
EMISFACT L0001059 HROFDY 13 13 7 7 17 33
EMISFACT L0001059 HROFDY 33 27 27 27 20 13
EMISFACT L0001059 HROFDY 13 20 27 33 33 50
EMISFACT L0001059 HROFDY 67 33 33 60 50 27
EMISFACT L0001060 HROFDY 13 13 7 7 17 33
EMISFACT L0001060 HROFDY 33 27 27 27 20 13
EMISFACT L0001060 HROFDY 13 20 27 33 33 50
EMISFACT L0001060 HROFDY 67 33 33 60 50 27
EMISFACT L0001061 HROFDY 13 13 7 7 17 33
EMISFACT L0001061 HROFDY 33 27 27 27 20 13
EMISFACT L0001061 HROFDY 13 20 27 33 33 50
EMISFACT L0001061 HROFDY 67 33 33 60 50 27
EMISFACT L0001062 HROFDY 13 13 7 7 17 33
EMISFACT L0001062 HROFDY 33 27 27 27 20 13
EMISFACT L0001062 HROFDY 13 20 27 33 33 50
EMISFACT L0001062 HROFDY 67 33 33 60 50 27
EMISFACT L0001063 HROFDY 13 13 7 7 17 33
EMISFACT L0001063 HROFDY 33 27 27 27 20 13
EMISFACT L0001063 HROFDY 13 20 27 33 33 50
EMISFACT L0001063 HROFDY 67 33 33 60 50 27
EMISFACT L0001064 HROFDY 13 13 7 7 17 33
EMISFACT L0001064 HROFDY 33 27 27 27 20 13
EMISFACT L0001064 HROFDY 13 20 27 33 33 50
EMISFACT L0001064 HROFDY 67 33 33 60 50 27

EMISFACT L0001065 HROFDY 13 13 7 7 17 33
EMISFACT L0001065 HROFDY 33 27 27 27 20 13
EMISFACT L0001065 HROFDY 13 20 27 33 33 50
EMISFACT L0001065 HROFDY 67 33 33 60 50 27
EMISFACT L0001066 HROFDY 13 13 7 7 17 33
EMISFACT L0001066 HROFDY 33 27 27 27 20 13
EMISFACT L0001066 HROFDY 13 20 27 33 33 50
EMISFACT L0001066 HROFDY 67 33 33 60 50 27
EMISFACT L0001067 HROFDY 13 13 7 7 17 33
EMISFACT L0001067 HROFDY 33 27 27 27 20 13
EMISFACT L0001067 HROFDY 13 20 27 33 33 50
EMISFACT L0001067 HROFDY 67 33 33 60 50 27
EMISFACT L0001068 HROFDY 13 13 7 7 17 33
EMISFACT L0001068 HROFDY 33 27 27 27 20 13
EMISFACT L0001068 HROFDY 13 20 27 33 33 50
EMISFACT L0001068 HROFDY 67 33 33 60 50 27
EMISFACT L0001069 HROFDY 13 13 7 7 17 33
EMISFACT L0001069 HROFDY 33 27 27 27 20 13
EMISFACT L0001069 HROFDY 13 20 27 33 33 50
EMISFACT L0001069 HROFDY 67 33 33 60 50 27
EMISFACT L0001070 HROFDY 13 13 7 7 17 33
EMISFACT L0001070 HROFDY 33 27 27 27 20 13
EMISFACT L0001070 HROFDY 13 20 27 33 33 50
EMISFACT L0001070 HROFDY 67 33 33 60 50 27
EMISFACT L0001071 HROFDY 13 13 7 7 17 33
EMISFACT L0001071 HROFDY 33 27 27 27 20 13
EMISFACT L0001071 HROFDY 13 20 27 33 33 50
EMISFACT L0001071 HROFDY 67 33 33 60 50 27
EMISFACT L0001072 HROFDY 13 13 7 7 17 33
EMISFACT L0001072 HROFDY 33 27 27 27 20 13
EMISFACT L0001072 HROFDY 13 20 27 33 33 50
EMISFACT L0001072 HROFDY 67 33 33 60 50 27
EMISFACT L0001073 HROFDY 13 13 7 7 17 33
EMISFACT L0001073 HROFDY 33 27 27 27 20 13
EMISFACT L0001073 HROFDY 13 20 27 33 33 50
EMISFACT L0001073 HROFDY 67 33 33 60 50 27
EMISFACT L0001074 HROFDY 13 13 7 7 17 33
EMISFACT L0001074 HROFDY 33 27 27 27 20 13
EMISFACT L0001074 HROFDY 13 20 27 33 33 50
EMISFACT L0001074 HROFDY 67 33 33 60 50 27
EMISFACT L0001075 HROFDY 13 13 7 7 17 33
EMISFACT L0001075 HROFDY 33 27 27 27 20 13
EMISFACT L0001075 HROFDY 13 20 27 33 33 50
EMISFACT L0001075 HROFDY 67 33 33 60 50 27
EMISFACT L0001076 HROFDY 13 13 7 7 17 33
EMISFACT L0001076 HROFDY 33 27 27 27 20 13
EMISFACT L0001076 HROFDY 13 20 27 33 33 50
EMISFACT L0001076 HROFDY 67 33 33 60 50 27

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 6"
EMISFACT L0001187 HROFDY 5 5 2 2 6 12
EMISFACT L0001187 HROFDY 12 10 10 10 7 5
EMISFACT L0001187 HROFDY 5 7 10 12 12 19
EMISFACT L0001187 HROFDY 25 12 12 22 19 10
EMISFACT L0001188 HROFDY 5 5 2 2 6 12
EMISFACT L0001188 HROFDY 12 10 10 10 7 5
EMISFACT L0001188 HROFDY 5 7 10 12 12 19
EMISFACT L0001188 HROFDY 25 12 12 22 19 10
EMISFACT L0001189 HROFDY 5 5 2 2 6 12
EMISFACT L0001189 HROFDY 12 10 10 10 7 5
EMISFACT L0001189 HROFDY 5 7 10 12 12 19
EMISFACT L0001189 HROFDY 25 12 12 22 19 10
EMISFACT L0001190 HROFDY 5 5 2 2 6 12
EMISFACT L0001190 HROFDY 12 10 10 10 7 5
EMISFACT L0001190 HROFDY 5 7 10 12 12 19

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  EMISFACT L0001190 HROFDY 25 12 12 22 19 10
  EMISFACT L0001191 HROFDY 5 5 2 2 6 12
  EMISFACT L0001191 HROFDY 12 10 10 10 7 5
  EMISFACT L0001191 HROFDY 5 7 10 12 12 19
  EMISFACT L0001191 HROFDY 25 12 12 22 19 10
  EMISFACT L0001192 HROFDY 5 5 2 2 6 12
  EMISFACT L0001192 HROFDY 12 10 10 10 7 5
  EMISFACT L0001192 HROFDY 5 7 10 12 12 19
  EMISFACT L0001192 HROFDY 25 12 12 22 19 10
  EMISFACT L0001193 HROFDY 5 5 2 2 6 12
  EMISFACT L0001193 HROFDY 12 10 10 10 7 5
  EMISFACT L0001193 HROFDY 5 7 10 12 12 19
  EMISFACT L0001193 HROFDY 25 12 12 22 19 10
  EMISFACT L0001194 HROFDY 5 5 2 2 6 12
  EMISFACT L0001194 HROFDY 12 10 10 10 7 5
  EMISFACT L0001194 HROFDY 5 7 10 12 12 19
  EMISFACT L0001194 HROFDY 25 12 12 22 19 10
  EMISFACT L0001195 HROFDY 5 5 2 2 6 12
  EMISFACT L0001195 HROFDY 12 10 10 10 7 5
  EMISFACT L0001195 HROFDY 5 7 10 12 12 19
  EMISFACT L0001195 HROFDY 25 12 12 22 19 10
  EMISFACT L0001196 HROFDY 5 5 2 2 6 12
  EMISFACT L0001196 HROFDY 12 10 10 10 7 5
  EMISFACT L0001196 HROFDY 5 7 10 12 12 19
  EMISFACT L0001196 HROFDY 25 12 12 22 19 10
  EMISFACT L0001197 HROFDY 5 5 2 2 6 12
  EMISFACT L0001197 HROFDY 12 10 10 10 7 5
  EMISFACT L0001197 HROFDY 5 7 10 12 12 19
  EMISFACT L0001197 HROFDY 25 12 12 22 19 10
  EMISFACT L0001198 HROFDY 5 5 2 2 6 12
  EMISFACT L0001198 HROFDY 12 10 10 10 7 5
  EMISFACT L0001198 HROFDY 5 7 10 12 12 19
  EMISFACT L0001198 HROFDY 25 12 12 22 19 10
  EMISFACT L0001199 HROFDY 5 5 2 2 6 12
  EMISFACT L0001199 HROFDY 12 10 10 10 7 5
  EMISFACT L0001199 HROFDY 5 7 10 12 12 19
  EMISFACT L0001199 HROFDY 25 12 12 22 19 10
  EMISFACT L0001200 HROFDY 5 5 2 2 6 12
  EMISFACT L0001200 HROFDY 12 10 10 10 7 5
  EMISFACT L0001200 HROFDY 5 7 10 12 12 19
  EMISFACT L0001200 HROFDY 25 12 12 22 19 10
  EMISFACT L0001201 HROFDY 5 5 2 2 6 12
  EMISFACT L0001201 HROFDY 12 10 10 10 7 5
  EMISFACT L0001201 HROFDY 5 7 10 12 12 19
  EMISFACT L0001201 HROFDY 25 12 12 22 19 10
  EMISFACT L0001202 HROFDY 5 5 2 2 6 12
  EMISFACT L0001202 HROFDY 12 10 10 10 7 5
  EMISFACT L0001202 HROFDY 5 7 10 12 12 19
  EMISFACT L0001202 HROFDY 25 12 12 22 19 10
  EMISFACT L0001203 HROFDY 5 5 2 2 6 12
  EMISFACT L0001203 HROFDY 12 10 10 10 7 5
  EMISFACT L0001203 HROFDY 5 7 10 12 12 19
  EMISFACT L0001203 HROFDY 25 12 12 22 19 10
  EMISFACT L0001204 HROFDY 5 5 2 2 6 12
  EMISFACT L0001204 HROFDY 12 10 10 10 7 5
  EMISFACT L0001204 HROFDY 5 7 10 12 12 19
  EMISFACT L0001204 HROFDY 25 12 12 22 19 10
  EMISFACT L0001205 HROFDY 5 5 2 2 6 12
  EMISFACT L0001205 HROFDY 12 10 10 10 7 5
  EMISFACT L0001205 HROFDY 5 7 10 12 12 19
  EMISFACT L0001205 HROFDY 25 12 12 22 19 10
  SRCGROUP ALL
SO FINISHED
**
****************************************
** ISCST3 Receptor Pathway
****************************************
**
**
RE STARTING
** DESCRREC "UPOL1" "Receptors generated from Uniform Polar Grid"
  DISCCART   485024.23  3755540.51   1.50
  DISCCART   485024.23  3755640.51   1.50
  DISCCART   485024.23  3755740.51   1.50
  DISCCART   485024.23  3755840.51   1.50
  DISCCART   485024.23  3755940.51   1.50
  DISCCART   485024.23  3756040.51   1.50
  DISCCART   485024.23  3756140.51   1.50
  DISCCART   485024.23  3756240.51   1.50
  DISCCART   485024.23  3756340.51   1.50
  DISCCART   485024.23  3756440.51   1.50
  DISCCART   485024.23  3756540.51   1.50
  DISCCART   485024.23  3756640.51   1.50
  DISCCART   485024.23  3756740.51   1.50
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  DISCCART   485024.23  3756940.51   1.50
  DISCCART   485024.23  3757040.51   1.50
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  DISCCART   485024.23  3757240.51   1.50
  DISCCART   485024.23  3757340.51   1.50
  DISCCART   485024.23  3757440.51   1.50
  DISCCART   485024.23  3757540.51   1.50
  DISCCART   485024.23  3757640.51   1.50
  DISCCART   485024.23  3757740.51   1.50
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  DISCCART   485024.23  3758240.51   1.50
  DISCCART   485076.32  3755535.95   1.50
  DISCCART   485093.69  3755634.43   1.50
  DISCCART   485111.05  3755732.91   1.50
  DISCCART   485128.42  3755831.39   1.50
  DISCCART   485145.78  3755929.88   1.50
  DISCCART   485163.15  3756028.36   1.50
  DISCCART   485180.51  3756126.84   1.50
  DISCCART   485197.88  3756225.32   1.50
  DISCCART   485215.24  3756323.80   1.50
  DISCCART   485232.61  3756422.28   1.50
  DISCCART   485249.97  3756520.76   1.50
  DISCCART   485267.34  3756619.24   1.50
  DISCCART   485284.70  3756717.72   1.50
  DISCCART   485302.07  3756816.20   1.50
  DISCCART   485319.43  3756914.68   1.50
  DISCCART   485336.80  3757013.16   1.50
  DISCCART   485354.16  3757111.64   1.50
  DISCCART   485371.53  3757210.13   1.50
  DISCCART   485388.89  3757308.61   1.50
  DISCCART   485406.26  3757407.09   1.50
  DISCCART   485423.62  3757505.57   1.50
  DISCCART   485440.99  3757604.05   1.50
  DISCCART   485458.35  3757702.53   1.50
  DISCCART   485475.72  3757801.01   1.50
  DISCCART   485493.08  3757899.49   1.50
  DISCCART   485510.44  3757997.97   1.50
  DISCCART   485527.81  3758096.45   1.50
  DISCCART   485545.17  3758194.93   1.50
  DISCCART   485126.84  3755522.42   1.50
  DISCCART   485161.04  3755616.39   1.50
  DISCCART   485195.24  3755710.36   1.50
  DISCCART   485229.44  3755804.33   1.50
  DISCCART   485263.64  3755898.29   1.50
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DISCCART	485297.85	3755992.26	1.50
DISCCART	485332.05	3756086.23	1.50
DISCCART	485366.25	3756180.20	1.50
DISCCART	485400.45	3756274.17	1.50
DISCCART	485434.65	3756368.14	1.50
DISCCART	485468.86	3756462.11	1.50
DISCCART	485503.06	3756556.08	1.50
DISCCART	485537.26	3756650.05	1.50
DISCCART	485571.46	3756744.02	1.50
DISCCART	485605.66	3756837.99	1.50
DISCCART	485639.87	3756931.96	1.50
DISCCART	485674.07	3757025.93	1.50
DISCCART	485708.27	3757119.90	1.50
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DISCCART 484716.41 3756086.23 1.50
DISCCART 484682.21 3756180.20 1.50
DISCCART 484648.01 3756274.17 1.50
DISCCART 484613.81 3756368.14 1.50
DISCCART 484579.60 3756462.11 1.50
DISCCART 484545.40 3756556.08 1.50
DISCCART 484511.20 3756650.05 1.50
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DISCCART 484442.80 3756837.99 1.50
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DISCCART 484374.39 3757025.93 1.50
DISCCART 484340.19 3757119.90 1.50
DISCCART 484305.99 3757213.86 1.50
DISCCART 484271.79 3757307.83 1.50
DISCCART 484237.58 3757401.80 1.50
DISCCART 484203.38 3757495.77 1.50
DISCCART 484169.18 3757589.74 1.50
DISCCART 484134.98 3757683.71 1.50
DISCCART 484100.78 3757777.68 1.50
DISCCART 484066.57 3757871.65 1.50
DISCCART 484032.37 3757965.62 1.50
DISCCART 483998.17 3758059.59 1.50
DISCCART 484972.14 3755535.95 1.50
DISCCART 484954.77 3755634.43 1.50
DISCCART 484937.41 3755732.91 1.50
DISCCART 484920.04 3755831.39 1.50
DISCCART 484902.68 3755929.88 1.50
DISCCART 484885.31 3756028.36 1.50
DISCCART 484867.95 3756126.84 1.50
DISCCART 484850.58 3756225.32 1.50
DISCCART 484833.22 3756323.80 1.50
DISCCART 484815.85 3756422.28 1.50
DISCCART 484798.49 3756520.76 1.50
DISCCART 484781.12 3756619.24 1.50
DISCCART 484763.76 3756717.72 1.50
DISCCART 484746.39 3756816.20 1.50
DISCCART 484729.03 3756914.68 1.50
DISCCART 484711.66 3757013.16 1.50
DISCCART 484694.30 3757111.64 1.50
DISCCART 484676.93 3757210.13 1.50
DISCCART 484659.57 3757308.61 1.50
DISCCART 484642.20 3757407.09 1.50
DISCCART 484624.84 3757505.57 1.50
DISCCART 484607.47 3757604.05 1.50
DISCCART 484590.11 3757702.53 1.50
DISCCART 484572.74 3757801.01 1.50
DISCCART 484555.38 3757899.49 1.50
DISCCART 484538.02 3757997.97 1.50
DISCCART 484520.65 3758096.45 1.50
DISCCART 484503.29 3758194.93 1.50

```
RE FINISHED
**
*****************************************
** ISCST3 Meteorology Pathway
*****************************************
**
**
ME STARTING
  INPUTFIL U:\UcAir\METDAT~1\REDLANDS.ASC
  ANEMHGHT 10 METERS
  SURFDATA 54161 1981
  UAIRDATA 99999 1981
ME FINISHED
**
*****************************************
** ISCST3 Output Pathway
*****************************************
**
**
OU STARTING
** Auto-Generated Plotfiles
  PLOTFILE ANNUAL ALL HRA.IS\AN00GALL.PLT
OU FINISHED

***********************************
*** SETUP Finishes Successfully ***
***********************************
```

```
 *** ISCST3 - VERSION 02035 ***    *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc          ***       10/08/09
                    *** West Ridge HRA                                          ***       09:47:24
**MODELOPTs:                                                                                PAGE   1
CONC              URBAN FLAT  FLGPOL                    NOCALM                    NOCMPL

                              ***    MODEL SETUP OPTIONS SUMMARY      ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

**Simple Terrain Model is Selected

**Model Is Setup For Calculation of Average CONCentration Values.

  -- SCAVENGING/DEPOSITION LOGIC --
**Model Uses NO DRY DEPLETION.  DDPLETE =  F
**Model Uses NO WET DEPLETION.  WDPLETE =  F
**NO WET SCAVENGING Data Provided.
**NO GAS DRY DEPOSITION Data Provided.
**Model Does NOT Use GRIDDED TERRAIN Data for Depletion Calculations

**Model Uses URBAN Dispersion.

**Model Uses User-Specified Options:
        1. Final Plume Rise.
        2. Stack-tip Downwash.
        3. Buoyancy-induced Dispersion.
        4. Not Use Calms Processing Routine.
        5. Not Use Missing Data Processing Routine.
        6. Default Wind Profile Exponents.
        7. Default Vertical Potential Temperature Gradients.

**Model Assumes Receptors on FLAT Terrain.

**Model Accepts FLAGPOLE Receptor Heights.

**Model Calculates ANNUAL Averages Only

**This Run Includes:   156 Source(s);     1 Source Group(s); and     985 Receptor(s)

**The Model Assumes A Pollutant Type of:  DPM

**Model Set To Continue RUNning After the Setup Testing.

**Output Options Selected:
       Model Outputs Tables of ANNUAL Averages by Receptor
       Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**Misc. Inputs:  Anem. Hgt. (m) =    10.00 ;    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 =     1.4 MB of RAM.

**Input Runstream File:         HRA.INP
**Output Print File:            HRA.OUT
```

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001052	0	0.48800E-06	485514.0	3755433.5	0.0	4.00	12.43	1.86	HROFDY
L0001053	0	0.48800E-06	485514.0	3755406.8	0.0	4.00	12.43	1.86	HROFDY
L0001054	0	0.48800E-06	485513.9	3755380.0	0.0	4.00	12.43	1.86	HROFDY
L0001055	0	0.48800E-06	485513.8	3755353.3	0.0	4.00	12.43	1.86	HROFDY
L0001056	0	0.48800E-06	485513.8	3755326.5	0.0	4.00	12.43	1.86	HROFDY
L0001057	0	0.48800E-06	485513.7	3755299.8	0.0	4.00	12.43	1.86	HROFDY
L0001058	0	0.48800E-06	485513.6	3755273.0	0.0	4.00	12.43	1.86	HROFDY
L0001059	0	0.48800E-06	485513.5	3755246.3	0.0	4.00	12.43	1.86	HROFDY
L0001060	0	0.48800E-06	485513.4	3755219.8	0.0	4.00	12.43	1.86	HROFDY
L0001061	0	0.48800E-06	485513.4	3755193.0	0.0	4.00	12.43	1.86	HROFDY
L0001062	0	0.48800E-06	485513.3	3755166.3	0.0	4.00	12.43	1.86	HROFDY
L0001063	0	0.48800E-06	485513.2	3755139.5	0.0	4.00	12.43	1.86	HROFDY
L0001064	0	0.48800E-06	485513.2	3755112.8	0.0	4.00	12.43	1.86	HROFDY
L0001065	0	0.48800E-06	485513.1	3755086.0	0.0	4.00	12.43	1.86	HROFDY
L0001066	0	0.48800E-06	485513.0	3755059.3	0.0	4.00	12.43	1.86	HROFDY
L0001067	0	0.48800E-06	485512.9	3755032.5	0.0	4.00	12.43	1.86	HROFDY
L0001068	0	0.48800E-06	485494.2	3755025.5	0.0	4.00	11.94	1.86	HROFDY
L0001069	0	0.48800E-06	485468.5	3755025.5	0.0	4.00	11.94	1.86	HROFDY
L0001070	0	0.48800E-06	485442.9	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001071	0	0.48800E-06	485417.2	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001072	0	0.48800E-06	485391.5	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001073	0	0.48800E-06	485365.8	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001074	0	0.48800E-06	485340.2	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001075	0	0.48800E-06	485314.5	3755026.0	0.0	4.00	11.94	1.86	HROFDY
L0001076	0	0.48800E-06	485288.8	3755026.0	0.0	4.00	11.94	1.86	HROFDY
L0001077	0	0.49000E-06	485265.3	3755112.8	0.0	4.00	7.15	1.86	HROFDY
L0001078	0	0.49000E-06	485249.9	3755113.0	0.0	4.00	7.15	1.86	HROFDY
L0001079	0	0.49000E-06	485234.5	3755113.0	0.0	4.00	7.15	1.86	HROFDY
L0001080	0	0.49000E-06	485219.2	3755113.0	0.0	4.00	7.15	1.86	HROFDY
L0001081	0	0.49000E-06	485203.8	3755113.3	0.0	4.00	7.15	1.86	HROFDY
L0001082	0	0.50800E-06	485281.9	3755043.8	0.0	4.00	7.53	1.86	HROFDY
L0001083	0	0.50800E-06	485281.7	3755060.0	0.0	4.00	7.53	1.86	HROFDY
L0001084	0	0.50800E-06	485281.4	3755076.3	0.0	4.00	7.53	1.86	HROFDY
L0001085	0	0.50800E-06	485281.3	3755092.3	0.0	4.00	7.53	1.86	HROFDY
L0001086	0	0.50800E-06	485281.0	3755108.5	0.0	4.00	7.53	1.86	HROFDY
L0001087	0	0.59474E-06	485280.8	3755119.8	0.0	4.00	8.82	1.86	HROFDY
L0001088	0	0.59474E-06	485280.0	3755138.8	0.0	4.00	8.82	1.86	HROFDY
L0001089	0	0.59474E-06	485279.3	3755157.8	0.0	4.00	8.82	1.86	HROFDY
L0001090	0	0.59474E-06	485278.4	3755176.5	0.0	4.00	8.82	1.86	HROFDY
L0001091	0	0.59474E-06	485277.7	3755195.5	0.0	4.00	8.82	1.86	HROFDY

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001092	0	0.59474E-06	485276.9	3755214.5	0.0	4.00	8.82	1.86	HROFDY
L0001093	0	0.59474E-06	485276.1	3755233.5	0.0	4.00	8.82	1.86	HROFDY
L0001094	0	0.59474E-06	485275.3	3755252.3	0.0	4.00	8.82	1.86	HROFDY
L0001095	0	0.59474E-06	485274.5	3755271.3	0.0	4.00	8.82	1.86	HROFDY
L0001096	0	0.59474E-06	485273.7	3755290.3	0.0	4.00	8.82	1.86	HROFDY
L0001097	0	0.59474E-06	485272.9	3755309.3	0.0	4.00	8.82	1.86	HROFDY
L0001098	0	0.59474E-06	485272.1	3755328.0	0.0	4.00	8.82	1.86	HROFDY
L0001099	0	0.59474E-06	485271.3	3755347.0	0.0	4.00	8.82	1.86	HROFDY
L0001100	0	0.59474E-06	485270.6	3755366.0	0.0	4.00	8.82	1.86	HROFDY
L0001101	0	0.59474E-06	485262.3	3755374.5	0.0	4.00	6.41	1.86	HROFDY
L0001102	0	0.59474E-06	485247.2	3755376.5	0.0	4.00	7.22	1.86	HROFDY
L0001103	0	0.59474E-06	485231.7	3755376.3	0.0	4.00	7.22	1.86	HROFDY
L0001104	0	0.59474E-06	485216.2	3755376.3	0.0	4.00	7.22	1.86	HROFDY
L0001105	0	0.59474E-06	485200.7	3755376.0	0.0	4.00	7.22	1.86	HROFDY
L0001106	0	0.48000E-06	483513.9	3755430.3	0.0	4.00	11.63	1.86	HROFDY
L0001107	0	0.48000E-06	483515.1	3755405.3	0.0	4.00	11.63	1.86	HROFDY
L0001108	0	0.48000E-06	483516.3	3755380.3	0.0	4.00	11.63	1.86	HROFDY
L0001109	0	0.48000E-06	483517.5	3755355.3	0.0	4.00	11.63	1.86	HROFDY
L0001110	0	0.48000E-06	483518.7	3755330.5	0.0	4.00	11.63	1.86	HROFDY
L0001111	0	0.48000E-06	483519.9	3755305.5	0.0	4.00	11.63	1.86	HROFDY
L0001112	0	0.48000E-06	483521.1	3755280.5	0.0	4.00	11.63	1.86	HROFDY
L0001113	0	0.48000E-06	483522.3	3755255.5	0.0	4.00	11.63	1.86	HROFDY
L0001114	0	0.48000E-06	483523.5	3755230.5	0.0	4.00	11.63	1.86	HROFDY
L0001115	0	0.48000E-06	483544.2	3755223.5	0.0	4.00	12.74	1.86	HROFDY
L0001116	0	0.48000E-06	483571.6	3755223.5	0.0	4.00	12.74	1.86	HROFDY
L0001117	0	0.48000E-06	483599.0	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001118	0	0.48000E-06	483626.4	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001119	0	0.48000E-06	483653.8	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001120	0	0.48000E-06	483681.1	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001121	0	0.48000E-06	483708.5	3755223.0	0.0	4.00	12.74	1.86	HROFDY
L0001122	0	0.48000E-06	483735.9	3755223.0	0.0	4.00	12.74	1.86	HROFDY
L0001123	0	0.48000E-06	483763.3	3755223.0	0.0	4.00	12.74	1.86	HROFDY
L0001124	0	0.48000E-06	483790.7	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001125	0	0.48000E-06	483818.0	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001126	0	0.48000E-06	483845.4	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001127	0	0.48000E-06	483872.8	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001128	0	0.48000E-06	483900.2	3755222.5	0.0	4.00	12.74	1.86	HROFDY
L0001129	0	0.48000E-06	483927.6	3755222.5	0.0	4.00	12.74	1.86	HROFDY
L0001130	0	0.48000E-06	483954.9	3755222.5	0.0	4.00	12.74	1.86	HROFDY
L0001131	0	0.48000E-06	483982.3	3755222.5	0.0	4.00	12.74	1.86	HROFDY

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001132	0	0.48000E-06	484009.7	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001133	0	0.48000E-06	484037.1	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001134	0	0.48000E-06	484064.5	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001135	0	0.48000E-06	484091.9	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001136	0	0.48000E-06	484119.3	3755222.0	0.0	4.00	12.74	1.86	HROFDY
L0001137	0	0.48000E-06	484146.6	3755222.0	0.0	4.00	12.74	1.86	HROFDY
L0001138	0	0.48000E-06	484172.9	3755216.8	0.0	4.00	12.55	1.86	HROFDY
L0001139	0	0.48000E-06	484199.0	3755209.8	0.0	4.00	12.55	1.86	HROFDY
L0001140	0	0.48000E-06	484225.1	3755202.8	0.0	4.00	12.55	1.86	HROFDY
L0001141	0	0.48000E-06	484251.1	3755195.8	0.0	4.00	12.55	1.86	HROFDY
L0001142	0	0.48000E-06	484277.2	3755188.8	0.0	4.00	12.55	1.86	HROFDY
L0001143	0	0.48000E-06	484296.1	3755176.3	0.0	4.00	10.81	1.86	HROFDY
L0001144	0	0.48000E-06	484313.3	3755160.5	0.0	4.00	10.81	1.86	HROFDY
L0001145	0	0.48000E-06	484330.6	3755145.0	0.0	4.00	10.81	1.86	HROFDY
L0001146	0	0.48000E-06	484347.9	3755129.5	0.0	4.00	10.81	1.86	HROFDY
L0001147	0	0.48000E-06	484365.2	3755114.0	0.0	4.00	10.81	1.86	HROFDY
L0001148	0	0.48000E-06	484386.2	3755100.8	0.0	4.00	11.58	1.86	HROFDY
L0001149	0	0.48000E-06	484408.2	3755089.3	0.0	4.00	11.58	1.86	HROFDY
L0001150	0	0.48000E-06	484430.1	3755077.5	0.0	4.00	11.58	1.86	HROFDY
L0001151	0	0.48000E-06	484452.1	3755065.8	0.0	4.00	11.58	1.86	HROFDY
L0001152	0	0.48000E-06	484474.1	3755054.0	0.0	4.00	11.58	1.86	HROFDY
L0001153	0	0.48000E-06	484496.0	3755042.3	0.0	4.00	11.58	1.86	HROFDY
L0001154	0	0.48000E-06	484517.0	3755036.0	0.0	4.00	10.25	1.86	HROFDY
L0001155	0	0.48000E-06	484538.6	3755031.8	0.0	4.00	10.25	1.86	HROFDY
L0001156	0	0.48000E-06	484560.2	3755027.3	0.0	4.00	10.25	1.86	HROFDY
L0001157	0	0.48000E-06	484581.8	3755023.0	0.0	4.00	10.25	1.86	HROFDY
L0001158	0	0.48000E-06	484605.9	3755021.3	0.0	4.00	11.29	1.86	HROFDY
L0001159	0	0.48000E-06	484630.2	3755021.3	0.0	4.00	11.29	1.86	HROFDY
L0001160	0	0.48000E-06	484654.4	3755021.0	0.0	4.00	11.29	1.86	HROFDY
L0001161	0	0.48000E-06	484678.7	3755020.8	0.0	4.00	11.29	1.86	HROFDY
L0001162	0	0.48000E-06	484703.0	3755020.5	0.0	4.00	11.29	1.86	HROFDY
L0001163	0	0.48000E-06	484727.3	3755020.3	0.0	4.00	11.29	1.86	HROFDY
L0001164	0	0.48000E-06	484751.5	3755020.0	0.0	4.00	11.29	1.86	HROFDY
L0001165	0	0.48000E-06	484775.8	3755021.0	0.0	4.00	11.31	1.86	HROFDY
L0001166	0	0.53667E-06	484781.4	3755040.5	0.0	4.00	8.84	1.86	HROFDY
L0001167	0	0.53667E-06	484781.2	3755059.5	0.0	4.00	8.84	1.86	HROFDY
L0001168	0	0.53667E-06	484780.9	3755078.5	0.0	4.00	8.84	1.86	HROFDY
L0001169	0	0.59444E-06	484780.2	3755088.0	0.0	4.00	8.78	1.86	HROFDY
L0001170	0	0.59444E-06	484780.0	3755106.8	0.0	4.00	8.78	1.86	HROFDY
L0001171	0	0.59444E-06	484779.8	3755125.8	0.0	4.00	8.78	1.86	HROFDY

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001172	0	0.59444E-06	484779.7	3755144.5	0.0	4.00	8.78	1.86	HROFDY
L0001173	0	0.59444E-06	484779.5	3755163.5	0.0	4.00	8.78	1.86	HROFDY
L0001174	0	0.59444E-06	484779.3	3755182.3	0.0	4.00	8.78	1.86	HROFDY
L0001175	0	0.59444E-06	484779.2	3755201.3	0.0	4.00	8.78	1.86	HROFDY
L0001176	0	0.59444E-06	484779.0	3755220.0	0.0	4.00	8.78	1.86	HROFDY
L0001177	0	0.59444E-06	484778.8	3755239.0	0.0	4.00	8.78	1.86	HROFDY
L0001178	0	0.59444E-06	484778.7	3755257.8	0.0	4.00	8.78	1.86	HROFDY
L0001179	0	0.59444E-06	484778.5	3755276.8	0.0	4.00	8.78	1.86	HROFDY
L0001180	0	0.59444E-06	484778.3	3755295.5	0.0	4.00	8.78	1.86	HROFDY
L0001181	0	0.59444E-06	484778.2	3755314.5	0.0	4.00	8.78	1.86	HROFDY
L0001182	0	0.59444E-06	484778.0	3755333.3	0.0	4.00	8.78	1.86	HROFDY
L0001183	0	0.59444E-06	484777.8	3755352.3	0.0	4.00	8.78	1.86	HROFDY
L0001184	0	0.59444E-06	484777.7	3755371.0	0.0	4.00	8.78	1.86	HROFDY
L0001185	0	0.59444E-06	484783.3	3755375.8	0.0	4.00	4.99	1.86	HROFDY
L0001186	0	0.59444E-06	484794.1	3755375.5	0.0	4.00	4.99	1.86	HROFDY
L0001187	0	0.48789E-06	485270.4	3755024.5	0.0	4.00	12.33	1.86	HROFDY
L0001188	0	0.48789E-06	485243.8	3755024.3	0.0	4.00	12.33	1.86	HROFDY
L0001189	0	0.48789E-06	485217.3	3755024.0	0.0	4.00	12.33	1.86	HROFDY
L0001190	0	0.48789E-06	485190.8	3755023.8	0.0	4.00	12.33	1.86	HROFDY
L0001191	0	0.48789E-06	485164.3	3755023.5	0.0	4.00	12.33	1.86	HROFDY
L0001192	0	0.48789E-06	485137.8	3755023.3	0.0	4.00	12.33	1.86	HROFDY
L0001193	0	0.48789E-06	485111.3	3755023.0	0.0	4.00	12.33	1.86	HROFDY
L0001194	0	0.48789E-06	485084.8	3755022.8	0.0	4.00	12.33	1.86	HROFDY
L0001195	0	0.48789E-06	485058.3	3755022.5	0.0	4.00	12.33	1.86	HROFDY
L0001196	0	0.48789E-06	485031.7	3755022.3	0.0	4.00	12.33	1.86	HROFDY
L0001197	0	0.48789E-06	485005.2	3755022.0	0.0	4.00	12.33	1.86	HROFDY
L0001198	0	0.48789E-06	484978.7	3755021.8	0.0	4.00	12.33	1.86	HROFDY
L0001199	0	0.48789E-06	484952.2	3755021.5	0.0	4.00	12.33	1.86	HROFDY
L0001200	0	0.48789E-06	484925.7	3755021.3	0.0	4.00	12.33	1.86	HROFDY
L0001201	0	0.48789E-06	484899.1	3755021.0	0.0	4.00	12.33	1.86	HROFDY
L0001202	0	0.48789E-06	484872.6	3755020.8	0.0	4.00	12.33	1.86	HROFDY
L0001203	0	0.48789E-06	484846.1	3755020.5	0.0	4.00	12.33	1.86	HROFDY
L0001204	0	0.48789E-06	484819.6	3755020.3	0.0	4.00	12.33	1.86	HROFDY
L0001205	0	0.48789E-06	484793.1	3755020.0	0.0	4.00	12.33	1.86	HROFDY

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
NORTH	0	0.14750E-08	484851.9	3755334.0	0.0	4.00	11	1.86	HROFDY
SOUTH	0	0.16140E-08	484832.9	3755147.5	0.0	4.00	10	1.86	HROFDY

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
ALL	NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056, L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068, L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, L0001080, L0001081, L0001082, L0001083, L0001084, L0001085, L0001086, L0001087, L0001088, L0001089, L0001090, L0001091, L0001092, L0001093, L0001094, L0001095, L0001096, L0001097, L0001098, L0001099, L0001100, L0001101, L0001102, L0001103, L0001104, L0001105, L0001106, L0001107, L0001108, L0001109, L0001110, L0001111, L0001112, L0001113, L0001114, L0001115, L0001116, L0001117, L0001118, L0001119, L0001120, L0001121, L0001122, L0001123, L0001124, L0001125, L0001126, L0001127, L0001128, L0001129, L0001130, L0001131, L0001132, L0001133, L0001134, L0001135, L0001136, L0001137, L0001138, L0001139, L0001140, L0001141, L0001142, L0001143, L0001144, L0001145, L0001146, L0001147, L0001148, L0001149, L0001150, L0001151, L0001152, L0001153, L0001154, L0001155, L0001156, L0001157, L0001158, L0001159, L0001160, L0001161, L0001162, L0001163, L0001164, L0001165, L0001166, L0001167, L0001168, L0001169, L0001170, L0001171, L0001172, L0001173, L0001174, L0001175, L0001176, L0001177, L0001178, L0001179, L0001180, L0001181, L0001182, L0001183, L0001184, L0001185, L0001186, L0001187, L0001188, L0001189, L0001190, L0001191, L0001192, L0001193, L0001194, L0001195, L0001196, L0001197, L0001198, L0001199, L0001200, L0001201, L0001202, L0001203, L0001204, L0001205,

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = NORTH ; SOURCE TYPE = AREAPOLY :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = SOUTH ; SOURCE TYPE = AREAPOLY :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001052 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001053 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001054 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001055 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001056 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001057 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001058 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001059 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001060 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001061 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001062 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001063 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001064 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001065 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001066 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001067 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001068 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001069 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001070 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001071 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001072 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001073 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001074 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 09:47:24

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001075 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001076 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001077 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001078 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001079 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001080 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001081 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001082 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001083 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001084 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001085 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001086 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001087 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001088 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001089 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001090 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001091 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001092 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001093 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001094 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001095 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001096 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001097 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001098 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001099 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001100 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001101 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001102 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001103 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001104 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001105 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001106 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001107 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001108 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001109 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001110 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001111 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001112 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001113 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001114 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001115 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001116 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001117 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001118 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001119 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001120 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001121 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001122 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001123 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001124 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001125 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001126 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001127 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001128 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001129 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001130 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001131 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001132 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001133 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001134 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 09:47:24

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001135 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001136 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001137 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001138 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001139 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001140 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001141 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001142 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001143 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001144 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001145 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001146 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001147 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001148 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001149 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001150 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001151 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001152 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001153 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001154 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

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*** West Ridge HRA *** 09:47:24

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001155 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001156 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001157 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001158 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001159 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001160 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001161 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001162 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001163 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001164 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001165 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001166 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001167 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001168 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001169 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001170 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001171 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001172 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001173 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001174 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

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*** West Ridge HRA *** 09:47:24

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001175 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001176 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001177 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001178 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001179 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001180 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001181 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001182 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001183 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001184 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001185 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001186 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001187 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001188 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001189 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001190 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001191 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001192 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001193 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001194 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001195 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001196 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001197 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001198 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001199 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001200 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001201 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001202 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001203 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001204 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001205 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485024.2, 3755540.5,	0.0,	1.5);	(485024.2, 3755640.5,	0.0,	1.5);
(485024.2, 3755740.5,	0.0,	1.5);	(485024.2, 3755840.5,	0.0,	1.5);
(485024.2, 3755940.5,	0.0,	1.5);	(485024.2, 3756040.5,	0.0,	1.5);
(485024.2, 3756140.5,	0.0,	1.5);	(485024.2, 3756240.5,	0.0,	1.5);
(485024.2, 3756340.5,	0.0,	1.5);	(485024.2, 3756440.5,	0.0,	1.5);
(485024.2, 3756540.5,	0.0,	1.5);	(485024.2, 3756640.5,	0.0,	1.5);
(485024.2, 3756740.5,	0.0,	1.5);	(485024.2, 3756840.5,	0.0,	1.5);
(485024.2, 3756940.5,	0.0,	1.5);	(485024.2, 3757040.5,	0.0,	1.5);
(485024.2, 3757140.5,	0.0,	1.5);	(485024.2, 3757240.5,	0.0,	1.5);
(485024.2, 3757340.5,	0.0,	1.5);	(485024.2, 3757440.5,	0.0,	1.5);
(485024.2, 3757540.5,	0.0,	1.5);	(485024.2, 3757640.5,	0.0,	1.5);
(485024.2, 3757740.5,	0.0,	1.5);	(485024.2, 3757840.5,	0.0,	1.5);
(485024.2, 3757940.5,	0.0,	1.5);	(485024.2, 3758040.5,	0.0,	1.5);
(485024.2, 3758140.5,	0.0,	1.5);	(485024.2, 3758240.5,	0.0,	1.5);
(485076.3, 3755536.0,	0.0,	1.5);	(485093.7, 3755634.5,	0.0,	1.5);
(485111.1, 3755733.0,	0.0,	1.5);	(485128.4, 3755831.5,	0.0,	1.5);
(485145.8, 3755930.0,	0.0,	1.5);	(485163.2, 3756028.3,	0.0,	1.5);
(485180.5, 3756126.8,	0.0,	1.5);	(485197.9, 3756225.3,	0.0,	1.5);
(485215.3, 3756323.8,	0.0,	1.5);	(485232.6, 3756422.3,	0.0,	1.5);
(485250.0, 3756520.8,	0.0,	1.5);	(485267.3, 3756619.3,	0.0,	1.5);
(485284.7, 3756717.8,	0.0,	1.5);	(485302.1, 3756816.3,	0.0,	1.5);
(485319.4, 3756914.8,	0.0,	1.5);	(485336.8, 3757013.3,	0.0,	1.5);
(485354.2, 3757111.8,	0.0,	1.5);	(485371.5, 3757210.3,	0.0,	1.5);
(485388.9, 3757308.5,	0.0,	1.5);	(485406.3, 3757407.0,	0.0,	1.5);
(485423.6, 3757505.5,	0.0,	1.5);	(485441.0, 3757604.0,	0.0,	1.5);
(485458.3, 3757702.5,	0.0,	1.5);	(485475.7, 3757801.0,	0.0,	1.5);
(485493.1, 3757899.5,	0.0,	1.5);	(485510.4, 3757998.0,	0.0,	1.5);
(485527.8, 3758096.5,	0.0,	1.5);	(485545.2, 3758195.0,	0.0,	1.5);
(485126.8, 3755522.5,	0.0,	1.5);	(485161.0, 3755616.5,	0.0,	1.5);
(485195.3, 3755710.3,	0.0,	1.5);	(485229.4, 3755804.3,	0.0,	1.5);
(485263.6, 3755898.3,	0.0,	1.5);	(485297.8, 3755992.3,	0.0,	1.5);
(485332.1, 3756086.3,	0.0,	1.5);	(485366.3, 3756180.3,	0.0,	1.5);
(485400.4, 3756274.3,	0.0,	1.5);	(485434.7, 3756368.3,	0.0,	1.5);
(485468.9, 3756462.0,	0.0,	1.5);	(485503.1, 3756556.0,	0.0,	1.5);
(485537.3, 3756650.0,	0.0,	1.5);	(485571.5, 3756744.0,	0.0,	1.5);
(485605.7, 3756838.0,	0.0,	1.5);	(485639.9, 3756932.0,	0.0,	1.5);
(485674.1, 3757026.0,	0.0,	1.5);	(485708.3, 3757120.0,	0.0,	1.5);
(485742.5, 3757213.8,	0.0,	1.5);	(485776.7, 3757307.8,	0.0,	1.5);
(485810.9, 3757401.8,	0.0,	1.5);	(485845.1, 3757495.8,	0.0,	1.5);
(485879.3, 3757589.8,	0.0,	1.5);	(485913.5, 3757683.8,	0.0,	1.5);
(485947.7, 3757777.8,	0.0,	1.5);	(485981.9, 3757871.8,	0.0,	1.5);
(486016.1, 3757965.5,	0.0,	1.5);	(486050.3, 3758059.5,	0.0,	1.5);
(485174.2, 3755500.3,	0.0,	1.5);	(485224.2, 3755587.0,	0.0,	1.5);
(485274.2, 3755673.5,	0.0,	1.5);	(485324.2, 3755760.3,	0.0,	1.5);
(485374.2, 3755846.8,	0.0,	1.5);	(485424.2, 3755933.3,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485474.2, 3756020.0,	0.0,	1.5);	(485524.2, 3756106.5,	0.0,	1.5);
(485574.2, 3756193.3,	0.0,	1.5);	(485624.2, 3756279.8,	0.0,	1.5);
(485674.2, 3756366.3,	0.0,	1.5);	(485724.2, 3756453.0,	0.0,	1.5);
(485774.2, 3756539.5,	0.0,	1.5);	(485824.2, 3756626.3,	0.0,	1.5);
(485874.2, 3756712.8,	0.0,	1.5);	(485924.2, 3756799.3,	0.0,	1.5);
(485974.2, 3756886.0,	0.0,	1.5);	(486024.2, 3756972.5,	0.0,	1.5);
(486074.2, 3757059.3,	0.0,	1.5);	(486124.2, 3757145.8,	0.0,	1.5);
(486174.2, 3757232.3,	0.0,	1.5);	(486224.2, 3757319.0,	0.0,	1.5);
(486274.2, 3757405.5,	0.0,	1.5);	(486324.2, 3757492.3,	0.0,	1.5);
(486374.2, 3757578.8,	0.0,	1.5);	(486424.2, 3757665.5,	0.0,	1.5);
(486474.2, 3757752.0,	0.0,	1.5);	(486524.2, 3757838.5,	0.0,	1.5);
(485217.1, 3755470.3,	0.0,	1.5);	(485281.3, 3755547.0,	0.0,	1.5);
(485345.6, 3755623.5,	0.0,	1.5);	(485409.9, 3755700.3,	0.0,	1.5);
(485474.2, 3755776.8,	0.0,	1.5);	(485538.5, 3755853.3,	0.0,	1.5);
(485602.8, 3755930.0,	0.0,	1.5);	(485667.0, 3756006.5,	0.0,	1.5);
(485731.3, 3756083.3,	0.0,	1.5);	(485795.6, 3756159.8,	0.0,	1.5);
(485859.8, 3756236.3,	0.0,	1.5);	(485924.1, 3756313.0,	0.0,	1.5);
(485988.4, 3756389.5,	0.0,	1.5);	(486052.7, 3756466.3,	0.0,	1.5);
(486117.0, 3756542.8,	0.0,	1.5);	(486181.3, 3756619.5,	0.0,	1.5);
(486245.5, 3756696.0,	0.0,	1.5);	(486309.8, 3756772.5,	0.0,	1.5);
(486374.1, 3756849.3,	0.0,	1.5);	(486438.4, 3756925.8,	0.0,	1.5);
(486502.6, 3757002.5,	0.0,	1.5);	(486566.9, 3757079.0,	0.0,	1.5);
(486631.2, 3757155.5,	0.0,	1.5);	(486695.5, 3757232.3,	0.0,	1.5);
(486759.8, 3757308.8,	0.0,	1.5);	(486824.0, 3757385.5,	0.0,	1.5);
(486888.3, 3757462.0,	0.0,	1.5);	(486952.6, 3757538.8,	0.0,	1.5);
(485330.7, 3755497.8,	0.0,	1.5);	(485407.3, 3755562.0,	0.0,	1.5);
(485483.9, 3755626.3,	0.0,	1.5);	(485560.5, 3755690.5,	0.0,	1.5);
(485637.1, 3755754.8,	0.0,	1.5);	(485713.7, 3755819.0,	0.0,	1.5);
(485790.3, 3755883.3,	0.0,	1.5);	(485866.9, 3755947.5,	0.0,	1.5);
(485943.5, 3756011.8,	0.0,	1.5);	(486020.1, 3756076.3,	0.0,	1.5);
(486096.7, 3756140.5,	0.0,	1.5);	(486173.3, 3756204.8,	0.0,	1.5);
(486249.9, 3756269.0,	0.0,	1.5);	(486326.5, 3756333.3,	0.0,	1.5);
(486403.1, 3756397.5,	0.0,	1.5);	(486479.7, 3756461.8,	0.0,	1.5);
(486556.3, 3756526.0,	0.0,	1.5);	(486632.9, 3756590.3,	0.0,	1.5);
(486709.5, 3756654.8,	0.0,	1.5);	(486786.1, 3756719.0,	0.0,	1.5);
(486862.8, 3756783.3,	0.0,	1.5);	(486939.3, 3756847.5,	0.0,	1.5);
(487015.9, 3756911.8,	0.0,	1.5);	(487092.6, 3756976.0,	0.0,	1.5);
(487169.2, 3757040.3,	0.0,	1.5);	(487245.8, 3757104.5,	0.0,	1.5);
(487322.4, 3757168.8,	0.0,	1.5);	(485457.3, 3755490.5,	0.0,	1.5);
(485543.8, 3755540.5,	0.0,	1.5);	(485630.4, 3755590.5,	0.0,	1.5);
(485717.1, 3755640.5,	0.0,	1.5);	(485803.7, 3755690.5,	0.0,	1.5);
(485890.3, 3755740.5,	0.0,	1.5);	(485976.9, 3755790.5,	0.0,	1.5);
(486063.5, 3755840.5,	0.0,	1.5);	(486150.1, 3755890.5,	0.0,	1.5);
(486236.7, 3755940.5,	0.0,	1.5);	(486323.3, 3755990.5,	0.0,	1.5);
(486409.9, 3756040.5,	0.0,	1.5);	(486496.5, 3756090.5,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(486583.1, 3756140.5,	0.0,	1.5);	(486669.7, 3756190.5,	0.0,	1.5);
(486756.3, 3756240.5,	0.0,	1.5);	(486842.9, 3756290.5,	0.0,	1.5);
(486929.5, 3756340.5,	0.0,	1.5);	(487016.1, 3756390.5,	0.0,	1.5);
(487102.7, 3756440.5,	0.0,	1.5);	(487189.3, 3756490.5,	0.0,	1.5);
(487275.9, 3756540.5,	0.0,	1.5);	(487362.5, 3756590.5,	0.0,	1.5);
(487449.1, 3756640.5,	0.0,	1.5);	(487535.7, 3756690.5,	0.0,	1.5);
(487622.3, 3756740.5,	0.0,	1.5);	(485400.1, 3755377.3,	0.0,	1.5);
(485494.1, 3755411.5,	0.0,	1.5);	(485268.9, 3755002.0,	0.0,	1.5);
(485682.0, 3755480.0,	0.0,	1.5);	(485776.0, 3755514.3,	0.0,	1.5);
(485869.9, 3755548.3,	0.0,	1.5);	(485963.9, 3755582.5,	0.0,	1.5);
(486057.9, 3755616.8,	0.0,	1.5);	(486151.9, 3755651.0,	0.0,	1.5);
(486245.8, 3755685.3,	0.0,	1.5);	(486339.8, 3755719.3,	0.0,	1.5);
(486433.8, 3755753.5,	0.0,	1.5);	(486527.8, 3755787.8,	0.0,	1.5);
(486621.7, 3755822.0,	0.0,	1.5);	(486715.7, 3755856.3,	0.0,	1.5);
(486809.7, 3755890.3,	0.0,	1.5);	(486903.6, 3755924.5,	0.0,	1.5);
(486997.6, 3755958.8,	0.0,	1.5);	(487091.6, 3755993.0,	0.0,	1.5);
(487185.5, 3756027.3,	0.0,	1.5);	(487279.5, 3756061.3,	0.0,	1.5);
(487373.5, 3756095.5,	0.0,	1.5);	(487467.4, 3756129.8,	0.0,	1.5);
(487561.4, 3756164.0,	0.0,	1.5);	(487655.4, 3756198.3,	0.0,	1.5);
(487749.3, 3756232.3,	0.0,	1.5);	(487843.3, 3756266.5,	0.0,	1.5);
(485418.2, 3755310.0,	0.0,	1.5);	(485615.1, 3755344.8,	0.0,	1.5);
(485713.6, 3755362.0,	0.0,	1.5);	(485812.1, 3755379.5,	0.0,	1.5);
(485910.6, 3755396.8,	0.0,	1.5);	(486009.0, 3755414.3,	0.0,	1.5);
(486107.5, 3755431.5,	0.0,	1.5);	(486206.0, 3755449.0,	0.0,	1.5);
(486304.5, 3755466.3,	0.0,	1.5);	(486403.0, 3755483.5,	0.0,	1.5);
(486501.4, 3755501.0,	0.0,	1.5);	(486599.9, 3755518.3,	0.0,	1.5);
(486698.4, 3755535.8,	0.0,	1.5);	(486796.9, 3755553.0,	0.0,	1.5);
(486895.4, 3755570.5,	0.0,	1.5);	(486993.8, 3755587.8,	0.0,	1.5);
(487092.3, 3755605.3,	0.0,	1.5);	(487190.8, 3755622.5,	0.0,	1.5);
(487289.3, 3755640.0,	0.0,	1.5);	(487387.8, 3755657.3,	0.0,	1.5);
(487486.3, 3755674.8,	0.0,	1.5);	(487584.7, 3755692.0,	0.0,	1.5);
(487683.2, 3755709.3,	0.0,	1.5);	(487781.7, 3755726.8,	0.0,	1.5);
(487880.2, 3755744.0,	0.0,	1.5);	(487978.7, 3755761.5,	0.0,	1.5);
(485324.2, 3755240.5,	0.0,	1.5);	(485424.2, 3755240.5,	0.0,	1.5);
(485524.2, 3755240.5,	0.0,	1.5);	(485624.2, 3755240.5,	0.0,	1.5);
(485724.2, 3755240.5,	0.0,	1.5);	(485824.2, 3755240.5,	0.0,	1.5);
(485924.2, 3755240.5,	0.0,	1.5);	(486024.2, 3755240.5,	0.0,	1.5);
(486124.2, 3755240.5,	0.0,	1.5);	(486224.2, 3755240.5,	0.0,	1.5);
(486324.2, 3755240.5,	0.0,	1.5);	(486424.2, 3755240.5,	0.0,	1.5);
(486524.2, 3755240.5,	0.0,	1.5);	(486624.2, 3755240.5,	0.0,	1.5);
(486724.2, 3755240.5,	0.0,	1.5);	(486824.2, 3755240.5,	0.0,	1.5);
(486924.2, 3755240.5,	0.0,	1.5);	(487024.2, 3755240.5,	0.0,	1.5);
(487124.2, 3755240.5,	0.0,	1.5);	(487224.2, 3755240.5,	0.0,	1.5);
(487324.2, 3755240.5,	0.0,	1.5);	(487424.2, 3755240.5,	0.0,	1.5);
(487524.2, 3755240.5,	0.0,	1.5);	(487624.2, 3755240.5,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(487724.2, 3755240.5,	0.0,	1.5);	(487824.2, 3755240.5,	0.0,	1.5);
(487924.2, 3755240.5,	0.0,	1.5);	(488024.2, 3755240.5,	0.0,	1.5);
(485418.2, 3755171.0,	0.0,	1.5);	(485615.1, 3755136.3,	0.0,	1.5);
(485713.6, 3755119.0,	0.0,	1.5);	(485812.1, 3755101.5,	0.0,	1.5);
(485910.6, 3755084.3,	0.0,	1.5);	(486009.0, 3755066.8,	0.0,	1.5);
(486107.5, 3755049.5,	0.0,	1.5);	(486206.0, 3755032.3,	0.0,	1.5);
(486304.5, 3755014.8,	0.0,	1.5);	(486403.0, 3754997.5,	0.0,	1.5);
(486501.4, 3754980.0,	0.0,	1.5);	(486599.9, 3754962.8,	0.0,	1.5);
(486698.4, 3754945.3,	0.0,	1.5);	(486796.9, 3754928.0,	0.0,	1.5);
(486895.4, 3754910.5,	0.0,	1.5);	(486993.8, 3754893.3,	0.0,	1.5);
(487092.3, 3754875.8,	0.0,	1.5);	(487190.8, 3754858.5,	0.0,	1.5);
(487289.3, 3754841.0,	0.0,	1.5);	(487387.8, 3754823.8,	0.0,	1.5);
(487486.3, 3754806.5,	0.0,	1.5);	(487584.7, 3754789.0,	0.0,	1.5);
(487683.2, 3754771.8,	0.0,	1.5);	(487781.7, 3754754.3,	0.0,	1.5);
(487880.2, 3754737.0,	0.0,	1.5);	(487978.7, 3754719.5,	0.0,	1.5);
(485400.1, 3755103.8,	0.0,	1.5);	(485494.1, 3755069.5,	0.0,	1.5);
(485588.1, 3755035.3,	0.0,	1.5);	(485682.0, 3755001.0,	0.0,	1.5);
(485776.0, 3754967.0,	0.0,	1.5);	(485869.9, 3754932.8,	0.0,	1.5);
(485963.9, 3754898.5,	0.0,	1.5);	(486057.9, 3754864.3,	0.0,	1.5);
(486151.9, 3754830.0,	0.0,	1.5);	(486245.8, 3754796.0,	0.0,	1.5);
(486339.8, 3754761.8,	0.0,	1.5);	(486433.8, 3754727.5,	0.0,	1.5);
(486527.8, 3754693.3,	0.0,	1.5);	(486621.7, 3754659.0,	0.0,	1.5);
(486715.7, 3754624.8,	0.0,	1.5);	(486809.7, 3754590.8,	0.0,	1.5);
(486903.6, 3754556.5,	0.0,	1.5);	(486997.6, 3754522.3,	0.0,	1.5);
(487091.6, 3754488.0,	0.0,	1.5);	(487185.5, 3754453.8,	0.0,	1.5);
(487279.5, 3754419.8,	0.0,	1.5);	(487373.5, 3754385.5,	0.0,	1.5);
(487467.4, 3754351.3,	0.0,	1.5);	(487561.4, 3754317.0,	0.0,	1.5);
(487655.4, 3754282.8,	0.0,	1.5);	(487749.3, 3754248.8,	0.0,	1.5);
(487843.3, 3754214.5,	0.0,	1.5);	(485457.3, 3754990.5,	0.0,	1.5);
(485543.8, 3754940.5,	0.0,	1.5);	(485630.4, 3754890.5,	0.0,	1.5);
(485717.1, 3754840.5,	0.0,	1.5);	(485803.7, 3754790.5,	0.0,	1.5);
(485890.3, 3754740.5,	0.0,	1.5);	(485976.9, 3754690.5,	0.0,	1.5);
(486063.5, 3754640.5,	0.0,	1.5);	(486150.1, 3754590.5,	0.0,	1.5);
(486236.7, 3754540.5,	0.0,	1.5);	(486323.3, 3754490.5,	0.0,	1.5);
(486409.9, 3754440.5,	0.0,	1.5);	(486496.5, 3754390.5,	0.0,	1.5);
(486583.1, 3754340.5,	0.0,	1.5);	(486669.7, 3754290.5,	0.0,	1.5);
(486756.3, 3754240.5,	0.0,	1.5);	(486842.9, 3754190.5,	0.0,	1.5);
(486929.5, 3754140.5,	0.0,	1.5);	(487016.1, 3754090.5,	0.0,	1.5);
(487102.7, 3754040.5,	0.0,	1.5);	(487189.3, 3753990.5,	0.0,	1.5);
(487275.9, 3753940.5,	0.0,	1.5);	(487362.5, 3753890.5,	0.0,	1.5);
(487449.1, 3753840.5,	0.0,	1.5);	(487535.7, 3753790.5,	0.0,	1.5);
(487622.3, 3753740.5,	0.0,	1.5);	(485330.7, 3754983.5,	0.0,	1.5);
(485407.3, 3754919.0,	0.0,	1.5);	(485483.9, 3754854.8,	0.0,	1.5);
(485560.5, 3754790.5,	0.0,	1.5);	(485637.1, 3754726.3,	0.0,	1.5);
(485713.7, 3754662.0,	0.0,	1.5);	(485790.3, 3754597.8,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485866.9, 3754533.5,	0.0,	1.5);	(485943.5, 3754469.3,	0.0,	1.5);
(486020.1, 3754405.0,	0.0,	1.5);	(486096.7, 3754340.5,	0.0,	1.5);
(486173.3, 3754276.3,	0.0,	1.5);	(486249.9, 3754212.0,	0.0,	1.5);
(486326.5, 3754147.8,	0.0,	1.5);	(486403.1, 3754083.5,	0.0,	1.5);
(486479.7, 3754019.3,	0.0,	1.5);	(486556.3, 3753955.0,	0.0,	1.5);
(486632.9, 3753890.8,	0.0,	1.5);	(486709.5, 3753826.5,	0.0,	1.5);
(486786.1, 3753762.0,	0.0,	1.5);	(486862.8, 3753697.8,	0.0,	1.5);
(486939.3, 3753633.5,	0.0,	1.5);	(487015.9, 3753569.3,	0.0,	1.5);
(487092.6, 3753505.0,	0.0,	1.5);	(487169.2, 3753440.8,	0.0,	1.5);
(487245.8, 3753376.5,	0.0,	1.5);	(487322.4, 3753312.3,	0.0,	1.5);
(485217.1, 3755010.8,	0.0,	1.5);	(485281.3, 3754934.0,	0.0,	1.5);
(485345.6, 3754857.5,	0.0,	1.5);	(485409.9, 3754781.0,	0.0,	1.5);
(485474.2, 3754704.3,	0.0,	1.5);	(485538.5, 3754627.8,	0.0,	1.5);
(485602.8, 3754551.0,	0.0,	1.5);	(485667.0, 3754474.5,	0.0,	1.5);
(485731.3, 3754397.8,	0.0,	1.5);	(485795.6, 3754321.3,	0.0,	1.5);
(485859.8, 3754244.8,	0.0,	1.5);	(485924.1, 3754168.0,	0.0,	1.5);
(485988.4, 3754091.5,	0.0,	1.5);	(486052.7, 3754014.8,	0.0,	1.5);
(486117.0, 3753938.3,	0.0,	1.5);	(486181.3, 3753861.8,	0.0,	1.5);
(486245.5, 3753785.0,	0.0,	1.5);	(486309.8, 3753708.5,	0.0,	1.5);
(486374.1, 3753631.8,	0.0,	1.5);	(486438.4, 3753555.3,	0.0,	1.5);
(486502.6, 3753478.5,	0.0,	1.5);	(486566.9, 3753402.0,	0.0,	1.5);
(486631.2, 3753325.5,	0.0,	1.5);	(486695.5, 3753248.8,	0.0,	1.5);
(486759.8, 3753172.3,	0.0,	1.5);	(486824.0, 3753095.5,	0.0,	1.5);
(486888.3, 3753019.0,	0.0,	1.5);	(486952.6, 3752942.5,	0.0,	1.5);
(485174.2, 3754980.8,	0.0,	1.5);	(485224.2, 3754894.0,	0.0,	1.5);
(485274.2, 3754807.5,	0.0,	1.5);	(485324.2, 3754721.0,	0.0,	1.5);
(485374.2, 3754634.3,	0.0,	1.5);	(485424.2, 3754547.8,	0.0,	1.5);
(485474.2, 3754461.0,	0.0,	1.5);	(485524.2, 3754374.5,	0.0,	1.5);
(485574.2, 3754288.0,	0.0,	1.5);	(485624.2, 3754201.3,	0.0,	1.5);
(485674.2, 3754114.8,	0.0,	1.5);	(485724.2, 3754028.0,	0.0,	1.5);
(485774.2, 3753941.5,	0.0,	1.5);	(485824.2, 3753854.8,	0.0,	1.5);
(485874.2, 3753768.3,	0.0,	1.5);	(485924.2, 3753681.8,	0.0,	1.5);
(485974.2, 3753595.0,	0.0,	1.5);	(486024.2, 3753508.5,	0.0,	1.5);
(486074.2, 3753421.8,	0.0,	1.5);	(486124.2, 3753335.3,	0.0,	1.5);
(486174.2, 3753248.8,	0.0,	1.5);	(486224.2, 3753162.0,	0.0,	1.5);
(486274.2, 3753075.5,	0.0,	1.5);	(486324.2, 3752988.8,	0.0,	1.5);
(486374.2, 3752902.3,	0.0,	1.5);	(486424.2, 3752815.8,	0.0,	1.5);
(486474.2, 3752729.0,	0.0,	1.5);	(486524.2, 3752642.5,	0.0,	1.5);
(485126.8, 3754958.5,	0.0,	1.5);	(485161.0, 3754864.8,	0.0,	1.5);
(485195.3, 3754770.8,	0.0,	1.5);	(485229.4, 3754676.8,	0.0,	1.5);
(485263.6, 3754582.8,	0.0,	1.5);	(485297.8, 3754488.8,	0.0,	1.5);
(485332.1, 3754394.8,	0.0,	1.5);	(485366.3, 3754300.8,	0.0,	1.5);
(485400.4, 3754206.8,	0.0,	1.5);	(485434.7, 3754113.0,	0.0,	1.5);
(485468.9, 3754019.0,	0.0,	1.5);	(485503.1, 3753925.0,	0.0,	1.5);
(485537.3, 3753831.0,	0.0,	1.5);	(485571.5, 3753737.0,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485605.7, 3753643.0,	0.0,	1.5);	(485639.9, 3753549.0,	0.0,	1.5);
(485674.1, 3753455.0,	0.0,	1.5);	(485708.3, 3753361.0,	0.0,	1.5);
(485742.5, 3753267.3,	0.0,	1.5);	(485776.7, 3753173.3,	0.0,	1.5);
(485810.9, 3753079.3,	0.0,	1.5);	(485845.1, 3752985.3,	0.0,	1.5);
(485879.3, 3752891.3,	0.0,	1.5);	(485913.5, 3752797.3,	0.0,	1.5);
(485947.7, 3752703.3,	0.0,	1.5);	(485981.9, 3752609.3,	0.0,	1.5);
(486016.1, 3752515.5,	0.0,	1.5);	(486050.3, 3752421.5,	0.0,	1.5);
(485076.3, 3754945.0,	0.0,	1.5);	(485093.7, 3754846.5,	0.0,	1.5);
(485111.1, 3754748.0,	0.0,	1.5);	(485128.4, 3754649.8,	0.0,	1.5);
(485145.8, 3754551.3,	0.0,	1.5);	(485163.2, 3754452.8,	0.0,	1.5);
(485180.5, 3754354.3,	0.0,	1.5);	(485197.9, 3754255.8,	0.0,	1.5);
(485215.3, 3754157.3,	0.0,	1.5);	(485232.6, 3754058.8,	0.0,	1.5);
(485250.0, 3753960.3,	0.0,	1.5);	(485267.3, 3753861.8,	0.0,	1.5);
(485284.7, 3753763.3,	0.0,	1.5);	(485302.1, 3753664.8,	0.0,	1.5);
(485319.4, 3753566.3,	0.0,	1.5);	(485336.8, 3753467.8,	0.0,	1.5);
(485354.2, 3753369.5,	0.0,	1.5);	(485371.5, 3753271.0,	0.0,	1.5);
(485388.9, 3753172.5,	0.0,	1.5);	(485406.3, 3753074.0,	0.0,	1.5);
(485423.6, 3752975.5,	0.0,	1.5);	(485441.0, 3752877.0,	0.0,	1.5);
(485458.3, 3752778.5,	0.0,	1.5);	(485475.7, 3752680.0,	0.0,	1.5);
(485493.1, 3752581.5,	0.0,	1.5);	(485510.4, 3752483.0,	0.0,	1.5);
(485527.8, 3752384.5,	0.0,	1.5);	(485545.2, 3752286.0,	0.0,	1.5);
(485024.2, 3754940.5,	0.0,	1.5);	(485024.2, 3754840.5,	0.0,	1.5);
(485024.2, 3754740.5,	0.0,	1.5);	(485024.2, 3754640.5,	0.0,	1.5);
(485024.2, 3754540.5,	0.0,	1.5);	(485024.2, 3754440.5,	0.0,	1.5);
(485024.2, 3754340.5,	0.0,	1.5);	(485024.2, 3754240.5,	0.0,	1.5);
(485024.2, 3754140.5,	0.0,	1.5);	(485024.2, 3754040.5,	0.0,	1.5);
(485024.2, 3753940.5,	0.0,	1.5);	(485024.2, 3753840.5,	0.0,	1.5);
(485024.2, 3753740.5,	0.0,	1.5);	(485024.2, 3753640.5,	0.0,	1.5);
(485024.2, 3753540.5,	0.0,	1.5);	(485024.2, 3753440.5,	0.0,	1.5);
(485024.2, 3753340.5,	0.0,	1.5);	(485024.2, 3753240.5,	0.0,	1.5);
(485024.2, 3753140.5,	0.0,	1.5);	(485024.2, 3753040.5,	0.0,	1.5);
(485024.2, 3752940.5,	0.0,	1.5);	(485024.2, 3752840.5,	0.0,	1.5);
(485024.2, 3752740.5,	0.0,	1.5);	(485024.2, 3752640.5,	0.0,	1.5);
(485024.2, 3752540.5,	0.0,	1.5);	(485024.2, 3752440.5,	0.0,	1.5);
(485024.2, 3752340.5,	0.0,	1.5);	(485024.2, 3752240.5,	0.0,	1.5);
(484972.1, 3754945.0,	0.0,	1.5);	(484954.8, 3754846.5,	0.0,	1.5);
(484937.4, 3754748.0,	0.0,	1.5);	(484920.0, 3754649.8,	0.0,	1.5);
(484902.7, 3754551.3,	0.0,	1.5);	(484885.3, 3754452.8,	0.0,	1.5);
(484867.9, 3754354.3,	0.0,	1.5);	(484850.6, 3754255.8,	0.0,	1.5);
(484833.2, 3754157.3,	0.0,	1.5);	(484815.8, 3754058.8,	0.0,	1.5);
(484798.5, 3753960.3,	0.0,	1.5);	(484781.1, 3753861.8,	0.0,	1.5);
(484763.8, 3753763.3,	0.0,	1.5);	(484746.4, 3753664.8,	0.0,	1.5);
(484729.0, 3753566.3,	0.0,	1.5);	(484711.7, 3753467.8,	0.0,	1.5);
(484694.3, 3753369.5,	0.0,	1.5);	(484676.9, 3753271.0,	0.0,	1.5);
(484659.6, 3753172.5,	0.0,	1.5);	(484642.2, 3753074.0,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(484624.8, 3752975.5,	0.0,	1.5);	(484607.5, 3752877.0,	0.0,	1.5);
(484590.1, 3752778.5,	0.0,	1.5);	(484572.8, 3752680.0,	0.0,	1.5);
(484555.4, 3752581.5,	0.0,	1.5);	(484538.0, 3752483.0,	0.0,	1.5);
(484520.7, 3752384.5,	0.0,	1.5);	(484503.3, 3752286.0,	0.0,	1.5);
(484921.6, 3754958.5,	0.0,	1.5);	(484887.4, 3754864.8,	0.0,	1.5);
(484853.2, 3754770.8,	0.0,	1.5);	(484819.0, 3754676.8,	0.0,	1.5);
(484784.8, 3754582.8,	0.0,	1.5);	(484750.6, 3754488.8,	0.0,	1.5);
(484716.4, 3754394.8,	0.0,	1.5);	(484682.2, 3754300.8,	0.0,	1.5);
(484648.0, 3754206.8,	0.0,	1.5);	(484613.8, 3754113.0,	0.0,	1.5);
(484579.6, 3754019.0,	0.0,	1.5);	(484545.4, 3753925.0,	0.0,	1.5);
(484511.2, 3753831.0,	0.0,	1.5);	(484477.0, 3753737.0,	0.0,	1.5);
(484442.8, 3753643.0,	0.0,	1.5);	(484408.6, 3753549.0,	0.0,	1.5);
(484374.4, 3753455.0,	0.0,	1.5);	(484340.2, 3753361.0,	0.0,	1.5);
(484306.0, 3753267.3,	0.0,	1.5);	(484271.8, 3753173.3,	0.0,	1.5);
(484237.6, 3753079.3,	0.0,	1.5);	(484203.4, 3752985.3,	0.0,	1.5);
(484169.2, 3752891.3,	0.0,	1.5);	(484135.0, 3752797.3,	0.0,	1.5);
(484100.8, 3752703.3,	0.0,	1.5);	(484066.6, 3752609.3,	0.0,	1.5);
(484032.4, 3752515.5,	0.0,	1.5);	(483998.2, 3752421.5,	0.0,	1.5);
(484874.2, 3754980.8,	0.0,	1.5);	(484824.2, 3754894.0,	0.0,	1.5);
(484774.2, 3754807.5,	0.0,	1.5);	(484724.2, 3754721.0,	0.0,	1.5);
(484674.2, 3754634.3,	0.0,	1.5);	(484624.2, 3754547.8,	0.0,	1.5);
(484574.2, 3754461.0,	0.0,	1.5);	(484524.2, 3754374.5,	0.0,	1.5);
(484474.2, 3754288.0,	0.0,	1.5);	(484424.2, 3754201.3,	0.0,	1.5);
(484374.2, 3754114.8,	0.0,	1.5);	(484324.2, 3754028.0,	0.0,	1.5);
(484274.2, 3753941.5,	0.0,	1.5);	(484224.2, 3753854.8,	0.0,	1.5);
(484174.2, 3753768.3,	0.0,	1.5);	(484124.2, 3753681.8,	0.0,	1.5);
(484074.2, 3753595.0,	0.0,	1.5);	(484024.2, 3753508.5,	0.0,	1.5);
(483974.2, 3753421.8,	0.0,	1.5);	(483924.2, 3753335.3,	0.0,	1.5);
(483874.2, 3753248.8,	0.0,	1.5);	(483824.2, 3753162.0,	0.0,	1.5);
(483774.2, 3753075.5,	0.0,	1.5);	(483724.2, 3752988.8,	0.0,	1.5);
(483674.2, 3752902.3,	0.0,	1.5);	(483624.2, 3752815.8,	0.0,	1.5);
(483574.2, 3752729.0,	0.0,	1.5);	(483524.2, 3752642.5,	0.0,	1.5);
(484767.1, 3754934.0,	0.0,	1.5);	(484702.8, 3754857.5,	0.0,	1.5);
(484638.6, 3754781.0,	0.0,	1.5);	(484574.3, 3754704.3,	0.0,	1.5);
(484510.0, 3754627.8,	0.0,	1.5);	(484445.7, 3754551.0,	0.0,	1.5);
(484381.4, 3754474.5,	0.0,	1.5);	(484317.2, 3754397.8,	0.0,	1.5);
(484252.9, 3754321.3,	0.0,	1.5);	(484188.6, 3754244.8,	0.0,	1.5);
(484124.3, 3754168.0,	0.0,	1.5);	(484060.1, 3754091.5,	0.0,	1.5);
(483995.8, 3754014.8,	0.0,	1.5);	(483931.5, 3753938.3,	0.0,	1.5);
(483867.2, 3753861.8,	0.0,	1.5);	(483802.9, 3753785.0,	0.0,	1.5);
(483738.7, 3753708.5,	0.0,	1.5);	(483674.4, 3753631.8,	0.0,	1.5);
(483610.1, 3753555.3,	0.0,	1.5);	(483545.8, 3753478.5,	0.0,	1.5);
(483481.5, 3753402.0,	0.0,	1.5);	(483417.3, 3753325.5,	0.0,	1.5);
(483353.0, 3753248.8,	0.0,	1.5);	(483288.7, 3753172.3,	0.0,	1.5);
(483224.4, 3753095.5,	0.0,	1.5);	(483160.2, 3753019.0,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483095.9, 3752942.5,	0.0,	1.5);	(484717.8, 3754983.5,	0.0,	1.5);
(484641.2, 3754919.0,	0.0,	1.5);	(484564.6, 3754854.8,	0.0,	1.5);
(484488.0, 3754790.5,	0.0,	1.5);	(484411.4, 3754726.3,	0.0,	1.5);
(484334.8, 3754662.0,	0.0,	1.5);	(484258.2, 3754597.8,	0.0,	1.5);
(484181.6, 3754533.5,	0.0,	1.5);	(484105.0, 3754469.3,	0.0,	1.5);
(484028.4, 3754405.0,	0.0,	1.5);	(483951.8, 3754340.5,	0.0,	1.5);
(483875.2, 3754276.3,	0.0,	1.5);	(483798.6, 3754212.0,	0.0,	1.5);
(483721.9, 3754147.8,	0.0,	1.5);	(483645.3, 3754083.5,	0.0,	1.5);
(483568.8, 3754019.3,	0.0,	1.5);	(483492.1, 3753955.0,	0.0,	1.5);
(483415.5, 3753890.8,	0.0,	1.5);	(483338.9, 3753826.5,	0.0,	1.5);
(483262.3, 3753762.0,	0.0,	1.5);	(483185.7, 3753697.8,	0.0,	1.5);
(483109.1, 3753633.5,	0.0,	1.5);	(483032.5, 3753569.3,	0.0,	1.5);
(482955.9, 3753505.0,	0.0,	1.5);	(482879.3, 3753440.8,	0.0,	1.5);
(482802.7, 3753376.5,	0.0,	1.5);	(482726.1, 3753312.3,	0.0,	1.5);
(484677.8, 3755040.5,	0.0,	1.5);	(484591.2, 3754990.5,	0.0,	1.5);
(484504.6, 3754940.5,	0.0,	1.5);	(484418.0, 3754890.5,	0.0,	1.5);
(484331.4, 3754840.5,	0.0,	1.5);	(484244.8, 3754790.5,	0.0,	1.5);
(484158.2, 3754740.5,	0.0,	1.5);	(484071.6, 3754690.5,	0.0,	1.5);
(483985.0, 3754640.5,	0.0,	1.5);	(483898.4, 3754590.5,	0.0,	1.5);
(483811.8, 3754540.5,	0.0,	1.5);	(483725.2, 3754490.5,	0.0,	1.5);
(483638.6, 3754440.5,	0.0,	1.5);	(483552.0, 3754390.5,	0.0,	1.5);
(483465.4, 3754340.5,	0.0,	1.5);	(483378.8, 3754290.5,	0.0,	1.5);
(483292.2, 3754240.5,	0.0,	1.5);	(483205.6, 3754190.5,	0.0,	1.5);
(483119.0, 3754140.5,	0.0,	1.5);	(483032.4, 3754090.5,	0.0,	1.5);
(482945.8, 3754040.5,	0.0,	1.5);	(482859.2, 3753990.5,	0.0,	1.5);
(482772.6, 3753940.5,	0.0,	1.5);	(482686.0, 3753890.5,	0.0,	1.5);
(482599.4, 3753840.5,	0.0,	1.5);	(482512.8, 3753790.5,	0.0,	1.5);
(482426.2, 3753740.5,	0.0,	1.5);	(484648.3, 3755103.8,	0.0,	1.5);
(484554.4, 3755069.5,	0.0,	1.5);	(484460.4, 3755035.3,	0.0,	1.5);
(484366.4, 3755001.0,	0.0,	1.5);	(484272.5, 3754967.0,	0.0,	1.5);
(484178.5, 3754932.8,	0.0,	1.5);	(484084.5, 3754898.5,	0.0,	1.5);
(483990.6, 3754864.3,	0.0,	1.5);	(483896.6, 3754830.0,	0.0,	1.5);
(483802.6, 3754796.0,	0.0,	1.5);	(483708.7, 3754761.8,	0.0,	1.5);
(483614.7, 3754727.5,	0.0,	1.5);	(483520.7, 3754693.3,	0.0,	1.5);
(483426.8, 3754659.0,	0.0,	1.5);	(483332.8, 3754624.8,	0.0,	1.5);
(483238.8, 3754590.8,	0.0,	1.5);	(483144.8, 3754556.5,	0.0,	1.5);
(483050.9, 3754522.3,	0.0,	1.5);	(482956.9, 3754488.0,	0.0,	1.5);
(482862.9, 3754453.8,	0.0,	1.5);	(482769.0, 3754419.8,	0.0,	1.5);
(482675.0, 3754385.5,	0.0,	1.5);	(482581.0, 3754351.3,	0.0,	1.5);
(482487.1, 3754317.0,	0.0,	1.5);	(482393.1, 3754282.8,	0.0,	1.5);
(482299.1, 3754248.8,	0.0,	1.5);	(482205.2, 3754214.5,	0.0,	1.5);
(484630.3, 3755171.0,	0.0,	1.5);	(484531.8, 3755153.8,	0.0,	1.5);
(484433.3, 3755136.3,	0.0,	1.5);	(484334.9, 3755119.0,	0.0,	1.5);
(484236.4, 3755101.5,	0.0,	1.5);	(484137.9, 3755084.3,	0.0,	1.5);
(484039.4, 3755066.8,	0.0,	1.5);	(483940.9, 3755049.5,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483842.5, 3755032.3,	0.0,	1.5);	(483744.0, 3755014.8,	0.0,	1.5);
(483645.5, 3754997.5,	0.0,	1.5);	(483547.0, 3754980.0,	0.0,	1.5);
(483448.5, 3754962.8,	0.0,	1.5);	(483350.1, 3754945.3,	0.0,	1.5);
(483251.6, 3754928.0,	0.0,	1.5);	(483153.1, 3754910.5,	0.0,	1.5);
(483054.6, 3754893.3,	0.0,	1.5);	(482956.1, 3754875.8,	0.0,	1.5);
(482857.7, 3754858.5,	0.0,	1.5);	(482759.2, 3754841.0,	0.0,	1.5);
(482660.7, 3754823.8,	0.0,	1.5);	(482562.2, 3754806.5,	0.0,	1.5);
(482463.7, 3754789.0,	0.0,	1.5);	(482365.3, 3754771.8,	0.0,	1.5);
(482266.8, 3754754.3,	0.0,	1.5);	(482168.3, 3754737.0,	0.0,	1.5);
(482069.8, 3754719.5,	0.0,	1.5);	(484624.2, 3755240.5,	0.0,	1.5);
(484524.2, 3755240.5,	0.0,	1.5);	(484424.2, 3755240.5,	0.0,	1.5);
(484324.2, 3755240.5,	0.0,	1.5);	(484224.2, 3755240.5,	0.0,	1.5);
(484124.2, 3755240.5,	0.0,	1.5);	(484024.2, 3755240.5,	0.0,	1.5);
(483924.2, 3755240.5,	0.0,	1.5);	(483824.2, 3755240.5,	0.0,	1.5);
(483724.2, 3755240.5,	0.0,	1.5);	(483624.2, 3755240.5,	0.0,	1.5);
(485270.1, 3754972.8,	0.0,	1.5);	(483424.2, 3755240.5,	0.0,	1.5);
(483324.2, 3755240.5,	0.0,	1.5);	(483224.2, 3755240.5,	0.0,	1.5);
(483124.2, 3755240.5,	0.0,	1.5);	(483024.2, 3755240.5,	0.0,	1.5);
(482924.2, 3755240.5,	0.0,	1.5);	(482824.2, 3755240.5,	0.0,	1.5);
(482724.2, 3755240.5,	0.0,	1.5);	(482624.2, 3755240.5,	0.0,	1.5);
(482524.2, 3755240.5,	0.0,	1.5);	(482424.2, 3755240.5,	0.0,	1.5);
(482324.2, 3755240.5,	0.0,	1.5);	(482224.2, 3755240.5,	0.0,	1.5);
(482124.2, 3755240.5,	0.0,	1.5);	(482024.2, 3755240.5,	0.0,	1.5);
(484630.3, 3755310.0,	0.0,	1.5);	(484531.8, 3755327.3,	0.0,	1.5);
(484433.3, 3755344.8,	0.0,	1.5);	(484334.9, 3755362.0,	0.0,	1.5);
(484236.4, 3755379.5,	0.0,	1.5);	(484137.9, 3755396.8,	0.0,	1.5);
(484039.4, 3755414.3,	0.0,	1.5);	(483940.9, 3755431.5,	0.0,	1.5);
(485244.8, 3754972.8,	0.0,	1.5);	(483744.0, 3755466.3,	0.0,	1.5);
(483645.5, 3755483.5,	0.0,	1.5);	(483547.0, 3755501.0,	0.0,	1.5);
(483448.5, 3755518.3,	0.0,	1.5);	(483350.1, 3755535.8,	0.0,	1.5);
(483251.6, 3755553.0,	0.0,	1.5);	(483153.1, 3755570.5,	0.0,	1.5);
(483054.6, 3755587.8,	0.0,	1.5);	(482956.1, 3755605.3,	0.0,	1.5);
(482857.7, 3755622.5,	0.0,	1.5);	(482759.2, 3755640.0,	0.0,	1.5);
(482660.7, 3755657.3,	0.0,	1.5);	(482562.2, 3755674.8,	0.0,	1.5);
(482463.7, 3755692.0,	0.0,	1.5);	(482365.3, 3755709.3,	0.0,	1.5);
(482266.8, 3755726.8,	0.0,	1.5);	(482168.3, 3755744.0,	0.0,	1.5);
(482069.8, 3755761.5,	0.0,	1.5);	(484648.3, 3755377.3,	0.0,	1.5);
(484554.4, 3755411.5,	0.0,	1.5);	(485246.7, 3755001.8,	0.0,	1.5);
(484366.4, 3755480.0,	0.0,	1.5);	(484272.5, 3755514.3,	0.0,	1.5);
(484178.5, 3755548.3,	0.0,	1.5);	(484084.5, 3755582.5,	0.0,	1.5);
(483990.6, 3755616.8,	0.0,	1.5);	(483896.6, 3755651.0,	0.0,	1.5);
(483802.6, 3755685.3,	0.0,	1.5);	(483708.7, 3755719.3,	0.0,	1.5);
(483614.7, 3755753.5,	0.0,	1.5);	(483520.7, 3755787.8,	0.0,	1.5);
(483426.8, 3755822.0,	0.0,	1.5);	(483332.8, 3755856.3,	0.0,	1.5);
(483238.8, 3755890.3,	0.0,	1.5);	(483144.8, 3755924.5,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483050.9, 3755958.8,	0.0,	1.5);	(482956.9, 3755993.0,	0.0,	1.5);
(482862.9, 3756027.3,	0.0,	1.5);	(482769.0, 3756061.3,	0.0,	1.5);
(482675.0, 3756095.5,	0.0,	1.5);	(482581.0, 3756129.8,	0.0,	1.5);
(482487.1, 3756164.0,	0.0,	1.5);	(482393.1, 3756198.3,	0.0,	1.5);
(482299.1, 3756232.3,	0.0,	1.5);	(482205.2, 3756266.5,	0.0,	1.5);
(484591.2, 3755490.5,	0.0,	1.5);	(484504.6, 3755540.5,	0.0,	1.5);
(484418.0, 3755590.5,	0.0,	1.5);	(484331.4, 3755640.5,	0.0,	1.5);
(484244.8, 3755690.5,	0.0,	1.5);	(484158.2, 3755740.5,	0.0,	1.5);
(484071.6, 3755790.5,	0.0,	1.5);	(483985.0, 3755840.5,	0.0,	1.5);
(483898.4, 3755890.5,	0.0,	1.5);	(483811.8, 3755940.5,	0.0,	1.5);
(483725.2, 3755990.5,	0.0,	1.5);	(483638.6, 3756040.5,	0.0,	1.5);
(483552.0, 3756090.5,	0.0,	1.5);	(483465.4, 3756140.5,	0.0,	1.5);
(483378.8, 3756190.5,	0.0,	1.5);	(483292.2, 3756240.5,	0.0,	1.5);
(483205.6, 3756290.5,	0.0,	1.5);	(483119.0, 3756340.5,	0.0,	1.5);
(483032.4, 3756390.5,	0.0,	1.5);	(482945.8, 3756440.5,	0.0,	1.5);
(482859.2, 3756490.5,	0.0,	1.5);	(482772.6, 3756540.5,	0.0,	1.5);
(482686.0, 3756590.5,	0.0,	1.5);	(482599.4, 3756640.5,	0.0,	1.5);
(482512.8, 3756690.5,	0.0,	1.5);	(482426.2, 3756740.5,	0.0,	1.5);
(484717.8, 3755497.8,	0.0,	1.5);	(484641.2, 3755562.0,	0.0,	1.5);
(484564.6, 3755626.3,	0.0,	1.5);	(484488.0, 3755690.5,	0.0,	1.5);
(484411.4, 3755754.8,	0.0,	1.5);	(484334.8, 3755819.0,	0.0,	1.5);
(484258.2, 3755883.3,	0.0,	1.5);	(484181.6, 3755947.5,	0.0,	1.5);
(484105.0, 3756011.8,	0.0,	1.5);	(484028.4, 3756076.3,	0.0,	1.5);
(483951.8, 3756140.5,	0.0,	1.5);	(483875.2, 3756204.8,	0.0,	1.5);
(483798.6, 3756269.0,	0.0,	1.5);	(483721.9, 3756333.3,	0.0,	1.5);
(483645.3, 3756397.5,	0.0,	1.5);	(483568.8, 3756461.8,	0.0,	1.5);
(483492.1, 3756526.0,	0.0,	1.5);	(483415.5, 3756590.3,	0.0,	1.5);
(483338.9, 3756654.8,	0.0,	1.5);	(483262.3, 3756719.0,	0.0,	1.5);
(483185.7, 3756783.3,	0.0,	1.5);	(483109.1, 3756847.5,	0.0,	1.5);
(483032.5, 3756911.8,	0.0,	1.5);	(482955.9, 3756976.0,	0.0,	1.5);
(482879.3, 3757040.3,	0.0,	1.5);	(482802.7, 3757104.5,	0.0,	1.5);
(482726.1, 3757168.8,	0.0,	1.5);	(484831.4, 3755470.3,	0.0,	1.5);
(484767.1, 3755547.0,	0.0,	1.5);	(484702.8, 3755623.5,	0.0,	1.5);
(484638.6, 3755700.3,	0.0,	1.5);	(484574.3, 3755776.8,	0.0,	1.5);
(484510.0, 3755853.3,	0.0,	1.5);	(484445.7, 3755930.0,	0.0,	1.5);
(484381.4, 3756006.5,	0.0,	1.5);	(484317.2, 3756083.3,	0.0,	1.5);
(484252.9, 3756159.8,	0.0,	1.5);	(484188.6, 3756236.3,	0.0,	1.5);
(484124.3, 3756313.0,	0.0,	1.5);	(484060.1, 3756389.5,	0.0,	1.5);
(483995.8, 3756466.3,	0.0,	1.5);	(483931.5, 3756542.8,	0.0,	1.5);
(483867.2, 3756619.5,	0.0,	1.5);	(483802.9, 3756696.0,	0.0,	1.5);
(483738.7, 3756772.5,	0.0,	1.5);	(483674.4, 3756849.3,	0.0,	1.5);
(483610.1, 3756925.8,	0.0,	1.5);	(483545.8, 3757002.5,	0.0,	1.5);
(483481.5, 3757079.0,	0.0,	1.5);	(483417.3, 3757155.5,	0.0,	1.5);
(483353.0, 3757232.3,	0.0,	1.5);	(483288.7, 3757308.8,	0.0,	1.5);
(483224.4, 3757385.5,	0.0,	1.5);	(483160.2, 3757462.0,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483095.9, 3757538.8,	0.0,	1.5);	(484874.2, 3755500.3,	0.0,	1.5);
(484824.2, 3755587.0,	0.0,	1.5);	(484774.2, 3755673.5,	0.0,	1.5);
(484724.2, 3755760.3,	0.0,	1.5);	(484674.2, 3755846.8,	0.0,	1.5);
(484624.2, 3755933.3,	0.0,	1.5);	(484574.2, 3756020.0,	0.0,	1.5);
(484524.2, 3756106.5,	0.0,	1.5);	(484474.2, 3756193.3,	0.0,	1.5);
(484424.2, 3756279.8,	0.0,	1.5);	(484374.2, 3756366.3,	0.0,	1.5);
(484324.2, 3756453.0,	0.0,	1.5);	(484274.2, 3756539.5,	0.0,	1.5);
(484224.2, 3756626.3,	0.0,	1.5);	(484174.2, 3756712.8,	0.0,	1.5);
(484124.2, 3756799.3,	0.0,	1.5);	(484074.2, 3756886.0,	0.0,	1.5);
(484024.2, 3756972.5,	0.0,	1.5);	(483974.2, 3757059.3,	0.0,	1.5);
(483924.2, 3757145.8,	0.0,	1.5);	(483874.2, 3757232.3,	0.0,	1.5);
(483824.2, 3757319.0,	0.0,	1.5);	(483774.2, 3757405.5,	0.0,	1.5);
(483724.2, 3757492.3,	0.0,	1.5);	(483674.2, 3757578.8,	0.0,	1.5);
(483624.2, 3757665.5,	0.0,	1.5);	(483574.2, 3757752.0,	0.0,	1.5);
(483524.2, 3757838.5,	0.0,	1.5);	(484921.6, 3755522.5,	0.0,	1.5);
(484887.4, 3755616.5,	0.0,	1.5);	(484853.2, 3755710.3,	0.0,	1.5);
(484819.0, 3755804.3,	0.0,	1.5);	(484784.8, 3755898.3,	0.0,	1.5);
(484750.6, 3755992.3,	0.0,	1.5);	(484716.4, 3756086.3,	0.0,	1.5);
(484682.2, 3756180.3,	0.0,	1.5);	(484648.0, 3756274.3,	0.0,	1.5);
(484613.8, 3756368.3,	0.0,	1.5);	(484579.6, 3756462.0,	0.0,	1.5);
(484545.4, 3756556.0,	0.0,	1.5);	(484511.2, 3756650.0,	0.0,	1.5);
(484477.0, 3756744.0,	0.0,	1.5);	(484442.8, 3756838.0,	0.0,	1.5);
(484408.6, 3756932.0,	0.0,	1.5);	(484374.4, 3757026.0,	0.0,	1.5);
(484340.2, 3757120.0,	0.0,	1.5);	(484306.0, 3757213.8,	0.0,	1.5);
(484271.8, 3757307.8,	0.0,	1.5);	(484237.6, 3757401.8,	0.0,	1.5);
(484203.4, 3757495.8,	0.0,	1.5);	(484169.2, 3757589.8,	0.0,	1.5);
(484135.0, 3757683.8,	0.0,	1.5);	(484100.8, 3757777.8,	0.0,	1.5);
(484066.6, 3757871.8,	0.0,	1.5);	(484032.4, 3757965.5,	0.0,	1.5);
(483998.2, 3758059.5,	0.0,	1.5);	(484972.1, 3755536.0,	0.0,	1.5);
(484954.8, 3755634.5,	0.0,	1.5);	(484937.4, 3755733.0,	0.0,	1.5);
(484920.0, 3755831.5,	0.0,	1.5);	(484902.7, 3755930.0,	0.0,	1.5);
(484885.3, 3756028.3,	0.0,	1.5);	(484867.9, 3756126.8,	0.0,	1.5);
(484850.6, 3756225.3,	0.0,	1.5);	(484833.2, 3756323.8,	0.0,	1.5);
(484815.8, 3756422.3,	0.0,	1.5);	(484798.5, 3756520.8,	0.0,	1.5);
(484781.1, 3756619.3,	0.0,	1.5);	(484763.8, 3756717.8,	0.0,	1.5);
(484746.4, 3756816.3,	0.0,	1.5);	(484729.0, 3756914.8,	0.0,	1.5);
(484711.7, 3757013.3,	0.0,	1.5);	(484694.3, 3757111.8,	0.0,	1.5);
(484676.9, 3757210.3,	0.0,	1.5);	(484659.6, 3757308.5,	0.0,	1.5);
(484642.2, 3757407.0,	0.0,	1.5);	(484624.8, 3757505.5,	0.0,	1.5);
(484607.5, 3757604.0,	0.0,	1.5);	(484590.1, 3757702.5,	0.0,	1.5);
(484572.8, 3757801.0,	0.0,	1.5);	(484555.4, 3757899.5,	0.0,	1.5);
(484538.0, 3757998.0,	0.0,	1.5);	(484520.7, 3758096.5,	0.0,	1.5);
(484503.3, 3758195.0,	0.0,	1.5);			

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
L0001053	485494.1	3755411.5	-6.29
L0001059	485524.2	3755240.5	-14.59
L0001060	485524.2	3755240.5	-3.34
L0001065	485494.1	3755069.5	-1.58
L0001066	485494.1	3755069.5	-5.22
L0001118	483624.2	3755240.5	-10.01
L0001121	483724.2	3755240.5	-3.89
L0001122	483724.2	3755240.5	-6.35
L0001125	483824.2	3755240.5	-8.59
L0001126	483824.2	3755240.5	0.27
L0001129	483924.2	3755240.5	-9.08
L0001132	484024.2	3755240.5	-4.08
L0001133	484024.2	3755240.5	-5.06
L0001136	484124.2	3755240.5	-8.24
L0001146	484334.9	3755119.0	-6.51
L0001152	484460.4	3755035.3	-1.70
L0001161	484677.8	3755040.5	-4.50
L0001187	485268.9	3755002.0	-3.96
L0001188	485246.7	3755001.8	-3.83
L0001189	485217.1	3755010.8	-13.26

*** ISCST3 - VERSION 02035 ***   *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc   ***   10/08/09
*** West Ridge HRA   ***   09:47:24
**MODELOPTs: PAGE 52
CONC   URBAN FLAT FLGPOL   NOCALM   NOCMPL

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** WIND PROFILE EXPONENTS ***

STABILITY	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
B	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
C	.20000E+00	.20000E+00	.20000E+00	.20000E+00	.20000E+00	.20000E+00
D	.25000E+00	.25000E+00	.25000E+00	.25000E+00	.25000E+00	.25000E+00
E	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00
F	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00

*** VERTICAL POTENTIAL TEMPERATURE GRADIENTS ***
(DEGREES KELVIN PER METER)

STABILITY	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
B	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
C	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
D	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
E	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01
F	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01

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*** West Ridge HRA   ***   09:47:24
**MODELOPTs: PAGE 53
CONC   URBAN FLAT FLGPOL   NOCALM   NOCMPL

*** THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

FILE: U:\UcAir\METDAT~1\REDLANDS.ASC
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 54161   UPPER AIR STATION NO.: 99999
NAME: UNKNOWN   NAME: UNKNOWN
YEAR: 1981   YEAR: 1981

YR MN DY HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL	URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
81 01 01 01	292.3	1.00	284.3	7	522.6	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 02	282.4	0.00	284.3	7	507.0	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 03	287.5	0.00	283.1	7	491.4	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 04	301.0	0.00	283.1	7	475.8	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 05	286.5	0.00	282.6	7	460.3	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 06	297.0	0.00	283.1	7	444.7	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 07	297.0	0.00	285.4	6	1.4	170.7	0.0000	0.0	0.0000	0	0.00
81 01 01 08	314.6	1.00	287.6	5	47.0	192.0	0.0000	0.0	0.0000	0	0.00
81 01 01 09	299.0	1.00	289.8	4	92.5	213.3	0.0000	0.0	0.0000	0	0.00
81 01 01 10	54.2	1.34	291.5	3	138.0	234.7	0.0000	0.0	0.0000	0	0.00
81 01 01 11	89.1	1.79	294.3	3	183.5	256.0	0.0000	0.0	0.0000	0	0.00
81 01 01 12	103.1	1.34	297.6	2	229.0	277.3	0.0000	0.0	0.0000	0	0.00
81 01 01 13	87.2	1.34	298.7	2	274.5	298.7	0.0000	0.0	0.0000	0	0.00
81 01 01 14	124.2	1.79	299.8	3	320.0	320.0	0.0000	0.0	0.0000	0	0.00
81 01 01 15	134.8	2.24	299.3	3	320.0	320.0	0.0000	0.0	0.0000	0	0.00
81 01 01 16	98.2	2.24	298.7	4	320.0	320.0	0.0000	0.0	0.0000	0	0.00
81 01 01 17	110.1	2.24	295.4	5	325.6	318.5	0.0000	0.0	0.0000	0	0.00
81 01 01 18	210.1	1.00	291.5	6	357.2	310.3	0.0000	0.0	0.0000	0	0.00
81 01 01 19	268.0	1.00	289.8	7	388.8	302.1	0.0000	0.0	0.0000	0	0.00
81 01 01 20	303.2	1.00	287.0	7	420.4	293.9	0.0000	0.0	0.0000	0	0.00
81 01 01 21	291.1	1.34	286.5	7	452.0	285.7	0.0000	0.0	0.0000	0	0.00
81 01 01 22	294.5	1.34	287.0	7	483.5	277.4	0.0000	0.0	0.0000	0	0.00
81 01 01 23	293.2	0.00	285.9	7	515.1	269.2	0.0000	0.0	0.0000	0	0.00
81 01 01 24	292.2	0.00	285.4	7	546.7	261.0	0.0000	0.0	0.0000	0	0.00

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	
485024.22	3755540.50	0.01356	485024.22	3755640.50	0.00693	
485024.22	3755740.50	0.00407	485024.22	3755840.50	0.00267	
485024.22	3755940.50	0.00197	485024.22	3756040.50	0.00154	
485024.22	3756140.50	0.00125	485024.22	3756240.50	0.00103	
485024.22	3756340.50	0.00088	485024.22	3756440.50	0.00076	
485024.22	3756540.50	0.00066	485024.22	3756640.50	0.00059	
485024.22	3756740.50	0.00052	485024.22	3756840.50	0.00047	
485024.22	3756940.50	0.00042	485024.22	3757040.50	0.00039	
485024.22	3757140.50	0.00035	485024.22	3757240.50	0.00032	
485024.22	3757340.50	0.00030	485024.22	3757440.50	0.00028	
485024.22	3757540.50	0.00026	485024.22	3757640.50	0.00024	
485024.22	3757740.50	0.00022	485024.22	3757840.50	0.00021	
485024.22	3757940.50	0.00020	485024.22	3758040.50	0.00019	
485024.22	3758140.50	0.00018	485024.22	3758240.50	0.00017	
485076.31	3755536.00	0.01268	485093.69	3755634.50	0.00657	
485111.06	3755733.00	0.00373	485128.41	3755831.50	0.00245	
485145.78	3755930.00	0.00179	485163.16	3756028.25	0.00138	
485180.50	3756126.75	0.00112	485197.88	3756225.25	0.00094	
485215.25	3756323.75	0.00080	485232.63	3756422.25	0.00069	
485249.97	3756520.75	0.00061	485267.34	3756619.25	0.00054	
485284.69	3756717.75	0.00048	485302.06	3756816.25	0.00043	
485319.44	3756914.75	0.00039	485336.81	3757013.25	0.00035	
485354.16	3757111.75	0.00032	485371.53	3757210.25	0.00030	
485388.88	3757308.50	0.00027	485406.25	3757407.00	0.00025	
485423.63	3757505.50	0.00024	485441.00	3757604.00	0.00022	
485458.34	3757702.50	0.00021	485475.72	3757801.00	0.00019	
485493.09	3757899.50	0.00018	485510.44	3757998.00	0.00017	
485527.81	3758096.50	0.00016	485545.16	3758195.00	0.00016	
485126.84	3755522.50	0.01284	485161.03	3755616.50	0.00666	
485195.25	3755710.25	0.00363	485229.44	3755804.25	0.00238	
485263.63	3755898.25	0.00173	485297.84	3755992.25	0.00135	
485332.06	3756086.25	0.00109	485366.25	3756180.25	0.00090	
485400.44	3756274.25	0.00075	485434.66	3756368.25	0.00064	
485468.88	3756462.00	0.00055	485503.06	3756556.00	0.00048	
485537.25	3756650.00	0.00042	485571.47	3756744.00	0.00037	
485605.66	3756838.00	0.00034	485639.88	3756932.00	0.00030	
485674.06	3757026.00	0.00028	485708.28	3757120.00	0.00025	
485742.47	3757213.75	0.00023	485776.66	3757307.75	0.00021	
485810.88	3757401.75	0.00020	485845.09	3757495.75	0.00018	
485879.28	3757589.75	0.00017	485913.47	3757683.75	0.00016	

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*** West Ridge HRA *** 09:47:24

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
485947.69	3757777.75	0.00015	485981.88	3757871.75	0.00014
486016.09	3757965.50	0.00013	486050.28	3758059.50	0.00013
485174.22	3755500.25	0.01410	485224.22	3755587.00	0.00726
485274.22	3755673.50	0.00375	485324.22	3755760.25	0.00247
485374.22	3755846.75	0.00184	485424.22	3755933.25	0.00142
485474.22	3756020.00	0.00113	485524.22	3756106.50	0.00092
485574.22	3756193.25	0.00077	485624.22	3756279.75	0.00066
485674.22	3756366.25	0.00057	485724.22	3756453.00	0.00050
485774.22	3756539.50	0.00044	485824.22	3756626.25	0.00039
485874.22	3756712.75	0.00035	485924.22	3756799.25	0.00032
485974.22	3756886.00	0.00029	486024.22	3756972.50	0.00026
486074.22	3757059.25	0.00024	486124.22	3757145.75	0.00022
486174.22	3757232.25	0.00021	486224.22	3757319.00	0.00019
486274.22	3757405.50	0.00018	486324.22	3757492.25	0.00017
486374.22	3757578.75	0.00016	486424.22	3757665.50	0.00015
486474.22	3757752.00	0.00014	486524.22	3757838.50	0.00013
485217.06	3755470.25	0.01661	485281.34	3755547.00	0.00873
485345.63	3755623.50	0.00423	485409.91	3755700.25	0.00281
485474.19	3755776.75	0.00207	485538.47	3755853.25	0.00158
485602.75	3755930.00	0.00126	485667.03	3756006.50	0.00103
485731.31	3756083.25	0.00086	485795.59	3756159.75	0.00073
485859.84	3756236.25	0.00063	485924.13	3756313.00	0.00055
485988.41	3756389.50	0.00049	486052.69	3756466.25	0.00044
486116.97	3756542.75	0.00040	486181.25	3756619.50	0.00036
486245.53	3756696.00	0.00033	486309.81	3756772.50	0.00031
486374.09	3756849.25	0.00028	486438.38	3756925.75	0.00027
486502.63	3757002.50	0.00025	486566.91	3757079.00	0.00023
486631.19	3757155.50	0.00022	486695.47	3757232.25	0.00021
486759.75	3757308.75	0.00019	486824.03	3757385.50	0.00018
486888.31	3757462.00	0.00017	486952.59	3757538.75	0.00016
485330.66	3755497.75	0.01222	485407.25	3755562.00	0.00537
485483.88	3755626.25	0.00341	485560.47	3755690.50	0.00241
485637.06	3755754.75	0.00180	485713.66	3755819.00	0.00141
485790.28	3755883.25	0.00115	485866.88	3755947.50	0.00097
485943.47	3756011.75	0.00083	486020.09	3756076.25	0.00073
486096.69	3756140.50	0.00064	486173.31	3756204.75	0.00057
486249.91	3756269.00	0.00051	486326.50	3756333.25	0.00046
486403.13	3756397.50	0.00042	486479.72	3756461.75	0.00038
486556.31	3756526.00	0.00035	486632.91	3756590.25	0.00032
486709.53	3756654.75	0.00030	486786.13	3756719.00	0.00028

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
486862.75	3756783.25	0.00026	486939.34	3756847.50	0.00024
487015.94	3756911.75	0.00023	487092.56	3756976.00	0.00022
487169.16	3757040.25	0.00020	487245.75	3757104.50	0.00019
487322.38	3757168.75	0.00018	485457.25	3755490.50	0.01029
485543.84	3755540.50	0.00457	485630.44	3755590.50	0.00298
485717.06	3755640.50	0.00220	485803.66	3755690.50	0.00173
485890.25	3755740.50	0.00140	485976.88	3755790.50	0.00117
486063.47	3755840.50	0.00099	486150.06	3755890.50	0.00086
486236.66	3755940.50	0.00075	486323.28	3755990.50	0.00066
486409.88	3756040.50	0.00059	486496.47	3756090.50	0.00053
486583.09	3756140.50	0.00048	486669.69	3756190.50	0.00044
486756.28	3756240.50	0.00040	486842.88	3756290.50	0.00037
486929.50	3756340.50	0.00034	487016.09	3756390.50	0.00032
487102.69	3756440.50	0.00030	487189.28	3756490.50	0.00028
487275.91	3756540.50	0.00026	487362.50	3756590.50	0.00025
487449.09	3756640.50	0.00023	487535.69	3756690.50	0.00022
487622.31	3756740.50	0.00021	485400.13	3755377.25	0.02567
485494.09	3755411.50	0.01693	485268.91	3755002.00	0.02931
485682.00	3755480.00	0.00473	485775.97	3755514.25	0.00326
485869.94	3755548.25	0.00245	485963.91	3755582.50	0.00193
486057.88	3755616.75	0.00157	486151.88	3755651.00	0.00131
486245.84	3755685.25	0.00111	486339.81	3755719.25	0.00096
486433.78	3755753.50	0.00084	486527.75	3755787.75	0.00074
486621.72	3755822.00	0.00066	486715.69	3755856.25	0.00059
486809.66	3755890.25	0.00054	486903.63	3755924.50	0.00049
486997.59	3755958.75	0.00045	487091.56	3755993.00	0.00041
487185.53	3756027.25	0.00038	487279.50	3756061.25	0.00036
487373.47	3756095.50	0.00033	487467.44	3756129.75	0.00031
487561.41	3756164.00	0.00029	487655.38	3756198.25	0.00027
487749.34	3756232.25	0.00026	487843.31	3756266.50	0.00025
485418.16	3755310.00	0.03002	485615.13	3755344.75	0.01343
485713.59	3755362.00	0.00744	485812.09	3755379.50	0.00493
485910.56	3755396.75	0.00365	486009.03	3755414.25	0.00288
486107.53	3755431.50	0.00236	486206.00	3755449.00	0.00199
486304.47	3755466.25	0.00171	486402.97	3755483.50	0.00149
486501.44	3755501.00	0.00132	486599.91	3755518.25	0.00118
486698.41	3755535.75	0.00106	486796.88	3755553.00	0.00096
486895.38	3755570.50	0.00088	486993.84	3755587.75	0.00081
487092.34	3755605.25	0.00075	487190.81	3755622.50	0.00070
487289.28	3755640.00	0.00065	487387.78	3755657.25	0.00061

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
487486.25	3755674.75	0.00057	487584.72	3755692.00	0.00054
487683.22	3755709.25	0.00051	487781.69	3755726.75	0.00048
487880.16	3755744.00	0.00046	487978.66	3755761.50	0.00043
485324.22	3755240.50	0.03268	485424.22	3755240.50	0.03151
485524.22	3755240.50	0.01527	485624.22	3755240.50	0.01510
485724.22	3755240.50	0.00965	485824.22	3755240.50	0.00691
485924.22	3755240.50	0.00525	486024.22	3755240.50	0.00416
486124.22	3755240.50	0.00340	486224.22	3755240.50	0.00286
486324.22	3755240.50	0.00245	486424.22	3755240.50	0.00213
486524.22	3755240.50	0.00187	486624.22	3755240.50	0.00166
486724.22	3755240.50	0.00149	486824.22	3755240.50	0.00134
486924.22	3755240.50	0.00122	487024.22	3755240.50	0.00112
487124.22	3755240.50	0.00102	487224.22	3755240.50	0.00095
487324.22	3755240.50	0.00088	487424.22	3755240.50	0.00082
487524.22	3755240.50	0.00076	487624.22	3755240.50	0.00071
487724.22	3755240.50	0.00067	487824.22	3755240.50	0.00063
487924.22	3755240.50	0.00060	488024.22	3755240.50	0.00056
485418.16	3755171.00	0.03220	485615.13	3755136.25	0.01720
485713.59	3755119.00	0.01119	485812.09	3755101.50	0.00824
485910.56	3755084.25	0.00640	486009.03	3755066.75	0.00513
486107.53	3755049.50	0.00422	486206.00	3755032.25	0.00355
486304.47	3755014.75	0.00303	486402.97	3754997.50	0.00263
486501.44	3754980.00	0.00231	486599.91	3754962.75	0.00205
486698.41	3754945.25	0.00184	486796.88	3754928.00	0.00166
486895.38	3754910.50	0.00151	486993.84	3754893.25	0.00138
487092.34	3754875.75	0.00127	487190.81	3754858.50	0.00118
487289.28	3754841.00	0.00109	487387.78	3754823.75	0.00102
487486.25	3754806.50	0.00095	487584.72	3754789.00	0.00090
487683.22	3754771.75	0.00084	487781.69	3754754.25	0.00080
487880.16	3754737.00	0.00075	487978.66	3754719.50	0.00071
485400.13	3755103.75	0.03696	485494.09	3755069.50	0.02452
485588.06	3755035.25	0.02134	485682.00	3755001.00	0.01216
485775.97	3754967.00	0.00858	485869.94	3754932.75	0.00660
485963.91	3754898.50	0.00533	486057.88	3754864.25	0.00443
486151.88	3754830.00	0.00376	486245.84	3754796.00	0.00325
486339.81	3754761.75	0.00285	486433.78	3754727.50	0.00252
486527.75	3754693.25	0.00225	486621.72	3754659.00	0.00203
486715.69	3754624.75	0.00184	486809.66	3754590.75	0.00168
486903.63	3754556.50	0.00154	486997.59	3754522.25	0.00142
487091.56	3754488.00	0.00131	487185.53	3754453.75	0.00122

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
487279.50	3754419.75	0.00114	487373.47	3754385.50	0.00106
487467.44	3754351.25	0.00100	487561.41	3754317.00	0.00094
487655.38	3754282.75	0.00088	487749.34	3754248.75	0.00083
487843.31	3754214.50	0.00079	485457.25	3754990.50	0.02592
485543.84	3754940.50	0.01299	485630.44	3754890.50	0.00866
485717.06	3754840.50	0.00638	485803.66	3754790.50	0.00500
485890.25	3754740.50	0.00407	485976.88	3754690.50	0.00341
486063.47	3754640.50	0.00291	486150.06	3754590.50	0.00252
486236.66	3754540.50	0.00222	486323.28	3754490.50	0.00197
486409.88	3754440.50	0.00177	486496.47	3754390.50	0.00160
486583.09	3754340.50	0.00146	486669.69	3754290.50	0.00133
486756.28	3754240.50	0.00123	486842.88	3754190.50	0.00114
486929.50	3754140.50	0.00106	487016.09	3754090.50	0.00099
487102.69	3754040.50	0.00092	487189.28	3753990.50	0.00087
487275.91	3753940.50	0.00082	487362.50	3753890.50	0.00077
487449.09	3753840.50	0.00073	487535.69	3753790.50	0.00069
487622.31	3753740.50	0.00066	485330.66	3754983.50	0.02319
485407.25	3754919.00	0.01048	485483.88	3754854.75	0.00666
485560.47	3754790.50	0.00476	485637.06	3754726.25	0.00363
485713.66	3754662.00	0.00287	485790.28	3754597.75	0.00233
485866.88	3754533.50	0.00193	485943.47	3754469.25	0.00163
486020.09	3754405.00	0.00140	486096.69	3754340.50	0.00122
486173.31	3754276.25	0.00107	486249.91	3754212.00	0.00095
486326.50	3754147.75	0.00085	486403.13	3754083.50	0.00076
486479.72	3754019.25	0.00069	486556.31	3753955.00	0.00063
486632.91	3753890.75	0.00057	486709.53	3753826.50	0.00053
486786.13	3753762.00	0.00049	486862.75	3753697.75	0.00045
486939.34	3753633.50	0.00042	487015.94	3753569.25	0.00039
487092.56	3753505.00	0.00036	487169.16	3753440.75	0.00034
487245.75	3753376.50	0.00032	487322.38	3753312.25	0.00030
485217.06	3755010.75	0.03309	485281.34	3754934.00	0.01096
485345.63	3754857.50	0.00593	485409.91	3754781.00	0.00383
485474.19	3754704.25	0.00269	485538.47	3754627.75	0.00202
485602.75	3754551.00	0.00159	485667.03	3754474.50	0.00129
485731.31	3754397.75	0.00107	485795.59	3754321.25	0.00091
485859.84	3754244.75	0.00078	485924.13	3754168.00	0.00068
485988.41	3754091.50	0.00060	486052.69	3754014.75	0.00053
486116.97	3753938.25	0.00048	486181.25	3753861.75	0.00043
486245.53	3753785.00	0.00039	486309.81	3753708.50	0.00036
486374.09	3753631.75	0.00033	486438.38	3753555.25	0.00030

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 09:47:24

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
486502.63	3753478.50	0.00028	486566.91	3753402.00	0.00026
486631.19	3753325.50	0.00024	486695.47	3753248.75	0.00023
486759.75	3753172.25	0.00021	486824.03	3753095.50	0.00020
486888.31	3753019.00	0.00019	486952.59	3752942.50	0.00018
485174.22	3754980.75	0.01873	485224.22	3754894.00	0.00698
485274.22	3754807.50	0.00372	485324.22	3754721.00	0.00237
485374.22	3754634.25	0.00167	485424.22	3754547.75	0.00125
485474.22	3754461.00	0.00097	485524.22	3754374.50	0.00078
485574.22	3754288.00	0.00065	485624.22	3754201.25	0.00054
485674.22	3754114.75	0.00047	485724.22	3754028.00	0.00040
485774.22	3753941.50	0.00035	485824.22	3753854.75	0.00031
485874.22	3753768.25	0.00028	485924.22	3753681.75	0.00025
485974.22	3753595.00	0.00022	486024.22	3753508.50	0.00020
486074.22	3753421.75	0.00018	486124.22	3753335.25	0.00017
486174.22	3753248.75	0.00016	486224.22	3753162.00	0.00014
486274.22	3753075.50	0.00013	486324.22	3752988.75	0.00012
486374.22	3752902.25	0.00012	486424.22	3752815.75	0.00011
486474.22	3752729.00	0.00010	486524.22	3752642.50	0.00010
485126.84	3754958.50	0.01265	485161.03	3754864.75	0.00488
485195.25	3754770.75	0.00261	485229.44	3754676.75	0.00163
485263.63	3754582.75	0.00113	485297.84	3754488.75	0.00084
485332.06	3754394.75	0.00064	485366.25	3754300.75	0.00051
485400.44	3754206.75	0.00041	485434.66	3754113.00	0.00034
485468.88	3754019.00	0.00029	485503.06	3753925.00	0.00025
485537.25	3753831.00	0.00022	485571.47	3753737.00	0.00019
485605.66	3753643.00	0.00017	485639.88	3753549.00	0.00015
485674.06	3753455.00	0.00014	485708.28	3753361.00	0.00013
485742.47	3753267.25	0.00012	485776.66	3753173.25	0.00011
485810.88	3753079.25	0.00010	485845.09	3752985.25	0.00009
485879.28	3752891.25	0.00009	485913.47	3752797.25	0.00008
485947.69	3752703.25	0.00008	485981.88	3752609.25	0.00007
486016.09	3752515.50	0.00007	486050.28	3752421.50	0.00006
485076.31	3754945.00	0.00975	485093.69	3754846.50	0.00382
485111.06	3754748.00	0.00201	485128.41	3754649.75	0.00124
485145.78	3754551.25	0.00084	485163.16	3754452.75	0.00061
485180.50	3754354.25	0.00047	485197.88	3754255.75	0.00037
485215.25	3754157.25	0.00030	485232.63	3754058.75	0.00025
485249.97	3753960.25	0.00021	485267.34	3753861.75	0.00018
485284.69	3753763.25	0.00016	485302.06	3753664.75	0.00014
485319.44	3753566.25	0.00012	485336.81	3753467.75	0.00011

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
485354.16	3753369.50	0.00010	485371.53	3753271.00	0.00009
485388.88	3753172.50	0.00008	485406.25	3753074.00	0.00008
485423.63	3752975.50	0.00007	485441.00	3752877.00	0.00007
485458.34	3752778.50	0.00006	485475.72	3752680.00	0.00006
485493.09	3752581.50	0.00005	485510.44	3752483.00	0.00005
485527.81	3752384.50	0.00005	485545.16	3752286.00	0.00004
485024.22	3754940.50	0.00856	485024.22	3754840.50	0.00327
485024.22	3754740.50	0.00174	485024.22	3754640.50	0.00105
485024.22	3754540.50	0.00071	485024.22	3754440.50	0.00051
485024.22	3754340.50	0.00039	485024.22	3754240.50	0.00030
485024.22	3754140.50	0.00024	485024.22	3754040.50	0.00020
485024.22	3753940.50	0.00017	485024.22	3753840.50	0.00014
485024.22	3753740.50	0.00013	485024.22	3753640.50	0.00011
485024.22	3753540.50	0.00010	485024.22	3753440.50	0.00009
485024.22	3753340.50	0.00008	485024.22	3753240.50	0.00007
485024.22	3753140.50	0.00006	485024.22	3753040.50	0.00006
485024.22	3752940.50	0.00005	485024.22	3752840.50	0.00005
485024.22	3752740.50	0.00005	485024.22	3752640.50	0.00004
485024.22	3752540.50	0.00004	485024.22	3752440.50	0.00004
485024.22	3752340.50	0.00003	485024.22	3752240.50	0.00003
484972.13	3754945.00	0.00850	484954.78	3754846.50	0.00312
484937.41	3754748.00	0.00165	484920.03	3754649.75	0.00101
484902.69	3754551.25	0.00068	484885.31	3754452.75	0.00049
484867.94	3754354.25	0.00037	484850.59	3754255.75	0.00029
484833.22	3754157.25	0.00023	484815.84	3754058.75	0.00020
484798.50	3753960.25	0.00017	484781.13	3753861.75	0.00015
484763.75	3753763.25	0.00013	484746.38	3753664.75	0.00011
484729.03	3753566.25	0.00010	484711.66	3753467.75	0.00009
484694.31	3753369.50	0.00008	484676.94	3753271.00	0.00008
484659.56	3753172.50	0.00007	484642.19	3753074.00	0.00006
484624.84	3752975.50	0.00006	484607.47	3752877.00	0.00006
484590.13	3752778.50	0.00005	484572.75	3752680.00	0.00005
484555.38	3752581.50	0.00005	484538.03	3752483.00	0.00004
484520.66	3752384.50	0.00004	484503.28	3752286.00	0.00004
484921.63	3754958.50	0.00964	484887.41	3754864.75	0.00336
484853.22	3754770.75	0.00174	484819.03	3754676.75	0.00109
484784.81	3754582.75	0.00075	484750.63	3754488.75	0.00055
484716.41	3754394.75	0.00041	484682.22	3754300.75	0.00032
484648.00	3754206.75	0.00026	484613.81	3754113.00	0.00022
484579.59	3754019.00	0.00019	484545.41	3753925.00	0.00016

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484511.19	3753831.00	0.00014	484477.00	3753737.00	0.00012
484442.81	3753643.00	0.00011	484408.59	3753549.00	0.00010
484374.38	3753455.00	0.00009	484340.19	3753361.00	0.00008
484306.00	3753267.25	0.00007	484271.78	3753173.25	0.00007
484237.59	3753079.25	0.00006	484203.38	3752985.25	0.00006
484169.19	3752891.25	0.00006	484134.97	3752797.25	0.00005
484100.78	3752703.25	0.00005	484066.56	3752609.25	0.00005
484032.38	3752515.50	0.00004	483998.16	3752421.50	0.00004
484874.22	3754980.75	0.01318	484824.22	3754894.00	0.00414
484774.22	3754807.50	0.00208	484724.22	3754721.00	0.00130
484674.22	3754634.25	0.00090	484624.22	3754547.75	0.00066
484574.22	3754461.00	0.00050	484524.22	3754374.50	0.00039
484474.22	3754288.00	0.00032	484424.22	3754201.25	0.00026
484374.22	3754114.75	0.00022	484324.22	3754028.00	0.00019
484274.22	3753941.50	0.00016	484224.22	3753854.75	0.00014
484174.22	3753768.25	0.00013	484124.22	3753681.75	0.00011
484074.22	3753595.00	0.00010	484024.22	3753508.50	0.00009
483974.22	3753421.75	0.00008	483924.22	3753335.25	0.00008
483874.22	3753248.75	0.00007	483824.22	3753162.00	0.00007
483774.22	3753075.50	0.00006	483724.22	3752988.75	0.00006
483674.22	3752902.25	0.00005	483624.22	3752815.75	0.00005
483574.22	3752729.00	0.00005	483524.22	3752642.50	0.00004
484767.13	3754934.00	0.00589	484702.84	3754857.50	0.00287
484638.56	3754781.00	0.00173	484574.28	3754704.25	0.00119
484510.00	3754627.75	0.00088	484445.72	3754551.00	0.00067
484381.44	3754474.50	0.00054	484317.16	3754397.75	0.00044
484252.88	3754321.25	0.00037	484188.63	3754244.75	0.00031
484124.34	3754168.00	0.00027	484060.06	3754091.50	0.00023
483995.78	3754014.75	0.00021	483931.50	3753938.25	0.00018
483867.22	3753861.75	0.00017	483802.94	3753785.00	0.00015
483738.66	3753708.50	0.00014	483674.38	3753631.75	0.00012
483610.09	3753555.25	0.00011	483545.81	3753478.50	0.00011
483481.53	3753402.00	0.00010	483417.25	3753325.50	0.00009
483352.97	3753248.75	0.00008	483288.69	3753172.25	0.00008
483224.41	3753095.50	0.00007	483160.16	3753019.00	0.00007
483095.88	3752942.50	0.00007	484717.81	3754983.50	0.01125
484641.22	3754919.00	0.00456	484564.59	3754854.75	0.00260
484488.00	3754790.50	0.00177	484411.38	3754726.25	0.00130
484334.78	3754662.00	0.00099	484258.19	3754597.75	0.00079
484181.59	3754533.50	0.00066	484104.97	3754469.25	0.00055

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484028.38	3754405.00	0.00048	483951.78	3754340.50	0.00042
483875.16	3754276.25	0.00037	483798.56	3754212.00	0.00033
483721.94	3754147.75	0.00030	483645.34	3754083.50	0.00027
483568.75	3754019.25	0.00024	483492.13	3753955.00	0.00022
483415.53	3753890.75	0.00021	483338.94	3753826.50	0.00019
483262.34	3753762.00	0.00018	483185.72	3753697.75	0.00017
483109.13	3753633.50	0.00015	483032.50	3753569.25	0.00014
482955.91	3753505.00	0.00014	482879.31	3753440.75	0.00013
482802.69	3753376.50	0.00012	482726.09	3753312.25	0.00011
484677.81	3755040.50	0.02571	484591.22	3754990.50	0.01073
484504.63	3754940.50	0.00446	484418.00	3754890.50	0.00288
484331.41	3754840.50	0.00208	484244.81	3754790.50	0.00157
484158.19	3754740.50	0.00122	484071.59	3754690.50	0.00099
483985.00	3754640.50	0.00082	483898.41	3754590.50	0.00070
483811.78	3754540.50	0.00060	483725.19	3754490.50	0.00053
483638.59	3754440.50	0.00047	483552.00	3754390.50	0.00042
483465.38	3754340.50	0.00039	483378.78	3754290.50	0.00035
483292.19	3754240.50	0.00032	483205.59	3754190.50	0.00030
483118.97	3754140.50	0.00028	483032.38	3754090.50	0.00026
482945.78	3754040.50	0.00024	482859.16	3753990.50	0.00023
482772.56	3753940.50	0.00021	482685.97	3753890.50	0.00020
482599.38	3753840.50	0.00019	482512.75	3753790.50	0.00018
482426.16	3753740.50	0.00017	484648.34	3755103.75	0.02784
484554.38	3755069.50	0.02110	484460.41	3755035.25	0.01557
484366.44	3755001.00	0.00622	484272.47	3754967.00	0.00420
484178.50	3754932.75	0.00311	484084.53	3754898.50	0.00239
483990.56	3754864.25	0.00188	483896.59	3754830.00	0.00152
483802.63	3754796.00	0.00126	483708.66	3754761.75	0.00107
483614.69	3754727.50	0.00092	483520.72	3754693.25	0.00080
483426.75	3754659.00	0.00071	483332.78	3754624.75	0.00063
483238.81	3754590.75	0.00057	483144.84	3754556.50	0.00051
483050.88	3754522.25	0.00046	482956.91	3754488.00	0.00042
482862.94	3754453.75	0.00039	482768.97	3754419.75	0.00036
482675.00	3754385.50	0.00033	482581.03	3754351.25	0.00030
482487.06	3754317.00	0.00028	482393.09	3754282.75	0.00026
482299.13	3754248.75	0.00025	482205.16	3754214.50	0.00023
484630.31	3755171.00	0.03345	484531.84	3755153.75	0.02028
484433.34	3755136.25	0.01724	484334.88	3755119.00	0.02121
484236.38	3755101.50	0.00956	484137.91	3755084.25	0.00636
484039.41	3755066.75	0.00486	483940.94	3755049.50	0.00391

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 09:47:24

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
483842.47	3755032.25	0.00318	483743.97	3755014.75	0.00261
483645.50	3754997.50	0.00221	483547.03	3754980.00	0.00193
483448.53	3754962.75	0.00173	483350.06	3754945.25	0.00156
483251.59	3754928.00	0.00142	483153.09	3754910.50	0.00130
483054.63	3754893.25	0.00119	482956.13	3754875.75	0.00110
482857.66	3754858.50	0.00102	482759.16	3754841.00	0.00094
482660.69	3754823.75	0.00088	482562.22	3754806.50	0.00082
482463.72	3754789.00	0.00077	482365.25	3754771.75	0.00073
482266.78	3754754.25	0.00069	482168.28	3754737.00	0.00065
482069.81	3754719.50	0.00061	484624.22	3755240.50	0.03875
484524.22	3755240.50	0.02672	484424.22	3755240.50	0.01976
484324.22	3755240.50	0.01630	484224.22	3755240.50	0.01786
484124.22	3755240.50	0.02110	484024.22	3755240.50	0.01791
483924.22	3755240.50	0.01732	483824.22	3755240.50	0.01451
483724.22	3755240.50	0.01450	483624.22	3755240.50	0.01526
485270.06	3754972.75	0.01765	483424.22	3755240.50	0.00662
483324.22	3755240.50	0.00400	483224.22	3755240.50	0.00306
483124.22	3755240.50	0.00254	483024.22	3755240.50	0.00219
482924.22	3755240.50	0.00192	482824.22	3755240.50	0.00172
482724.22	3755240.50	0.00155	482624.22	3755240.50	0.00142
482524.22	3755240.50	0.00130	482424.22	3755240.50	0.00120
482324.22	3755240.50	0.00111	482224.22	3755240.50	0.00104
482124.22	3755240.50	0.00097	482024.22	3755240.50	0.00091
484630.31	3755310.00	0.03586	484531.84	3755327.25	0.02896
484433.34	3755344.75	0.02288	484334.88	3755362.00	0.01839
484236.38	3755379.50	0.01517	484137.91	3755396.75	0.01285
484039.41	3755414.25	0.01119	483940.94	3755431.50	0.01003
485244.81	3754972.75	0.01750	483743.97	3755466.25	0.00832
483645.50	3755483.50	0.00763	483547.03	3755501.00	0.00704
483448.53	3755518.25	0.00652	483350.06	3755535.75	0.00620
483251.59	3755553.00	0.00573	483153.09	3755570.50	0.00522
483054.63	3755587.75	0.00473	482956.13	3755605.25	0.00429
482857.66	3755622.50	0.00388	482759.16	3755640.00	0.00353
482660.69	3755657.25	0.00322	482562.22	3755674.75	0.00296
482463.72	3755692.00	0.00273	482365.25	3755709.25	0.00253
482266.78	3755726.75	0.00235	482168.28	3755744.00	0.00220
482069.81	3755761.50	0.00206	484648.34	3755377.25	0.03966
484554.38	3755411.50	0.02999	485246.72	3755001.75	0.02919
484366.44	3755480.00	0.02024	484272.47	3755514.25	0.01721
484178.50	3755548.25	0.01484	484084.53	3755582.50	0.01295

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
483990.56	3755616.75	0.01142	483896.59	3755651.00	0.01016
483802.63	3755685.25	0.00911	483708.66	3755719.25	0.00823
483614.69	3755753.50	0.00749	483520.72	3755787.75	0.00686
483426.75	3755822.00	0.00631	483332.78	3755856.25	0.00582
483238.81	3755890.25	0.00540	483144.84	3755924.50	0.00503
483050.88	3755958.75	0.00470	482956.91	3755993.00	0.00440
482862.94	3756027.25	0.00414	482768.97	3756061.25	0.00389
482675.00	3756095.50	0.00368	482581.03	3756129.75	0.00348
482487.06	3756164.00	0.00330	482393.09	3756198.25	0.00313
482299.13	3756232.25	0.00298	482205.16	3756266.50	0.00284
484591.22	3755490.50	0.03385	484504.63	3755540.50	0.02427
484418.00	3755590.50	0.01873	484331.41	3755640.50	0.01514
484244.81	3755690.50	0.01262	484158.19	3755740.50	0.01076
484071.59	3755790.50	0.00934	483985.00	3755840.50	0.00822
483898.41	3755890.50	0.00731	483811.78	3755940.50	0.00656
483725.19	3755990.50	0.00594	483638.59	3756040.50	0.00542
483552.00	3756090.50	0.00497	483465.38	3756140.50	0.00458
483378.78	3756190.50	0.00424	483292.19	3756240.50	0.00394
483205.59	3756290.50	0.00367	483118.97	3756340.50	0.00343
483032.38	3756390.50	0.00322	482945.78	3756440.50	0.00303
482859.16	3756490.50	0.00286	482772.56	3756540.50	0.00271
482685.97	3756590.50	0.00257	482599.38	3756640.50	0.00244
482512.75	3756690.50	0.00232	482426.16	3756740.50	0.00221
484717.81	3755497.75	0.03451	484641.22	3755562.00	0.02167
484564.59	3755626.25	0.01515	484488.00	3755690.50	0.01130
484411.38	3755754.75	0.00879	484334.78	3755819.00	0.00706
484258.19	3755883.25	0.00580	484181.59	3755947.50	0.00485
484104.97	3756011.75	0.00412	484028.38	3756076.25	0.00354
483951.78	3756140.50	0.00308	483875.16	3756204.75	0.00270
483798.56	3756269.00	0.00239	483721.94	3756333.25	0.00213
483645.34	3756397.50	0.00192	483568.75	3756461.75	0.00173
483492.13	3756526.00	0.00157	483415.53	3756590.25	0.00143
483338.94	3756654.75	0.00131	483262.34	3756719.00	0.00120
483185.72	3756783.25	0.00111	483109.13	3756847.50	0.00102
483032.50	3756911.75	0.00095	482955.91	3756976.00	0.00088
482879.31	3757040.25	0.00082	482802.69	3757104.50	0.00077
482726.09	3757168.75	0.00072	484831.38	3755470.25	0.04410
484767.13	3755547.00	0.02185	484702.84	3755623.50	0.01299
484638.56	3755700.25	0.00858	484574.28	3755776.75	0.00610
484510.00	3755853.25	0.00458	484445.72	3755930.00	0.00357

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*** West Ridge HRA *** 09:47:24

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484381.44	3756006.50	0.00288	484317.16	3756083.25	0.00237
484252.88	3756159.75	0.00200	484188.63	3756236.25	0.00171
484124.34	3756313.00	0.00148	484060.06	3756389.50	0.00130
483995.78	3756466.25	0.00115	483931.50	3756542.75	0.00103
483867.22	3756619.50	0.00093	483802.94	3756696.00	0.00085
483738.66	3756772.50	0.00077	483674.38	3756849.25	0.00071
483610.09	3756925.75	0.00066	483545.81	3757002.50	0.00061
483481.53	3757079.00	0.00057	483417.25	3757155.50	0.00053
483352.97	3757232.25	0.00050	483288.69	3757308.75	0.00047
483224.41	3757385.50	0.00045	483160.16	3757462.00	0.00042
483095.88	3757538.75	0.00040	484874.22	3755500.25	0.03005
484824.22	3755587.00	0.01410	484774.22	3755673.50	0.00810
484724.22	3755760.25	0.00531	484674.22	3755846.75	0.00377
484624.22	3755933.25	0.00282	484574.22	3756020.00	0.00219
484524.22	3756106.50	0.00175	484474.22	3756193.25	0.00144
484424.22	3756279.75	0.00121	484374.22	3756366.25	0.00103
484324.22	3756453.00	0.00090	484274.22	3756539.50	0.00079
484224.22	3756626.25	0.00071	484174.22	3756712.75	0.00063
484124.22	3756799.25	0.00057	484074.22	3756886.00	0.00052
484024.22	3756972.50	0.00048	483974.22	3757059.25	0.00044
483924.22	3757145.75	0.00041	483874.22	3757232.25	0.00038
483824.22	3757319.00	0.00035	483774.22	3757405.50	0.00033
483724.22	3757492.25	0.00031	483674.22	3757578.75	0.00029
483624.22	3757665.50	0.00027	483574.22	3757752.00	0.00025
483524.22	3757838.50	0.00024	484921.63	3755522.50	0.02119
484887.41	3755616.50	0.00975	484853.22	3755710.25	0.00587
484819.03	3755804.25	0.00393	484784.81	3755898.25	0.00278
484750.63	3755992.25	0.00207	484716.41	3756086.25	0.00162
484682.22	3756180.25	0.00132	484648.00	3756274.25	0.00110
484613.81	3756368.25	0.00094	484579.59	3756462.00	0.00081
484545.41	3756556.00	0.00071	484511.19	3756650.00	0.00063
484477.00	3756744.00	0.00056	484442.81	3756838.00	0.00050
484408.59	3756932.00	0.00046	484374.38	3757026.00	0.00041
484340.19	3757120.00	0.00038	484306.00	3757213.75	0.00035
484271.78	3757307.75	0.00032	484237.59	3757401.75	0.00030
484203.38	3757495.75	0.00028	484169.19	3757589.75	0.00026
484134.97	3757683.75	0.00024	484100.78	3757777.75	0.00023
484066.56	3757871.75	0.00022	484032.38	3757965.50	0.00020
483998.16	3758059.50	0.00019	484972.13	3755536.00	0.01603
484954.78	3755634.50	0.00780	484937.41	3755733.00	0.00475

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484920.03	3755831.50	0.00313	484902.69	3755930.00	0.00224
484885.31	3756028.25	0.00172	484867.94	3756126.75	0.00139
484850.59	3756225.25	0.00115	484833.22	3756323.75	0.00097
484815.84	3756422.25	0.00084	484798.50	3756520.75	0.00073
484781.13	3756619.25	0.00064	484763.75	3756717.75	0.00058
484746.38	3756816.25	0.00052	484729.03	3756914.75	0.00047
484711.66	3757013.25	0.00043	484694.31	3757111.75	0.00040
484676.94	3757210.25	0.00037	484659.56	3757308.50	0.00034
484642.19	3757407.00	0.00032	484624.84	3757505.50	0.00030
484607.47	3757604.00	0.00028	484590.13	3757702.50	0.00026
484572.75	3757801.00	0.00025	484555.38	3757899.50	0.00023
484538.03	3757998.00	0.00022	484520.66	3758096.50	0.00021
484503.28	3758195.00	0.00020			

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 09:47:24

*** THE SUMMARY OF MAXIMUM ANNUAL (1 YRS) RESULTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	NETWORK RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	0.04410	AT (484831.38, 3755470.25, 0.00, 1.50)	DC	NA
	2ND HIGHEST VALUE IS	0.03966	AT (484648.34, 3755377.25, 0.00, 1.50)	DC	NA
	3RD HIGHEST VALUE IS	0.03875	AT (484624.22, 3755240.50, 0.00, 1.50)	DC	NA
	4TH HIGHEST VALUE IS	0.03696	AT (485400.13, 3755103.75, 0.00, 1.50)	DC	NA
	5TH HIGHEST VALUE IS	0.03586	AT (484630.31, 3755310.00, 0.00, 1.50)	DC	NA
	6TH HIGHEST VALUE IS	0.03451	AT (484717.81, 3755497.75, 0.00, 1.50)	DC	NA
	7TH HIGHEST VALUE IS	0.03385	AT (484591.22, 3755490.50, 0.00, 1.50)	DC	NA
	8TH HIGHEST VALUE IS	0.03345	AT (484630.31, 3755171.00, 0.00, 1.50)	DC	NA
	9TH HIGHEST VALUE IS	0.03309	AT (485217.06, 3755010.75, 0.00, 1.50)	DC	NA
	10TH HIGHEST VALUE IS	0.03268	AT (485324.22, 3755240.50, 0.00, 1.50)	DC	NA

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR
BD = BOUNDARY

*** Message Summary : ISCST3 Model Execution ***

-------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 1398 Informational Message(s)

A Total of 1398 Calm Hours Identified

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
*** NONE ***

****
*** ISCST3 Finishes Successfully ***
****

```
**
**********************************************
**
** ISCST3 Input Produced by:
** AERMOD View Ver. 6.2.0
** Lakes Environmental Software Inc.
** Date: 10/8/2009
** File: C:\Documents and Settings\hqureshi\Desktop\06192 HRA\HRAMIT.INP
**
**********************************************
**
**
**********************************************
** ISCST3 Control Pathway
**********************************************
**
**
CO STARTING
  TITLEONE C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc
  TITLETWO West Ridge HRA
  MODELOPT CONC NOCMPL  URBAN NOCALM
  AVERTIME ANNUAL
  POLLUTID DPM
  TERRHGTS FLAT
  FLAGPOLE 1.50
  RUNORNOT RUN
CO FINISHED
**
**********************************************
** ISCST3 Source Pathway
**********************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION NORTH AREAPOLY 484851.861 3755334.115
  LOCATION SOUTH AREAPOLY 484832.883 3755147.441
** Line Source represented by Separated Volume Sources
** ----------------------------------------------------------------------
** LINE Source ID = RED
** DESCRSRC
** Length of Side = 14.00
** Emission Rate = 1.22E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 3
** 485514.05, 3755440.55, 0.00, 4.00, 0.0
** 485512.92, 3755025.40, 0.00, 4.00, 12.43
** 485281.77, 3755025.97, 0.00, 4.00, 11.94
** ----------------------------------------------------------------------
  LOCATION L0001052 VOLUME 485514.043 3755433.500
  LOCATION L0001053 VOLUME 485513.969 3755406.767
  LOCATION L0001054 VOLUME 485513.894 3755380.033
  LOCATION L0001055 VOLUME 485513.820 3755353.300
  LOCATION L0001056 VOLUME 485513.745 3755326.567
  LOCATION L0001057 VOLUME 485513.671 3755299.833
  LOCATION L0001058 VOLUME 485513.596 3755273.100
  LOCATION L0001059 VOLUME 485513.522 3755246.367
  LOCATION L0001060 VOLUME 485513.447 3755219.633
  LOCATION L0001061 VOLUME 485513.373 3755192.900
  LOCATION L0001062 VOLUME 485513.298 3755166.167
  LOCATION L0001063 VOLUME 485513.224 3755139.433
  LOCATION L0001064 VOLUME 485513.149 3755112.700
  LOCATION L0001065 VOLUME 485513.075 3755085.967
  LOCATION L0001066 VOLUME 485513.000 3755059.233
  LOCATION L0001067 VOLUME 485512.926 3755032.500
  LOCATION L0001068 VOLUME 485494.226 3755025.540
  LOCATION L0001069 VOLUME 485468.545 3755025.596
  LOCATION L0001070 VOLUME 485442.865 3755025.652
  LOCATION L0001071 VOLUME 485417.184 3755025.707
  LOCATION L0001072 VOLUME 485391.503 3755025.763
  LOCATION L0001073 VOLUME 485365.823 3755025.818
  LOCATION L0001074 VOLUME 485340.142 3755025.874
  LOCATION L0001075 VOLUME 485314.462 3755025.929
  LOCATION L0001076 VOLUME 485288.781 3755025.985
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------------------------------------------------------------------
** LINE Source ID = EDS
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 2.45E-06
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
** 485270.26, 3755112.67, 0.00, 4.00, 0.0
** 485198.77, 3755113.34, 0.00, 4.00, 7.15
** ----------------------------------------------------------------------
  LOCATION L0001077 VOLUME 485265.250 3755112.785
  LOCATION L0001078 VOLUME 485249.883 3755112.892
  LOCATION L0001079 VOLUME 485234.516 3755113.000
  LOCATION L0001080 VOLUME 485219.148 3755113.108
  LOCATION L0001081 VOLUME 485203.781 3755113.215
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------------------------------------------------------------------
** LINE Source ID = EDTOT
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 2.54E-06
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
** 485281.95, 3755038.82, 0.00, 4.00, 0.0
** 485280.98, 3755113.51, 0.00, 4.00, 7.53
** ----------------------------------------------------------------------
  LOCATION L0001082 VOLUME 485281.873 3755043.750
  LOCATION L0001083 VOLUME 485281.663 3755059.937
  LOCATION L0001084 VOLUME 485281.453 3755076.125
  LOCATION L0001085 VOLUME 485281.243 3755092.313
  LOCATION L0001086 VOLUME 485281.034 3755108.500
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------------------------------------------------------------------
** LINE Source ID = EDN
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 1.13E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 4
** 485281.03, 3755114.82, 0.00, 4.00, 0.0
** 485270.33, 3755371.11, 0.00, 4.00, 8.82
** 485257.73, 3755376.46, 0.00, 4.00, 6.41
** 485195.66, 3755376.08, 0.00, 4.00, 7.22
** ----------------------------------------------------------------------
  LOCATION L0001087 VOLUME 485280.823 3755119.746
  LOCATION L0001088 VOLUME 485280.033 3755138.689
  LOCATION L0001089 VOLUME 485279.243 3755157.632
  LOCATION L0001090 VOLUME 485278.453 3755176.575
```

LOCATION L0001091 VOLUME 485277.663 3755195.518
LOCATION L0001092 VOLUME 485276.873 3755214.461
LOCATION L0001093 VOLUME 485276.083 3755233.404
LOCATION L0001094 VOLUME 485275.292 3755252.346
LOCATION L0001095 VOLUME 485274.502 3755271.289
LOCATION L0001096 VOLUME 485273.712 3755290.232
LOCATION L0001097 VOLUME 485272.922 3755309.175
LOCATION L0001098 VOLUME 485272.132 3755328.118
LOCATION L0001099 VOLUME 485271.342 3755347.061
LOCATION L0001100 VOLUME 485270.552 3755366.004
LOCATION L0001101 VOLUME 485262.303 3755374.503
LOCATION L0001102 VOLUME 485247.203 3755376.415
LOCATION L0001103 VOLUME 485231.687 3755376.290
LOCATION L0001104 VOLUME 485216.172 3755376.165
LOCATION L0001105 VOLUME 485200.656 3755376.040
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------
** LINE Source ID = EA1
** DESCRSRC
** Length of Side = 14.00
** Emission Rate = 2.88E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 9
** 483513.58, 3755437.36, 0.00, 4.00, 0.0
** 483523.83, 3755223.52, 0.00, 4.00, 11.63
** 484153.63, 3755222.06, 0.00, 4.00, 12.74
** 484283.98, 3755186.90, 0.00, 4.00, 12.55
** 484370.40, 3755109.28, 0.00, 4.00, 10.81
** 484502.21, 3755038.97, 0.00, 4.00, 11.58
** 484588.63, 3755021.40, 0.00, 4.00, 10.25
** 484758.53, 3755019.93, 0.00, 4.00, 11.29
** 484782.82, 3755021.23, 0.00, 4.00, 11.31
** ----------
LOCATION L0001106 VOLUME 483513.899 3755430.258
LOCATION L0001107 VOLUME 483515.100 3755405.287
LOCATION L0001108 VOLUME 483516.301 3755380.317
LOCATION L0001109 VOLUME 483517.502 3755355.346
LOCATION L0001110 VOLUME 483518.703 3755330.375
LOCATION L0001111 VOLUME 483519.904 3755305.404
LOCATION L0001112 VOLUME 483521.105 3755280.433
LOCATION L0001113 VOLUME 483522.306 3755255.463
LOCATION L0001114 VOLUME 483523.507 3755230.492
LOCATION L0001115 VOLUME 483544.226 3755223.451
LOCATION L0001116 VOLUME 483571.607 3755223.386
LOCATION L0001117 VOLUME 483598.989 3755223.321
LOCATION L0001118 VOLUME 483626.371 3755223.256
LOCATION L0001119 VOLUME 483653.753 3755223.191
LOCATION L0001120 VOLUME 483681.135 3755223.125
LOCATION L0001121 VOLUME 483708.516 3755223.060
LOCATION L0001122 VOLUME 483735.898 3755222.995
LOCATION L0001123 VOLUME 483763.280 3755222.930
LOCATION L0001124 VOLUME 483790.662 3755222.864
LOCATION L0001125 VOLUME 483818.043 3755222.799
LOCATION L0001126 VOLUME 483845.425 3755222.734
LOCATION L0001127 VOLUME 483872.807 3755222.669
LOCATION L0001128 VOLUME 483900.189 3755222.604
LOCATION L0001129 VOLUME 483927.571 3755222.538
LOCATION L0001130 VOLUME 483954.952 3755222.473
LOCATION L0001131 VOLUME 483982.334 3755222.408
LOCATION L0001132 VOLUME 484009.716 3755222.343
LOCATION L0001133 VOLUME 484037.098 3755222.278
LOCATION L0001134 VOLUME 484064.480 3755222.212
LOCATION L0001135 VOLUME 484091.861 3755222.147
LOCATION L0001136 VOLUME 484119.243 3755222.082
LOCATION L0001137 VOLUME 484146.625 3755222.017
LOCATION L0001138 VOLUME 484172.933 3755216.815
LOCATION L0001139 VOLUME 484199.002 3755209.815
LOCATION L0001140 VOLUME 484225.071 3755202.815
LOCATION L0001141 VOLUME 484251.139 3755195.815
LOCATION L0001142 VOLUME 484277.208 3755188.815
LOCATION L0001143 VOLUME 484296.052 3755176.131
LOCATION L0001144 VOLUME 484313.339 3755160.581
LOCATION L0001145 VOLUME 484330.627 3755145.031
LOCATION L0001146 VOLUME 484347.914 3755129.481
LOCATION L0001147 VOLUME 484365.202 3755113.931
LOCATION L0001148 VOLUME 484386.198 3755100.834
LOCATION L0001149 VOLUME 484408.166 3755089.126
LOCATION L0001150 VOLUME 484430.135 3755077.417
LOCATION L0001151 VOLUME 484452.104 3755065.709
LOCATION L0001152 VOLUME 484474.073 3755054.001
LOCATION L0001153 VOLUME 484496.041 3755042.292
LOCATION L0001154 VOLUME 484516.960 3755036.015
LOCATION L0001155 VOLUME 484538.561 3755031.640
LOCATION L0001156 VOLUME 484560.163 3755027.265
LOCATION L0001157 VOLUME 484581.764 3755022.890
LOCATION L0001158 VOLUME 484605.898 3755021.348
LOCATION L0001159 VOLUME 484630.170 3755021.133
LOCATION L0001160 VOLUME 484654.442 3755020.919
LOCATION L0001161 VOLUME 484678.715 3755020.705
LOCATION L0001162 VOLUME 484702.987 3755020.490
LOCATION L0001163 VOLUME 484727.259 3755020.276
LOCATION L0001164 VOLUME 484751.532 3755020.062
LOCATION L0001165 VOLUME 484775.822 3755020.890
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------
** LINE Source ID = WDTOT
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 1.61E-06
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
** 484781.52, 3755035.53, 0.00, 4.00, 0.0
** 484780.87, 3755083.62, 0.00, 4.00, 8.84
** ----------
LOCATION L0001166 VOLUME 484781.435 3755040.500
LOCATION L0001167 VOLUME 484781.188 3755059.500
LOCATION L0001168 VOLUME 484780.940 3755078.500
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------
** LINE Source ID = WDN
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 1.07E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 3
** 484780.22, 3755082.97, 0.00, 4.00, 0.0
** 484777.62, 3755376.07, 0.00, 4.00, 8.78
** 484799.06, 3755375.42, 0.00, 4.00, 4.99
** ----------
LOCATION L0001169 VOLUME 484780.174 3755088.000
LOCATION L0001170 VOLUME 484780.007 3755106.866
LOCATION L0001171 VOLUME 484779.840 3755125.733
LOCATION L0001172 VOLUME 484779.673 3755144.600
LOCATION L0001173 VOLUME 484779.506 3755163.467
LOCATION L0001174 VOLUME 484779.339 3755182.333
LOCATION L0001175 VOLUME 484779.172 3755201.200

LOCATION L0001176 VOLUME 484779.005 3755220.067
LOCATION L0001177 VOLUME 484778.838 3755238.933
LOCATION L0001178 VOLUME 484778.671 3755257.800
LOCATION L0001179 VOLUME 484778.504 3755276.667
LOCATION L0001180 VOLUME 484778.337 3755295.533
LOCATION L0001181 VOLUME 484778.170 3755314.400
LOCATION L0001182 VOLUME 484778.003 3755333.267
LOCATION L0001183 VOLUME 484777.836 3755352.134
LOCATION L0001184 VOLUME 484777.669 3755371.000
LOCATION L0001185 VOLUME 484783.345 3755375.867
LOCATION L0001186 VOLUME 484794.064 3755375.617
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------
** LINE Source ID = EACONN
** DESCRSRC
** Length of Side = 14.00
** Emission Rate = 9.27E-06
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
** 485277.37, 3755024.48, 0.00, 4.00, 0.0
** 484786.06, 3755019.93, 0.00, 4.00, 12.33
** ----------
LOCATION L0001187 VOLUME 485270.375 3755024.436
LOCATION L0001188 VOLUME 485243.858 3755024.193
LOCATION L0001189 VOLUME 485217.341 3755023.950
LOCATION L0001190 VOLUME 485190.823 3755023.707
LOCATION L0001191 VOLUME 485164.306 3755023.464
LOCATION L0001192 VOLUME 485137.788 3755023.222
LOCATION L0001193 VOLUME 485111.271 3755022.979
LOCATION L0001194 VOLUME 485084.754 3755022.736
LOCATION L0001195 VOLUME 485058.236 3755022.493
LOCATION L0001196 VOLUME 485031.719 3755022.250
LOCATION L0001197 VOLUME 485005.201 3755022.007
LOCATION L0001198 VOLUME 484978.684 3755021.764
LOCATION L0001199 VOLUME 484952.167 3755021.521
LOCATION L0001200 VOLUME 484925.649 3755021.278
LOCATION L0001201 VOLUME 484899.132 3755021.036
LOCATION L0001202 VOLUME 484872.614 3755020.793
LOCATION L0001203 VOLUME 484846.097 3755020.550
LOCATION L0001204 VOLUME 484819.580 3755020.307
LOCATION L0001205 VOLUME 484793.062 3755020.064
** End of Line Source
** Source Parameters **
SRCPARAM NORTH 2.95E-10 4.000 11 1.860
AREAVERT NORTH 484851.861 3755334.115 484795.898 3755334.215
AREAVERT NORTH 484793.656 3755354.326 484789.516 3755391.010
AREAVERT NORTH 484791.656 3755391.005 485116.083 3755390.148
AREAVERT NORTH 485099.331 3755390.160 485136.349 3755386.791
AREAVERT NORTH 485222.754 3755374.982 485234.337 3755341.479
AREAVERT NORTH 485184.092 3755342.300
SRCPARAM SOUTH 3.229E-10 4.000 10 1.860
AREAVERT SOUTH 484832.883 3755147.441 484832.883 3755132.927
AREAVERT SOUTH 484832.775 3755132.927 484834.526 3755092.171
AREAVERT SOUTH 485198.157 3755095.373 485196.612 3755131.130
AREAVERT SOUTH 485196.184 3755149.677 485181.290 3755150.857
AREAVERT SOUTH 485176.151 3755150.296 485174.750 3755149.918
SRCPARAM L0001052 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001053 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001054 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001055 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001056 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001057 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001058 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001059 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001060 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001061 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001062 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001063 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001064 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001065 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001066 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001067 4.88E-07 4.00 12.43 1.86
SRCPARAM L0001068 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001069 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001070 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001071 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001072 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001073 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001074 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001075 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001076 4.88E-07 4.00 11.94 1.86
SRCPARAM L0001077 4.9E-07 4.00 7.15 1.86
SRCPARAM L0001078 4.9E-07 4.00 7.15 1.86
SRCPARAM L0001079 4.9E-07 4.00 7.15 1.86
SRCPARAM L0001080 4.9E-07 4.00 7.15 1.86
SRCPARAM L0001081 4.9E-07 4.00 7.15 1.86
SRCPARAM L0001082 5.08E-07 4.00 7.53 1.86
SRCPARAM L0001083 5.08E-07 4.00 7.53 1.86
SRCPARAM L0001084 5.08E-07 4.00 7.53 1.86
SRCPARAM L0001085 5.08E-07 4.00 7.53 1.86
SRCPARAM L0001086 5.08E-07 4.00 7.53 1.86
SRCPARAM L0001087 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001088 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001089 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001090 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001091 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001092 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001093 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001094 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001095 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001096 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001097 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001098 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001099 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001100 5.9474E-07 4.00 8.82 1.86
SRCPARAM L0001101 5.9474E-07 4.00 6.41 1.86
SRCPARAM L0001102 5.9474E-07 4.00 7.22 1.86
SRCPARAM L0001103 5.9474E-07 4.00 7.22 1.86
SRCPARAM L0001104 5.9474E-07 4.00 7.22 1.86
SRCPARAM L0001105 5.9474E-07 4.00 7.22 1.86
SRCPARAM L0001106 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001107 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001108 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001109 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001110 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001111 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001112 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001113 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001114 4.8E-07 4.00 11.63 1.86
SRCPARAM L0001115 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001116 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001117 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001118 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001119 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001120 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001121 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001122 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001123 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001124 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001125 4.8E-07 4.00 12.74 1.86

SRCPARAM L0001126 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001127 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001128 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001129 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001130 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001131 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001132 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001133 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001134 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001135 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001136 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001137 4.8E-07 4.00 12.74 1.86
SRCPARAM L0001138 4.8E-07 4.00 12.55 1.86
SRCPARAM L0001139 4.8E-07 4.00 12.55 1.86
SRCPARAM L0001140 4.8E-07 4.00 12.55 1.86
SRCPARAM L0001141 4.8E-07 4.00 12.55 1.86
SRCPARAM L0001142 4.8E-07 4.00 12.55 1.86
SRCPARAM L0001143 4.8E-07 4.00 10.81 1.86
SRCPARAM L0001144 4.8E-07 4.00 10.81 1.86
SRCPARAM L0001145 4.8E-07 4.00 10.81 1.86
SRCPARAM L0001146 4.8E-07 4.00 10.81 1.86
SRCPARAM L0001147 4.8E-07 4.00 10.81 1.86
SRCPARAM L0001148 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001149 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001150 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001151 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001152 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001153 4.8E-07 4.00 11.58 1.86
SRCPARAM L0001154 4.8E-07 4.00 10.25 1.86
SRCPARAM L0001155 4.8E-07 4.00 10.25 1.86
SRCPARAM L0001156 4.8E-07 4.00 10.25 1.86
SRCPARAM L0001157 4.8E-07 4.00 10.25 1.86
SRCPARAM L0001158 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001159 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001160 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001161 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001162 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001163 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001164 4.8E-07 4.00 11.29 1.86
SRCPARAM L0001165 4.8E-07 4.00 11.31 1.86
SRCPARAM L0001166 5.3667E-07 4.00 8.84 1.86
SRCPARAM L0001167 5.3667E-07 4.00 8.84 1.86
SRCPARAM L0001168 5.3667E-07 4.00 8.84 1.86
SRCPARAM L0001169 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001170 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001171 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001172 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001173 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001174 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001175 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001176 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001177 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001178 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001179 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001180 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001181 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001182 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001183 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001184 5.9444E-07 4.00 8.78 1.86
SRCPARAM L0001185 5.9444E-07 4.00 4.99 1.86
SRCPARAM L0001186 5.9444E-07 4.00 4.99 1.86
SRCPARAM L0001187 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001188 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001189 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001190 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001191 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001192 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001193 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001194 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001195 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001196 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001197 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001198 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001199 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001200 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001201 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001202 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001203 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001204 4.8789E-07 4.00 12.33 1.86
SRCPARAM L0001205 4.8789E-07 4.00 12.33 1.86

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 1"
EMISFACT NORTH HROFDY 8 8 4 4 10 21
EMISFACT NORTH HROFDY 21 17 17 17 13 8
EMISFACT NORTH HROFDY 8 13 17 21 21 31
EMISFACT NORTH HROFDY 42 21 21 38 31 17
EMISFACT SOUTH HROFDY 8 8 4 4 10 21
EMISFACT SOUTH HROFDY 21 17 17 17 13 8
EMISFACT SOUTH HROFDY 8 13 17 21 21 31
EMISFACT SOUTH HROFDY 42 21 21 38 31 17

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 2"
EMISFACT L0001106 HROFDY 3 3 2 2 4 8
EMISFACT L0001106 HROFDY 8 7 7 7 5 3
EMISFACT L0001106 HROFDY 3 5 7 8 8 13
EMISFACT L0001106 HROFDY 17 8 8 15 13 7
EMISFACT L0001107 HROFDY 3 3 2 2 4 8
EMISFACT L0001107 HROFDY 8 7 7 7 5 3
EMISFACT L0001107 HROFDY 3 5 7 8 8 13
EMISFACT L0001107 HROFDY 17 8 8 15 13 7
EMISFACT L0001108 HROFDY 3 3 2 2 4 8
EMISFACT L0001108 HROFDY 8 7 7 7 5 3
EMISFACT L0001108 HROFDY 3 5 7 8 8 13
EMISFACT L0001108 HROFDY 17 8 8 15 13 7
EMISFACT L0001109 HROFDY 3 3 2 2 4 8
EMISFACT L0001109 HROFDY 8 7 7 7 5 3
EMISFACT L0001109 HROFDY 3 5 7 8 8 13
EMISFACT L0001109 HROFDY 17 8 8 15 13 7
EMISFACT L0001110 HROFDY 3 3 2 2 4 8
EMISFACT L0001110 HROFDY 8 7 7 7 5 3
EMISFACT L0001110 HROFDY 3 5 7 8 8 13
EMISFACT L0001110 HROFDY 17 8 8 15 13 7
EMISFACT L0001111 HROFDY 3 3 2 2 4 8
EMISFACT L0001111 HROFDY 8 7 7 7 5 3
EMISFACT L0001111 HROFDY 3 5 7 8 8 13
EMISFACT L0001111 HROFDY 17 8 8 15 13 7
EMISFACT L0001112 HROFDY 3 3 2 2 4 8
EMISFACT L0001112 HROFDY 8 7 7 7 5 3
EMISFACT L0001112 HROFDY 3 5 7 8 8 13
EMISFACT L0001112 HROFDY 17 8 8 15 13 7
EMISFACT L0001113 HROFDY 3 3 2 2 4 8
EMISFACT L0001113 HROFDY 8 7 7 7 5 3
EMISFACT L0001113 HROFDY 3 5 7 8 8 13
EMISFACT L0001113 HROFDY 17 8 8 15 13 7
EMISFACT L0001114 HROFDY 3 3 2 2 4 8
EMISFACT L0001114 HROFDY 8 7 7 7 5 3
EMISFACT L0001114 HROFDY 3 5 7 8 8 13
EMISFACT L0001114 HROFDY 17 8 8 15 13 7
EMISFACT L0001115 HROFDY 3 3 2 2 4 8
EMISFACT L0001115 HROFDY 8 7 7 7 5 3

EMISFACT L0001115 HROFDY 3 5 7 8 8 13
EMISFACT L0001115 HROFDY 17 8 8 15 13 7
EMISFACT L0001116 HROFDY 3 3 2 2 4 8
EMISFACT L0001116 HROFDY 8 7 7 7 5 3
EMISFACT L0001116 HROFDY 3 5 7 8 8 13
EMISFACT L0001116 HROFDY 17 8 8 15 13 7
EMISFACT L0001117 HROFDY 3 3 2 2 4 8
EMISFACT L0001117 HROFDY 8 7 7 7 5 3
EMISFACT L0001117 HROFDY 3 5 7 8 8 13
EMISFACT L0001117 HROFDY 17 8 8 15 13 7
EMISFACT L0001118 HROFDY 3 3 2 2 4 8
EMISFACT L0001118 HROFDY 8 7 7 7 5 3
EMISFACT L0001118 HROFDY 3 5 7 8 8 13
EMISFACT L0001118 HROFDY 17 8 8 15 13 7
EMISFACT L0001119 HROFDY 3 3 2 2 4 8
EMISFACT L0001119 HROFDY 8 7 7 7 5 3
EMISFACT L0001119 HROFDY 3 5 7 8 8 13
EMISFACT L0001119 HROFDY 17 8 8 15 13 7
EMISFACT L0001120 HROFDY 3 3 2 2 4 8
EMISFACT L0001120 HROFDY 8 7 7 7 5 3
EMISFACT L0001120 HROFDY 3 5 7 8 8 13
EMISFACT L0001120 HROFDY 17 8 8 15 13 7
EMISFACT L0001121 HROFDY 3 3 2 2 4 8
EMISFACT L0001121 HROFDY 8 7 7 7 5 3
EMISFACT L0001121 HROFDY 3 5 7 8 8 13
EMISFACT L0001121 HROFDY 17 8 8 15 13 7
EMISFACT L0001122 HROFDY 3 3 2 2 4 8
EMISFACT L0001122 HROFDY 8 7 7 7 5 3
EMISFACT L0001122 HROFDY 3 5 7 8 8 13
EMISFACT L0001122 HROFDY 17 8 8 15 13 7
EMISFACT L0001123 HROFDY 3 3 2 2 4 8
EMISFACT L0001123 HROFDY 8 7 7 7 5 3
EMISFACT L0001123 HROFDY 3 5 7 8 8 13
EMISFACT L0001123 HROFDY 17 8 8 15 13 7
EMISFACT L0001124 HROFDY 3 3 2 2 4 8
EMISFACT L0001124 HROFDY 8 7 7 7 5 3
EMISFACT L0001124 HROFDY 3 5 7 8 8 13
EMISFACT L0001124 HROFDY 17 8 8 15 13 7
EMISFACT L0001125 HROFDY 3 3 2 2 4 8
EMISFACT L0001125 HROFDY 8 7 7 7 5 3
EMISFACT L0001125 HROFDY 3 5 7 8 8 13
EMISFACT L0001125 HROFDY 17 8 8 15 13 7
EMISFACT L0001126 HROFDY 3 3 2 2 4 8
EMISFACT L0001126 HROFDY 8 7 7 7 5 3
EMISFACT L0001126 HROFDY 3 5 7 8 8 13
EMISFACT L0001126 HROFDY 17 8 8 15 13 7
EMISFACT L0001127 HROFDY 3 3 2 2 4 8
EMISFACT L0001127 HROFDY 8 7 7 7 5 3
EMISFACT L0001127 HROFDY 3 5 7 8 8 13
EMISFACT L0001127 HROFDY 17 8 8 15 13 7
EMISFACT L0001128 HROFDY 3 3 2 2 4 8
EMISFACT L0001128 HROFDY 8 7 7 7 5 3
EMISFACT L0001128 HROFDY 3 5 7 8 8 13
EMISFACT L0001128 HROFDY 17 8 8 15 13 7
EMISFACT L0001129 HROFDY 3 3 2 2 4 8
EMISFACT L0001129 HROFDY 8 7 7 7 5 3
EMISFACT L0001129 HROFDY 3 5 7 8 8 13
EMISFACT L0001129 HROFDY 17 8 8 15 13 7
EMISFACT L0001130 HROFDY 3 3 2 2 4 8
EMISFACT L0001130 HROFDY 8 7 7 7 5 3
EMISFACT L0001130 HROFDY 3 5 7 8 8 13
EMISFACT L0001130 HROFDY 17 8 8 15 13 7
EMISFACT L0001131 HROFDY 3 3 2 2 4 8
EMISFACT L0001131 HROFDY 8 7 7 7 5 3
EMISFACT L0001131 HROFDY 3 5 7 8 8 13
EMISFACT L0001131 HROFDY 17 8 8 15 13 7

EMISFACT L0001132 HROFDY 3 3 2 2 4 8
EMISFACT L0001132 HROFDY 8 7 7 7 5 3
EMISFACT L0001132 HROFDY 3 5 7 8 8 13
EMISFACT L0001132 HROFDY 17 8 8 15 13 7
EMISFACT L0001133 HROFDY 3 3 2 2 4 8
EMISFACT L0001133 HROFDY 8 7 7 7 5 3
EMISFACT L0001133 HROFDY 3 5 7 8 8 13
EMISFACT L0001133 HROFDY 17 8 8 15 13 7
EMISFACT L0001134 HROFDY 3 3 2 2 4 8
EMISFACT L0001134 HROFDY 8 7 7 7 5 3
EMISFACT L0001134 HROFDY 3 5 7 8 8 13
EMISFACT L0001134 HROFDY 17 8 8 15 13 7
EMISFACT L0001135 HROFDY 3 3 2 2 4 8
EMISFACT L0001135 HROFDY 8 7 7 7 5 3
EMISFACT L0001135 HROFDY 3 5 7 8 8 13
EMISFACT L0001135 HROFDY 17 8 8 15 13 7
EMISFACT L0001136 HROFDY 3 3 2 2 4 8
EMISFACT L0001136 HROFDY 8 7 7 7 5 3
EMISFACT L0001136 HROFDY 3 5 7 8 8 13
EMISFACT L0001136 HROFDY 17 8 8 15 13 7
EMISFACT L0001137 HROFDY 3 3 2 2 4 8
EMISFACT L0001137 HROFDY 8 7 7 7 5 3
EMISFACT L0001137 HROFDY 3 5 7 8 8 13
EMISFACT L0001137 HROFDY 17 8 8 15 13 7
EMISFACT L0001138 HROFDY 3 3 2 2 4 8
EMISFACT L0001138 HROFDY 8 7 7 7 5 3
EMISFACT L0001138 HROFDY 3 5 7 8 8 13
EMISFACT L0001138 HROFDY 17 8 8 15 13 7
EMISFACT L0001139 HROFDY 3 3 2 2 4 8
EMISFACT L0001139 HROFDY 8 7 7 7 5 3
EMISFACT L0001139 HROFDY 3 5 7 8 8 13
EMISFACT L0001139 HROFDY 17 8 8 15 13 7
EMISFACT L0001140 HROFDY 3 3 2 2 4 8
EMISFACT L0001140 HROFDY 8 7 7 7 5 3
EMISFACT L0001140 HROFDY 3 5 7 8 8 13
EMISFACT L0001140 HROFDY 17 8 8 15 13 7
EMISFACT L0001141 HROFDY 3 3 2 2 4 8
EMISFACT L0001141 HROFDY 8 7 7 7 5 3
EMISFACT L0001141 HROFDY 3 5 7 8 8 13
EMISFACT L0001141 HROFDY 17 8 8 15 13 7
EMISFACT L0001142 HROFDY 3 3 2 2 4 8
EMISFACT L0001142 HROFDY 8 7 7 7 5 3
EMISFACT L0001142 HROFDY 3 5 7 8 8 13
EMISFACT L0001142 HROFDY 17 8 8 15 13 7
EMISFACT L0001143 HROFDY 3 3 2 2 4 8
EMISFACT L0001143 HROFDY 8 7 7 7 5 3
EMISFACT L0001143 HROFDY 3 5 7 8 8 13
EMISFACT L0001143 HROFDY 17 8 8 15 13 7
EMISFACT L0001144 HROFDY 3 3 2 2 4 8
EMISFACT L0001144 HROFDY 8 7 7 7 5 3
EMISFACT L0001144 HROFDY 3 5 7 8 8 13
EMISFACT L0001144 HROFDY 17 8 8 15 13 7
EMISFACT L0001145 HROFDY 3 3 2 2 4 8
EMISFACT L0001145 HROFDY 8 7 7 7 5 3
EMISFACT L0001145 HROFDY 3 5 7 8 8 13
EMISFACT L0001145 HROFDY 17 8 8 15 13 7
EMISFACT L0001146 HROFDY 3 3 2 2 4 8
EMISFACT L0001146 HROFDY 8 7 7 7 5 3
EMISFACT L0001146 HROFDY 3 5 7 8 8 13
EMISFACT L0001146 HROFDY 17 8 8 15 13 7
EMISFACT L0001147 HROFDY 3 3 2 2 4 8
EMISFACT L0001147 HROFDY 8 7 7 7 5 3
EMISFACT L0001147 HROFDY 3 5 7 8 8 13
EMISFACT L0001147 HROFDY 17 8 8 15 13 7
EMISFACT L0001148 HROFDY 3 3 2 2 4 8
EMISFACT L0001148 HROFDY 8 7 7 7 5 3

EMISFACT L0001148 HROFDY 3 5 7 8 8 13
EMISFACT L0001148 HROFDY 17 8 8 15 13 7
EMISFACT L0001149 HROFDY 3 3 2 2 4 8
EMISFACT L0001149 HROFDY 8 7 7 7 5 3
EMISFACT L0001149 HROFDY 3 5 7 8 8 13
EMISFACT L0001149 HROFDY 17 8 8 15 13 7
EMISFACT L0001150 HROFDY 3 3 2 2 4 8
EMISFACT L0001150 HROFDY 8 7 7 7 5 3
EMISFACT L0001150 HROFDY 3 5 7 8 8 13
EMISFACT L0001150 HROFDY 17 8 8 15 13 7
EMISFACT L0001151 HROFDY 3 3 2 2 4 8
EMISFACT L0001151 HROFDY 8 7 7 7 5 3
EMISFACT L0001151 HROFDY 3 5 7 8 8 13
EMISFACT L0001151 HROFDY 17 8 8 15 13 7
EMISFACT L0001152 HROFDY 3 3 2 2 4 8
EMISFACT L0001152 HROFDY 8 7 7 7 5 3
EMISFACT L0001152 HROFDY 3 5 7 8 8 13
EMISFACT L0001152 HROFDY 17 8 8 15 13 7
EMISFACT L0001153 HROFDY 3 3 2 2 4 8
EMISFACT L0001153 HROFDY 8 7 7 7 5 3
EMISFACT L0001153 HROFDY 3 5 7 8 8 13
EMISFACT L0001153 HROFDY 17 8 8 15 13 7
EMISFACT L0001154 HROFDY 3 3 2 2 4 8
EMISFACT L0001154 HROFDY 8 7 7 7 5 3
EMISFACT L0001154 HROFDY 3 5 7 8 8 13
EMISFACT L0001154 HROFDY 17 8 8 15 13 7
EMISFACT L0001155 HROFDY 3 3 2 2 4 8
EMISFACT L0001155 HROFDY 8 7 7 7 5 3
EMISFACT L0001155 HROFDY 3 5 7 8 8 13
EMISFACT L0001155 HROFDY 17 8 8 15 13 7
EMISFACT L0001156 HROFDY 3 3 2 2 4 8
EMISFACT L0001156 HROFDY 8 7 7 7 5 3
EMISFACT L0001156 HROFDY 3 5 7 8 8 13
EMISFACT L0001156 HROFDY 17 8 8 15 13 7
EMISFACT L0001157 HROFDY 3 3 2 2 4 8
EMISFACT L0001157 HROFDY 8 7 7 7 5 3
EMISFACT L0001157 HROFDY 3 5 7 8 8 13
EMISFACT L0001157 HROFDY 17 8 8 15 13 7
EMISFACT L0001158 HROFDY 3 3 2 2 4 8
EMISFACT L0001158 HROFDY 8 7 7 7 5 3
EMISFACT L0001158 HROFDY 3 5 7 8 8 13
EMISFACT L0001158 HROFDY 17 8 8 15 13 7
EMISFACT L0001159 HROFDY 3 3 2 2 4 8
EMISFACT L0001159 HROFDY 8 7 7 7 5 3
EMISFACT L0001159 HROFDY 3 5 7 8 8 13
EMISFACT L0001159 HROFDY 17 8 8 15 13 7
EMISFACT L0001160 HROFDY 3 3 2 2 4 8
EMISFACT L0001160 HROFDY 8 7 7 7 5 3
EMISFACT L0001160 HROFDY 3 5 7 8 8 13
EMISFACT L0001160 HROFDY 17 8 8 15 13 7
EMISFACT L0001161 HROFDY 3 3 2 2 4 8
EMISFACT L0001161 HROFDY 8 7 7 7 5 3
EMISFACT L0001161 HROFDY 3 5 7 8 8 13
EMISFACT L0001161 HROFDY 17 8 8 15 13 7
EMISFACT L0001162 HROFDY 3 3 2 2 4 8
EMISFACT L0001162 HROFDY 8 7 7 7 5 3
EMISFACT L0001162 HROFDY 3 5 7 8 8 13
EMISFACT L0001162 HROFDY 17 8 8 15 13 7
EMISFACT L0001163 HROFDY 3 3 2 2 4 8
EMISFACT L0001163 HROFDY 8 7 7 7 5 3
EMISFACT L0001163 HROFDY 3 5 7 8 8 13
EMISFACT L0001163 HROFDY 17 8 8 15 13 7
EMISFACT L0001164 HROFDY 3 3 2 2 4 8
EMISFACT L0001164 HROFDY 8 7 7 7 5 3
EMISFACT L0001164 HROFDY 3 5 7 8 8 13
EMISFACT L0001164 HROFDY 17 8 8 15 13 7

EMISFACT L0001165 HROFDY 3 3 2 2 4 8
EMISFACT L0001165 HROFDY 8 7 7 7 5 3
EMISFACT L0001165 HROFDY 3 5 7 8 8 13
EMISFACT L0001165 HROFDY 17 8 8 15 13 7

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 3"
EMISFACT L0001166 HROFDY 8 8 4 4 10 21
EMISFACT L0001166 HROFDY 21 17 17 17 13 8
EMISFACT L0001166 HROFDY 8 13 17 21 21 31
EMISFACT L0001166 HROFDY 42 21 21 38 31 17
EMISFACT L0001167 HROFDY 8 8 4 4 10 21
EMISFACT L0001167 HROFDY 21 17 17 17 13 8
EMISFACT L0001167 HROFDY 8 13 17 21 21 31
EMISFACT L0001167 HROFDY 42 21 21 38 31 17
EMISFACT L0001168 HROFDY 8 8 4 4 10 21
EMISFACT L0001168 HROFDY 21 17 17 17 13 8
EMISFACT L0001168 HROFDY 8 13 17 21 21 31
EMISFACT L0001168 HROFDY 42 21 21 38 31 17
EMISFACT L0001082 HROFDY 8 8 4 4 10 21
EMISFACT L0001082 HROFDY 21 17 17 17 13 8
EMISFACT L0001082 HROFDY 8 13 17 21 21 31
EMISFACT L0001082 HROFDY 42 21 21 38 31 17
EMISFACT L0001083 HROFDY 8 8 4 4 10 21
EMISFACT L0001083 HROFDY 21 17 17 17 13 8
EMISFACT L0001083 HROFDY 8 13 17 21 21 31
EMISFACT L0001083 HROFDY 42 21 21 38 31 17
EMISFACT L0001084 HROFDY 8 8 4 4 10 21
EMISFACT L0001084 HROFDY 21 17 17 17 13 8
EMISFACT L0001084 HROFDY 8 13 17 21 21 31
EMISFACT L0001084 HROFDY 42 21 21 38 31 17
EMISFACT L0001085 HROFDY 8 8 4 4 10 21
EMISFACT L0001085 HROFDY 21 17 17 17 13 8
EMISFACT L0001085 HROFDY 8 13 17 21 21 31
EMISFACT L0001085 HROFDY 42 21 21 38 31 17
EMISFACT L0001086 HROFDY 8 8 4 4 10 21
EMISFACT L0001086 HROFDY 21 17 17 17 13 8
EMISFACT L0001086 HROFDY 8 13 17 21 21 31
EMISFACT L0001086 HROFDY 42 21 21 38 31 17

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 4"
EMISFACT L0001169 HROFDY 4 4 2 2 5 10
EMISFACT L0001169 HROFDY 10 8 8 8 6 4
EMISFACT L0001169 HROFDY 4 6 8 10 10 16
EMISFACT L0001169 HROFDY 21 10 10 19 16 8
EMISFACT L0001170 HROFDY 4 4 2 2 5 10
EMISFACT L0001170 HROFDY 10 8 8 8 6 4
EMISFACT L0001170 HROFDY 4 6 8 10 10 16
EMISFACT L0001170 HROFDY 21 10 10 19 16 8
EMISFACT L0001171 HROFDY 4 4 2 2 5 10
EMISFACT L0001171 HROFDY 10 8 8 8 6 4
EMISFACT L0001171 HROFDY 4 6 8 10 10 16
EMISFACT L0001171 HROFDY 21 10 10 19 16 8
EMISFACT L0001172 HROFDY 4 4 2 2 5 10
EMISFACT L0001172 HROFDY 10 8 8 8 6 4
EMISFACT L0001172 HROFDY 4 6 8 10 10 16
EMISFACT L0001172 HROFDY 21 10 10 19 16 8
EMISFACT L0001173 HROFDY 4 4 2 2 5 10
EMISFACT L0001173 HROFDY 10 8 8 8 6 4
EMISFACT L0001173 HROFDY 4 6 8 10 10 16
EMISFACT L0001173 HROFDY 21 10 10 19 16 8
EMISFACT L0001174 HROFDY 4 4 2 2 5 10
EMISFACT L0001174 HROFDY 10 8 8 8 6 4
EMISFACT L0001174 HROFDY 4 6 8 10 10 16
EMISFACT L0001174 HROFDY 21 10 10 19 16 8

EMISFACT L0001175 HROFDY 4 4 2 2 5 10
EMISFACT L0001175 HROFDY 10 8 8 8 6 4
EMISFACT L0001175 HROFDY 4 6 8 10 10 16
EMISFACT L0001175 HROFDY 21 10 10 19 16 8
EMISFACT L0001176 HROFDY 4 4 2 2 5 10
EMISFACT L0001176 HROFDY 10 8 8 8 6 4
EMISFACT L0001176 HROFDY 4 6 8 10 10 16
EMISFACT L0001176 HROFDY 21 10 10 19 16 8
EMISFACT L0001177 HROFDY 4 4 2 2 5 10
EMISFACT L0001177 HROFDY 10 8 8 8 6 4
EMISFACT L0001177 HROFDY 4 6 8 10 10 16
EMISFACT L0001177 HROFDY 21 10 10 19 16 8
EMISFACT L0001178 HROFDY 4 4 2 2 5 10
EMISFACT L0001178 HROFDY 10 8 8 8 6 4
EMISFACT L0001178 HROFDY 4 6 8 10 10 16
EMISFACT L0001178 HROFDY 21 10 10 19 16 8
EMISFACT L0001179 HROFDY 4 4 2 2 5 10
EMISFACT L0001179 HROFDY 10 8 8 8 6 4
EMISFACT L0001179 HROFDY 4 6 8 10 10 16
EMISFACT L0001179 HROFDY 21 10 10 19 16 8
EMISFACT L0001180 HROFDY 4 4 2 2 5 10
EMISFACT L0001180 HROFDY 10 8 8 8 6 4
EMISFACT L0001180 HROFDY 4 6 8 10 10 16
EMISFACT L0001180 HROFDY 21 10 10 19 16 8
EMISFACT L0001181 HROFDY 4 4 2 2 5 10
EMISFACT L0001181 HROFDY 10 8 8 8 6 4
EMISFACT L0001181 HROFDY 4 6 8 10 10 16
EMISFACT L0001181 HROFDY 21 10 10 19 16 8
EMISFACT L0001182 HROFDY 4 4 2 2 5 10
EMISFACT L0001182 HROFDY 10 8 8 8 6 4
EMISFACT L0001182 HROFDY 4 6 8 10 10 16
EMISFACT L0001182 HROFDY 21 10 10 19 16 8
EMISFACT L0001183 HROFDY 4 4 2 2 5 10
EMISFACT L0001183 HROFDY 10 8 8 8 6 4
EMISFACT L0001183 HROFDY 4 6 8 10 10 16
EMISFACT L0001183 HROFDY 21 10 10 19 16 8
EMISFACT L0001184 HROFDY 4 4 2 2 5 10
EMISFACT L0001184 HROFDY 10 8 8 8 6 4
EMISFACT L0001184 HROFDY 4 6 8 10 10 16
EMISFACT L0001184 HROFDY 21 10 10 19 16 8
EMISFACT L0001185 HROFDY 4 4 2 2 5 10
EMISFACT L0001185 HROFDY 10 8 8 8 6 4
EMISFACT L0001185 HROFDY 4 6 8 10 10 16
EMISFACT L0001185 HROFDY 21 10 10 19 16 8
EMISFACT L0001186 HROFDY 4 4 2 2 5 10
EMISFACT L0001186 HROFDY 10 8 8 8 6 4
EMISFACT L0001186 HROFDY 4 6 8 10 10 16
EMISFACT L0001186 HROFDY 21 10 10 19 16 8
EMISFACT L0001087 HROFDY 4 4 2 2 5 10
EMISFACT L0001087 HROFDY 10 8 8 8 6 4
EMISFACT L0001087 HROFDY 4 6 8 10 10 16
EMISFACT L0001087 HROFDY 21 10 10 19 16 8
EMISFACT L0001088 HROFDY 4 4 2 2 5 10
EMISFACT L0001088 HROFDY 10 8 8 8 6 4
EMISFACT L0001088 HROFDY 4 6 8 10 10 16
EMISFACT L0001088 HROFDY 21 10 10 19 16 8
EMISFACT L0001089 HROFDY 4 4 2 2 5 10
EMISFACT L0001089 HROFDY 10 8 8 8 6 4
EMISFACT L0001089 HROFDY 4 6 8 10 10 16
EMISFACT L0001089 HROFDY 21 10 10 19 16 8
EMISFACT L0001090 HROFDY 4 4 2 2 5 10
EMISFACT L0001090 HROFDY 10 8 8 8 6 4
EMISFACT L0001090 HROFDY 4 6 8 10 10 16
EMISFACT L0001090 HROFDY 21 10 10 19 16 8
EMISFACT L0001091 HROFDY 4 4 2 2 5 10
EMISFACT L0001091 HROFDY 10 8 8 8 6 4

EMISFACT L0001091 HROFDY 4 6 8 10 10 16
EMISFACT L0001091 HROFDY 21 10 10 19 16 8
EMISFACT L0001092 HROFDY 4 4 2 2 5 10
EMISFACT L0001092 HROFDY 10 8 8 8 6 4
EMISFACT L0001092 HROFDY 4 6 8 10 10 16
EMISFACT L0001092 HROFDY 21 10 10 19 16 8
EMISFACT L0001093 HROFDY 4 4 2 2 5 10
EMISFACT L0001093 HROFDY 10 8 8 8 6 4
EMISFACT L0001093 HROFDY 4 6 8 10 10 16
EMISFACT L0001093 HROFDY 21 10 10 19 16 8
EMISFACT L0001094 HROFDY 4 4 2 2 5 10
EMISFACT L0001094 HROFDY 10 8 8 8 6 4
EMISFACT L0001094 HROFDY 4 6 8 10 10 16
EMISFACT L0001094 HROFDY 21 10 10 19 16 8
EMISFACT L0001095 HROFDY 4 4 2 2 5 10
EMISFACT L0001095 HROFDY 10 8 8 8 6 4
EMISFACT L0001095 HROFDY 4 6 8 10 10 16
EMISFACT L0001095 HROFDY 21 10 10 19 16 8
EMISFACT L0001096 HROFDY 4 4 2 2 5 10
EMISFACT L0001096 HROFDY 10 8 8 8 6 4
EMISFACT L0001096 HROFDY 4 6 8 10 10 16
EMISFACT L0001096 HROFDY 21 10 10 19 16 8
EMISFACT L0001097 HROFDY 4 4 2 2 5 10
EMISFACT L0001097 HROFDY 10 8 8 8 6 4
EMISFACT L0001097 HROFDY 4 6 8 10 10 16
EMISFACT L0001097 HROFDY 21 10 10 19 16 8
EMISFACT L0001098 HROFDY 4 4 2 2 5 10
EMISFACT L0001098 HROFDY 10 8 8 8 6 4
EMISFACT L0001098 HROFDY 4 6 8 10 10 16
EMISFACT L0001098 HROFDY 21 10 10 19 16 8
EMISFACT L0001099 HROFDY 4 4 2 2 5 10
EMISFACT L0001099 HROFDY 10 8 8 8 6 4
EMISFACT L0001099 HROFDY 4 6 8 10 10 16
EMISFACT L0001099 HROFDY 21 10 10 19 16 8
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EMISFACT L0001100 HROFDY 4 6 8 10 10 16
EMISFACT L0001100 HROFDY 21 10 10 19 16 8
EMISFACT L0001101 HROFDY 4 4 2 2 5 10
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EMISFACT L0001101 HROFDY 4 6 8 10 10 16
EMISFACT L0001101 HROFDY 21 10 10 19 16 8
EMISFACT L0001102 HROFDY 4 4 2 2 5 10
EMISFACT L0001102 HROFDY 10 8 8 8 6 4
EMISFACT L0001102 HROFDY 4 6 8 10 10 16
EMISFACT L0001102 HROFDY 21 10 10 19 16 8
EMISFACT L0001103 HROFDY 4 4 2 2 5 10
EMISFACT L0001103 HROFDY 10 8 8 8 6 4
EMISFACT L0001103 HROFDY 4 6 8 10 10 16
EMISFACT L0001103 HROFDY 21 10 10 19 16 8
EMISFACT L0001104 HROFDY 4 4 2 2 5 10
EMISFACT L0001104 HROFDY 10 8 8 8 6 4
EMISFACT L0001104 HROFDY 4 6 8 10 10 16
EMISFACT L0001104 HROFDY 21 10 10 19 16 8
EMISFACT L0001105 HROFDY 4 4 2 2 5 10
EMISFACT L0001105 HROFDY 10 8 8 8 6 4
EMISFACT L0001105 HROFDY 4 6 8 10 10 16
EMISFACT L0001105 HROFDY 21 10 10 19 16 8
EMISFACT L0001077 HROFDY 4 4 2 2 5 10
EMISFACT L0001077 HROFDY 10 8 8 8 6 4
EMISFACT L0001077 HROFDY 4 6 8 10 10 16
EMISFACT L0001077 HROFDY 21 10 10 19 16 8
EMISFACT L0001078 HROFDY 4 4 2 2 5 10
EMISFACT L0001078 HROFDY 10 8 8 8 6 4
EMISFACT L0001078 HROFDY 4 6 8 10 10 16
EMISFACT L0001078 HROFDY 21 10 10 19 16 8

EMISFACT L0001079 HROFDY 4 4 2 2 5 10
EMISFACT L0001079 HROFDY 10 8 8 8 6 4
EMISFACT L0001079 HROFDY 4 6 8 10 10 16
EMISFACT L0001079 HROFDY 21 10 10 19 16 8
EMISFACT L0001080 HROFDY 4 4 2 2 5 10
EMISFACT L0001080 HROFDY 10 8 8 8 6 4
EMISFACT L0001080 HROFDY 4 6 8 10 10 16
EMISFACT L0001080 HROFDY 21 10 10 19 16 8
EMISFACT L0001081 HROFDY 4 4 2 2 5 10
EMISFACT L0001081 HROFDY 10 8 8 8 6 4
EMISFACT L0001081 HROFDY 4 6 8 10 10 16
EMISFACT L0001081 HROFDY 21 10 10 19 16 8

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 5"
EMISFACT L0001052 HROFDY 13 13 7 7 17 33
EMISFACT L0001052 HROFDY 33 27 27 27 20 13
EMISFACT L0001052 HROFDY 13 20 27 33 33 50
EMISFACT L0001052 HROFDY 67 33 33 60 50 27
EMISFACT L0001053 HROFDY 13 13 7 7 17 33
EMISFACT L0001053 HROFDY 33 27 27 27 20 13
EMISFACT L0001053 HROFDY 13 20 27 33 33 50
EMISFACT L0001053 HROFDY 67 33 33 60 50 27
EMISFACT L0001054 HROFDY 13 13 7 7 17 33
EMISFACT L0001054 HROFDY 33 27 27 27 20 13
EMISFACT L0001054 HROFDY 13 20 27 33 33 50
EMISFACT L0001054 HROFDY 67 33 33 60 50 27
EMISFACT L0001055 HROFDY 13 13 7 7 17 33
EMISFACT L0001055 HROFDY 33 27 27 27 20 13
EMISFACT L0001055 HROFDY 13 20 27 33 33 50
EMISFACT L0001055 HROFDY 67 33 33 60 50 27
EMISFACT L0001056 HROFDY 13 13 7 7 17 33
EMISFACT L0001056 HROFDY 33 27 27 27 20 13
EMISFACT L0001056 HROFDY 13 20 27 33 33 50
EMISFACT L0001056 HROFDY 67 33 33 60 50 27
EMISFACT L0001057 HROFDY 13 13 7 7 17 33
EMISFACT L0001057 HROFDY 33 27 27 27 20 13
EMISFACT L0001057 HROFDY 13 20 27 33 33 50
EMISFACT L0001057 HROFDY 67 33 33 60 50 27
EMISFACT L0001058 HROFDY 13 13 7 7 17 33
EMISFACT L0001058 HROFDY 33 27 27 27 20 13
EMISFACT L0001058 HROFDY 13 20 27 33 33 50
EMISFACT L0001058 HROFDY 67 33 33 60 50 27
EMISFACT L0001059 HROFDY 13 13 7 7 17 33
EMISFACT L0001059 HROFDY 33 27 27 27 20 13
EMISFACT L0001059 HROFDY 13 20 27 33 33 50
EMISFACT L0001059 HROFDY 67 33 33 60 50 27
EMISFACT L0001060 HROFDY 13 13 7 7 17 33
EMISFACT L0001060 HROFDY 33 27 27 27 20 13
EMISFACT L0001060 HROFDY 13 20 27 33 33 50
EMISFACT L0001060 HROFDY 67 33 33 60 50 27
EMISFACT L0001061 HROFDY 13 13 7 7 17 33
EMISFACT L0001061 HROFDY 33 27 27 27 20 13
EMISFACT L0001061 HROFDY 13 20 27 33 33 50
EMISFACT L0001061 HROFDY 67 33 33 60 50 27
EMISFACT L0001062 HROFDY 13 13 7 7 17 33
EMISFACT L0001062 HROFDY 33 27 27 27 20 13
EMISFACT L0001062 HROFDY 13 20 27 33 33 50
EMISFACT L0001062 HROFDY 67 33 33 60 50 27
EMISFACT L0001063 HROFDY 13 13 7 7 17 33
EMISFACT L0001063 HROFDY 33 27 27 27 20 13
EMISFACT L0001063 HROFDY 13 20 27 33 33 50
EMISFACT L0001063 HROFDY 67 33 33 60 50 27
EMISFACT L0001064 HROFDY 13 13 7 7 17 33
EMISFACT L0001064 HROFDY 33 27 27 27 20 13
EMISFACT L0001064 HROFDY 13 20 27 33 33 50
EMISFACT L0001064 HROFDY 67 33 33 60 50 27
EMISFACT L0001065 HROFDY 13 13 7 7 17 33
EMISFACT L0001065 HROFDY 33 27 27 27 20 13
EMISFACT L0001065 HROFDY 13 20 27 33 33 50
EMISFACT L0001065 HROFDY 67 33 33 60 50 27
EMISFACT L0001066 HROFDY 13 13 7 7 17 33
EMISFACT L0001066 HROFDY 33 27 27 27 20 13
EMISFACT L0001066 HROFDY 13 20 27 33 33 50
EMISFACT L0001066 HROFDY 67 33 33 60 50 27
EMISFACT L0001067 HROFDY 13 13 7 7 17 33
EMISFACT L0001067 HROFDY 33 27 27 27 20 13
EMISFACT L0001067 HROFDY 13 20 27 33 33 50
EMISFACT L0001067 HROFDY 67 33 33 60 50 27
EMISFACT L0001068 HROFDY 13 13 7 7 17 33
EMISFACT L0001068 HROFDY 33 27 27 27 20 13
EMISFACT L0001068 HROFDY 13 20 27 33 33 50
EMISFACT L0001068 HROFDY 67 33 33 60 50 27
EMISFACT L0001069 HROFDY 13 13 7 7 17 33
EMISFACT L0001069 HROFDY 33 27 27 27 20 13
EMISFACT L0001069 HROFDY 13 20 27 33 33 50
EMISFACT L0001069 HROFDY 67 33 33 60 50 27
EMISFACT L0001070 HROFDY 13 13 7 7 17 33
EMISFACT L0001070 HROFDY 33 27 27 27 20 13
EMISFACT L0001070 HROFDY 13 20 27 33 33 50
EMISFACT L0001070 HROFDY 67 33 33 60 50 27
EMISFACT L0001071 HROFDY 13 13 7 7 17 33
EMISFACT L0001071 HROFDY 33 27 27 27 20 13
EMISFACT L0001071 HROFDY 13 20 27 33 33 50
EMISFACT L0001071 HROFDY 67 33 33 60 50 27
EMISFACT L0001072 HROFDY 13 13 7 7 17 33
EMISFACT L0001072 HROFDY 33 27 27 27 20 13
EMISFACT L0001072 HROFDY 13 20 27 33 33 50
EMISFACT L0001072 HROFDY 67 33 33 60 50 27
EMISFACT L0001073 HROFDY 13 13 7 7 17 33
EMISFACT L0001073 HROFDY 33 27 27 27 20 13
EMISFACT L0001073 HROFDY 13 20 27 33 33 50
EMISFACT L0001073 HROFDY 67 33 33 60 50 27
EMISFACT L0001074 HROFDY 13 13 7 7 17 33
EMISFACT L0001074 HROFDY 33 27 27 27 20 13
EMISFACT L0001074 HROFDY 13 20 27 33 33 50
EMISFACT L0001074 HROFDY 67 33 33 60 50 27
EMISFACT L0001075 HROFDY 13 13 7 7 17 33
EMISFACT L0001075 HROFDY 33 27 27 27 20 13
EMISFACT L0001075 HROFDY 13 20 27 33 33 50
EMISFACT L0001075 HROFDY 67 33 33 60 50 27
EMISFACT L0001076 HROFDY 13 13 7 7 17 33
EMISFACT L0001076 HROFDY 33 27 27 27 20 13
EMISFACT L0001076 HROFDY 13 20 27 33 33 50
EMISFACT L0001076 HROFDY 67 33 33 60 50 27

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 6"
EMISFACT L0001187 HROFDY 5 5 2 2 6 12
EMISFACT L0001187 HROFDY 12 10 10 10 7 5
EMISFACT L0001187 HROFDY 5 7 10 12 12 19
EMISFACT L0001187 HROFDY 25 12 12 22 19 10
EMISFACT L0001188 HROFDY 5 5 2 2 6 12
EMISFACT L0001188 HROFDY 12 10 10 10 7 5
EMISFACT L0001188 HROFDY 5 7 10 12 12 19
EMISFACT L0001188 HROFDY 25 12 12 22 19 10
EMISFACT L0001189 HROFDY 5 5 2 2 6 12
EMISFACT L0001189 HROFDY 12 10 10 10 7 5
EMISFACT L0001189 HROFDY 5 7 10 12 12 19
EMISFACT L0001189 HROFDY 25 12 12 22 19 10
EMISFACT L0001190 HROFDY 5 5 2 2 6 12
EMISFACT L0001190 HROFDY 12 10 10 10 7 5

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  EMISFACT L0001190 HROFDY 5 7 10 12 12 19
  EMISFACT L0001190 HROFDY 25 12 12 22 19 10
  EMISFACT L0001191 HROFDY 5 5 2 2 6 12
  EMISFACT L0001191 HROFDY 12 10 10 10 7 5
  EMISFACT L0001191 HROFDY 5 7 10 12 12 19
  EMISFACT L0001191 HROFDY 25 12 12 22 19 10
  EMISFACT L0001192 HROFDY 5 5 2 2 6 12
  EMISFACT L0001192 HROFDY 12 10 10 10 7 5
  EMISFACT L0001192 HROFDY 5 7 10 12 12 19
  EMISFACT L0001192 HROFDY 25 12 12 22 19 10
  EMISFACT L0001193 HROFDY 5 5 2 2 6 12
  EMISFACT L0001193 HROFDY 12 10 10 10 7 5
  EMISFACT L0001193 HROFDY 5 7 10 12 12 19
  EMISFACT L0001193 HROFDY 25 12 12 22 19 10
  EMISFACT L0001194 HROFDY 5 5 2 2 6 12
  EMISFACT L0001194 HROFDY 12 10 10 10 7 5
  EMISFACT L0001194 HROFDY 5 7 10 12 12 19
  EMISFACT L0001194 HROFDY 25 12 12 22 19 10
  EMISFACT L0001195 HROFDY 5 5 2 2 6 12
  EMISFACT L0001195 HROFDY 12 10 10 10 7 5
  EMISFACT L0001195 HROFDY 5 7 10 12 12 19
  EMISFACT L0001195 HROFDY 25 12 12 22 19 10
  EMISFACT L0001196 HROFDY 5 5 2 2 6 12
  EMISFACT L0001196 HROFDY 12 10 10 10 7 5
  EMISFACT L0001196 HROFDY 5 7 10 12 12 19
  EMISFACT L0001196 HROFDY 25 12 12 22 19 10
  EMISFACT L0001197 HROFDY 5 5 2 2 6 12
  EMISFACT L0001197 HROFDY 12 10 10 10 7 5
  EMISFACT L0001197 HROFDY 5 7 10 12 12 19
  EMISFACT L0001197 HROFDY 25 12 12 22 19 10
  EMISFACT L0001198 HROFDY 5 5 2 2 6 12
  EMISFACT L0001198 HROFDY 12 10 10 10 7 5
  EMISFACT L0001198 HROFDY 5 7 10 12 12 19
  EMISFACT L0001198 HROFDY 25 12 12 22 19 10
  EMISFACT L0001199 HROFDY 5 5 2 2 6 12
  EMISFACT L0001199 HROFDY 12 10 10 10 7 5
  EMISFACT L0001199 HROFDY 5 7 10 12 12 19
  EMISFACT L0001199 HROFDY 25 12 12 22 19 10
  EMISFACT L0001200 HROFDY 5 5 2 2 6 12
  EMISFACT L0001200 HROFDY 12 10 10 10 7 5
  EMISFACT L0001200 HROFDY 5 7 10 12 12 19
  EMISFACT L0001200 HROFDY 25 12 12 22 19 10
  EMISFACT L0001201 HROFDY 5 5 2 2 6 12
  EMISFACT L0001201 HROFDY 12 10 10 10 7 5
  EMISFACT L0001201 HROFDY 5 7 10 12 12 19
  EMISFACT L0001201 HROFDY 25 12 12 22 19 10
  EMISFACT L0001202 HROFDY 5 5 2 2 6 12
  EMISFACT L0001202 HROFDY 12 10 10 10 7 5
  EMISFACT L0001202 HROFDY 5 7 10 12 12 19
  EMISFACT L0001202 HROFDY 25 12 12 22 19 10
  EMISFACT L0001203 HROFDY 5 5 2 2 6 12
  EMISFACT L0001203 HROFDY 12 10 10 10 7 5
  EMISFACT L0001203 HROFDY 5 7 10 12 12 19
  EMISFACT L0001203 HROFDY 25 12 12 22 19 10
  EMISFACT L0001204 HROFDY 5 5 2 2 6 12
  EMISFACT L0001204 HROFDY 12 10 10 10 7 5
  EMISFACT L0001204 HROFDY 5 7 10 12 12 19
  EMISFACT L0001204 HROFDY 25 12 12 22 19 10
  EMISFACT L0001205 HROFDY 5 5 2 2 6 12
  EMISFACT L0001205 HROFDY 12 10 10 10 7 5
  EMISFACT L0001205 HROFDY 5 7 10 12 12 19
  EMISFACT L0001205 HROFDY 25 12 12 22 19 10
  SRCGROUP ALL
SO FINISHED
**
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** ISCST3 Receptor Pathway
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RE STARTING
** DESCRREC "UPOL1" "Receptors generated from Uniform Polar Grid"
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  DISCCART   485024.23  3755640.51   1.50
  DISCCART   485024.23  3755740.51   1.50
  DISCCART   485024.23  3755840.51   1.50
  DISCCART   485024.23  3755940.51   1.50
  DISCCART   485024.23  3756040.51   1.50
  DISCCART   485024.23  3756140.51   1.50
  DISCCART   485024.23  3756240.51   1.50
  DISCCART   485024.23  3756340.51   1.50
  DISCCART   485024.23  3756440.51   1.50
  DISCCART   485024.23  3756540.51   1.50
  DISCCART   485024.23  3756640.51   1.50
  DISCCART   485024.23  3756740.51   1.50
  DISCCART   485024.23  3756840.51   1.50
  DISCCART   485024.23  3756940.51   1.50
  DISCCART   485024.23  3757040.51   1.50
  DISCCART   485024.23  3757140.51   1.50
  DISCCART   485024.23  3757240.51   1.50
  DISCCART   485024.23  3757340.51   1.50
  DISCCART   485024.23  3757440.51   1.50
  DISCCART   485024.23  3757540.51   1.50
  DISCCART   485024.23  3757640.51   1.50
  DISCCART   485024.23  3757740.51   1.50
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  DISCCART   485024.23  3757940.51   1.50
  DISCCART   485024.23  3758040.51   1.50
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  DISCCART   485024.23  3758240.51   1.50
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  DISCCART   485093.69  3755634.43   1.50
  DISCCART   485111.05  3755732.91   1.50
  DISCCART   485128.42  3755831.39   1.50
  DISCCART   485145.78  3755929.88   1.50
  DISCCART   485163.15  3756028.36   1.50
  DISCCART   485180.51  3756126.84   1.50
  DISCCART   485197.88  3756225.32   1.50
  DISCCART   485215.24  3756323.80   1.50
  DISCCART   485232.61  3756422.28   1.50
  DISCCART   485249.97  3756520.76   1.50
  DISCCART   485267.34  3756619.24   1.50
  DISCCART   485284.70  3756717.72   1.50
  DISCCART   485302.07  3756816.20   1.50
  DISCCART   485319.43  3756914.68   1.50
  DISCCART   485336.80  3757013.16   1.50
  DISCCART   485354.16  3757111.64   1.50
  DISCCART   485371.53  3757210.13   1.50
  DISCCART   485388.89  3757308.61   1.50
  DISCCART   485406.26  3757407.09   1.50
  DISCCART   485423.62  3757505.57   1.50
  DISCCART   485440.99  3757604.05   1.50
  DISCCART   485458.35  3757702.53   1.50
  DISCCART   485475.72  3757801.01   1.50
  DISCCART   485493.08  3757899.49   1.50
  DISCCART   485510.44  3757997.97   1.50
  DISCCART   485527.81  3758096.45   1.50
  DISCCART   485545.17  3758194.93   1.50
  DISCCART   485126.84  3755522.42   1.50
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  DISCCART   485229.44  3755804.33   1.50
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DISCCART 485400.45 3756274.17 1.50
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DISCCART 485503.06 3756556.08 1.50
DISCCART 485537.26 3756650.05 1.50
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DISCCART 485605.66 3756837.99 1.50
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DISCCART 485974.23 3756885.96 1.50
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DISCCART 486074.23 3757059.16 1.50
DISCCART 486124.23 3757145.77 1.50
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DISCCART 486324.23 3757492.18 1.50
DISCCART 486374.23 3757578.78 1.50
DISCCART 486424.23 3757665.38 1.50
DISCCART 486474.23 3757751.98 1.50
DISCCART 486524.23 3757838.59 1.50
DISCCART 485217.07 3755470.32 1.50
DISCCART 485281.35 3755546.93 1.50
DISCCART 485345.62 3755623.53 1.50
DISCCART 485409.90 3755700.14 1.50
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DISCCART 485924.13 3756312.97 1.50
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DISCCART 486181.25 3756619.39 1.50
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DISCCART 486631.20 3757155.62 1.50
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DISCCART 485866.88 3755947.58 1.50
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** Auto-Generated Plotfiles
  PLOTFILE ANNUAL ALL HRAMIT.IS\AN00GALL.PLT
OU FINISHED

***********************************
*** SETUP Finishes Successfully ***
***********************************
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 *** ISCST3 - VERSION 02035 ***    *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc          ***       10/08/09
                    *** West Ridge HRA                                          ***       10:20:07
**MODELOPTs:                                                                                PAGE   1
CONC              URBAN FLAT  FLGPOL                    NOCALM                    NOCMPL

                              ***    MODEL SETUP OPTIONS SUMMARY      ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

**Simple Terrain Model is Selected

**Model Is Setup For Calculation of Average CONCentration Values.

  --  SCAVENGING/DEPOSITION LOGIC --
**Model Uses NO DRY DEPLETION.  DDPLETE =  F
**Model Uses NO WET DEPLETION.  WDPLETE =  F
**NO WET SCAVENGING Data Provided.
**NO GAS DRY DEPOSITION Data Provided.
**Model Does NOT Use GRIDDED TERRAIN Data for Depletion Calculations

**Model Uses URBAN Dispersion.

**Model Uses User-Specified Options:
        1. Final Plume Rise.
        2. Stack-tip Downwash.
        3. Buoyancy-induced Dispersion.
        4. Not Use Calms Processing Routine.
        5. Not Use Missing Data Processing Routine.
        6. Default Wind Profile Exponents.
        7. Default Vertical Potential Temperature Gradients.

**Model Assumes Receptors on FLAT Terrain.

**Model Accepts FLAGPOLE Receptor Heights.

**Model Calculates ANNUAL Averages Only

**This Run Includes:   156 Source(s);     1 Source Group(s); and     985 Receptor(s)

**The Model Assumes A Pollutant Type of:  DPM

**Model Set To Continue RUNning After the Setup Testing.

**Output Options Selected:
       Model Outputs Tables of ANNUAL Averages by Receptor
       Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**Misc. Inputs:  Anem. Hgt. (m) =    10.00 ;   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 =     1.4 MB of RAM.

**Input Runstream File:         HRAMIT.INP
**Output Print File:            HRAMIT.OUT
```

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001052	0	0.48800E-06	485514.0	3755433.5	0.0	4.00	12.43	1.86	HROFDY
L0001053	0	0.48800E-06	485514.0	3755406.8	0.0	4.00	12.43	1.86	HROFDY
L0001054	0	0.48800E-06	485513.9	3755380.0	0.0	4.00	12.43	1.86	HROFDY
L0001055	0	0.48800E-06	485513.8	3755353.3	0.0	4.00	12.43	1.86	HROFDY
L0001056	0	0.48800E-06	485513.8	3755326.5	0.0	4.00	12.43	1.86	HROFDY
L0001057	0	0.48800E-06	485513.7	3755299.8	0.0	4.00	12.43	1.86	HROFDY
L0001058	0	0.48800E-06	485513.6	3755273.0	0.0	4.00	12.43	1.86	HROFDY
L0001059	0	0.48800E-06	485513.5	3755246.3	0.0	4.00	12.43	1.86	HROFDY
L0001060	0	0.48800E-06	485513.4	3755219.8	0.0	4.00	12.43	1.86	HROFDY
L0001061	0	0.48800E-06	485513.4	3755193.0	0.0	4.00	12.43	1.86	HROFDY
L0001062	0	0.48800E-06	485513.3	3755166.3	0.0	4.00	12.43	1.86	HROFDY
L0001063	0	0.48800E-06	485513.2	3755139.5	0.0	4.00	12.43	1.86	HROFDY
L0001064	0	0.48800E-06	485513.2	3755112.8	0.0	4.00	12.43	1.86	HROFDY
L0001065	0	0.48800E-06	485513.1	3755086.0	0.0	4.00	12.43	1.86	HROFDY
L0001066	0	0.48800E-06	485513.0	3755059.3	0.0	4.00	12.43	1.86	HROFDY
L0001067	0	0.48800E-06	485512.9	3755032.5	0.0	4.00	12.43	1.86	HROFDY
L0001068	0	0.48800E-06	485494.2	3755025.5	0.0	4.00	11.94	1.86	HROFDY
L0001069	0	0.48800E-06	485468.5	3755025.5	0.0	4.00	11.94	1.86	HROFDY
L0001070	0	0.48800E-06	485442.9	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001071	0	0.48800E-06	485417.2	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001072	0	0.48800E-06	485391.5	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001073	0	0.48800E-06	485365.8	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001074	0	0.48800E-06	485340.2	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001075	0	0.48800E-06	485314.5	3755026.0	0.0	4.00	11.94	1.86	HROFDY
L0001076	0	0.48800E-06	485288.8	3755026.0	0.0	4.00	11.94	1.86	HROFDY
L0001077	0	0.49000E-06	485265.3	3755112.8	0.0	4.00	7.15	1.86	HROFDY
L0001078	0	0.49000E-06	485249.9	3755113.0	0.0	4.00	7.15	1.86	HROFDY
L0001079	0	0.49000E-06	485234.5	3755113.0	0.0	4.00	7.15	1.86	HROFDY
L0001080	0	0.49000E-06	485219.2	3755113.0	0.0	4.00	7.15	1.86	HROFDY
L0001081	0	0.49000E-06	485203.8	3755113.3	0.0	4.00	7.15	1.86	HROFDY
L0001082	0	0.50800E-06	485281.9	3755043.8	0.0	4.00	7.53	1.86	HROFDY
L0001083	0	0.50800E-06	485281.7	3755060.0	0.0	4.00	7.53	1.86	HROFDY
L0001084	0	0.50800E-06	485281.4	3755076.3	0.0	4.00	7.53	1.86	HROFDY
L0001085	0	0.50800E-06	485281.3	3755092.3	0.0	4.00	7.53	1.86	HROFDY
L0001086	0	0.50800E-06	485281.0	3755108.5	0.0	4.00	7.53	1.86	HROFDY
L0001087	0	0.59474E-06	485280.8	3755119.8	0.0	4.00	8.82	1.86	HROFDY
L0001088	0	0.59474E-06	485280.0	3755138.8	0.0	4.00	8.82	1.86	HROFDY
L0001089	0	0.59474E-06	485279.3	3755157.8	0.0	4.00	8.82	1.86	HROFDY
L0001090	0	0.59474E-06	485278.4	3755176.5	0.0	4.00	8.82	1.86	HROFDY
L0001091	0	0.59474E-06	485277.7	3755195.5	0.0	4.00	8.82	1.86	HROFDY

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001092	0	0.59474E-06	485276.9	3755214.5	0.0	4.00	8.82	1.86	HROFDY
L0001093	0	0.59474E-06	485276.1	3755233.5	0.0	4.00	8.82	1.86	HROFDY
L0001094	0	0.59474E-06	485275.3	3755252.3	0.0	4.00	8.82	1.86	HROFDY
L0001095	0	0.59474E-06	485274.5	3755271.3	0.0	4.00	8.82	1.86	HROFDY
L0001096	0	0.59474E-06	485273.7	3755290.3	0.0	4.00	8.82	1.86	HROFDY
L0001097	0	0.59474E-06	485272.9	3755309.3	0.0	4.00	8.82	1.86	HROFDY
L0001098	0	0.59474E-06	485272.1	3755328.0	0.0	4.00	8.82	1.86	HROFDY
L0001099	0	0.59474E-06	485271.3	3755347.0	0.0	4.00	8.82	1.86	HROFDY
L0001100	0	0.59474E-06	485270.6	3755366.0	0.0	4.00	8.82	1.86	HROFDY
L0001101	0	0.59474E-06	485262.3	3755374.5	0.0	4.00	6.41	1.86	HROFDY
L0001102	0	0.59474E-06	485247.2	3755376.5	0.0	4.00	7.22	1.86	HROFDY
L0001103	0	0.59474E-06	485231.7	3755376.3	0.0	4.00	7.22	1.86	HROFDY
L0001104	0	0.59474E-06	485216.2	3755376.3	0.0	4.00	7.22	1.86	HROFDY
L0001105	0	0.59474E-06	485200.7	3755376.0	0.0	4.00	7.22	1.86	HROFDY
L0001106	0	0.48000E-06	483513.9	3755430.3	0.0	4.00	11.63	1.86	HROFDY
L0001107	0	0.48000E-06	483515.1	3755405.3	0.0	4.00	11.63	1.86	HROFDY
L0001108	0	0.48000E-06	483516.3	3755380.3	0.0	4.00	11.63	1.86	HROFDY
L0001109	0	0.48000E-06	483517.5	3755355.3	0.0	4.00	11.63	1.86	HROFDY
L0001110	0	0.48000E-06	483518.7	3755330.5	0.0	4.00	11.63	1.86	HROFDY
L0001111	0	0.48000E-06	483519.9	3755305.5	0.0	4.00	11.63	1.86	HROFDY
L0001112	0	0.48000E-06	483521.1	3755280.5	0.0	4.00	11.63	1.86	HROFDY
L0001113	0	0.48000E-06	483522.3	3755255.5	0.0	4.00	11.63	1.86	HROFDY
L0001114	0	0.48000E-06	483523.5	3755230.5	0.0	4.00	11.63	1.86	HROFDY
L0001115	0	0.48000E-06	483544.2	3755223.5	0.0	4.00	12.74	1.86	HROFDY
L0001116	0	0.48000E-06	483571.6	3755223.5	0.0	4.00	12.74	1.86	HROFDY
L0001117	0	0.48000E-06	483599.0	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001118	0	0.48000E-06	483626.4	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001119	0	0.48000E-06	483653.8	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001120	0	0.48000E-06	483681.1	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001121	0	0.48000E-06	483708.5	3755223.0	0.0	4.00	12.74	1.86	HROFDY
L0001122	0	0.48000E-06	483735.9	3755223.0	0.0	4.00	12.74	1.86	HROFDY
L0001123	0	0.48000E-06	483763.3	3755223.0	0.0	4.00	12.74	1.86	HROFDY
L0001124	0	0.48000E-06	483790.7	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001125	0	0.48000E-06	483818.0	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001126	0	0.48000E-06	483845.4	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001127	0	0.48000E-06	483872.8	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001128	0	0.48000E-06	483900.2	3755222.5	0.0	4.00	12.74	1.86	HROFDY
L0001129	0	0.48000E-06	483927.6	3755222.5	0.0	4.00	12.74	1.86	HROFDY
L0001130	0	0.48000E-06	483954.9	3755222.5	0.0	4.00	12.74	1.86	HROFDY
L0001131	0	0.48000E-06	483982.3	3755222.5	0.0	4.00	12.74	1.86	HROFDY

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001132	0	0.48000E-06	484009.7	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001133	0	0.48000E-06	484037.1	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001134	0	0.48000E-06	484064.5	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001135	0	0.48000E-06	484091.9	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001136	0	0.48000E-06	484119.3	3755222.0	0.0	4.00	12.74	1.86	HROFDY
L0001137	0	0.48000E-06	484146.6	3755222.0	0.0	4.00	12.74	1.86	HROFDY
L0001138	0	0.48000E-06	484172.9	3755216.8	0.0	4.00	12.55	1.86	HROFDY
L0001139	0	0.48000E-06	484199.0	3755209.8	0.0	4.00	12.55	1.86	HROFDY
L0001140	0	0.48000E-06	484225.1	3755202.8	0.0	4.00	12.55	1.86	HROFDY
L0001141	0	0.48000E-06	484251.1	3755195.8	0.0	4.00	12.55	1.86	HROFDY
L0001142	0	0.48000E-06	484277.2	3755188.8	0.0	4.00	12.55	1.86	HROFDY
L0001143	0	0.48000E-06	484296.1	3755176.3	0.0	4.00	10.81	1.86	HROFDY
L0001144	0	0.48000E-06	484313.3	3755160.5	0.0	4.00	10.81	1.86	HROFDY
L0001145	0	0.48000E-06	484330.6	3755145.0	0.0	4.00	10.81	1.86	HROFDY
L0001146	0	0.48000E-06	484347.9	3755129.5	0.0	4.00	10.81	1.86	HROFDY
L0001147	0	0.48000E-06	484365.2	3755114.0	0.0	4.00	10.81	1.86	HROFDY
L0001148	0	0.48000E-06	484386.2	3755100.8	0.0	4.00	11.58	1.86	HROFDY
L0001149	0	0.48000E-06	484408.2	3755089.3	0.0	4.00	11.58	1.86	HROFDY
L0001150	0	0.48000E-06	484430.1	3755077.5	0.0	4.00	11.58	1.86	HROFDY
L0001151	0	0.48000E-06	484452.1	3755065.8	0.0	4.00	11.58	1.86	HROFDY
L0001152	0	0.48000E-06	484474.1	3755054.0	0.0	4.00	11.58	1.86	HROFDY
L0001153	0	0.48000E-06	484496.0	3755042.3	0.0	4.00	11.58	1.86	HROFDY
L0001154	0	0.48000E-06	484517.0	3755036.0	0.0	4.00	10.25	1.86	HROFDY
L0001155	0	0.48000E-06	484538.6	3755031.8	0.0	4.00	10.25	1.86	HROFDY
L0001156	0	0.48000E-06	484560.2	3755027.3	0.0	4.00	10.25	1.86	HROFDY
L0001157	0	0.48000E-06	484581.8	3755023.0	0.0	4.00	10.25	1.86	HROFDY
L0001158	0	0.48000E-06	484605.9	3755021.3	0.0	4.00	11.29	1.86	HROFDY
L0001159	0	0.48000E-06	484630.2	3755021.3	0.0	4.00	11.29	1.86	HROFDY
L0001160	0	0.48000E-06	484654.4	3755021.0	0.0	4.00	11.29	1.86	HROFDY
L0001161	0	0.48000E-06	484678.7	3755020.8	0.0	4.00	11.29	1.86	HROFDY
L0001162	0	0.48000E-06	484703.0	3755020.5	0.0	4.00	11.29	1.86	HROFDY
L0001163	0	0.48000E-06	484727.3	3755020.3	0.0	4.00	11.29	1.86	HROFDY
L0001164	0	0.48000E-06	484751.5	3755020.0	0.0	4.00	11.29	1.86	HROFDY
L0001165	0	0.48000E-06	484775.8	3755021.0	0.0	4.00	11.31	1.86	HROFDY
L0001166	0	0.53667E-06	484781.4	3755040.5	0.0	4.00	8.84	1.86	HROFDY
L0001167	0	0.53667E-06	484781.2	3755059.5	0.0	4.00	8.84	1.86	HROFDY
L0001168	0	0.53667E-06	484780.9	3755078.5	0.0	4.00	8.84	1.86	HROFDY
L0001169	0	0.59444E-06	484780.2	3755088.0	0.0	4.00	8.78	1.86	HROFDY
L0001170	0	0.59444E-06	484780.0	3755106.8	0.0	4.00	8.78	1.86	HROFDY
L0001171	0	0.59444E-06	484779.8	3755125.8	0.0	4.00	8.78	1.86	HROFDY

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001172	0	0.59444E-06	484779.7	3755144.5	0.0	4.00	8.78	1.86	HROFDY
L0001173	0	0.59444E-06	484779.5	3755163.5	0.0	4.00	8.78	1.86	HROFDY
L0001174	0	0.59444E-06	484779.3	3755182.3	0.0	4.00	8.78	1.86	HROFDY
L0001175	0	0.59444E-06	484779.2	3755201.3	0.0	4.00	8.78	1.86	HROFDY
L0001176	0	0.59444E-06	484779.0	3755220.0	0.0	4.00	8.78	1.86	HROFDY
L0001177	0	0.59444E-06	484778.8	3755239.0	0.0	4.00	8.78	1.86	HROFDY
L0001178	0	0.59444E-06	484778.7	3755257.8	0.0	4.00	8.78	1.86	HROFDY
L0001179	0	0.59444E-06	484778.5	3755276.8	0.0	4.00	8.78	1.86	HROFDY
L0001180	0	0.59444E-06	484778.3	3755295.5	0.0	4.00	8.78	1.86	HROFDY
L0001181	0	0.59444E-06	484778.2	3755314.5	0.0	4.00	8.78	1.86	HROFDY
L0001182	0	0.59444E-06	484778.0	3755333.3	0.0	4.00	8.78	1.86	HROFDY
L0001183	0	0.59444E-06	484777.8	3755352.3	0.0	4.00	8.78	1.86	HROFDY
L0001184	0	0.59444E-06	484777.7	3755371.0	0.0	4.00	8.78	1.86	HROFDY
L0001185	0	0.59444E-06	484783.3	3755375.8	0.0	4.00	4.99	1.86	HROFDY
L0001186	0	0.59444E-06	484794.1	3755375.5	0.0	4.00	4.99	1.86	HROFDY
L0001187	0	0.48789E-06	485270.4	3755024.5	0.0	4.00	12.33	1.86	HROFDY
L0001188	0	0.48789E-06	485243.8	3755024.3	0.0	4.00	12.33	1.86	HROFDY
L0001189	0	0.48789E-06	485217.3	3755024.0	0.0	4.00	12.33	1.86	HROFDY
L0001190	0	0.48789E-06	485190.8	3755023.8	0.0	4.00	12.33	1.86	HROFDY
L0001191	0	0.48789E-06	485164.3	3755023.5	0.0	4.00	12.33	1.86	HROFDY
L0001192	0	0.48789E-06	485137.8	3755023.3	0.0	4.00	12.33	1.86	HROFDY
L0001193	0	0.48789E-06	485111.3	3755023.0	0.0	4.00	12.33	1.86	HROFDY
L0001194	0	0.48789E-06	485084.8	3755022.8	0.0	4.00	12.33	1.86	HROFDY
L0001195	0	0.48789E-06	485058.3	3755022.5	0.0	4.00	12.33	1.86	HROFDY
L0001196	0	0.48789E-06	485031.7	3755022.3	0.0	4.00	12.33	1.86	HROFDY
L0001197	0	0.48789E-06	485005.2	3755022.0	0.0	4.00	12.33	1.86	HROFDY
L0001198	0	0.48789E-06	484978.7	3755021.8	0.0	4.00	12.33	1.86	HROFDY
L0001199	0	0.48789E-06	484952.2	3755021.5	0.0	4.00	12.33	1.86	HROFDY
L0001200	0	0.48789E-06	484925.7	3755021.3	0.0	4.00	12.33	1.86	HROFDY
L0001201	0	0.48789E-06	484899.1	3755021.0	0.0	4.00	12.33	1.86	HROFDY
L0001202	0	0.48789E-06	484872.6	3755020.8	0.0	4.00	12.33	1.86	HROFDY
L0001203	0	0.48789E-06	484846.1	3755020.5	0.0	4.00	12.33	1.86	HROFDY
L0001204	0	0.48789E-06	484819.6	3755020.3	0.0	4.00	12.33	1.86	HROFDY
L0001205	0	0.48789E-06	484793.1	3755020.0	0.0	4.00	12.33	1.86	HROFDY

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
NORTH	0	0.29500E-09	484851.9	3755334.0	0.0	4.00	11	1.86	HROFDY
SOUTH	0	0.32290E-09	484832.9	3755147.5	0.0	4.00	10	1.86	HROFDY

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
ALL	NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056, L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068, L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, L0001080, L0001081, L0001082, L0001083, L0001084, L0001085, L0001086, L0001087, L0001088, L0001089, L0001090, L0001091, L0001092, L0001093, L0001094, L0001095, L0001096, L0001097, L0001098, L0001099, L0001100, L0001101, L0001102, L0001103, L0001104, L0001105, L0001106, L0001107, L0001108, L0001109, L0001110, L0001111, L0001112, L0001113, L0001114, L0001115, L0001116, L0001117, L0001118, L0001119, L0001120, L0001121, L0001122, L0001123, L0001124, L0001125, L0001126, L0001127, L0001128, L0001129, L0001130, L0001131, L0001132, L0001133, L0001134, L0001135, L0001136, L0001137, L0001138, L0001139, L0001140, L0001141, L0001142, L0001143, L0001144, L0001145, L0001146, L0001147, L0001148, L0001149, L0001150, L0001151, L0001152, L0001153, L0001154, L0001155, L0001156, L0001157, L0001158, L0001159, L0001160, L0001161, L0001162, L0001163, L0001164, L0001165, L0001166, L0001167, L0001168, L0001169, L0001170, L0001171, L0001172, L0001173, L0001174, L0001175, L0001176, L0001177, L0001178, L0001179, L0001180, L0001181, L0001182, L0001183, L0001184, L0001185, L0001186, L0001187, L0001188, L0001189, L0001190, L0001191, L0001192, L0001193, L0001194, L0001195, L0001196, L0001197, L0001198, L0001199, L0001200, L0001201, L0001202, L0001203, L0001204, L0001205,

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = NORTH ; SOURCE TYPE = AREAPOLY :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = SOUTH ; SOURCE TYPE = AREAPOLY :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001052 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001053 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001054 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001055 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001056 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001057 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001058 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001059 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001060 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001061 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001062 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001063 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001064 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001065 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001066 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001067 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001068 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001069 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001070 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001071 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001072 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001073 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001074 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 10:20:07

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001075 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001076 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001077 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001078 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001079 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001080 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001081 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001082 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001083 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001084 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001085 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001086 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001087 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001088 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001089 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001090 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001091 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001092 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001093 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001094 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 10:20:07

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001095 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001096 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001097 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001098 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001099 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001100 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001101 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001102 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001103 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001104 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 10:20:07

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001105 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001106 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001107 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001108 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001109 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001110 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001111 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001112 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001113 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001114 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001115 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001116 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001117 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001118 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001119 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001120 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001121 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001122 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001123 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001124 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001125 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001126 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001127 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001128 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001129 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001130 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001131 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001132 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001133 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001134 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 10:20:07

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001135 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001136 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001137 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001138 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001139 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001140 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001141 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001142 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001143 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001144 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 10:20:07

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001145 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001146 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001147 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001148 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001149 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001150 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001151 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001152 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001153 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001154 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001155 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001156 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001157 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001158 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001159 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001160 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001161 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001162 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001163 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001164 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001165 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001166 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001167 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001168 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001169 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001170 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001171 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001172 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001173 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001174 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001175 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001176 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001177 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001178 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001179 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001180 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001181 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001182 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001183 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001184 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001185 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001186 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001187 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001188 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001189 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001190 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001191 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001192 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001193 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001194 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001195 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001196 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001197 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001198 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001199 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001200 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001201 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001202 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001203 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001204 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001205 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485024.2, 3755540.5,	0.0,	1.5);	(485024.2, 3755640.5,	0.0,	1.5);
(485024.2, 3755740.5,	0.0,	1.5);	(485024.2, 3755840.5,	0.0,	1.5);
(485024.2, 3755940.5,	0.0,	1.5);	(485024.2, 3756040.5,	0.0,	1.5);
(485024.2, 3756140.5,	0.0,	1.5);	(485024.2, 3756240.5,	0.0,	1.5);
(485024.2, 3756340.5,	0.0,	1.5);	(485024.2, 3756440.5,	0.0,	1.5);
(485024.2, 3756540.5,	0.0,	1.5);	(485024.2, 3756640.5,	0.0,	1.5);
(485024.2, 3756740.5,	0.0,	1.5);	(485024.2, 3756840.5,	0.0,	1.5);
(485024.2, 3756940.5,	0.0,	1.5);	(485024.2, 3757040.5,	0.0,	1.5);
(485024.2, 3757140.5,	0.0,	1.5);	(485024.2, 3757240.5,	0.0,	1.5);
(485024.2, 3757340.5,	0.0,	1.5);	(485024.2, 3757440.5,	0.0,	1.5);
(485024.2, 3757540.5,	0.0,	1.5);	(485024.2, 3757640.5,	0.0,	1.5);
(485024.2, 3757740.5,	0.0,	1.5);	(485024.2, 3757840.5,	0.0,	1.5);
(485024.2, 3757940.5,	0.0,	1.5);	(485024.2, 3758040.5,	0.0,	1.5);
(485024.2, 3758140.5,	0.0,	1.5);	(485024.2, 3758240.5,	0.0,	1.5);
(485076.3, 3755536.0,	0.0,	1.5);	(485093.7, 3755634.5,	0.0,	1.5);
(485111.1, 3755733.0,	0.0,	1.5);	(485128.4, 3755831.5,	0.0,	1.5);
(485145.8, 3755930.0,	0.0,	1.5);	(485163.2, 3756028.3,	0.0,	1.5);
(485180.5, 3756126.8,	0.0,	1.5);	(485197.9, 3756225.3,	0.0,	1.5);
(485215.3, 3756323.8,	0.0,	1.5);	(485232.6, 3756422.3,	0.0,	1.5);
(485250.0, 3756520.8,	0.0,	1.5);	(485267.3, 3756619.3,	0.0,	1.5);
(485284.7, 3756717.8,	0.0,	1.5);	(485302.1, 3756816.3,	0.0,	1.5);
(485319.4, 3756914.8,	0.0,	1.5);	(485336.8, 3757013.3,	0.0,	1.5);
(485354.2, 3757111.8,	0.0,	1.5);	(485371.5, 3757210.3,	0.0,	1.5);
(485388.9, 3757308.5,	0.0,	1.5);	(485406.3, 3757407.0,	0.0,	1.5);
(485423.6, 3757505.5,	0.0,	1.5);	(485441.0, 3757604.0,	0.0,	1.5);
(485458.3, 3757702.5,	0.0,	1.5);	(485475.7, 3757801.0,	0.0,	1.5);
(485493.1, 3757899.5,	0.0,	1.5);	(485510.4, 3757998.0,	0.0,	1.5);
(485527.8, 3758096.5,	0.0,	1.5);	(485545.2, 3758195.0,	0.0,	1.5);
(485126.8, 3755522.5,	0.0,	1.5);	(485161.0, 3755616.5,	0.0,	1.5);
(485195.3, 3755710.3,	0.0,	1.5);	(485229.4, 3755804.3,	0.0,	1.5);
(485263.6, 3755898.3,	0.0,	1.5);	(485297.8, 3755992.3,	0.0,	1.5);
(485332.1, 3756086.3,	0.0,	1.5);	(485366.3, 3756180.3,	0.0,	1.5);
(485400.4, 3756274.3,	0.0,	1.5);	(485434.7, 3756368.3,	0.0,	1.5);
(485468.9, 3756462.0,	0.0,	1.5);	(485503.1, 3756556.0,	0.0,	1.5);
(485537.3, 3756650.0,	0.0,	1.5);	(485571.5, 3756744.0,	0.0,	1.5);
(485605.7, 3756838.0,	0.0,	1.5);	(485639.9, 3756932.0,	0.0,	1.5);
(485674.1, 3757026.0,	0.0,	1.5);	(485708.3, 3757120.0,	0.0,	1.5);
(485742.5, 3757213.8,	0.0,	1.5);	(485776.7, 3757307.8,	0.0,	1.5);
(485810.9, 3757401.8,	0.0,	1.5);	(485845.1, 3757495.8,	0.0,	1.5);
(485879.3, 3757589.8,	0.0,	1.5);	(485913.5, 3757683.8,	0.0,	1.5);
(485947.7, 3757777.8,	0.0,	1.5);	(485981.9, 3757871.8,	0.0,	1.5);
(486016.1, 3757965.5,	0.0,	1.5);	(486050.3, 3758059.5,	0.0,	1.5);
(485174.2, 3755500.3,	0.0,	1.5);	(485224.2, 3755587.0,	0.0,	1.5);
(485274.2, 3755673.5,	0.0,	1.5);	(485324.2, 3755760.3,	0.0,	1.5);
(485374.2, 3755846.8,	0.0,	1.5);	(485424.2, 3755933.3,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485474.2, 3756020.0,	0.0,	1.5);	(485524.2, 3756106.5,	0.0,	1.5);
(485574.2, 3756193.3,	0.0,	1.5);	(485624.2, 3756279.8,	0.0,	1.5);
(485674.2, 3756366.3,	0.0,	1.5);	(485724.2, 3756453.0,	0.0,	1.5);
(485774.2, 3756539.5,	0.0,	1.5);	(485824.2, 3756626.3,	0.0,	1.5);
(485874.2, 3756712.8,	0.0,	1.5);	(485924.2, 3756799.3,	0.0,	1.5);
(485974.2, 3756886.0,	0.0,	1.5);	(486024.2, 3756972.5,	0.0,	1.5);
(486074.2, 3757059.3,	0.0,	1.5);	(486124.2, 3757145.8,	0.0,	1.5);
(486174.2, 3757232.3,	0.0,	1.5);	(486224.2, 3757319.0,	0.0,	1.5);
(486274.2, 3757405.5,	0.0,	1.5);	(486324.2, 3757492.3,	0.0,	1.5);
(486374.2, 3757578.8,	0.0,	1.5);	(486424.2, 3757665.5,	0.0,	1.5);
(486474.2, 3757752.0,	0.0,	1.5);	(486524.2, 3757838.5,	0.0,	1.5);
(485217.1, 3755470.3,	0.0,	1.5);	(485281.3, 3755547.0,	0.0,	1.5);
(485345.6, 3755623.5,	0.0,	1.5);	(485409.9, 3755700.3,	0.0,	1.5);
(485474.2, 3755776.8,	0.0,	1.5);	(485538.5, 3755853.3,	0.0,	1.5);
(485602.8, 3755930.0,	0.0,	1.5);	(485667.0, 3756006.5,	0.0,	1.5);
(485731.3, 3756083.3,	0.0,	1.5);	(485795.6, 3756159.8,	0.0,	1.5);
(485859.8, 3756236.3,	0.0,	1.5);	(485924.1, 3756313.0,	0.0,	1.5);
(485988.4, 3756389.5,	0.0,	1.5);	(486052.7, 3756466.3,	0.0,	1.5);
(486117.0, 3756542.8,	0.0,	1.5);	(486181.3, 3756619.5,	0.0,	1.5);
(486245.5, 3756696.0,	0.0,	1.5);	(486309.8, 3756772.5,	0.0,	1.5);
(486374.1, 3756849.3,	0.0,	1.5);	(486438.4, 3756925.8,	0.0,	1.5);
(486502.6, 3757002.5,	0.0,	1.5);	(486566.9, 3757079.0,	0.0,	1.5);
(486631.2, 3757155.5,	0.0,	1.5);	(486695.5, 3757232.3,	0.0,	1.5);
(486759.8, 3757308.8,	0.0,	1.5);	(486824.0, 3757385.5,	0.0,	1.5);
(486888.3, 3757462.0,	0.0,	1.5);	(486952.6, 3757538.8,	0.0,	1.5);
(485330.7, 3755497.8,	0.0,	1.5);	(485407.3, 3755562.0,	0.0,	1.5);
(485483.9, 3755626.3,	0.0,	1.5);	(485560.5, 3755690.5,	0.0,	1.5);
(485637.1, 3755754.8,	0.0,	1.5);	(485713.7, 3755819.0,	0.0,	1.5);
(485790.3, 3755883.3,	0.0,	1.5);	(485866.9, 3755947.5,	0.0,	1.5);
(485943.5, 3756011.8,	0.0,	1.5);	(486020.1, 3756076.3,	0.0,	1.5);
(486096.7, 3756140.5,	0.0,	1.5);	(486173.3, 3756204.8,	0.0,	1.5);
(486249.9, 3756269.0,	0.0,	1.5);	(486326.5, 3756333.3,	0.0,	1.5);
(486403.1, 3756397.5,	0.0,	1.5);	(486479.7, 3756461.8,	0.0,	1.5);
(486556.3, 3756526.0,	0.0,	1.5);	(486632.9, 3756590.3,	0.0,	1.5);
(486709.5, 3756654.8,	0.0,	1.5);	(486786.1, 3756719.0,	0.0,	1.5);
(486862.8, 3756783.3,	0.0,	1.5);	(486939.3, 3756847.5,	0.0,	1.5);
(487015.9, 3756911.8,	0.0,	1.5);	(487092.6, 3756976.0,	0.0,	1.5);
(487169.2, 3757040.3,	0.0,	1.5);	(487245.8, 3757104.5,	0.0,	1.5);
(487322.4, 3757168.8,	0.0,	1.5);	(485457.3, 3755490.5,	0.0,	1.5);
(485543.8, 3755540.5,	0.0,	1.5);	(485630.4, 3755590.5,	0.0,	1.5);
(485717.1, 3755640.5,	0.0,	1.5);	(485803.7, 3755690.5,	0.0,	1.5);
(485890.3, 3755740.5,	0.0,	1.5);	(485976.9, 3755790.5,	0.0,	1.5);
(486063.5, 3755840.5,	0.0,	1.5);	(486150.1, 3755890.5,	0.0,	1.5);
(486236.7, 3755940.5,	0.0,	1.5);	(486323.3, 3755990.5,	0.0,	1.5);
(486409.9, 3756040.5,	0.0,	1.5);	(486496.5, 3756090.5,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(486583.1, 3756140.5,	0.0,	1.5);	(486669.7, 3756190.5,	0.0,	1.5);
(486756.3, 3756240.5,	0.0,	1.5);	(486842.9, 3756290.5,	0.0,	1.5);
(486929.5, 3756340.5,	0.0,	1.5);	(487016.1, 3756390.5,	0.0,	1.5);
(487102.7, 3756440.5,	0.0,	1.5);	(487189.3, 3756490.5,	0.0,	1.5);
(487275.9, 3756540.5,	0.0,	1.5);	(487362.5, 3756590.5,	0.0,	1.5);
(487449.1, 3756640.5,	0.0,	1.5);	(487535.7, 3756690.5,	0.0,	1.5);
(487622.3, 3756740.5,	0.0,	1.5);	(485400.1, 3755377.3,	0.0,	1.5);
(485494.1, 3755411.5,	0.0,	1.5);	(485268.9, 3755002.0,	0.0,	1.5);
(485682.0, 3755480.0,	0.0,	1.5);	(485776.0, 3755514.3,	0.0,	1.5);
(485869.9, 3755548.3,	0.0,	1.5);	(485963.9, 3755582.5,	0.0,	1.5);
(486057.9, 3755616.8,	0.0,	1.5);	(486151.9, 3755651.0,	0.0,	1.5);
(486245.8, 3755685.3,	0.0,	1.5);	(486339.8, 3755719.3,	0.0,	1.5);
(486433.8, 3755753.5,	0.0,	1.5);	(486527.8, 3755787.8,	0.0,	1.5);
(486621.7, 3755822.0,	0.0,	1.5);	(486715.7, 3755856.3,	0.0,	1.5);
(486809.7, 3755890.3,	0.0,	1.5);	(486903.6, 3755924.5,	0.0,	1.5);
(486997.6, 3755958.8,	0.0,	1.5);	(487091.6, 3755993.0,	0.0,	1.5);
(487185.5, 3756027.3,	0.0,	1.5);	(487279.5, 3756061.3,	0.0,	1.5);
(487373.5, 3756095.5,	0.0,	1.5);	(487467.4, 3756129.8,	0.0,	1.5);
(487561.4, 3756164.0,	0.0,	1.5);	(487655.4, 3756198.3,	0.0,	1.5);
(487749.3, 3756232.3,	0.0,	1.5);	(487843.3, 3756266.5,	0.0,	1.5);
(485418.2, 3755310.0,	0.0,	1.5);	(485615.1, 3755344.8,	0.0,	1.5);
(485713.6, 3755362.0,	0.0,	1.5);	(485812.1, 3755379.5,	0.0,	1.5);
(485910.6, 3755396.8,	0.0,	1.5);	(486009.0, 3755414.3,	0.0,	1.5);
(486107.5, 3755431.5,	0.0,	1.5);	(486206.0, 3755449.0,	0.0,	1.5);
(486304.5, 3755466.3,	0.0,	1.5);	(486403.0, 3755483.5,	0.0,	1.5);
(486501.4, 3755501.0,	0.0,	1.5);	(486599.9, 3755518.3,	0.0,	1.5);
(486698.4, 3755535.8,	0.0,	1.5);	(486796.9, 3755553.0,	0.0,	1.5);
(486895.4, 3755570.5,	0.0,	1.5);	(486993.8, 3755587.8,	0.0,	1.5);
(487092.3, 3755605.3,	0.0,	1.5);	(487190.8, 3755622.5,	0.0,	1.5);
(487289.3, 3755640.0,	0.0,	1.5);	(487387.8, 3755657.3,	0.0,	1.5);
(487486.3, 3755674.8,	0.0,	1.5);	(487584.7, 3755692.0,	0.0,	1.5);
(487683.2, 3755709.3,	0.0,	1.5);	(487781.7, 3755726.8,	0.0,	1.5);
(487880.2, 3755744.0,	0.0,	1.5);	(487978.7, 3755761.5,	0.0,	1.5);
(485324.2, 3755240.5,	0.0,	1.5);	(485424.2, 3755240.5,	0.0,	1.5);
(485524.2, 3755240.5,	0.0,	1.5);	(485624.2, 3755240.5,	0.0,	1.5);
(485724.2, 3755240.5,	0.0,	1.5);	(485824.2, 3755240.5,	0.0,	1.5);
(485924.2, 3755240.5,	0.0,	1.5);	(486024.2, 3755240.5,	0.0,	1.5);
(486124.2, 3755240.5,	0.0,	1.5);	(486224.2, 3755240.5,	0.0,	1.5);
(486324.2, 3755240.5,	0.0,	1.5);	(486424.2, 3755240.5,	0.0,	1.5);
(486524.2, 3755240.5,	0.0,	1.5);	(486624.2, 3755240.5,	0.0,	1.5);
(486724.2, 3755240.5,	0.0,	1.5);	(486824.2, 3755240.5,	0.0,	1.5);
(486924.2, 3755240.5,	0.0,	1.5);	(487024.2, 3755240.5,	0.0,	1.5);
(487124.2, 3755240.5,	0.0,	1.5);	(487224.2, 3755240.5,	0.0,	1.5);
(487324.2, 3755240.5,	0.0,	1.5);	(487424.2, 3755240.5,	0.0,	1.5);
(487524.2, 3755240.5,	0.0,	1.5);	(487624.2, 3755240.5,	0.0,	1.5);

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 10:20:07

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(487724.2, 3755240.5,	0.0,	1.5);	(487824.2, 3755240.5,	0.0,	1.5);
(487924.2, 3755240.5,	0.0,	1.5);	(488024.2, 3755240.5,	0.0,	1.5);
(485418.2, 3755171.0,	0.0,	1.5);	(485615.1, 3755136.3,	0.0,	1.5);
(485713.6, 3755119.0,	0.0,	1.5);	(485812.1, 3755101.5,	0.0,	1.5);
(485910.6, 3755084.3,	0.0,	1.5);	(486009.0, 3755066.8,	0.0,	1.5);
(486107.5, 3755049.5,	0.0,	1.5);	(486206.0, 3755032.3,	0.0,	1.5);
(486304.5, 3755014.8,	0.0,	1.5);	(486403.0, 3754997.5,	0.0,	1.5);
(486501.4, 3754980.0,	0.0,	1.5);	(486599.9, 3754962.8,	0.0,	1.5);
(486698.4, 3754945.3,	0.0,	1.5);	(486796.9, 3754928.0,	0.0,	1.5);
(486895.4, 3754910.5,	0.0,	1.5);	(486993.8, 3754893.3,	0.0,	1.5);
(487092.3, 3754875.8,	0.0,	1.5);	(487190.8, 3754858.5,	0.0,	1.5);
(487289.3, 3754841.0,	0.0,	1.5);	(487387.8, 3754823.8,	0.0,	1.5);
(487486.3, 3754806.5,	0.0,	1.5);	(487584.7, 3754789.0,	0.0,	1.5);
(487683.2, 3754771.8,	0.0,	1.5);	(487781.7, 3754754.3,	0.0,	1.5);
(487880.2, 3754737.0,	0.0,	1.5);	(487978.7, 3754719.5,	0.0,	1.5);
(485400.1, 3755103.8,	0.0,	1.5);	(485494.1, 3755069.5,	0.0,	1.5);
(485588.1, 3755035.3,	0.0,	1.5);	(485682.0, 3755001.0,	0.0,	1.5);
(485776.0, 3754967.0,	0.0,	1.5);	(485869.9, 3754932.8,	0.0,	1.5);
(485963.9, 3754898.5,	0.0,	1.5);	(486057.9, 3754864.3,	0.0,	1.5);
(486151.9, 3754830.0,	0.0,	1.5);	(486245.8, 3754796.0,	0.0,	1.5);
(486339.8, 3754761.8,	0.0,	1.5);	(486433.8, 3754727.5,	0.0,	1.5);
(486527.8, 3754693.3,	0.0,	1.5);	(486621.7, 3754659.0,	0.0,	1.5);
(486715.7, 3754624.8,	0.0,	1.5);	(486809.7, 3754590.8,	0.0,	1.5);
(486903.6, 3754556.5,	0.0,	1.5);	(486997.6, 3754522.3,	0.0,	1.5);
(487091.6, 3754488.0,	0.0,	1.5);	(487185.5, 3754453.8,	0.0,	1.5);
(487279.5, 3754419.8,	0.0,	1.5);	(487373.5, 3754385.5,	0.0,	1.5);
(487467.4, 3754351.3,	0.0,	1.5);	(487561.4, 3754317.0,	0.0,	1.5);
(487655.4, 3754282.8,	0.0,	1.5);	(487749.3, 3754248.8,	0.0,	1.5);
(487843.3, 3754214.5,	0.0,	1.5);	(485457.3, 3754990.5,	0.0,	1.5);
(485543.8, 3754940.5,	0.0,	1.5);	(485630.4, 3754890.5,	0.0,	1.5);
(485717.1, 3754840.5,	0.0,	1.5);	(485803.7, 3754790.5,	0.0,	1.5);
(485890.3, 3754740.5,	0.0,	1.5);	(485976.9, 3754690.5,	0.0,	1.5);
(486063.5, 3754640.5,	0.0,	1.5);	(486150.1, 3754590.5,	0.0,	1.5);
(486236.7, 3754540.5,	0.0,	1.5);	(486323.3, 3754490.5,	0.0,	1.5);
(486409.9, 3754440.5,	0.0,	1.5);	(486496.5, 3754390.5,	0.0,	1.5);
(486583.1, 3754340.5,	0.0,	1.5);	(486669.7, 3754290.5,	0.0,	1.5);
(486756.3, 3754240.5,	0.0,	1.5);	(486842.9, 3754190.5,	0.0,	1.5);
(486929.5, 3754140.5,	0.0,	1.5);	(487016.1, 3754090.5,	0.0,	1.5);
(487102.7, 3754040.5,	0.0,	1.5);	(487189.3, 3753990.5,	0.0,	1.5);
(487275.9, 3753940.5,	0.0,	1.5);	(487362.5, 3753890.5,	0.0,	1.5);
(487449.1, 3753840.5,	0.0,	1.5);	(487535.7, 3753790.5,	0.0,	1.5);
(487622.3, 3753740.5,	0.0,	1.5);	(485330.7, 3754983.5,	0.0,	1.5);
(485407.3, 3754919.0,	0.0,	1.5);	(485483.9, 3754854.8,	0.0,	1.5);
(485560.5, 3754790.5,	0.0,	1.5);	(485637.1, 3754726.3,	0.0,	1.5);
(485713.7, 3754662.0,	0.0,	1.5);	(485790.3, 3754597.8,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485866.9, 3754533.5,	0.0,	1.5);	(485943.5, 3754469.3,	0.0,	1.5);
(486020.1, 3754405.0,	0.0,	1.5);	(486096.7, 3754340.5,	0.0,	1.5);
(486173.3, 3754276.3,	0.0,	1.5);	(486249.9, 3754212.0,	0.0,	1.5);
(486326.5, 3754147.8,	0.0,	1.5);	(486403.1, 3754083.5,	0.0,	1.5);
(486479.7, 3754019.3,	0.0,	1.5);	(486556.3, 3753955.0,	0.0,	1.5);
(486632.9, 3753890.8,	0.0,	1.5);	(486709.5, 3753826.5,	0.0,	1.5);
(486786.1, 3753762.0,	0.0,	1.5);	(486862.8, 3753697.8,	0.0,	1.5);
(486939.3, 3753633.5,	0.0,	1.5);	(487015.9, 3753569.3,	0.0,	1.5);
(487092.6, 3753505.0,	0.0,	1.5);	(487169.2, 3753440.8,	0.0,	1.5);
(487245.8, 3753376.5,	0.0,	1.5);	(487322.4, 3753312.3,	0.0,	1.5);
(485217.1, 3755010.8,	0.0,	1.5);	(485281.3, 3754934.0,	0.0,	1.5);
(485345.6, 3754857.5,	0.0,	1.5);	(485409.9, 3754781.0,	0.0,	1.5);
(485474.2, 3754704.3,	0.0,	1.5);	(485538.5, 3754627.8,	0.0,	1.5);
(485602.8, 3754551.0,	0.0,	1.5);	(485667.0, 3754474.5,	0.0,	1.5);
(485731.3, 3754397.8,	0.0,	1.5);	(485795.6, 3754321.3,	0.0,	1.5);
(485859.8, 3754244.8,	0.0,	1.5);	(485924.1, 3754168.0,	0.0,	1.5);
(485988.4, 3754091.5,	0.0,	1.5);	(486052.7, 3754014.8,	0.0,	1.5);
(486117.0, 3753938.3,	0.0,	1.5);	(486181.3, 3753861.8,	0.0,	1.5);
(486245.5, 3753785.0,	0.0,	1.5);	(486309.8, 3753708.5,	0.0,	1.5);
(486374.1, 3753631.8,	0.0,	1.5);	(486438.4, 3753555.3,	0.0,	1.5);
(486502.6, 3753478.5,	0.0,	1.5);	(486566.9, 3753402.0,	0.0,	1.5);
(486631.2, 3753325.5,	0.0,	1.5);	(486695.5, 3753248.8,	0.0,	1.5);
(486759.8, 3753172.3,	0.0,	1.5);	(486824.0, 3753095.5,	0.0,	1.5);
(486888.3, 3753019.0,	0.0,	1.5);	(486952.6, 3752942.5,	0.0,	1.5);
(485174.2, 3754980.8,	0.0,	1.5);	(485224.2, 3754894.0,	0.0,	1.5);
(485274.2, 3754807.5,	0.0,	1.5);	(485324.2, 3754721.0,	0.0,	1.5);
(485374.2, 3754634.3,	0.0,	1.5);	(485424.2, 3754547.8,	0.0,	1.5);
(485474.2, 3754461.0,	0.0,	1.5);	(485524.2, 3754374.5,	0.0,	1.5);
(485574.2, 3754288.0,	0.0,	1.5);	(485624.2, 3754201.3,	0.0,	1.5);
(485674.2, 3754114.8,	0.0,	1.5);	(485724.2, 3754028.0,	0.0,	1.5);
(485774.2, 3753941.5,	0.0,	1.5);	(485824.2, 3753854.8,	0.0,	1.5);
(485874.2, 3753768.3,	0.0,	1.5);	(485924.2, 3753681.8,	0.0,	1.5);
(485974.2, 3753595.0,	0.0,	1.5);	(486024.2, 3753508.5,	0.0,	1.5);
(486074.2, 3753421.8,	0.0,	1.5);	(486124.2, 3753335.3,	0.0,	1.5);
(486174.2, 3753248.8,	0.0,	1.5);	(486224.2, 3753162.0,	0.0,	1.5);
(486274.2, 3753075.5,	0.0,	1.5);	(486324.2, 3752988.8,	0.0,	1.5);
(486374.2, 3752902.3,	0.0,	1.5);	(486424.2, 3752815.8,	0.0,	1.5);
(486474.2, 3752729.0,	0.0,	1.5);	(486524.2, 3752642.5,	0.0,	1.5);
(485126.8, 3754958.5,	0.0,	1.5);	(485161.0, 3754864.8,	0.0,	1.5);
(485195.3, 3754770.8,	0.0,	1.5);	(485229.4, 3754676.8,	0.0,	1.5);
(485263.6, 3754582.8,	0.0,	1.5);	(485297.8, 3754488.8,	0.0,	1.5);
(485332.1, 3754394.8,	0.0,	1.5);	(485366.3, 3754300.8,	0.0,	1.5);
(485400.4, 3754206.8,	0.0,	1.5);	(485434.7, 3754113.0,	0.0,	1.5);
(485468.9, 3754019.0,	0.0,	1.5);	(485503.1, 3753925.0,	0.0,	1.5);
(485537.3, 3753831.0,	0.0,	1.5);	(485571.5, 3753737.0,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485605.7, 3753643.0,	0.0,	1.5);	(485639.9, 3753549.0,	0.0,	1.5);
(485674.1, 3753455.0,	0.0,	1.5);	(485708.3, 3753361.0,	0.0,	1.5);
(485742.5, 3753267.3,	0.0,	1.5);	(485776.7, 3753173.3,	0.0,	1.5);
(485810.9, 3753079.3,	0.0,	1.5);	(485845.1, 3752985.3,	0.0,	1.5);
(485879.3, 3752891.3,	0.0,	1.5);	(485913.5, 3752797.3,	0.0,	1.5);
(485947.7, 3752703.3,	0.0,	1.5);	(485981.9, 3752609.3,	0.0,	1.5);
(486016.1, 3752515.5,	0.0,	1.5);	(486050.3, 3752421.5,	0.0,	1.5);
(485076.3, 3754945.0,	0.0,	1.5);	(485093.7, 3754846.5,	0.0,	1.5);
(485111.1, 3754748.0,	0.0,	1.5);	(485128.4, 3754649.8,	0.0,	1.5);
(485145.8, 3754551.3,	0.0,	1.5);	(485163.2, 3754452.8,	0.0,	1.5);
(485180.5, 3754354.3,	0.0,	1.5);	(485197.9, 3754255.8,	0.0,	1.5);
(485215.3, 3754157.3,	0.0,	1.5);	(485232.6, 3754058.8,	0.0,	1.5);
(485250.0, 3753960.3,	0.0,	1.5);	(485267.3, 3753861.8,	0.0,	1.5);
(485284.7, 3753763.3,	0.0,	1.5);	(485302.1, 3753664.8,	0.0,	1.5);
(485319.4, 3753566.3,	0.0,	1.5);	(485336.8, 3753467.8,	0.0,	1.5);
(485354.2, 3753369.5,	0.0,	1.5);	(485371.5, 3753271.0,	0.0,	1.5);
(485388.9, 3753172.5,	0.0,	1.5);	(485406.3, 3753074.0,	0.0,	1.5);
(485423.6, 3752975.5,	0.0,	1.5);	(485441.0, 3752877.0,	0.0,	1.5);
(485458.3, 3752778.5,	0.0,	1.5);	(485475.7, 3752680.0,	0.0,	1.5);
(485493.1, 3752581.5,	0.0,	1.5);	(485510.4, 3752483.0,	0.0,	1.5);
(485527.8, 3752384.5,	0.0,	1.5);	(485545.2, 3752286.0,	0.0,	1.5);
(485024.2, 3754940.5,	0.0,	1.5);	(485024.2, 3754840.5,	0.0,	1.5);
(485024.2, 3754740.5,	0.0,	1.5);	(485024.2, 3754640.5,	0.0,	1.5);
(485024.2, 3754540.5,	0.0,	1.5);	(485024.2, 3754440.5,	0.0,	1.5);
(485024.2, 3754340.5,	0.0,	1.5);	(485024.2, 3754240.5,	0.0,	1.5);
(485024.2, 3754140.5,	0.0,	1.5);	(485024.2, 3754040.5,	0.0,	1.5);
(485024.2, 3753940.5,	0.0,	1.5);	(485024.2, 3753840.5,	0.0,	1.5);
(485024.2, 3753740.5,	0.0,	1.5);	(485024.2, 3753640.5,	0.0,	1.5);
(485024.2, 3753540.5,	0.0,	1.5);	(485024.2, 3753440.5,	0.0,	1.5);
(485024.2, 3753340.5,	0.0,	1.5);	(485024.2, 3753240.5,	0.0,	1.5);
(485024.2, 3753140.5,	0.0,	1.5);	(485024.2, 3753040.5,	0.0,	1.5);
(485024.2, 3752940.5,	0.0,	1.5);	(485024.2, 3752840.5,	0.0,	1.5);
(485024.2, 3752740.5,	0.0,	1.5);	(485024.2, 3752640.5,	0.0,	1.5);
(485024.2, 3752540.5,	0.0,	1.5);	(485024.2, 3752440.5,	0.0,	1.5);
(485024.2, 3752340.5,	0.0,	1.5);	(485024.2, 3752240.5,	0.0,	1.5);
(484972.1, 3754945.0,	0.0,	1.5);	(484954.8, 3754846.5,	0.0,	1.5);
(484937.4, 3754748.0,	0.0,	1.5);	(484920.0, 3754649.8,	0.0,	1.5);
(484902.7, 3754551.3,	0.0,	1.5);	(484885.3, 3754452.8,	0.0,	1.5);
(484867.9, 3754354.3,	0.0,	1.5);	(484850.6, 3754255.8,	0.0,	1.5);
(484833.2, 3754157.3,	0.0,	1.5);	(484815.8, 3754058.8,	0.0,	1.5);
(484798.5, 3753960.3,	0.0,	1.5);	(484781.1, 3753861.8,	0.0,	1.5);
(484763.8, 3753763.3,	0.0,	1.5);	(484746.4, 3753664.8,	0.0,	1.5);
(484729.0, 3753566.3,	0.0,	1.5);	(484711.7, 3753467.8,	0.0,	1.5);
(484694.3, 3753369.5,	0.0,	1.5);	(484676.9, 3753271.0,	0.0,	1.5);
(484659.6, 3753172.5,	0.0,	1.5);	(484642.2, 3753074.0,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(484624.8, 3752975.5,	0.0,	1.5);	(484607.5, 3752877.0,	0.0,	1.5);
(484590.1, 3752778.5,	0.0,	1.5);	(484572.8, 3752680.0,	0.0,	1.5);
(484555.4, 3752581.5,	0.0,	1.5);	(484538.0, 3752483.0,	0.0,	1.5);
(484520.7, 3752384.5,	0.0,	1.5);	(484503.3, 3752286.0,	0.0,	1.5);
(484921.6, 3754958.5,	0.0,	1.5);	(484887.4, 3754864.8,	0.0,	1.5);
(484853.2, 3754770.8,	0.0,	1.5);	(484819.0, 3754676.8,	0.0,	1.5);
(484784.8, 3754582.8,	0.0,	1.5);	(484750.6, 3754488.8,	0.0,	1.5);
(484716.4, 3754394.8,	0.0,	1.5);	(484682.2, 3754300.8,	0.0,	1.5);
(484648.0, 3754206.8,	0.0,	1.5);	(484613.8, 3754113.0,	0.0,	1.5);
(484579.6, 3754019.0,	0.0,	1.5);	(484545.4, 3753925.0,	0.0,	1.5);
(484511.2, 3753831.0,	0.0,	1.5);	(484477.0, 3753737.0,	0.0,	1.5);
(484442.8, 3753643.0,	0.0,	1.5);	(484408.6, 3753549.0,	0.0,	1.5);
(484374.4, 3753455.0,	0.0,	1.5);	(484340.2, 3753361.0,	0.0,	1.5);
(484306.0, 3753267.3,	0.0,	1.5);	(484271.8, 3753173.3,	0.0,	1.5);
(484237.6, 3753079.3,	0.0,	1.5);	(484203.4, 3752985.3,	0.0,	1.5);
(484169.2, 3752891.3,	0.0,	1.5);	(484135.0, 3752797.3,	0.0,	1.5);
(484100.8, 3752703.3,	0.0,	1.5);	(484066.6, 3752609.3,	0.0,	1.5);
(484032.4, 3752515.5,	0.0,	1.5);	(483998.2, 3752421.5,	0.0,	1.5);
(484874.2, 3754980.8,	0.0,	1.5);	(484824.2, 3754894.0,	0.0,	1.5);
(484774.2, 3754807.5,	0.0,	1.5);	(484724.2, 3754721.0,	0.0,	1.5);
(484674.2, 3754634.3,	0.0,	1.5);	(484624.2, 3754547.8,	0.0,	1.5);
(484574.2, 3754461.0,	0.0,	1.5);	(484524.2, 3754374.5,	0.0,	1.5);
(484474.2, 3754288.0,	0.0,	1.5);	(484424.2, 3754201.3,	0.0,	1.5);
(484374.2, 3754114.8,	0.0,	1.5);	(484324.2, 3754028.0,	0.0,	1.5);
(484274.2, 3753941.5,	0.0,	1.5);	(484224.2, 3753854.8,	0.0,	1.5);
(484174.2, 3753768.3,	0.0,	1.5);	(484124.2, 3753681.8,	0.0,	1.5);
(484074.2, 3753595.0,	0.0,	1.5);	(484024.2, 3753508.5,	0.0,	1.5);
(483974.2, 3753421.8,	0.0,	1.5);	(483924.2, 3753335.3,	0.0,	1.5);
(483874.2, 3753248.8,	0.0,	1.5);	(483824.2, 3753162.0,	0.0,	1.5);
(483774.2, 3753075.5,	0.0,	1.5);	(483724.2, 3752988.8,	0.0,	1.5);
(483674.2, 3752902.3,	0.0,	1.5);	(483624.2, 3752815.8,	0.0,	1.5);
(483574.2, 3752729.0,	0.0,	1.5);	(483524.2, 3752642.5,	0.0,	1.5);
(484767.1, 3754934.0,	0.0,	1.5);	(484702.8, 3754857.5,	0.0,	1.5);
(484638.6, 3754781.0,	0.0,	1.5);	(484574.3, 3754704.3,	0.0,	1.5);
(484510.0, 3754627.8,	0.0,	1.5);	(484445.7, 3754551.0,	0.0,	1.5);
(484381.4, 3754474.5,	0.0,	1.5);	(484317.2, 3754397.8,	0.0,	1.5);
(484252.9, 3754321.3,	0.0,	1.5);	(484188.6, 3754244.8,	0.0,	1.5);
(484124.3, 3754168.0,	0.0,	1.5);	(484060.1, 3754091.5,	0.0,	1.5);
(483995.8, 3754014.8,	0.0,	1.5);	(483931.5, 3753938.3,	0.0,	1.5);
(483867.2, 3753861.8,	0.0,	1.5);	(483802.9, 3753785.0,	0.0,	1.5);
(483738.7, 3753708.5,	0.0,	1.5);	(483674.4, 3753631.8,	0.0,	1.5);
(483610.1, 3753555.3,	0.0,	1.5);	(483545.8, 3753478.5,	0.0,	1.5);
(483481.5, 3753402.0,	0.0,	1.5);	(483417.3, 3753325.5,	0.0,	1.5);
(483353.0, 3753248.8,	0.0,	1.5);	(483288.7, 3753172.3,	0.0,	1.5);
(483224.4, 3753095.5,	0.0,	1.5);	(483160.2, 3753019.0,	0.0,	1.5);

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 10:20:07

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483095.9, 3752942.5,	0.0,	1.5);	(484717.8, 3754983.5,	0.0,	1.5);
(484641.2, 3754919.0,	0.0,	1.5);	(484564.6, 3754854.8,	0.0,	1.5);
(484488.0, 3754790.5,	0.0,	1.5);	(484411.4, 3754726.3,	0.0,	1.5);
(484334.8, 3754662.0,	0.0,	1.5);	(484258.2, 3754597.8,	0.0,	1.5);
(484181.6, 3754533.5,	0.0,	1.5);	(484105.0, 3754469.3,	0.0,	1.5);
(484028.4, 3754405.0,	0.0,	1.5);	(483951.8, 3754340.5,	0.0,	1.5);
(483875.2, 3754276.3,	0.0,	1.5);	(483798.6, 3754212.0,	0.0,	1.5);
(483721.9, 3754147.8,	0.0,	1.5);	(483645.3, 3754083.5,	0.0,	1.5);
(483568.8, 3754019.3,	0.0,	1.5);	(483492.1, 3753955.0,	0.0,	1.5);
(483415.5, 3753890.8,	0.0,	1.5);	(483338.9, 3753826.5,	0.0,	1.5);
(483262.3, 3753762.0,	0.0,	1.5);	(483185.7, 3753697.8,	0.0,	1.5);
(483109.1, 3753633.5,	0.0,	1.5);	(483032.5, 3753569.3,	0.0,	1.5);
(482955.9, 3753505.0,	0.0,	1.5);	(482879.3, 3753440.8,	0.0,	1.5);
(482802.7, 3753376.5,	0.0,	1.5);	(482726.1, 3753312.3,	0.0,	1.5);
(484677.8, 3755040.5,	0.0,	1.5);	(484591.2, 3754990.5,	0.0,	1.5);
(484504.6, 3754940.5,	0.0,	1.5);	(484418.0, 3754890.5,	0.0,	1.5);
(484331.4, 3754840.5,	0.0,	1.5);	(484244.8, 3754790.5,	0.0,	1.5);
(484158.2, 3754740.5,	0.0,	1.5);	(484071.6, 3754690.5,	0.0,	1.5);
(483985.0, 3754640.5,	0.0,	1.5);	(483898.4, 3754590.5,	0.0,	1.5);
(483811.8, 3754540.5,	0.0,	1.5);	(483725.2, 3754490.5,	0.0,	1.5);
(483638.6, 3754440.5,	0.0,	1.5);	(483552.0, 3754390.5,	0.0,	1.5);
(483465.4, 3754340.5,	0.0,	1.5);	(483378.8, 3754290.5,	0.0,	1.5);
(483292.2, 3754240.5,	0.0,	1.5);	(483205.6, 3754190.5,	0.0,	1.5);
(483119.0, 3754140.5,	0.0,	1.5);	(483032.4, 3754090.5,	0.0,	1.5);
(482945.8, 3754040.5,	0.0,	1.5);	(482859.2, 3753990.5,	0.0,	1.5);
(482772.6, 3753940.5,	0.0,	1.5);	(482686.0, 3753890.5,	0.0,	1.5);
(482599.4, 3753840.5,	0.0,	1.5);	(482512.8, 3753790.5,	0.0,	1.5);
(482426.2, 3753740.5,	0.0,	1.5);	(484648.3, 3755103.8,	0.0,	1.5);
(484554.4, 3755069.5,	0.0,	1.5);	(484460.4, 3755035.3,	0.0,	1.5);
(484366.4, 3755001.0,	0.0,	1.5);	(484272.5, 3754967.0,	0.0,	1.5);
(484178.5, 3754932.8,	0.0,	1.5);	(484084.5, 3754898.5,	0.0,	1.5);
(483990.6, 3754864.3,	0.0,	1.5);	(483896.6, 3754830.0,	0.0,	1.5);
(483802.6, 3754796.0,	0.0,	1.5);	(483708.7, 3754761.8,	0.0,	1.5);
(483614.7, 3754727.5,	0.0,	1.5);	(483520.7, 3754693.3,	0.0,	1.5);
(483426.8, 3754659.0,	0.0,	1.5);	(483332.8, 3754624.8,	0.0,	1.5);
(483238.8, 3754590.8,	0.0,	1.5);	(483144.8, 3754556.5,	0.0,	1.5);
(483050.9, 3754522.3,	0.0,	1.5);	(482956.9, 3754488.0,	0.0,	1.5);
(482862.9, 3754453.8,	0.0,	1.5);	(482769.0, 3754419.8,	0.0,	1.5);
(482675.0, 3754385.5,	0.0,	1.5);	(482581.0, 3754351.3,	0.0,	1.5);
(482487.1, 3754317.0,	0.0,	1.5);	(482393.1, 3754282.8,	0.0,	1.5);
(482299.1, 3754248.8,	0.0,	1.5);	(482205.2, 3754214.5,	0.0,	1.5);
(484630.3, 3755171.0,	0.0,	1.5);	(484531.8, 3755153.8,	0.0,	1.5);
(484433.3, 3755136.3,	0.0,	1.5);	(484334.9, 3755119.0,	0.0,	1.5);
(484236.4, 3755101.5,	0.0,	1.5);	(484137.9, 3755084.3,	0.0,	1.5);
(484039.4, 3755066.8,	0.0,	1.5);	(483940.9, 3755049.5,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483842.5, 3755032.3,	0.0,	1.5);	(483744.0, 3755014.8,	0.0,	1.5);
(483645.5, 3754997.5,	0.0,	1.5);	(483547.0, 3754980.0,	0.0,	1.5);
(483448.5, 3754962.8,	0.0,	1.5);	(483350.1, 3754945.3,	0.0,	1.5);
(483251.6, 3754928.0,	0.0,	1.5);	(483153.1, 3754910.5,	0.0,	1.5);
(483054.6, 3754893.3,	0.0,	1.5);	(482956.1, 3754875.8,	0.0,	1.5);
(482857.7, 3754858.5,	0.0,	1.5);	(482759.2, 3754841.0,	0.0,	1.5);
(482660.7, 3754823.8,	0.0,	1.5);	(482562.2, 3754806.5,	0.0,	1.5);
(482463.7, 3754789.0,	0.0,	1.5);	(482365.3, 3754771.8,	0.0,	1.5);
(482266.8, 3754754.3,	0.0,	1.5);	(482168.3, 3754737.0,	0.0,	1.5);
(482069.8, 3754719.5,	0.0,	1.5);	(484624.2, 3755240.5,	0.0,	1.5);
(484524.2, 3755240.5,	0.0,	1.5);	(484424.2, 3755240.5,	0.0,	1.5);
(484324.2, 3755240.5,	0.0,	1.5);	(484224.2, 3755240.5,	0.0,	1.5);
(484124.2, 3755240.5,	0.0,	1.5);	(484024.2, 3755240.5,	0.0,	1.5);
(483924.2, 3755240.5,	0.0,	1.5);	(483824.2, 3755240.5,	0.0,	1.5);
(483724.2, 3755240.5,	0.0,	1.5);	(483624.2, 3755240.5,	0.0,	1.5);
(485270.1, 3754972.8,	0.0,	1.5);	(483424.2, 3755240.5,	0.0,	1.5);
(483324.2, 3755240.5,	0.0,	1.5);	(483224.2, 3755240.5,	0.0,	1.5);
(483124.2, 3755240.5,	0.0,	1.5);	(483024.2, 3755240.5,	0.0,	1.5);
(482924.2, 3755240.5,	0.0,	1.5);	(482824.2, 3755240.5,	0.0,	1.5);
(482724.2, 3755240.5,	0.0,	1.5);	(482624.2, 3755240.5,	0.0,	1.5);
(482524.2, 3755240.5,	0.0,	1.5);	(482424.2, 3755240.5,	0.0,	1.5);
(482324.2, 3755240.5,	0.0,	1.5);	(482224.2, 3755240.5,	0.0,	1.5);
(482124.2, 3755240.5,	0.0,	1.5);	(482024.2, 3755240.5,	0.0,	1.5);
(484630.3, 3755310.0,	0.0,	1.5);	(484531.8, 3755327.3,	0.0,	1.5);
(484433.3, 3755344.8,	0.0,	1.5);	(484334.9, 3755362.0,	0.0,	1.5);
(484236.4, 3755379.5,	0.0,	1.5);	(484137.9, 3755396.8,	0.0,	1.5);
(484039.4, 3755414.3,	0.0,	1.5);	(483940.9, 3755431.5,	0.0,	1.5);
(485244.8, 3754972.8,	0.0,	1.5);	(483744.0, 3755466.3,	0.0,	1.5);
(483645.5, 3755483.5,	0.0,	1.5);	(483547.0, 3755501.0,	0.0,	1.5);
(483448.5, 3755518.3,	0.0,	1.5);	(483350.1, 3755535.8,	0.0,	1.5);
(483251.6, 3755553.0,	0.0,	1.5);	(483153.1, 3755570.5,	0.0,	1.5);
(483054.6, 3755587.8,	0.0,	1.5);	(482956.1, 3755605.3,	0.0,	1.5);
(482857.7, 3755622.5,	0.0,	1.5);	(482759.2, 3755640.0,	0.0,	1.5);
(482660.7, 3755657.3,	0.0,	1.5);	(482562.2, 3755674.8,	0.0,	1.5);
(482463.7, 3755692.0,	0.0,	1.5);	(482365.3, 3755709.3,	0.0,	1.5);
(482266.8, 3755726.8,	0.0,	1.5);	(482168.3, 3755744.0,	0.0,	1.5);
(482069.8, 3755761.5,	0.0,	1.5);	(484648.3, 3755377.3,	0.0,	1.5);
(484554.4, 3755411.5,	0.0,	1.5);	(485246.7, 3755001.8,	0.0,	1.5);
(484366.4, 3755480.0,	0.0,	1.5);	(484272.5, 3755514.3,	0.0,	1.5);
(484178.5, 3755548.3,	0.0,	1.5);	(484084.5, 3755582.5,	0.0,	1.5);
(483990.6, 3755616.8,	0.0,	1.5);	(483896.6, 3755651.0,	0.0,	1.5);
(483802.6, 3755685.3,	0.0,	1.5);	(483708.7, 3755719.3,	0.0,	1.5);
(483614.7, 3755753.5,	0.0,	1.5);	(483520.7, 3755787.8,	0.0,	1.5);
(483426.8, 3755822.0,	0.0,	1.5);	(483332.8, 3755856.3,	0.0,	1.5);
(483238.8, 3755890.3,	0.0,	1.5);	(483144.8, 3755924.5,	0.0,	1.5);

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*** West Ridge HRA *** 10:20:07

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483050.9, 3755958.8,	0.0,	1.5);	(482956.9, 3755993.0,	0.0,	1.5);
(482862.9, 3756027.3,	0.0,	1.5);	(482769.0, 3756061.3,	0.0,	1.5);
(482675.0, 3756095.5,	0.0,	1.5);	(482581.0, 3756129.8,	0.0,	1.5);
(482487.1, 3756164.0,	0.0,	1.5);	(482393.1, 3756198.3,	0.0,	1.5);
(482299.1, 3756232.3,	0.0,	1.5);	(482205.2, 3756266.5,	0.0,	1.5);
(484591.2, 3755490.5,	0.0,	1.5);	(484504.6, 3755540.5,	0.0,	1.5);
(484418.0, 3755590.5,	0.0,	1.5);	(484331.4, 3755640.5,	0.0,	1.5);
(484244.8, 3755690.5,	0.0,	1.5);	(484158.2, 3755740.5,	0.0,	1.5);
(484071.6, 3755790.5,	0.0,	1.5);	(483985.0, 3755840.5,	0.0,	1.5);
(483898.4, 3755890.5,	0.0,	1.5);	(483811.8, 3755940.5,	0.0,	1.5);
(483725.2, 3755990.5,	0.0,	1.5);	(483638.6, 3756040.5,	0.0,	1.5);
(483552.0, 3756090.5,	0.0,	1.5);	(483465.4, 3756140.5,	0.0,	1.5);
(483378.8, 3756190.5,	0.0,	1.5);	(483292.2, 3756240.5,	0.0,	1.5);
(483205.6, 3756290.5,	0.0,	1.5);	(483119.0, 3756340.5,	0.0,	1.5);
(483032.4, 3756390.5,	0.0,	1.5);	(482945.8, 3756440.5,	0.0,	1.5);
(482859.2, 3756490.5,	0.0,	1.5);	(482772.6, 3756540.5,	0.0,	1.5);
(482686.0, 3756590.5,	0.0,	1.5);	(482599.4, 3756640.5,	0.0,	1.5);
(482512.8, 3756690.5,	0.0,	1.5);	(482426.2, 3756740.5,	0.0,	1.5);
(484717.8, 3755497.8,	0.0,	1.5);	(484641.2, 3755562.0,	0.0,	1.5);
(484564.6, 3755626.3,	0.0,	1.5);	(484488.0, 3755690.5,	0.0,	1.5);
(484411.4, 3755754.8,	0.0,	1.5);	(484334.8, 3755819.0,	0.0,	1.5);
(484258.2, 3755883.3,	0.0,	1.5);	(484181.6, 3755947.5,	0.0,	1.5);
(484105.0, 3756011.8,	0.0,	1.5);	(484028.4, 3756076.3,	0.0,	1.5);
(483951.8, 3756140.5,	0.0,	1.5);	(483875.2, 3756204.8,	0.0,	1.5);
(483798.6, 3756269.0,	0.0,	1.5);	(483721.9, 3756333.3,	0.0,	1.5);
(483645.3, 3756397.5,	0.0,	1.5);	(483568.8, 3756461.8,	0.0,	1.5);
(483492.1, 3756526.0,	0.0,	1.5);	(483415.5, 3756590.3,	0.0,	1.5);
(483338.9, 3756654.8,	0.0,	1.5);	(483262.3, 3756719.0,	0.0,	1.5);
(483185.7, 3756783.3,	0.0,	1.5);	(483109.1, 3756847.5,	0.0,	1.5);
(483032.5, 3756911.8,	0.0,	1.5);	(482955.9, 3756976.0,	0.0,	1.5);
(482879.3, 3757040.3,	0.0,	1.5);	(482802.7, 3757104.5,	0.0,	1.5);
(482726.1, 3757168.8,	0.0,	1.5);	(484831.4, 3755470.3,	0.0,	1.5);
(484767.1, 3755547.0,	0.0,	1.5);	(484702.8, 3755623.5,	0.0,	1.5);
(484638.6, 3755700.3,	0.0,	1.5);	(484574.3, 3755776.8,	0.0,	1.5);
(484510.0, 3755853.3,	0.0,	1.5);	(484445.7, 3755930.0,	0.0,	1.5);
(484381.4, 3756006.5,	0.0,	1.5);	(484317.2, 3756083.3,	0.0,	1.5);
(484252.9, 3756159.8,	0.0,	1.5);	(484188.6, 3756236.3,	0.0,	1.5);
(484124.3, 3756313.0,	0.0,	1.5);	(484060.1, 3756389.5,	0.0,	1.5);
(483995.8, 3756466.3,	0.0,	1.5);	(483931.5, 3756542.8,	0.0,	1.5);
(483867.2, 3756619.5,	0.0,	1.5);	(483802.9, 3756696.0,	0.0,	1.5);
(483738.7, 3756772.5,	0.0,	1.5);	(483674.4, 3756849.3,	0.0,	1.5);
(483610.1, 3756925.8,	0.0,	1.5);	(483545.8, 3757002.5,	0.0,	1.5);
(483481.5, 3757079.0,	0.0,	1.5);	(483417.3, 3757155.5,	0.0,	1.5);
(483353.0, 3757232.3,	0.0,	1.5);	(483288.7, 3757308.8,	0.0,	1.5);
(483224.4, 3757385.5,	0.0,	1.5);	(483160.2, 3757462.0,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483095.9, 3757538.8,	0.0,	1.5);	(484874.2, 3755500.3,	0.0,	1.5);
(484824.2, 3755587.0,	0.0,	1.5);	(484774.2, 3755673.5,	0.0,	1.5);
(484724.2, 3755760.3,	0.0,	1.5);	(484674.2, 3755846.8,	0.0,	1.5);
(484624.2, 3755933.3,	0.0,	1.5);	(484574.2, 3756020.0,	0.0,	1.5);
(484524.2, 3756106.5,	0.0,	1.5);	(484474.2, 3756193.3,	0.0,	1.5);
(484424.2, 3756279.8,	0.0,	1.5);	(484374.2, 3756366.3,	0.0,	1.5);
(484324.2, 3756453.0,	0.0,	1.5);	(484274.2, 3756539.5,	0.0,	1.5);
(484224.2, 3756626.3,	0.0,	1.5);	(484174.2, 3756712.8,	0.0,	1.5);
(484124.2, 3756799.3,	0.0,	1.5);	(484074.2, 3756886.0,	0.0,	1.5);
(484024.2, 3756972.5,	0.0,	1.5);	(483974.2, 3757059.3,	0.0,	1.5);
(483924.2, 3757145.8,	0.0,	1.5);	(483874.2, 3757232.3,	0.0,	1.5);
(483824.2, 3757319.0,	0.0,	1.5);	(483774.2, 3757405.5,	0.0,	1.5);
(483724.2, 3757492.3,	0.0,	1.5);	(483674.2, 3757578.8,	0.0,	1.5);
(483624.2, 3757665.5,	0.0,	1.5);	(483574.2, 3757752.0,	0.0,	1.5);
(483524.2, 3757838.5,	0.0,	1.5);	(484921.6, 3755522.5,	0.0,	1.5);
(484887.4, 3755616.5,	0.0,	1.5);	(484853.2, 3755710.3,	0.0,	1.5);
(484819.0, 3755804.3,	0.0,	1.5);	(484784.8, 3755898.3,	0.0,	1.5);
(484750.6, 3755992.3,	0.0,	1.5);	(484716.4, 3756086.3,	0.0,	1.5);
(484682.2, 3756180.3,	0.0,	1.5);	(484648.0, 3756274.3,	0.0,	1.5);
(484613.8, 3756368.3,	0.0,	1.5);	(484579.6, 3756462.0,	0.0,	1.5);
(484545.4, 3756556.0,	0.0,	1.5);	(484511.2, 3756650.0,	0.0,	1.5);
(484477.0, 3756744.0,	0.0,	1.5);	(484442.8, 3756838.0,	0.0,	1.5);
(484408.6, 3756932.0,	0.0,	1.5);	(484374.4, 3757026.0,	0.0,	1.5);
(484340.2, 3757120.0,	0.0,	1.5);	(484306.0, 3757213.8,	0.0,	1.5);
(484271.8, 3757307.8,	0.0,	1.5);	(484237.6, 3757401.8,	0.0,	1.5);
(484203.4, 3757495.8,	0.0,	1.5);	(484169.2, 3757589.8,	0.0,	1.5);
(484135.0, 3757683.8,	0.0,	1.5);	(484100.8, 3757777.8,	0.0,	1.5);
(484066.6, 3757871.8,	0.0,	1.5);	(484032.4, 3757965.5,	0.0,	1.5);
(483998.2, 3758059.5,	0.0,	1.5);	(484972.1, 3755536.0,	0.0,	1.5);
(484954.8, 3755634.5,	0.0,	1.5);	(484937.4, 3755733.0,	0.0,	1.5);
(484920.0, 3755831.5,	0.0,	1.5);	(484902.7, 3755930.0,	0.0,	1.5);
(484885.3, 3756028.3,	0.0,	1.5);	(484867.9, 3756126.8,	0.0,	1.5);
(484850.6, 3756225.3,	0.0,	1.5);	(484833.2, 3756323.8,	0.0,	1.5);
(484815.8, 3756422.3,	0.0,	1.5);	(484798.5, 3756520.8,	0.0,	1.5);
(484781.1, 3756619.3,	0.0,	1.5);	(484763.8, 3756717.8,	0.0,	1.5);
(484746.4, 3756816.3,	0.0,	1.5);	(484729.0, 3756914.8,	0.0,	1.5);
(484711.7, 3757013.3,	0.0,	1.5);	(484694.3, 3757111.8,	0.0,	1.5);
(484676.9, 3757210.3,	0.0,	1.5);	(484659.6, 3757308.5,	0.0,	1.5);
(484642.2, 3757407.0,	0.0,	1.5);	(484624.8, 3757505.5,	0.0,	1.5);
(484607.5, 3757604.0,	0.0,	1.5);	(484590.1, 3757702.5,	0.0,	1.5);
(484572.8, 3757801.0,	0.0,	1.5);	(484555.4, 3757899.5,	0.0,	1.5);
(484538.0, 3757998.0,	0.0,	1.5);	(484520.7, 3758096.5,	0.0,	1.5);
(484503.3, 3758195.0,	0.0,	1.5);			

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 10:20:07
**MODELOPTs: PAGE 51
CONC URBAN FLAT FLGPOL NOCALM NOCMPL

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
L0001053	485494.1	3755411.5	-6.29
L0001059	485524.2	3755240.5	-14.59
L0001060	485524.2	3755240.5	-3.34
L0001065	485494.1	3755069.5	-1.58
L0001066	485494.1	3755069.5	-5.22
L0001118	483624.2	3755240.5	-10.01
L0001121	483724.2	3755240.5	-3.89
L0001122	483724.2	3755240.5	-6.35
L0001125	483824.2	3755240.5	-8.59
L0001126	483824.2	3755240.5	0.27
L0001129	483924.2	3755240.5	-9.08
L0001132	484024.2	3755240.5	-4.08
L0001133	484024.2	3755240.5	-5.06
L0001136	484124.2	3755240.5	-8.24
L0001146	484334.9	3755119.0	-6.51
L0001152	484460.4	3755035.3	-1.70
L0001161	484677.8	3755040.5	-4.50
L0001187	485268.9	3755002.0	-3.96
L0001188	485246.7	3755001.8	-3.83
L0001189	485217.1	3755010.8	-13.26

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 10:20:07
**MODELOPTs: PAGE 52
CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** WIND PROFILE EXPONENTS ***

STABILITY	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
B	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
C	.20000E+00	.20000E+00	.20000E+00	.20000E+00	.20000E+00	.20000E+00
D	.25000E+00	.25000E+00	.25000E+00	.25000E+00	.25000E+00	.25000E+00
E	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00
F	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00

*** VERTICAL POTENTIAL TEMPERATURE GRADIENTS ***
(DEGREES KELVIN PER METER)

STABILITY	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
B	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
C	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
D	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
E	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01
F	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 10:20:07
**MODELOPTs: PAGE 53
CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

FILE: U:\UcAir\METDAT~1\REDLANDS.ASC
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 54161 UPPER AIR STATION NO.: 99999
NAME: UNKNOWN NAME: UNKNOWN
YEAR: 1981 YEAR: 1981

YR MN DY HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL	URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
81 01 01 01	292.3	1.00	284.3	7	522.6	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 02	282.4	0.00	284.3	7	507.0	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 03	287.5	0.00	283.1	7	491.4	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 04	301.0	0.00	283.1	7	475.8	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 05	286.5	0.00	282.6	7	460.3	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 06	297.0	0.00	283.1	7	444.7	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 07	297.0	0.00	285.4	6	1.4	170.7	0.0000	0.0	0.0000	0	0.00
81 01 01 08	314.6	1.00	287.6	5	47.0	192.0	0.0000	0.0	0.0000	0	0.00
81 01 01 09	299.0	1.00	289.8	4	92.5	213.3	0.0000	0.0	0.0000	0	0.00
81 01 01 10	54.2	1.34	291.5	3	138.0	234.7	0.0000	0.0	0.0000	0	0.00
81 01 01 11	89.1	1.79	294.3	3	183.5	256.0	0.0000	0.0	0.0000	0	0.00
81 01 01 12	103.1	1.34	297.6	2	229.0	277.3	0.0000	0.0	0.0000	0	0.00
81 01 01 13	87.2	1.34	298.7	2	274.5	298.7	0.0000	0.0	0.0000	0	0.00
81 01 01 14	124.2	1.79	299.8	3	320.0	320.0	0.0000	0.0	0.0000	0	0.00
81 01 01 15	134.8	2.24	299.3	3	320.0	320.0	0.0000	0.0	0.0000	0	0.00
81 01 01 16	98.2	2.24	298.7	4	320.0	320.0	0.0000	0.0	0.0000	0	0.00
81 01 01 17	110.1	2.24	295.4	5	325.6	318.5	0.0000	0.0	0.0000	0	0.00
81 01 01 18	210.1	1.00	291.5	6	357.2	310.3	0.0000	0.0	0.0000	0	0.00
81 01 01 19	268.0	1.00	289.8	7	388.8	302.1	0.0000	0.0	0.0000	0	0.00
81 01 01 20	303.2	1.00	287.0	7	420.4	293.9	0.0000	0.0	0.0000	0	0.00
81 01 01 21	291.1	1.34	286.5	7	452.0	285.7	0.0000	0.0	0.0000	0	0.00
81 01 01 22	294.5	1.34	287.0	7	483.5	277.4	0.0000	0.0	0.0000	0	0.00
81 01 01 23	293.2	0.00	285.9	7	515.1	269.2	0.0000	0.0	0.0000	0	0.00
81 01 01 24	292.2	0.00	285.4	7	546.7	261.0	0.0000	0.0	0.0000	0	0.00

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

**MODELOPTs:
CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
485024.22	3755540.50	0.00729	485024.22	3755640.50	0.00395
485024.22	3755740.50	0.00224	485024.22	3755840.50	0.00139
485024.22	3755940.50	0.00101	485024.22	3756040.50	0.00079
485024.22	3756140.50	0.00064	485024.22	3756240.50	0.00053
485024.22	3756340.50	0.00046	485024.22	3756440.50	0.00040
485024.22	3756540.50	0.00035	485024.22	3756640.50	0.00031
485024.22	3756740.50	0.00028	485024.22	3756840.50	0.00025
485024.22	3756940.50	0.00023	485024.22	3757040.50	0.00021
485024.22	3757140.50	0.00019	485024.22	3757240.50	0.00018
485024.22	3757340.50	0.00017	485024.22	3757440.50	0.00015
485024.22	3757540.50	0.00014	485024.22	3757640.50	0.00013
485024.22	3757740.50	0.00013	485024.22	3757840.50	0.00012
485024.22	3757940.50	0.00011	485024.22	3758040.50	0.00010
485024.22	3758140.50	0.00010	485024.22	3758240.50	0.00009
485076.31	3755536.00	0.00698	485093.69	3755634.50	0.00380
485111.06	3755733.00	0.00203	485128.41	3755831.50	0.00130
485145.78	3755930.00	0.00095	485163.16	3756028.25	0.00073
485180.50	3756126.75	0.00060	485197.88	3756225.25	0.00050
485215.25	3756323.75	0.00043	485232.63	3756422.25	0.00038
485249.97	3756520.75	0.00033	485267.34	3756619.25	0.00029
485284.69	3756717.75	0.00026	485302.06	3756816.25	0.00023
485319.44	3756914.75	0.00021	485336.81	3757013.25	0.00019
485354.16	3757111.75	0.00018	485371.53	3757210.25	0.00016
485388.88	3757308.50	0.00015	485406.25	3757407.00	0.00014
485423.63	3757505.50	0.00013	485441.00	3757604.00	0.00012
485458.34	3757702.50	0.00011	485475.72	3757801.00	0.00010
485493.09	3757899.50	0.00010	485510.44	3757998.00	0.00009
485527.81	3758096.50	0.00009	485545.16	3758195.00	0.00008
485126.84	3755522.50	0.00725	485161.03	3755616.50	0.00395
485195.25	3755710.25	0.00200	485229.44	3755804.25	0.00128
485263.63	3755898.25	0.00094	485297.84	3755992.25	0.00074
485332.06	3756086.25	0.00061	485366.25	3756180.25	0.00051
485400.44	3756274.25	0.00043	485434.66	3756368.25	0.00036
485468.88	3756462.00	0.00031	485503.06	3756556.00	0.00027
485537.25	3756650.00	0.00024	485571.47	3756744.00	0.00021
485605.66	3756838.00	0.00019	485639.88	3756932.00	0.00018
485674.06	3757026.00	0.00016	485708.28	3757120.00	0.00015
485742.47	3757213.75	0.00014	485776.66	3757307.75	0.00013
485810.88	3757401.75	0.00012	485845.09	3757495.75	0.00011
485879.28	3757589.75	0.00010	485913.47	3757683.75	0.00010

**MODELOPTs:
CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
485947.69	3757777.75	0.00009	485981.88	3757871.75	0.00008
486016.09	3757965.50	0.00008	486050.28	3758059.50	0.00007
485174.22	3755500.25	0.00816	485224.22	3755587.00	0.00448
485274.22	3755673.50	0.00209	485324.22	3755760.25	0.00134
485374.22	3755846.75	0.00102	485424.22	3755933.25	0.00080
485474.22	3756020.00	0.00063	485524.22	3756106.50	0.00051
485574.22	3756193.25	0.00043	485624.22	3756279.75	0.00036
485674.22	3756366.25	0.00032	485724.22	3756453.00	0.00028
485774.22	3756539.50	0.00024	485824.22	3756626.25	0.00022
485874.22	3756712.75	0.00019	485924.22	3756799.25	0.00017
485974.22	3756886.00	0.00016	486024.22	3756972.50	0.00014
486074.22	3757059.25	0.00013	486124.22	3757145.75	0.00012
486174.22	3757232.25	0.00011	486224.22	3757319.00	0.00010
486274.22	3757405.50	0.00010	486324.22	3757492.25	0.00009
486374.22	3757578.75	0.00008	486424.22	3757665.50	0.00008
486474.22	3757752.00	0.00008	486524.22	3757838.50	0.00007
485217.06	3755470.25	0.00984	485281.34	3755547.00	0.00570
485345.63	3755623.50	0.00240	485409.91	3755700.25	0.00155
485474.19	3755776.75	0.00114	485538.47	3755853.25	0.00085
485602.75	3755930.00	0.00068	485667.03	3756006.50	0.00055
485731.31	3756083.25	0.00046	485795.59	3756159.75	0.00038
485859.84	3756236.25	0.00033	485924.13	3756313.00	0.00029
485988.41	3756389.50	0.00026	486052.69	3756466.25	0.00023
486116.97	3756542.75	0.00021	486181.25	3756619.50	0.00019
486245.53	3756696.00	0.00018	486309.81	3756772.50	0.00016
486374.09	3756849.25	0.00015	486438.38	3756925.75	0.00014
486502.63	3757002.50	0.00013	486566.91	3757079.00	0.00012
486631.19	3757155.50	0.00012	486695.47	3757232.25	0.00011
486759.75	3757308.75	0.00010	486824.03	3757385.50	0.00010
486888.31	3757462.00	0.00009	486952.59	3757538.75	0.00009
485330.66	3755497.75	0.00860	485407.25	3755562.00	0.00325
485483.88	3755626.25	0.00197	485560.47	3755690.50	0.00135
485637.06	3755754.75	0.00099	485713.66	3755819.00	0.00076
485790.28	3755883.25	0.00062	485866.88	3755947.50	0.00052
485943.47	3756011.75	0.00045	486020.09	3756076.25	0.00039
486096.69	3756140.50	0.00035	486173.31	3756204.75	0.00031
486249.91	3756269.00	0.00028	486326.50	3756333.25	0.00025
486403.13	3756397.50	0.00023	486479.72	3756461.75	0.00021
486556.31	3756526.00	0.00019	486632.91	3756590.25	0.00018
486709.53	3756654.75	0.00017	486786.13	3756719.00	0.00015

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
486862.75	3756783.25	0.00014	486939.34	3756847.50	0.00014
487015.94	3756911.75	0.00013	487092.56	3756976.00	0.00012
487169.16	3757040.25	0.00011	487245.75	3757104.50	0.00011
487322.38	3757168.75	0.00010	485457.25	3755490.50	0.00761
485543.84	3755540.50	0.00282	485630.44	3755590.50	0.00174
485717.06	3755640.50	0.00126	485803.66	3755690.50	0.00098
485890.25	3755740.50	0.00079	485976.88	3755790.50	0.00066
486063.47	3755840.50	0.00056	486150.06	3755890.50	0.00048
486236.66	3755940.50	0.00042	486323.28	3755990.50	0.00037
486409.88	3756040.50	0.00033	486496.47	3756090.50	0.00029
486583.09	3756140.50	0.00027	486669.69	3756190.50	0.00024
486756.28	3756240.50	0.00022	486842.88	3756290.50	0.00020
486929.50	3756340.50	0.00019	487016.09	3756390.50	0.00018
487102.69	3756440.50	0.00016	487189.28	3756490.50	0.00015
487275.91	3756540.50	0.00014	487362.50	3756590.50	0.00014
487449.09	3756640.50	0.00013	487535.69	3756690.50	0.00012
487622.31	3756740.50	0.00011	485400.13	3755377.25	0.01904
485494.09	3755411.50	0.01310	485268.91	3755002.00	0.01988
485682.00	3755480.00	0.00294	485775.97	3755514.25	0.00192
485869.94	3755548.25	0.00141	485963.91	3755582.50	0.00110
486057.88	3755616.75	0.00088	486151.88	3755651.00	0.00073
486245.84	3755685.25	0.00062	486339.81	3755719.25	0.00053
486433.78	3755753.50	0.00047	486527.75	3755787.75	0.00041
486621.72	3755822.00	0.00037	486715.69	3755856.25	0.00033
486809.66	3755890.25	0.00030	486903.63	3755924.50	0.00027
486997.59	3755958.75	0.00025	487091.56	3755993.00	0.00023
487185.53	3756027.25	0.00021	487279.50	3756061.25	0.00020
487373.47	3756095.50	0.00019	487467.44	3756129.75	0.00017
487561.41	3756164.00	0.00016	487655.38	3756198.25	0.00015
487749.34	3756232.25	0.00014	487843.31	3756266.50	0.00014
485418.16	3755310.00	0.02251	485615.13	3755344.75	0.01039
485713.59	3755362.00	0.00520	485812.09	3755379.50	0.00318
485910.56	3755396.75	0.00224	486009.03	3755414.25	0.00170
486107.53	3755431.50	0.00136	486206.00	3755449.00	0.00113
486304.47	3755466.25	0.00096	486402.97	3755483.50	0.00083
486501.44	3755501.00	0.00072	486599.91	3755518.25	0.00064
486698.41	3755535.75	0.00058	486796.88	3755553.00	0.00052
486895.38	3755570.50	0.00048	486993.84	3755587.75	0.00044
487092.34	3755605.25	0.00040	487190.81	3755622.50	0.00037
487289.28	3755640.00	0.00035	487387.78	3755657.25	0.00033

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
487486.25	3755674.75	0.00031	487584.72	3755692.00	0.00029
487683.22	3755709.25	0.00027	487781.69	3755726.75	0.00026
487880.16	3755744.00	0.00024	487978.66	3755761.50	0.00023
485324.22	3755240.50	0.02221	485424.22	3755240.50	0.02376
485524.22	3755240.50	0.00985	485624.22	3755240.50	0.01113
485724.22	3755240.50	0.00663	485824.22	3755240.50	0.00452
485924.22	3755240.50	0.00331	486024.22	3755240.50	0.00256
486124.22	3755240.50	0.00206	486224.22	3755240.50	0.00170
486324.22	3755240.50	0.00145	486424.22	3755240.50	0.00125
486524.22	3755240.50	0.00109	486624.22	3755240.50	0.00097
486724.22	3755240.50	0.00086	486824.22	3755240.50	0.00078
486924.22	3755240.50	0.00070	487024.22	3755240.50	0.00064
487124.22	3755240.50	0.00059	487224.22	3755240.50	0.00054
487324.22	3755240.50	0.00050	487424.22	3755240.50	0.00047
487524.22	3755240.50	0.00043	487624.22	3755240.50	0.00041
487724.22	3755240.50	0.00038	487824.22	3755240.50	0.00036
487924.22	3755240.50	0.00034	488024.22	3755240.50	0.00032
485418.16	3755171.00	0.02424	485615.13	3755136.25	0.01270
485713.59	3755119.00	0.00773	485812.09	3755101.50	0.00549
485910.56	3755084.25	0.00415	486009.03	3755066.75	0.00326
486107.53	3755049.50	0.00263	486206.00	3755032.25	0.00218
486304.47	3755014.75	0.00183	486402.97	3754997.50	0.00157
486501.44	3754980.00	0.00137	486599.91	3754962.75	0.00120
486698.41	3754945.25	0.00107	486796.88	3754928.00	0.00096
486895.38	3754910.50	0.00087	486993.84	3754893.25	0.00079
487092.34	3754875.75	0.00073	487190.81	3754858.50	0.00067
487289.28	3754841.00	0.00062	487387.78	3754823.75	0.00058
487486.25	3754806.50	0.00054	487584.72	3754789.00	0.00051
487683.22	3754771.75	0.00047	487781.69	3754754.25	0.00045
487880.16	3754737.00	0.00042	487978.66	3754719.50	0.00040
485400.13	3755103.75	0.02842	485494.09	3755069.50	0.01853
485588.06	3755035.25	0.01682	485682.00	3755001.00	0.00859
485775.97	3754967.00	0.00568	485869.94	3754932.75	0.00420
485963.91	3754898.50	0.00330	486057.88	3754864.25	0.00269
486151.88	3754830.00	0.00226	486245.84	3754796.00	0.00194
486339.81	3754761.75	0.00168	486433.78	3754727.50	0.00148
486527.75	3754693.25	0.00132	486621.72	3754659.00	0.00118
486715.69	3754624.75	0.00107	486809.66	3754590.75	0.00097
486903.63	3754556.50	0.00089	486997.59	3754522.25	0.00082
487091.56	3754488.00	0.00075	487185.53	3754453.75	0.00070

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
487279.50	3754419.75	0.00065	487373.47	3754385.50	0.00061
487467.44	3754351.25	0.00057	487561.41	3754317.00	0.00053
487655.38	3754282.75	0.00050	487749.34	3754248.75	0.00047
487843.31	3754214.50	0.00045	485457.25	3754990.50	0.01990
485543.84	3754940.50	0.00876	485630.44	3754890.50	0.00549
485717.06	3754840.50	0.00390	485803.66	3754790.50	0.00298
485890.25	3754740.50	0.00239	485976.88	3754690.50	0.00197
486063.47	3754640.50	0.00167	486150.06	3754590.50	0.00144
486236.66	3754540.50	0.00126	486323.28	3754490.50	0.00111
486409.88	3754440.50	0.00100	486496.47	3754390.50	0.00090
486583.09	3754340.50	0.00082	486669.69	3754290.50	0.00075
486756.28	3754240.50	0.00069	486842.88	3754190.50	0.00063
486929.50	3754140.50	0.00059	487016.09	3754090.50	0.00055
487102.69	3754040.50	0.00051	487189.28	3753990.50	0.00048
487275.91	3753940.50	0.00045	487362.50	3753890.50	0.00043
487449.09	3753840.50	0.00041	487535.69	3753790.50	0.00038
487622.31	3753740.50	0.00037	485330.66	3754983.50	0.01563
485407.25	3754919.00	0.00603	485483.88	3754854.75	0.00368
485560.47	3754790.50	0.00262	485637.06	3754726.25	0.00201
485713.66	3754662.00	0.00160	485790.28	3754597.75	0.00131
485866.88	3754533.50	0.00109	485943.47	3754469.25	0.00093
486020.09	3754405.00	0.00080	486096.69	3754340.50	0.00070
486173.31	3754276.25	0.00062	486249.91	3754212.00	0.00055
486326.50	3754147.75	0.00049	486403.13	3754083.50	0.00045
486479.72	3754019.25	0.00041	486556.31	3753955.00	0.00037
486632.91	3753890.75	0.00034	486709.53	3753826.50	0.00031
486786.13	3753762.00	0.00029	486862.75	3753697.75	0.00027
486939.34	3753633.50	0.00025	487015.94	3753569.25	0.00023
487092.56	3753505.00	0.00022	487169.16	3753440.75	0.00020
487245.75	3753376.50	0.00019	487322.38	3753312.25	0.00018
485217.06	3755010.75	0.02275	485281.34	3754934.00	0.00622
485345.63	3754857.50	0.00325	485409.91	3754781.00	0.00213
485474.19	3754704.25	0.00152	485538.47	3754627.75	0.00116
485602.75	3754551.00	0.00092	485667.03	3754474.50	0.00076
485731.31	3754397.75	0.00063	485795.59	3754321.25	0.00053
485859.84	3754244.75	0.00046	485924.13	3754168.00	0.00040
485988.41	3754091.50	0.00035	486052.69	3754014.75	0.00031
486116.97	3753938.25	0.00028	486181.25	3753861.75	0.00025
486245.53	3753785.00	0.00023	486309.81	3753708.50	0.00021
486374.09	3753631.75	0.00019	486438.38	3753555.25	0.00017

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
486502.63	3753478.50	0.00016	486566.91	3753402.00	0.00015
486631.19	3753325.50	0.00014	486695.47	3753248.75	0.00013
486759.75	3753172.25	0.00012	486824.03	3753095.50	0.00011
486888.31	3753019.00	0.00011	486952.59	3752942.50	0.00010
485174.22	3754980.75	0.01214	485224.22	3754894.00	0.00420
485274.22	3754807.50	0.00224	485324.22	3754721.00	0.00143
485374.22	3754634.25	0.00101	485424.22	3754547.75	0.00076
485474.22	3754461.00	0.00059	485524.22	3754374.50	0.00047
485574.22	3754288.00	0.00039	485624.22	3754201.25	0.00033
485674.22	3754114.75	0.00028	485724.22	3754028.00	0.00024
485774.22	3753941.50	0.00021	485824.22	3753854.75	0.00019
485874.22	3753768.25	0.00016	485924.22	3753681.75	0.00015
485974.22	3753595.00	0.00013	486024.22	3753508.50	0.00012
486074.22	3753421.75	0.00011	486124.22	3753335.25	0.00010
486174.22	3753248.75	0.00009	486224.22	3753162.00	0.00008
486274.22	3753075.50	0.00008	486324.22	3752988.75	0.00007
486374.22	3752902.25	0.00007	486424.22	3752815.75	0.00006
486474.22	3752729.00	0.00006	486524.22	3752642.50	0.00006
485126.84	3754958.50	0.00837	485161.03	3754864.75	0.00324
485195.25	3754770.75	0.00172	485229.44	3754676.75	0.00106
485263.63	3754582.75	0.00073	485297.84	3754488.75	0.00053
485332.06	3754394.75	0.00041	485366.25	3754300.75	0.00032
485400.44	3754206.75	0.00026	485434.66	3754113.00	0.00021
485468.88	3754019.00	0.00018	485503.06	3753925.00	0.00015
485537.25	3753831.00	0.00013	485571.47	3753737.00	0.00011
485605.66	3753643.00	0.00010	485639.88	3753549.00	0.00009
485674.06	3753455.00	0.00008	485708.28	3753361.00	0.00007
485742.47	3753267.25	0.00007	485776.66	3753173.25	0.00006
485810.88	3753079.25	0.00006	485845.09	3752985.25	0.00005
485879.28	3752891.25	0.00005	485913.47	3752797.25	0.00005
485947.69	3752703.25	0.00004	485981.88	3752609.25	0.00004
486016.09	3752515.50	0.00004	486050.28	3752421.50	0.00004
485076.31	3754945.00	0.00689	485093.69	3754846.50	0.00272
485111.06	3754748.00	0.00142	485128.41	3754649.75	0.00086
485145.78	3754551.25	0.00057	485163.16	3754452.75	0.00041
485180.50	3754354.25	0.00031	485197.88	3754255.75	0.00024
485215.25	3754157.25	0.00019	485232.63	3754058.75	0.00016
485249.97	3753960.25	0.00013	485267.34	3753861.75	0.00011
485284.69	3753763.25	0.00010	485302.06	3753664.75	0.00008
485319.44	3753566.25	0.00007	485336.81	3753467.75	0.00007

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
485354.16	3753369.50	0.00006	485371.53	3753271.00	0.00005
485388.88	3753172.50	0.00005	485406.25	3753074.00	0.00004
485423.63	3752975.50	0.00004	485441.00	3752877.00	0.00004
485458.34	3752778.50	0.00003	485475.72	3752680.00	0.00003
485493.09	3752581.50	0.00003	485510.44	3752483.00	0.00003
485527.81	3752384.50	0.00003	485545.16	3752286.00	0.00002
485024.22	3754940.50	0.00641	485024.22	3754840.50	0.00244
485024.22	3754740.50	0.00128	485024.22	3754640.50	0.00076
485024.22	3754540.50	0.00050	485024.22	3754440.50	0.00035
485024.22	3754340.50	0.00027	485024.22	3754240.50	0.00021
485024.22	3754140.50	0.00016	485024.22	3754040.50	0.00013
485024.22	3753940.50	0.00011	485024.22	3753840.50	0.00010
485024.22	3753740.50	0.00008	485024.22	3753640.50	0.00007
485024.22	3753540.50	0.00006	485024.22	3753440.50	0.00006
485024.22	3753340.50	0.00005	485024.22	3753240.50	0.00004
485024.22	3753140.50	0.00004	485024.22	3753040.50	0.00004
485024.22	3752940.50	0.00003	485024.22	3752840.50	0.00003
485024.22	3752740.50	0.00003	485024.22	3752640.50	0.00003
485024.22	3752540.50	0.00002	485024.22	3752440.50	0.00002
485024.22	3752340.50	0.00002	485024.22	3752240.50	0.00002
484972.13	3754945.00	0.00662	484954.78	3754846.50	0.00239
484937.41	3754748.00	0.00124	484920.03	3754649.75	0.00074
484902.69	3754551.25	0.00049	484885.31	3754452.75	0.00034
484867.94	3754354.25	0.00025	484850.59	3754255.75	0.00019
484833.22	3754157.25	0.00015	484815.84	3754058.75	0.00012
484798.50	3753960.25	0.00010	484781.13	3753861.75	0.00009
484763.75	3753763.25	0.00008	484746.38	3753664.75	0.00007
484729.03	3753566.25	0.00006	484711.66	3753467.75	0.00005
484694.31	3753369.50	0.00005	484676.94	3753271.00	0.00004
484659.56	3753172.50	0.00004	484642.19	3753074.00	0.00004
484624.84	3752975.50	0.00003	484607.47	3752877.00	0.00003
484590.13	3752778.50	0.00003	484572.75	3752680.00	0.00003
484555.38	3752581.50	0.00003	484538.03	3752483.00	0.00002
484520.66	3752384.50	0.00002	484503.28	3752286.00	0.00002
484921.63	3754958.50	0.00771	484887.41	3754864.75	0.00257
484853.22	3754770.75	0.00129	484819.03	3754676.75	0.00078
484784.81	3754582.75	0.00053	484750.63	3754488.75	0.00037
484716.41	3754394.75	0.00027	484682.22	3754300.75	0.00021
484648.00	3754206.75	0.00017	484613.81	3754113.00	0.00014
484579.59	3754019.00	0.00011	484545.41	3753925.00	0.00010

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484511.19	3753831.00	0.00008	484477.00	3753737.00	0.00007
484442.81	3753643.00	0.00006	484408.59	3753549.00	0.00006
484374.38	3753455.00	0.00005	484340.19	3753361.00	0.00005
484306.00	3753267.25	0.00004	484271.78	3753173.25	0.00004
484237.59	3753079.25	0.00004	484203.38	3752985.25	0.00003
484169.19	3752891.25	0.00003	484134.97	3752797.25	0.00003
484100.78	3752703.25	0.00003	484066.56	3752609.25	0.00003
484032.38	3752515.50	0.00002	483998.16	3752421.50	0.00002
484874.22	3754980.75	0.01086	484824.22	3754894.00	0.00311
484774.22	3754807.50	0.00149	484724.22	3754721.00	0.00091
484674.22	3754634.25	0.00063	484624.22	3754547.75	0.00045
484574.22	3754461.00	0.00034	484524.22	3754374.50	0.00026
484474.22	3754288.00	0.00021	484424.22	3754201.25	0.00017
484374.22	3754114.75	0.00014	484324.22	3754028.00	0.00012
484274.22	3753941.50	0.00010	484224.22	3753854.75	0.00009
484174.22	3753768.25	0.00008	484124.22	3753681.75	0.00007
484074.22	3753595.00	0.00006	484024.22	3753508.50	0.00006
483974.22	3753421.75	0.00005	483924.22	3753335.25	0.00005
483874.22	3753248.75	0.00004	483824.22	3753162.00	0.00004
483774.22	3753075.50	0.00004	483724.22	3752988.75	0.00003
483674.22	3752902.25	0.00003	483624.22	3752815.75	0.00003
483574.22	3752729.00	0.00003	483524.22	3752642.50	0.00003
484767.13	3754934.00	0.00443	484702.84	3754857.50	0.00202
484638.56	3754781.00	0.00117	484574.28	3754704.25	0.00079
484510.00	3754627.75	0.00057	484445.72	3754551.00	0.00043
484381.44	3754474.50	0.00034	484317.16	3754397.75	0.00028
484252.88	3754321.25	0.00023	484188.63	3754244.75	0.00019
484124.34	3754168.00	0.00017	484060.06	3754091.50	0.00014
483995.78	3754014.75	0.00013	483931.50	3753938.25	0.00011
483867.22	3753861.75	0.00010	483802.94	3753785.00	0.00009
483738.66	3753708.50	0.00008	483674.38	3753631.75	0.00007
483610.09	3753555.25	0.00007	483545.81	3753478.50	0.00006
483481.53	3753402.00	0.00006	483417.25	3753325.50	0.00005
483352.97	3753248.75	0.00005	483288.69	3753172.25	0.00005
483224.41	3753095.50	0.00004	483160.16	3753019.00	0.00004
483095.88	3752942.50	0.00004	484717.81	3754983.50	0.00895
484641.22	3754919.00	0.00327	484564.59	3754854.75	0.00174
484488.00	3754790.50	0.00114	484411.38	3754726.25	0.00081
484334.78	3754662.00	0.00061	484258.19	3754597.75	0.00047
484181.59	3754533.50	0.00039	484104.97	3754469.25	0.00032

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484028.38	3754405.00	0.00028	483951.78	3754340.50	0.00024
483875.16	3754276.25	0.00021	483798.56	3754212.00	0.00019
483721.94	3754147.75	0.00017	483645.34	3754083.50	0.00015
483568.75	3754019.25	0.00014	483492.13	3753955.00	0.00013
483415.53	3753890.75	0.00012	483338.94	3753826.50	0.00011
483262.34	3753762.00	0.00010	483185.72	3753697.75	0.00009
483109.13	3753633.50	0.00009	483032.50	3753569.25	0.00008
482955.91	3753505.00	0.00008	482879.31	3753440.75	0.00007
482802.69	3753376.50	0.00007	482726.09	3753312.25	0.00007
484677.81	3755040.50	0.02136	484591.22	3754990.50	0.00858
484504.63	3754940.50	0.00313	484418.00	3754890.50	0.00195
484331.41	3754840.50	0.00137	484244.81	3754790.50	0.00101
484158.19	3754740.50	0.00076	484071.59	3754690.50	0.00060
483985.00	3754640.50	0.00049	483898.41	3754590.50	0.00040
483811.78	3754540.50	0.00034	483725.19	3754490.50	0.00030
483638.59	3754440.50	0.00026	483552.00	3754390.50	0.00024
483465.38	3754340.50	0.00021	483378.78	3754290.50	0.00019
483292.19	3754240.50	0.00018	483205.59	3754190.50	0.00016
483118.97	3754140.50	0.00015	483032.38	3754090.50	0.00014
482945.78	3754040.50	0.00013	482859.16	3753990.50	0.00012
482772.56	3753940.50	0.00012	482685.97	3753890.50	0.00011
482599.38	3753840.50	0.00010	482512.75	3753790.50	0.00010
482426.16	3753740.50	0.00009	484648.34	3755103.75	0.01939
484554.38	3755069.50	0.01659	484460.41	3755035.25	0.01274
484366.44	3755001.00	0.00428	484272.47	3754967.00	0.00278
484178.50	3754932.75	0.00204	484084.53	3754898.50	0.00154
483990.56	3754864.25	0.00119	483896.59	3754830.00	0.00095
483802.63	3754796.00	0.00078	483708.66	3754761.75	0.00066
483614.69	3754727.50	0.00056	483520.72	3754693.25	0.00049
483426.75	3754659.00	0.00043	483332.78	3754624.75	0.00038
483238.81	3754590.75	0.00034	483144.84	3754556.50	0.00031
483050.88	3754522.25	0.00028	482956.91	3754488.00	0.00025
482862.94	3754453.75	0.00023	482768.97	3754419.75	0.00021
482675.00	3754385.50	0.00020	482581.03	3754351.25	0.00018
482487.06	3754317.00	0.00017	482393.09	3754282.75	0.00016
482299.13	3754248.75	0.00015	482205.16	3754214.50	0.00014
484630.31	3755171.00	0.01798	484531.84	3755153.75	0.01317
484433.34	3755136.25	0.01297	484334.88	3755119.00	0.01821
484236.38	3755101.50	0.00727	484137.91	3755084.25	0.00452
484039.41	3755066.75	0.00334	483940.94	3755049.50	0.00262

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
483842.47	3755032.25	0.00207	483743.97	3755014.75	0.00164
483645.50	3754997.50	0.00135	483547.03	3754980.00	0.00116
483448.53	3754962.75	0.00103	483350.06	3754945.25	0.00093
483251.59	3754928.00	0.00084	483153.09	3754910.50	0.00077
483054.63	3754893.25	0.00070	482956.13	3754875.75	0.00065
482857.66	3754858.50	0.00060	482759.16	3754841.00	0.00055
482660.69	3754823.75	0.00051	482562.22	3754806.50	0.00048
482463.72	3754789.00	0.00045	482365.25	3754771.75	0.00042
482266.78	3754754.25	0.00040	482168.28	3754737.00	0.00038
482069.81	3754719.50	0.00036	484624.22	3755240.50	0.01766
484524.22	3755240.50	0.01339	484424.22	3755240.50	0.01097
484324.22	3755240.50	0.01011	484224.22	3755240.50	0.01327
484124.22	3755240.50	0.01754	484024.22	3755240.50	0.01507
483924.22	3755240.50	0.01499	483824.22	3755240.50	0.01255
483724.22	3755240.50	0.01282	483624.22	3755240.50	0.01382
485270.06	3754972.75	0.01076	483424.22	3755240.50	0.00549
483324.22	3755240.50	0.00300	483224.22	3755240.50	0.00216
483124.22	3755240.50	0.00172	483024.22	3755240.50	0.00144
482924.22	3755240.50	0.00124	482824.22	3755240.50	0.00109
482724.22	3755240.50	0.00097	482624.22	3755240.50	0.00087
482524.22	3755240.50	0.00079	482424.22	3755240.50	0.00073
482324.22	3755240.50	0.00067	482224.22	3755240.50	0.00062
482124.22	3755240.50	0.00057	482024.22	3755240.50	0.00054
484630.31	3755310.00	0.01691	484531.84	3755327.25	0.01327
484433.34	3755344.75	0.01079	484334.88	3755362.00	0.00906
484236.38	3755379.50	0.00780	484137.91	3755396.75	0.00687
484039.41	3755414.25	0.00623	483940.94	3755431.50	0.00584
485244.81	3754972.75	0.01076	483743.97	3755466.25	0.00518
483645.50	3755483.50	0.00487	483547.03	3755501.00	0.00459
483448.53	3755518.25	0.00432	483350.06	3755535.75	0.00422
483251.59	3755553.00	0.00392	483153.09	3755570.50	0.00357
483054.63	3755587.75	0.00322	482956.13	3755605.25	0.00289
482857.66	3755622.50	0.00259	482759.16	3755640.00	0.00233
482660.69	3755657.25	0.00210	482562.22	3755674.75	0.00191
482463.72	3755692.00	0.00175	482365.25	3755709.25	0.00160
482266.78	3755726.75	0.00148	482168.28	3755744.00	0.00138
482069.81	3755761.50	0.00128	484648.34	3755377.25	0.01801
484554.38	3755411.50	0.01327	485246.72	3755001.75	0.01980
484366.44	3755480.00	0.00894	484272.47	3755514.25	0.00769
484178.50	3755548.25	0.00673	484084.53	3755582.50	0.00597

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
483990.56	3755616.75	0.00535	483896.59	3755651.00	0.00483
483802.63	3755685.25	0.00440	483708.66	3755719.25	0.00402
483614.69	3755753.50	0.00371	483520.72	3755787.75	0.00344
483426.75	3755822.00	0.00320	483332.78	3755856.25	0.00298
483238.81	3755890.25	0.00279	483144.84	3755924.50	0.00262
483050.88	3755958.75	0.00247	482956.91	3755993.00	0.00233
482862.94	3756027.25	0.00220	482768.97	3756061.25	0.00209
482675.00	3756095.50	0.00198	482581.03	3756129.75	0.00189
482487.06	3756164.00	0.00180	482393.09	3756198.25	0.00172
482299.13	3756232.25	0.00164	482205.16	3756266.50	0.00157
484591.22	3755490.50	0.01251	484504.63	3755540.50	0.00946
484418.00	3755590.50	0.00763	484331.41	3755640.50	0.00639
484244.81	3755690.50	0.00548	484158.19	3755740.50	0.00478
484071.59	3755790.50	0.00422	483985.00	3755840.50	0.00377
483898.41	3755890.50	0.00340	483811.78	3755940.50	0.00308
483725.19	3755990.50	0.00282	483638.59	3756040.50	0.00259
483552.00	3756090.50	0.00239	483465.38	3756140.50	0.00222
483378.78	3756190.50	0.00207	483292.19	3756240.50	0.00193
483205.59	3756290.50	0.00180	483118.97	3756340.50	0.00169
483032.38	3756390.50	0.00160	482945.78	3756440.50	0.00151
482859.16	3756490.50	0.00143	482772.56	3756540.50	0.00136
482685.97	3756590.50	0.00129	482599.38	3756640.50	0.00123
482512.75	3756690.50	0.00117	482426.16	3756740.50	0.00112
484717.81	3755497.75	0.01197	484641.22	3755562.00	0.00840
484564.59	3755626.25	0.00638	484488.00	3755690.50	0.00506
484411.38	3755754.75	0.00413	484334.78	3755819.00	0.00344
484258.19	3755883.25	0.00291	484181.59	3755947.50	0.00249
484104.97	3756011.75	0.00216	484028.38	3756076.25	0.00188
483951.78	3756140.50	0.00166	483875.16	3756204.75	0.00147
483798.56	3756269.00	0.00131	483721.94	3756333.25	0.00118
483645.34	3756397.50	0.00107	483568.75	3756461.75	0.00097
483492.13	3756526.00	0.00088	483415.53	3756590.25	0.00081
483338.94	3756654.75	0.00074	483262.34	3756719.00	0.00068
483185.72	3756783.25	0.00063	483109.13	3756847.50	0.00058
483032.50	3756911.75	0.00054	482955.91	3756976.00	0.00050
482879.31	3757040.25	0.00047	482802.69	3757104.50	0.00044
482726.09	3757168.75	0.00041	484831.38	3755470.25	0.01456
484767.13	3755547.00	0.00885	484702.84	3755623.50	0.00604
484638.56	3755700.25	0.00436	484574.28	3755776.75	0.00328
484510.00	3755853.25	0.00254	484445.72	3755930.00	0.00202

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484381.44	3756006.50	0.00163	484317.16	3756083.25	0.00135
484252.88	3756159.75	0.00113	484188.63	3756236.25	0.00096
484124.34	3756313.00	0.00082	484060.06	3756389.50	0.00072
483995.78	3756466.25	0.00063	483931.50	3756542.75	0.00056
483867.22	3756619.50	0.00050	483802.94	3756696.00	0.00046
483738.66	3756772.50	0.00042	483674.38	3756849.25	0.00038
483610.09	3756925.75	0.00035	483545.81	3757002.50	0.00033
483481.53	3757079.00	0.00030	483417.25	3757155.50	0.00028
483352.97	3757232.25	0.00027	483288.69	3757308.75	0.00025
483224.41	3757385.50	0.00024	483160.16	3757462.00	0.00022
483095.88	3757538.75	0.00021	484874.22	3755500.25	0.01149
484824.22	3755587.00	0.00678	484774.22	3755673.50	0.00440
484724.22	3755760.25	0.00304	484674.22	3755846.75	0.00219
484624.22	3755933.25	0.00164	484574.22	3756020.00	0.00126
484524.22	3756106.50	0.00100	484474.22	3756193.25	0.00081
484424.22	3756279.75	0.00068	484374.22	3756366.25	0.00058
484324.22	3756453.00	0.00050	484274.22	3756539.50	0.00045
484224.22	3756626.25	0.00040	484174.22	3756712.75	0.00036
484124.22	3756799.25	0.00033	484074.22	3756886.00	0.00030
484024.22	3756972.50	0.00027	483974.22	3757059.25	0.00025
483924.22	3757145.75	0.00023	483874.22	3757232.25	0.00022
483824.22	3757319.00	0.00020	483774.22	3757405.50	0.00019
483724.22	3757492.25	0.00018	483674.22	3757578.75	0.00017
483624.22	3757665.50	0.00016	483574.22	3757752.00	0.00015
483524.22	3757838.50	0.00014	484921.63	3755522.50	0.00953
484887.41	3755616.50	0.00528	484853.22	3755710.25	0.00332
484819.03	3755804.25	0.00223	484784.81	3755898.25	0.00155
484750.63	3755992.25	0.00113	484716.41	3756086.25	0.00088
484682.22	3756180.25	0.00071	484648.00	3756274.25	0.00060
484613.81	3756368.25	0.00051	484579.59	3756462.00	0.00044
484545.41	3756556.00	0.00039	484511.19	3756650.00	0.00034
484477.00	3756744.00	0.00030	484442.81	3756838.00	0.00027
484408.59	3756932.00	0.00025	484374.38	3757026.00	0.00022
484340.19	3757120.00	0.00020	484306.00	3757213.75	0.00019
484271.78	3757307.75	0.00017	484237.59	3757401.75	0.00016
484203.38	3757495.75	0.00015	484169.19	3757589.75	0.00014
484134.97	3757683.75	0.00013	484100.78	3757777.75	0.00012
484066.56	3757871.75	0.00012	484032.38	3757965.50	0.00011
483998.16	3758059.50	0.00011	484972.13	3755536.00	0.00817
484954.78	3755634.50	0.00437	484937.41	3755733.00	0.00267

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001052, L0001053, L0001054, L0001055, L0001056,
L0001057, L0001058, L0001059, L0001060, L0001061, L0001062, L0001063, L0001064, L0001065, L0001066, L0001067, L0001068,
L0001069, L0001070, L0001071, L0001072, L0001073, L0001074, L0001075, L0001076, L0001077, L0001078, L0001079, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484920.03	3755831.50	0.00170	484902.69	3755930.00	0.00117
484885.31	3756028.25	0.00089	484867.94	3756126.75	0.00071
484850.59	3756225.25	0.00059	484833.22	3756323.75	0.00050
484815.84	3756422.25	0.00042	484798.50	3756520.75	0.00037
484781.13	3756619.25	0.00033	484763.75	3756717.75	0.00029
484746.38	3756816.25	0.00026	484729.03	3756914.75	0.00024
484711.66	3757013.25	0.00022	484694.31	3757111.75	0.00020
484676.94	3757210.25	0.00019	484659.56	3757308.50	0.00017
484642.19	3757407.00	0.00016	484624.84	3757505.50	0.00015
484607.47	3757604.00	0.00014	484590.13	3757702.50	0.00014
484572.75	3757801.00	0.00013	484555.38	3757899.50	0.00012
484538.03	3757998.00	0.00012	484520.66	3758096.50	0.00011
484503.28	3758195.00	0.00011			

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** THE SUMMARY OF MAXIMUM ANNUAL (1 YRS) RESULTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	NETWORK RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	0.02842	AT (485400.13, 3755103.75, 0.00, 1.50)	DC	NA
	2ND HIGHEST VALUE IS	0.02424	AT (485418.16, 3755171.00, 0.00, 1.50)	DC	NA
	3RD HIGHEST VALUE IS	0.02376	AT (485424.22, 3755240.50, 0.00, 1.50)	DC	NA
	4TH HIGHEST VALUE IS	0.02275	AT (485217.06, 3755010.75, 0.00, 1.50)	DC	NA
	5TH HIGHEST VALUE IS	0.02251	AT (485418.16, 3755310.00, 0.00, 1.50)	DC	NA
	6TH HIGHEST VALUE IS	0.02221	AT (485324.22, 3755240.50, 0.00, 1.50)	DC	NA
	7TH HIGHEST VALUE IS	0.02136	AT (484677.81, 3755040.50, 0.00, 1.50)	DC	NA
	8TH HIGHEST VALUE IS	0.01990	AT (485457.25, 3754990.50, 0.00, 1.50)	DC	NA
	9TH HIGHEST VALUE IS	0.01988	AT (485268.91, 3755002.00, 0.00, 1.50)	DC	NA
	10TH HIGHEST VALUE IS	0.01980	AT (485246.72, 3755001.75, 0.00, 1.50)	DC	NA

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR
BD = BOUNDARY

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** Message Summary : ISCST3 Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 1398 Informational Message(s)

A Total of 1398 Calm Hours Identified

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
*** NONE ***

****
*** ISCST3 Finishes Successfully ***
****

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**
** ISCST3 Input Produced by:
** AERMOD View Ver. 6.2.0
** Lakes Environmental Software Inc.
** Date: 10/8/2009
** File: C:\Documents and Settings\hqureshi\Desktop\06192 HRA\WORKER.INP
**
**********************************************
**
**
**********************************************
** ISCST3 Control Pathway
**********************************************
**
**
CO STARTING
  TITLEONE C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc
  TITLETWO West Ridge HRA
  MODELOPT CONC NOCMPL  URBAN NOCALM
  AVERTIME ANNUAL
  POLLUTID DPM
  TERRHGTS FLAT
  FLAGPOLE 1.50
  RUNORNOT RUN
CO FINISHED
**
**********************************************
** ISCST3 Source Pathway
**********************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION NORTH AREAPOLY 484851.861 3755334.115
  LOCATION SOUTH AREAPOLY 484832.883 3755147.441
** Line Source represented by Separated Volume Sources
** ----------------------------------------------------------------------
** LINE Source ID = RED
** DESCRSRC
** Length of Side = 14.00
** Emission Rate = 1.44E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 3
** 485514.05, 3755440.55, 0.00, 4.00, 0.0
** 485512.92, 3755025.40, 0.00, 4.00, 12.43
** 485281.77, 3755025.97, 0.00, 4.00, 11.94
** ----------------------------------------------------------------------
  LOCATION L0001206 VOLUME 485514.043 3755433.500
  LOCATION L0001207 VOLUME 485513.969 3755406.767
  LOCATION L0001208 VOLUME 485513.894 3755380.033
  LOCATION L0001209 VOLUME 485513.820 3755353.300
  LOCATION L0001210 VOLUME 485513.745 3755326.567
  LOCATION L0001211 VOLUME 485513.671 3755299.833
  LOCATION L0001212 VOLUME 485513.596 3755273.100
  LOCATION L0001213 VOLUME 485513.522 3755246.367
  LOCATION L0001214 VOLUME 485513.447 3755219.633
  LOCATION L0001215 VOLUME 485513.373 3755192.900
  LOCATION L0001216 VOLUME 485513.298 3755166.167
  LOCATION L0001217 VOLUME 485513.224 3755139.433
  LOCATION L0001218 VOLUME 485513.149 3755112.700
  LOCATION L0001219 VOLUME 485513.075 3755085.967
  LOCATION L0001220 VOLUME 485513.000 3755059.233
  LOCATION L0001221 VOLUME 485512.926 3755032.500
  LOCATION L0001222 VOLUME 485494.226 3755025.540
  LOCATION L0001223 VOLUME 485468.545 3755025.596
  LOCATION L0001224 VOLUME 485442.865 3755025.652
  LOCATION L0001225 VOLUME 485417.184 3755025.707
  LOCATION L0001226 VOLUME 485391.503 3755025.763
  LOCATION L0001227 VOLUME 485365.823 3755025.818
  LOCATION L0001228 VOLUME 485340.142 3755025.874
  LOCATION L0001229 VOLUME 485314.462 3755025.929
  LOCATION L0001230 VOLUME 485288.781 3755025.985
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------------------------------------------------------------------
** LINE Source ID = EDS
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 3.1E-06
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
** 485270.26, 3755112.67, 0.00, 4.00, 0.0
** 485198.77, 3755113.34, 0.00, 4.00, 7.15
** ----------------------------------------------------------------------
  LOCATION L0001231 VOLUME 485265.250 3755112.785
  LOCATION L0001232 VOLUME 485249.883 3755112.892
  LOCATION L0001233 VOLUME 485234.516 3755113.000
  LOCATION L0001234 VOLUME 485219.148 3755113.108
  LOCATION L0001235 VOLUME 485203.781 3755113.215
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------------------------------------------------------------------
** LINE Source ID = EDTOT
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 3.21E-06
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
** 485281.95, 3755038.82, 0.00, 4.00, 0.0
** 485280.98, 3755113.51, 0.00, 4.00, 7.53
** ----------------------------------------------------------------------
  LOCATION L0001236 VOLUME 485281.873 3755043.750
  LOCATION L0001237 VOLUME 485281.663 3755059.937
  LOCATION L0001238 VOLUME 485281.453 3755076.125
  LOCATION L0001239 VOLUME 485281.243 3755092.313
  LOCATION L0001240 VOLUME 485281.034 3755108.500
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------------------------------------------------------------------
** LINE Source ID = EDN
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 1.42E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 4
** 485281.03, 3755114.82, 0.00, 4.00, 0.0
** 485270.33, 3755371.11, 0.00, 4.00, 8.82
** 485257.73, 3755376.46, 0.00, 4.00, 6.41
** 485195.66, 3755376.08, 0.00, 4.00, 7.22
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  LOCATION L0001241 VOLUME 485280.823 3755119.746
  LOCATION L0001242 VOLUME 485280.033 3755138.689
  LOCATION L0001243 VOLUME 485279.243 3755157.632
  LOCATION L0001244 VOLUME 485278.453 3755176.575
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LOCATION L0001245 VOLUME 485277.663 3755195.518
LOCATION L0001246 VOLUME 485276.873 3755214.461
LOCATION L0001247 VOLUME 485276.083 3755233.404
LOCATION L0001248 VOLUME 485275.292 3755252.346
LOCATION L0001249 VOLUME 485274.502 3755271.289
LOCATION L0001250 VOLUME 485273.712 3755290.232
LOCATION L0001251 VOLUME 485272.922 3755309.175
LOCATION L0001252 VOLUME 485272.132 3755328.118
LOCATION L0001253 VOLUME 485271.342 3755347.061
LOCATION L0001254 VOLUME 485270.552 3755366.004
LOCATION L0001255 VOLUME 485262.303 3755374.503
LOCATION L0001256 VOLUME 485247.203 3755376.415
LOCATION L0001257 VOLUME 485231.687 3755376.290
LOCATION L0001258 VOLUME 485216.172 3755376.165
LOCATION L0001259 VOLUME 485200.656 3755376.040
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------
** LINE Source ID = EA1
** DESCRSRC
** Length of Side = 14.00
** Emission Rate = 3.41E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 9
** 483513.58, 3755437.36, 0.00, 4.00, 0.0
** 483523.83, 3755223.52, 0.00, 4.00, 11.63
** 484153.63, 3755222.06, 0.00, 4.00, 12.74
** 484283.98, 3755186.90, 0.00, 4.00, 12.55
** 484370.40, 3755109.28, 0.00, 4.00, 10.81
** 484502.21, 3755038.97, 0.00, 4.00, 11.58
** 484588.63, 3755021.40, 0.00, 4.00, 10.25
** 484758.53, 3755019.93, 0.00, 4.00, 11.29
** 484782.82, 3755021.23, 0.00, 4.00, 11.31
** ----------
LOCATION L0001260 VOLUME 483513.899 3755430.258
LOCATION L0001261 VOLUME 483515.100 3755405.287
LOCATION L0001262 VOLUME 483516.301 3755380.317
LOCATION L0001263 VOLUME 483517.502 3755355.346
LOCATION L0001264 VOLUME 483518.703 3755330.375
LOCATION L0001265 VOLUME 483519.904 3755305.404
LOCATION L0001266 VOLUME 483521.105 3755280.433
LOCATION L0001267 VOLUME 483522.306 3755255.463
LOCATION L0001268 VOLUME 483523.507 3755230.492
LOCATION L0001269 VOLUME 483544.226 3755223.451
LOCATION L0001270 VOLUME 483571.607 3755223.386
LOCATION L0001271 VOLUME 483598.989 3755223.321
LOCATION L0001272 VOLUME 483626.371 3755223.256
LOCATION L0001273 VOLUME 483653.753 3755223.191
LOCATION L0001274 VOLUME 483681.135 3755223.125
LOCATION L0001275 VOLUME 483708.516 3755223.060
LOCATION L0001276 VOLUME 483735.898 3755222.995
LOCATION L0001277 VOLUME 483763.280 3755222.930
LOCATION L0001278 VOLUME 483790.662 3755222.864
LOCATION L0001279 VOLUME 483818.043 3755222.799
LOCATION L0001280 VOLUME 483845.425 3755222.734
LOCATION L0001281 VOLUME 483872.807 3755222.669
LOCATION L0001282 VOLUME 483900.189 3755222.604
LOCATION L0001283 VOLUME 483927.571 3755222.538
LOCATION L0001284 VOLUME 483954.952 3755222.473
LOCATION L0001285 VOLUME 483982.334 3755222.408
LOCATION L0001286 VOLUME 484009.716 3755222.343
LOCATION L0001287 VOLUME 484037.098 3755222.278
LOCATION L0001288 VOLUME 484064.480 3755222.212
LOCATION L0001289 VOLUME 484091.861 3755222.147
LOCATION L0001290 VOLUME 484119.243 3755222.082
LOCATION L0001291 VOLUME 484146.625 3755222.017
LOCATION L0001292 VOLUME 484172.933 3755216.815
LOCATION L0001293 VOLUME 484199.002 3755209.815
LOCATION L0001294 VOLUME 484225.071 3755202.815
LOCATION L0001295 VOLUME 484251.139 3755195.815
LOCATION L0001296 VOLUME 484277.208 3755188.815
LOCATION L0001297 VOLUME 484296.052 3755176.131
LOCATION L0001298 VOLUME 484313.339 3755160.581
LOCATION L0001299 VOLUME 484330.627 3755145.031
LOCATION L0001300 VOLUME 484347.914 3755129.481
LOCATION L0001301 VOLUME 484365.202 3755113.931
LOCATION L0001302 VOLUME 484386.198 3755100.834
LOCATION L0001303 VOLUME 484408.166 3755089.126
LOCATION L0001304 VOLUME 484430.135 3755077.417
LOCATION L0001305 VOLUME 484452.104 3755065.709
LOCATION L0001306 VOLUME 484474.073 3755054.001
LOCATION L0001307 VOLUME 484496.041 3755042.292
LOCATION L0001308 VOLUME 484516.960 3755036.015
LOCATION L0001309 VOLUME 484538.561 3755031.640
LOCATION L0001310 VOLUME 484560.163 3755027.265
LOCATION L0001311 VOLUME 484581.764 3755022.890
LOCATION L0001312 VOLUME 484605.898 3755021.348
LOCATION L0001313 VOLUME 484630.170 3755021.133
LOCATION L0001314 VOLUME 484654.442 3755020.919
LOCATION L0001315 VOLUME 484678.715 3755020.705
LOCATION L0001316 VOLUME 484702.987 3755020.490
LOCATION L0001317 VOLUME 484727.259 3755020.276
LOCATION L0001318 VOLUME 484751.532 3755020.062
LOCATION L0001319 VOLUME 484775.822 3755020.890
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------
** LINE Source ID = WDTOT
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 2.03E-06
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
** 484781.52, 3755035.53, 0.00, 4.00, 0.0
** 484780.87, 3755083.62, 0.00, 4.00, 8.84
** ----------
LOCATION L0001320 VOLUME 484781.435 3755040.500
LOCATION L0001321 VOLUME 484781.188 3755059.500
LOCATION L0001322 VOLUME 484780.940 3755078.500
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------
** LINE Source ID = WDN
** DESCRSRC
** Length of Side = 10.00
** Emission Rate = 1.35E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 3
** 484780.22, 3755082.97, 0.00, 4.00, 0.0
** 484777.62, 3755376.07, 0.00, 4.00, 8.78
** 484799.06, 3755375.42, 0.00, 4.00, 4.99
** ----------
LOCATION L0001323 VOLUME 484780.174 3755088.000
LOCATION L0001324 VOLUME 484780.007 3755106.866
LOCATION L0001325 VOLUME 484779.840 3755125.733
LOCATION L0001326 VOLUME 484779.673 3755144.600
LOCATION L0001327 VOLUME 484779.506 3755163.467
LOCATION L0001328 VOLUME 484779.339 3755182.333
LOCATION L0001329 VOLUME 484779.172 3755201.200

LOCATION L0001330 VOLUME 484779.005 3755220.067
LOCATION L0001331 VOLUME 484778.838 3755238.933
LOCATION L0001332 VOLUME 484778.671 3755257.800
LOCATION L0001333 VOLUME 484778.504 3755276.667
LOCATION L0001334 VOLUME 484778.337 3755295.533
LOCATION L0001335 VOLUME 484778.170 3755314.400
LOCATION L0001336 VOLUME 484778.003 3755333.267
LOCATION L0001337 VOLUME 484777.836 3755352.134
LOCATION L0001338 VOLUME 484777.669 3755371.000
LOCATION L0001339 VOLUME 484783.345 3755375.867
LOCATION L0001340 VOLUME 484794.064 3755375.617
** End of Line Source
** Line Source represented by Separated Volume Sources
** ----------
** LINE Source ID = EACONN
** DESCRSRC
** Length of Side = 14.00
** Emission Rate = 1.1E-5
** Vertical Dimension = 4.00
** SZINIT = 1.86
** Nodes = 2
** 485277.37, 3755024.48, 0.00, 4.00, 0.0
** 484786.06, 3755019.93, 0.00, 4.00, 12.33
** ----------
LOCATION L0001341 VOLUME 485270.375 3755024.436
LOCATION L0001342 VOLUME 485243.858 3755024.193
LOCATION L0001343 VOLUME 485217.341 3755023.950
LOCATION L0001344 VOLUME 485190.823 3755023.707
LOCATION L0001345 VOLUME 485164.306 3755023.464
LOCATION L0001346 VOLUME 485137.788 3755023.222
LOCATION L0001347 VOLUME 485111.271 3755022.979
LOCATION L0001348 VOLUME 485084.754 3755022.736
LOCATION L0001349 VOLUME 485058.236 3755022.493
LOCATION L0001350 VOLUME 485031.719 3755022.250
LOCATION L0001351 VOLUME 485005.201 3755022.007
LOCATION L0001352 VOLUME 484978.684 3755021.764
LOCATION L0001353 VOLUME 484952.167 3755021.521
LOCATION L0001354 VOLUME 484925.649 3755021.278
LOCATION L0001355 VOLUME 484899.132 3755021.036
LOCATION L0001356 VOLUME 484872.614 3755020.793
LOCATION L0001357 VOLUME 484846.097 3755020.550
LOCATION L0001358 VOLUME 484819.580 3755020.307
LOCATION L0001359 VOLUME 484793.062 3755020.064
** End of Line Source
** Source Parameters **
SRCPARAM NORTH 3.41E-10 4.000 11 1.860
AREAVERT NORTH 484851.861 3755334.115 484795.898 3755334.215
AREAVERT NORTH 484793.656 3755354.326 484789.516 3755391.010
AREAVERT NORTH 484791.656 3755391.005 485116.083 3755390.148
AREAVERT NORTH 485099.331 3755390.160 485136.349 3755386.791
AREAVERT NORTH 485222.754 3755374.982 485234.337 3755341.479
AREAVERT NORTH 485184.092 3755342.300
SRCPARAM SOUTH 3.732E-10 4.000 10 1.860
AREAVERT SOUTH 484832.883 3755147.441 484832.883 3755132.927
AREAVERT SOUTH 484832.775 3755132.927 484834.526 3755092.171
AREAVERT SOUTH 485198.157 3755095.373 485196.612 3755131.130
AREAVERT SOUTH 485196.184 3755149.677 485181.290 3755150.857
AREAVERT SOUTH 485176.151 3755150.296 485174.750 3755149.918
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SRCPARAM L0001330 7.5E-07 4.00 8.78 1.86
SRCPARAM L0001331 7.5E-07 4.00 8.78 1.86
SRCPARAM L0001332 7.5E-07 4.00 8.78 1.86
SRCPARAM L0001333 7.5E-07 4.00 8.78 1.86
SRCPARAM L0001334 7.5E-07 4.00 8.78 1.86
SRCPARAM L0001335 7.5E-07 4.00 8.78 1.86
SRCPARAM L0001336 7.5E-07 4.00 8.78 1.86
SRCPARAM L0001337 7.5E-07 4.00 8.78 1.86
SRCPARAM L0001338 7.5E-07 4.00 8.78 1.86
SRCPARAM L0001339 7.5E-07 4.00 4.99 1.86
SRCPARAM L0001340 7.5E-07 4.00 4.99 1.86
SRCPARAM L0001341 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001342 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001343 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001344 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001345 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001346 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001347 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001348 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001349 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001350 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001351 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001352 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001353 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001354 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001355 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001356 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001357 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001358 5.7895E-07 4.00 12.33 1.86
SRCPARAM L0001359 5.7895E-07 4.00 12.33 1.86

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 1"
EMISFACT NORTH HROFDY 8 8 4 4 10 21
EMISFACT NORTH HROFDY 21 17 17 17 13 8
EMISFACT NORTH HROFDY 8 13 17 21 21 31
EMISFACT NORTH HROFDY 42 21 21 38 31 17
EMISFACT SOUTH HROFDY 8 8 4 4 10 21
EMISFACT SOUTH HROFDY 21 17 17 17 13 8
EMISFACT SOUTH HROFDY 8 13 17 21 21 31
EMISFACT SOUTH HROFDY 42 21 21 38 31 17

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 2"
EMISFACT L0001260 HROFDY 3 3 2 2 4 8
EMISFACT L0001260 HROFDY 8 7 7 7 5 3
EMISFACT L0001260 HROFDY 3 5 7 8 8 13
EMISFACT L0001260 HROFDY 17 8 8 15 13 7
EMISFACT L0001261 HROFDY 3 3 2 2 4 8
EMISFACT L0001261 HROFDY 8 7 7 7 5 3
EMISFACT L0001261 HROFDY 3 5 7 8 8 13
EMISFACT L0001261 HROFDY 17 8 8 15 13 7
EMISFACT L0001262 HROFDY 3 3 2 2 4 8
EMISFACT L0001262 HROFDY 8 7 7 7 5 3
EMISFACT L0001262 HROFDY 3 5 7 8 8 13
EMISFACT L0001262 HROFDY 17 8 8 15 13 7
EMISFACT L0001263 HROFDY 3 3 2 2 4 8
EMISFACT L0001263 HROFDY 8 7 7 7 5 3
EMISFACT L0001263 HROFDY 3 5 7 8 8 13
EMISFACT L0001263 HROFDY 17 8 8 15 13 7
EMISFACT L0001264 HROFDY 3 3 2 2 4 8
EMISFACT L0001264 HROFDY 8 7 7 7 5 3
EMISFACT L0001264 HROFDY 3 5 7 8 8 13
EMISFACT L0001264 HROFDY 17 8 8 15 13 7
EMISFACT L0001265 HROFDY 3 3 2 2 4 8
EMISFACT L0001265 HROFDY 8 7 7 7 5 3
EMISFACT L0001265 HROFDY 3 5 7 8 8 13
EMISFACT L0001265 HROFDY 17 8 8 15 13 7
EMISFACT L0001266 HROFDY 3 3 2 2 4 8
EMISFACT L0001266 HROFDY 8 7 7 7 5 3
EMISFACT L0001266 HROFDY 3 5 7 8 8 13
EMISFACT L0001266 HROFDY 17 8 8 15 13 7
EMISFACT L0001267 HROFDY 3 3 2 2 4 8
EMISFACT L0001267 HROFDY 8 7 7 7 5 3
EMISFACT L0001267 HROFDY 3 5 7 8 8 13
EMISFACT L0001267 HROFDY 17 8 8 15 13 7
EMISFACT L0001268 HROFDY 3 3 2 2 4 8
EMISFACT L0001268 HROFDY 8 7 7 7 5 3
EMISFACT L0001268 HROFDY 3 5 7 8 8 13
EMISFACT L0001268 HROFDY 17 8 8 15 13 7
EMISFACT L0001269 HROFDY 3 3 2 2 4 8
EMISFACT L0001269 HROFDY 8 7 7 7 5 3

EMISFACT L0001269 HROFDY 3 5 7 8 8 13
EMISFACT L0001269 HROFDY 17 8 8 15 13 7
EMISFACT L0001270 HROFDY 3 3 2 2 4 8
EMISFACT L0001270 HROFDY 8 7 7 7 5 3
EMISFACT L0001270 HROFDY 3 5 7 8 8 13
EMISFACT L0001270 HROFDY 17 8 8 15 13 7
EMISFACT L0001271 HROFDY 3 3 2 2 4 8
EMISFACT L0001271 HROFDY 8 7 7 7 5 3
EMISFACT L0001271 HROFDY 3 5 7 8 8 13
EMISFACT L0001271 HROFDY 17 8 8 15 13 7
EMISFACT L0001272 HROFDY 3 3 2 2 4 8
EMISFACT L0001272 HROFDY 8 7 7 7 5 3
EMISFACT L0001272 HROFDY 3 5 7 8 8 13
EMISFACT L0001272 HROFDY 17 8 8 15 13 7
EMISFACT L0001273 HROFDY 3 3 2 2 4 8
EMISFACT L0001273 HROFDY 8 7 7 7 5 3
EMISFACT L0001273 HROFDY 3 5 7 8 8 13
EMISFACT L0001273 HROFDY 17 8 8 15 13 7
EMISFACT L0001274 HROFDY 3 3 2 2 4 8
EMISFACT L0001274 HROFDY 8 7 7 7 5 3
EMISFACT L0001274 HROFDY 3 5 7 8 8 13
EMISFACT L0001274 HROFDY 17 8 8 15 13 7
EMISFACT L0001275 HROFDY 3 3 2 2 4 8
EMISFACT L0001275 HROFDY 8 7 7 7 5 3
EMISFACT L0001275 HROFDY 3 5 7 8 8 13
EMISFACT L0001275 HROFDY 17 8 8 15 13 7
EMISFACT L0001276 HROFDY 3 3 2 2 4 8
EMISFACT L0001276 HROFDY 8 7 7 7 5 3
EMISFACT L0001276 HROFDY 3 5 7 8 8 13
EMISFACT L0001276 HROFDY 17 8 8 15 13 7
EMISFACT L0001277 HROFDY 3 3 2 2 4 8
EMISFACT L0001277 HROFDY 8 7 7 7 5 3
EMISFACT L0001277 HROFDY 3 5 7 8 8 13
EMISFACT L0001277 HROFDY 17 8 8 15 13 7
EMISFACT L0001278 HROFDY 3 3 2 2 4 8
EMISFACT L0001278 HROFDY 8 7 7 7 5 3
EMISFACT L0001278 HROFDY 3 5 7 8 8 13
EMISFACT L0001278 HROFDY 17 8 8 15 13 7
EMISFACT L0001279 HROFDY 3 3 2 2 4 8
EMISFACT L0001279 HROFDY 8 7 7 7 5 3
EMISFACT L0001279 HROFDY 3 5 7 8 8 13
EMISFACT L0001279 HROFDY 17 8 8 15 13 7
EMISFACT L0001280 HROFDY 3 3 2 2 4 8
EMISFACT L0001280 HROFDY 8 7 7 7 5 3
EMISFACT L0001280 HROFDY 3 5 7 8 8 13
EMISFACT L0001280 HROFDY 17 8 8 15 13 7
EMISFACT L0001281 HROFDY 3 3 2 2 4 8
EMISFACT L0001281 HROFDY 8 7 7 7 5 3
EMISFACT L0001281 HROFDY 3 5 7 8 8 13
EMISFACT L0001281 HROFDY 17 8 8 15 13 7
EMISFACT L0001282 HROFDY 3 3 2 2 4 8
EMISFACT L0001282 HROFDY 8 7 7 7 5 3
EMISFACT L0001282 HROFDY 3 5 7 8 8 13
EMISFACT L0001282 HROFDY 17 8 8 15 13 7
EMISFACT L0001283 HROFDY 3 3 2 2 4 8
EMISFACT L0001283 HROFDY 8 7 7 7 5 3
EMISFACT L0001283 HROFDY 3 5 7 8 8 13
EMISFACT L0001283 HROFDY 17 8 8 15 13 7
EMISFACT L0001284 HROFDY 3 3 2 2 4 8
EMISFACT L0001284 HROFDY 8 7 7 7 5 3
EMISFACT L0001284 HROFDY 3 5 7 8 8 13
EMISFACT L0001284 HROFDY 17 8 8 15 13 7
EMISFACT L0001285 HROFDY 3 3 2 2 4 8
EMISFACT L0001285 HROFDY 8 7 7 7 5 3
EMISFACT L0001285 HROFDY 3 5 7 8 8 13
EMISFACT L0001285 HROFDY 17 8 8 15 13 7
EMISFACT L0001286 HROFDY 3 3 2 2 4 8
EMISFACT L0001286 HROFDY 8 7 7 7 5 3
EMISFACT L0001286 HROFDY 3 5 7 8 8 13
EMISFACT L0001286 HROFDY 17 8 8 15 13 7
EMISFACT L0001287 HROFDY 3 3 2 2 4 8
EMISFACT L0001287 HROFDY 8 7 7 7 5 3
EMISFACT L0001287 HROFDY 3 5 7 8 8 13
EMISFACT L0001287 HROFDY 17 8 8 15 13 7
EMISFACT L0001288 HROFDY 3 3 2 2 4 8
EMISFACT L0001288 HROFDY 8 7 7 7 5 3
EMISFACT L0001288 HROFDY 3 5 7 8 8 13
EMISFACT L0001288 HROFDY 17 8 8 15 13 7
EMISFACT L0001289 HROFDY 3 3 2 2 4 8
EMISFACT L0001289 HROFDY 8 7 7 7 5 3
EMISFACT L0001289 HROFDY 3 5 7 8 8 13
EMISFACT L0001289 HROFDY 17 8 8 15 13 7
EMISFACT L0001290 HROFDY 3 3 2 2 4 8
EMISFACT L0001290 HROFDY 8 7 7 7 5 3
EMISFACT L0001290 HROFDY 3 5 7 8 8 13
EMISFACT L0001290 HROFDY 17 8 8 15 13 7
EMISFACT L0001291 HROFDY 3 3 2 2 4 8
EMISFACT L0001291 HROFDY 8 7 7 7 5 3
EMISFACT L0001291 HROFDY 3 5 7 8 8 13
EMISFACT L0001291 HROFDY 17 8 8 15 13 7
EMISFACT L0001292 HROFDY 3 3 2 2 4 8
EMISFACT L0001292 HROFDY 8 7 7 7 5 3
EMISFACT L0001292 HROFDY 3 5 7 8 8 13
EMISFACT L0001292 HROFDY 17 8 8 15 13 7
EMISFACT L0001293 HROFDY 3 3 2 2 4 8
EMISFACT L0001293 HROFDY 8 7 7 7 5 3
EMISFACT L0001293 HROFDY 3 5 7 8 8 13
EMISFACT L0001293 HROFDY 17 8 8 15 13 7
EMISFACT L0001294 HROFDY 3 3 2 2 4 8
EMISFACT L0001294 HROFDY 8 7 7 7 5 3
EMISFACT L0001294 HROFDY 3 5 7 8 8 13
EMISFACT L0001294 HROFDY 17 8 8 15 13 7
EMISFACT L0001295 HROFDY 3 3 2 2 4 8
EMISFACT L0001295 HROFDY 8 7 7 7 5 3
EMISFACT L0001295 HROFDY 3 5 7 8 8 13
EMISFACT L0001295 HROFDY 17 8 8 15 13 7
EMISFACT L0001296 HROFDY 3 3 2 2 4 8
EMISFACT L0001296 HROFDY 8 7 7 7 5 3
EMISFACT L0001296 HROFDY 3 5 7 8 8 13
EMISFACT L0001296 HROFDY 17 8 8 15 13 7
EMISFACT L0001297 HROFDY 3 3 2 2 4 8
EMISFACT L0001297 HROFDY 8 7 7 7 5 3
EMISFACT L0001297 HROFDY 3 5 7 8 8 13
EMISFACT L0001297 HROFDY 17 8 8 15 13 7
EMISFACT L0001298 HROFDY 3 3 2 2 4 8
EMISFACT L0001298 HROFDY 8 7 7 7 5 3
EMISFACT L0001298 HROFDY 3 5 7 8 8 13
EMISFACT L0001298 HROFDY 17 8 8 15 13 7
EMISFACT L0001299 HROFDY 3 3 2 2 4 8
EMISFACT L0001299 HROFDY 8 7 7 7 5 3
EMISFACT L0001299 HROFDY 3 5 7 8 8 13
EMISFACT L0001299 HROFDY 17 8 8 15 13 7
EMISFACT L0001300 HROFDY 3 3 2 2 4 8
EMISFACT L0001300 HROFDY 8 7 7 7 5 3
EMISFACT L0001300 HROFDY 3 5 7 8 8 13
EMISFACT L0001300 HROFDY 17 8 8 15 13 7
EMISFACT L0001301 HROFDY 3 3 2 2 4 8
EMISFACT L0001301 HROFDY 8 7 7 7 5 3
EMISFACT L0001301 HROFDY 3 5 7 8 8 13
EMISFACT L0001301 HROFDY 17 8 8 15 13 7
EMISFACT L0001302 HROFDY 3 3 2 2 4 8
EMISFACT L0001302 HROFDY 8 7 7 7 5 3

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EMISFACT L0001302 HROFDY 3 5 7 8 8 13
EMISFACT L0001302 HROFDY 17 8 8 15 13 7
EMISFACT L0001303 HROFDY 3 3 2 2 4 8
EMISFACT L0001303 HROFDY 8 7 7 7 5 3
EMISFACT L0001303 HROFDY 3 5 7 8 8 13
EMISFACT L0001303 HROFDY 17 8 8 15 13 7
EMISFACT L0001304 HROFDY 3 3 2 2 4 8
EMISFACT L0001304 HROFDY 8 7 7 7 5 3
EMISFACT L0001304 HROFDY 3 5 7 8 8 13
EMISFACT L0001304 HROFDY 17 8 8 15 13 7
EMISFACT L0001305 HROFDY 3 3 2 2 4 8
EMISFACT L0001305 HROFDY 8 7 7 7 5 3
EMISFACT L0001305 HROFDY 3 5 7 8 8 13
EMISFACT L0001305 HROFDY 17 8 8 15 13 7
EMISFACT L0001306 HROFDY 3 3 2 2 4 8
EMISFACT L0001306 HROFDY 8 7 7 7 5 3
EMISFACT L0001306 HROFDY 3 5 7 8 8 13
EMISFACT L0001306 HROFDY 17 8 8 15 13 7
EMISFACT L0001307 HROFDY 3 3 2 2 4 8
EMISFACT L0001307 HROFDY 8 7 7 7 5 3
EMISFACT L0001307 HROFDY 3 5 7 8 8 13
EMISFACT L0001307 HROFDY 17 8 8 15 13 7
EMISFACT L0001308 HROFDY 3 3 2 2 4 8
EMISFACT L0001308 HROFDY 8 7 7 7 5 3
EMISFACT L0001308 HROFDY 3 5 7 8 8 13
EMISFACT L0001308 HROFDY 17 8 8 15 13 7
EMISFACT L0001309 HROFDY 3 3 2 2 4 8
EMISFACT L0001309 HROFDY 8 7 7 7 5 3
EMISFACT L0001309 HROFDY 3 5 7 8 8 13
EMISFACT L0001309 HROFDY 17 8 8 15 13 7
EMISFACT L0001310 HROFDY 3 3 2 2 4 8
EMISFACT L0001310 HROFDY 8 7 7 7 5 3
EMISFACT L0001310 HROFDY 3 5 7 8 8 13
EMISFACT L0001310 HROFDY 17 8 8 15 13 7
EMISFACT L0001311 HROFDY 3 3 2 2 4 8
EMISFACT L0001311 HROFDY 8 7 7 7 5 3
EMISFACT L0001311 HROFDY 3 5 7 8 8 13
EMISFACT L0001311 HROFDY 17 8 8 15 13 7
EMISFACT L0001312 HROFDY 3 3 2 2 4 8
EMISFACT L0001312 HROFDY 8 7 7 7 5 3
EMISFACT L0001312 HROFDY 3 5 7 8 8 13
EMISFACT L0001312 HROFDY 17 8 8 15 13 7
EMISFACT L0001313 HROFDY 3 3 2 2 4 8
EMISFACT L0001313 HROFDY 8 7 7 7 5 3
EMISFACT L0001313 HROFDY 3 5 7 8 8 13
EMISFACT L0001313 HROFDY 17 8 8 15 13 7
EMISFACT L0001314 HROFDY 3 3 2 2 4 8
EMISFACT L0001314 HROFDY 8 7 7 7 5 3
EMISFACT L0001314 HROFDY 3 5 7 8 8 13
EMISFACT L0001314 HROFDY 17 8 8 15 13 7
EMISFACT L0001315 HROFDY 3 3 2 2 4 8
EMISFACT L0001315 HROFDY 8 7 7 7 5 3
EMISFACT L0001315 HROFDY 3 5 7 8 8 13
EMISFACT L0001315 HROFDY 17 8 8 15 13 7
EMISFACT L0001316 HROFDY 3 3 2 2 4 8
EMISFACT L0001316 HROFDY 8 7 7 7 5 3
EMISFACT L0001316 HROFDY 3 5 7 8 8 13
EMISFACT L0001316 HROFDY 17 8 8 15 13 7
EMISFACT L0001317 HROFDY 3 3 2 2 4 8
EMISFACT L0001317 HROFDY 8 7 7 7 5 3
EMISFACT L0001317 HROFDY 3 5 7 8 8 13
EMISFACT L0001317 HROFDY 17 8 8 15 13 7
EMISFACT L0001318 HROFDY 3 3 2 2 4 8
EMISFACT L0001318 HROFDY 8 7 7 7 5 3
EMISFACT L0001318 HROFDY 3 5 7 8 8 13
EMISFACT L0001318 HROFDY 17 8 8 15 13 7
EMISFACT L0001319 HROFDY 3 3 2 2 4 8
EMISFACT L0001319 HROFDY 8 7 7 7 5 3
EMISFACT L0001319 HROFDY 3 5 7 8 8 13
EMISFACT L0001319 HROFDY 17 8 8 15 13 7

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 3"
EMISFACT L0001320 HROFDY 8 8 4 4 10 21
EMISFACT L0001320 HROFDY 21 17 17 17 13 8
EMISFACT L0001320 HROFDY 8 13 17 21 21 31
EMISFACT L0001320 HROFDY 42 21 21 38 31 17
EMISFACT L0001321 HROFDY 8 8 4 4 10 21
EMISFACT L0001321 HROFDY 21 17 17 17 13 8
EMISFACT L0001321 HROFDY 8 13 17 21 21 31
EMISFACT L0001321 HROFDY 42 21 21 38 31 17
EMISFACT L0001322 HROFDY 8 8 4 4 10 21
EMISFACT L0001322 HROFDY 21 17 17 17 13 8
EMISFACT L0001322 HROFDY 8 13 17 21 21 31
EMISFACT L0001322 HROFDY 42 21 21 38 31 17
EMISFACT L0001236 HROFDY 8 8 4 4 10 21
EMISFACT L0001236 HROFDY 21 17 17 17 13 8
EMISFACT L0001236 HROFDY 8 13 17 21 21 31
EMISFACT L0001236 HROFDY 42 21 21 38 31 17
EMISFACT L0001237 HROFDY 8 8 4 4 10 21
EMISFACT L0001237 HROFDY 21 17 17 17 13 8
EMISFACT L0001237 HROFDY 8 13 17 21 21 31
EMISFACT L0001237 HROFDY 42 21 21 38 31 17
EMISFACT L0001238 HROFDY 8 8 4 4 10 21
EMISFACT L0001238 HROFDY 21 17 17 17 13 8
EMISFACT L0001238 HROFDY 8 13 17 21 21 31
EMISFACT L0001238 HROFDY 42 21 21 38 31 17
EMISFACT L0001239 HROFDY 8 8 4 4 10 21
EMISFACT L0001239 HROFDY 21 17 17 17 13 8
EMISFACT L0001239 HROFDY 8 13 17 21 21 31
EMISFACT L0001239 HROFDY 42 21 21 38 31 17
EMISFACT L0001240 HROFDY 8 8 4 4 10 21
EMISFACT L0001240 HROFDY 21 17 17 17 13 8
EMISFACT L0001240 HROFDY 8 13 17 21 21 31
EMISFACT L0001240 HROFDY 42 21 21 38 31 17

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 4"
EMISFACT L0001323 HROFDY 4 4 2 2 5 10
EMISFACT L0001323 HROFDY 10 8 8 8 6 4
EMISFACT L0001323 HROFDY 4 6 8 10 10 16
EMISFACT L0001323 HROFDY 21 10 10 19 16 8
EMISFACT L0001324 HROFDY 4 4 2 2 5 10
EMISFACT L0001324 HROFDY 10 8 8 8 6 4
EMISFACT L0001324 HROFDY 4 6 8 10 10 16
EMISFACT L0001324 HROFDY 21 10 10 19 16 8
EMISFACT L0001325 HROFDY 4 4 2 2 5 10
EMISFACT L0001325 HROFDY 10 8 8 8 6 4
EMISFACT L0001325 HROFDY 4 6 8 10 10 16
EMISFACT L0001325 HROFDY 21 10 10 19 16 8
EMISFACT L0001326 HROFDY 4 4 2 2 5 10
EMISFACT L0001326 HROFDY 10 8 8 8 6 4
EMISFACT L0001326 HROFDY 4 6 8 10 10 16
EMISFACT L0001326 HROFDY 21 10 10 19 16 8
EMISFACT L0001327 HROFDY 4 4 2 2 5 10
EMISFACT L0001327 HROFDY 10 8 8 8 6 4
EMISFACT L0001327 HROFDY 4 6 8 10 10 16
EMISFACT L0001327 HROFDY 21 10 10 19 16 8
EMISFACT L0001328 HROFDY 4 4 2 2 5 10
EMISFACT L0001328 HROFDY 10 8 8 8 6 4
EMISFACT L0001328 HROFDY 4 6 8 10 10 16
EMISFACT L0001328 HROFDY 21 10 10 19 16 8
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EMISFACT L0001329 HROFDY 4 4 2 2 5 10
EMISFACT L0001329 HROFDY 10 8 8 8 6 4
EMISFACT L0001329 HROFDY 4 6 8 10 10 16
EMISFACT L0001329 HROFDY 21 10 10 19 16 8
EMISFACT L0001330 HROFDY 4 4 2 2 5 10
EMISFACT L0001330 HROFDY 10 8 8 8 6 4
EMISFACT L0001330 HROFDY 4 6 8 10 10 16
EMISFACT L0001330 HROFDY 21 10 10 19 16 8
EMISFACT L0001331 HROFDY 4 4 2 2 5 10
EMISFACT L0001331 HROFDY 10 8 8 8 6 4
EMISFACT L0001331 HROFDY 4 6 8 10 10 16
EMISFACT L0001331 HROFDY 21 10 10 19 16 8
EMISFACT L0001332 HROFDY 4 4 2 2 5 10
EMISFACT L0001332 HROFDY 10 8 8 8 6 4
EMISFACT L0001332 HROFDY 4 6 8 10 10 16
EMISFACT L0001332 HROFDY 21 10 10 19 16 8
EMISFACT L0001333 HROFDY 4 4 2 2 5 10
EMISFACT L0001333 HROFDY 10 8 8 8 6 4
EMISFACT L0001333 HROFDY 4 6 8 10 10 16
EMISFACT L0001333 HROFDY 21 10 10 19 16 8
EMISFACT L0001334 HROFDY 4 4 2 2 5 10
EMISFACT L0001334 HROFDY 10 8 8 8 6 4
EMISFACT L0001334 HROFDY 4 6 8 10 10 16
EMISFACT L0001334 HROFDY 21 10 10 19 16 8
EMISFACT L0001335 HROFDY 4 4 2 2 5 10
EMISFACT L0001335 HROFDY 10 8 8 8 6 4
EMISFACT L0001335 HROFDY 4 6 8 10 10 16
EMISFACT L0001335 HROFDY 21 10 10 19 16 8
EMISFACT L0001336 HROFDY 4 4 2 2 5 10
EMISFACT L0001336 HROFDY 10 8 8 8 6 4
EMISFACT L0001336 HROFDY 4 6 8 10 10 16
EMISFACT L0001336 HROFDY 21 10 10 19 16 8
EMISFACT L0001337 HROFDY 4 4 2 2 5 10
EMISFACT L0001337 HROFDY 10 8 8 8 6 4
EMISFACT L0001337 HROFDY 4 6 8 10 10 16
EMISFACT L0001337 HROFDY 21 10 10 19 16 8
EMISFACT L0001338 HROFDY 4 4 2 2 5 10
EMISFACT L0001338 HROFDY 10 8 8 8 6 4
EMISFACT L0001338 HROFDY 4 6 8 10 10 16
EMISFACT L0001338 HROFDY 21 10 10 19 16 8
EMISFACT L0001339 HROFDY 4 4 2 2 5 10
EMISFACT L0001339 HROFDY 10 8 8 8 6 4
EMISFACT L0001339 HROFDY 4 6 8 10 10 16
EMISFACT L0001339 HROFDY 21 10 10 19 16 8
EMISFACT L0001340 HROFDY 4 4 2 2 5 10
EMISFACT L0001340 HROFDY 10 8 8 8 6 4
EMISFACT L0001340 HROFDY 4 6 8 10 10 16
EMISFACT L0001340 HROFDY 21 10 10 19 16 8
EMISFACT L0001241 HROFDY 4 4 2 2 5 10
EMISFACT L0001241 HROFDY 10 8 8 8 6 4
EMISFACT L0001241 HROFDY 4 6 8 10 10 16
EMISFACT L0001241 HROFDY 21 10 10 19 16 8
EMISFACT L0001242 HROFDY 4 4 2 2 5 10
EMISFACT L0001242 HROFDY 10 8 8 8 6 4
EMISFACT L0001242 HROFDY 4 6 8 10 10 16
EMISFACT L0001242 HROFDY 21 10 10 19 16 8
EMISFACT L0001243 HROFDY 4 4 2 2 5 10
EMISFACT L0001243 HROFDY 10 8 8 8 6 4
EMISFACT L0001243 HROFDY 4 6 8 10 10 16
EMISFACT L0001243 HROFDY 21 10 10 19 16 8
EMISFACT L0001244 HROFDY 4 4 2 2 5 10
EMISFACT L0001244 HROFDY 10 8 8 8 6 4
EMISFACT L0001244 HROFDY 4 6 8 10 10 16
EMISFACT L0001244 HROFDY 21 10 10 19 16 8
EMISFACT L0001245 HROFDY 4 4 2 2 5 10
EMISFACT L0001245 HROFDY 10 8 8 8 6 4

EMISFACT L0001245 HROFDY 4 6 8 10 10 16
EMISFACT L0001245 HROFDY 21 10 10 19 16 8
EMISFACT L0001246 HROFDY 4 4 2 2 5 10
EMISFACT L0001246 HROFDY 10 8 8 8 6 4
EMISFACT L0001246 HROFDY 4 6 8 10 10 16
EMISFACT L0001246 HROFDY 21 10 10 19 16 8
EMISFACT L0001247 HROFDY 4 4 2 2 5 10
EMISFACT L0001247 HROFDY 10 8 8 8 6 4
EMISFACT L0001247 HROFDY 4 6 8 10 10 16
EMISFACT L0001247 HROFDY 21 10 10 19 16 8
EMISFACT L0001248 HROFDY 4 4 2 2 5 10
EMISFACT L0001248 HROFDY 10 8 8 8 6 4
EMISFACT L0001248 HROFDY 4 6 8 10 10 16
EMISFACT L0001248 HROFDY 21 10 10 19 16 8
EMISFACT L0001249 HROFDY 4 4 2 2 5 10
EMISFACT L0001249 HROFDY 10 8 8 8 6 4
EMISFACT L0001249 HROFDY 4 6 8 10 10 16
EMISFACT L0001249 HROFDY 21 10 10 19 16 8
EMISFACT L0001250 HROFDY 4 4 2 2 5 10
EMISFACT L0001250 HROFDY 10 8 8 8 6 4
EMISFACT L0001250 HROFDY 4 6 8 10 10 16
EMISFACT L0001250 HROFDY 21 10 10 19 16 8
EMISFACT L0001251 HROFDY 4 4 2 2 5 10
EMISFACT L0001251 HROFDY 10 8 8 8 6 4
EMISFACT L0001251 HROFDY 4 6 8 10 10 16
EMISFACT L0001251 HROFDY 21 10 10 19 16 8
EMISFACT L0001252 HROFDY 4 4 2 2 5 10
EMISFACT L0001252 HROFDY 10 8 8 8 6 4
EMISFACT L0001252 HROFDY 4 6 8 10 10 16
EMISFACT L0001252 HROFDY 21 10 10 19 16 8
EMISFACT L0001253 HROFDY 4 4 2 2 5 10
EMISFACT L0001253 HROFDY 10 8 8 8 6 4
EMISFACT L0001253 HROFDY 4 6 8 10 10 16
EMISFACT L0001253 HROFDY 21 10 10 19 16 8
EMISFACT L0001254 HROFDY 4 4 2 2 5 10
EMISFACT L0001254 HROFDY 10 8 8 8 6 4
EMISFACT L0001254 HROFDY 4 6 8 10 10 16
EMISFACT L0001254 HROFDY 21 10 10 19 16 8
EMISFACT L0001255 HROFDY 4 4 2 2 5 10
EMISFACT L0001255 HROFDY 10 8 8 8 6 4
EMISFACT L0001255 HROFDY 4 6 8 10 10 16
EMISFACT L0001255 HROFDY 21 10 10 19 16 8
EMISFACT L0001256 HROFDY 4 4 2 2 5 10
EMISFACT L0001256 HROFDY 10 8 8 8 6 4
EMISFACT L0001256 HROFDY 4 6 8 10 10 16
EMISFACT L0001256 HROFDY 21 10 10 19 16 8
EMISFACT L0001257 HROFDY 4 4 2 2 5 10
EMISFACT L0001257 HROFDY 10 8 8 8 6 4
EMISFACT L0001257 HROFDY 4 6 8 10 10 16
EMISFACT L0001257 HROFDY 21 10 10 19 16 8
EMISFACT L0001258 HROFDY 4 4 2 2 5 10
EMISFACT L0001258 HROFDY 10 8 8 8 6 4
EMISFACT L0001258 HROFDY 4 6 8 10 10 16
EMISFACT L0001258 HROFDY 21 10 10 19 16 8
EMISFACT L0001259 HROFDY 4 4 2 2 5 10
EMISFACT L0001259 HROFDY 10 8 8 8 6 4
EMISFACT L0001259 HROFDY 4 6 8 10 10 16
EMISFACT L0001259 HROFDY 21 10 10 19 16 8
EMISFACT L0001231 HROFDY 4 4 2 2 5 10
EMISFACT L0001231 HROFDY 10 8 8 8 6 4
EMISFACT L0001231 HROFDY 4 6 8 10 10 16
EMISFACT L0001231 HROFDY 21 10 10 19 16 8
EMISFACT L0001232 HROFDY 4 4 2 2 5 10
EMISFACT L0001232 HROFDY 10 8 8 8 6 4
EMISFACT L0001232 HROFDY 4 6 8 10 10 16
EMISFACT L0001232 HROFDY 21 10 10 19 16 8

EMISFACT L0001233 HROFDY 4 4 2 2 5 10
EMISFACT L0001233 HROFDY 10 8 8 8 6 4
EMISFACT L0001233 HROFDY 4 6 8 10 10 16
EMISFACT L0001233 HROFDY 21 10 10 19 16 8
EMISFACT L0001234 HROFDY 4 4 2 2 5 10
EMISFACT L0001234 HROFDY 10 8 8 8 6 4
EMISFACT L0001234 HROFDY 4 6 8 10 10 16
EMISFACT L0001234 HROFDY 21 10 10 19 16 8
EMISFACT L0001235 HROFDY 4 4 2 2 5 10
EMISFACT L0001235 HROFDY 10 8 8 8 6 4
EMISFACT L0001235 HROFDY 4 6 8 10 10 16
EMISFACT L0001235 HROFDY 21 10 10 19 16 8

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 5"
EMISFACT L0001206 HROFDY 13 13 7 7 17 33
EMISFACT L0001206 HROFDY 33 27 27 27 20 13
EMISFACT L0001206 HROFDY 13 20 27 33 33 50
EMISFACT L0001206 HROFDY 67 33 33 60 50 27
EMISFACT L0001207 HROFDY 13 13 7 7 17 33
EMISFACT L0001207 HROFDY 33 27 27 27 20 13
EMISFACT L0001207 HROFDY 13 20 27 33 33 50
EMISFACT L0001207 HROFDY 67 33 33 60 50 27
EMISFACT L0001208 HROFDY 13 13 7 7 17 33
EMISFACT L0001208 HROFDY 33 27 27 27 20 13
EMISFACT L0001208 HROFDY 13 20 27 33 33 50
EMISFACT L0001208 HROFDY 67 33 33 60 50 27
EMISFACT L0001209 HROFDY 13 13 7 7 17 33
EMISFACT L0001209 HROFDY 33 27 27 27 20 13
EMISFACT L0001209 HROFDY 13 20 27 33 33 50
EMISFACT L0001209 HROFDY 67 33 33 60 50 27
EMISFACT L0001210 HROFDY 13 13 7 7 17 33
EMISFACT L0001210 HROFDY 33 27 27 27 20 13
EMISFACT L0001210 HROFDY 13 20 27 33 33 50
EMISFACT L0001210 HROFDY 67 33 33 60 50 27
EMISFACT L0001211 HROFDY 13 13 7 7 17 33
EMISFACT L0001211 HROFDY 33 27 27 27 20 13
EMISFACT L0001211 HROFDY 13 20 27 33 33 50
EMISFACT L0001211 HROFDY 67 33 33 60 50 27
EMISFACT L0001212 HROFDY 13 13 7 7 17 33
EMISFACT L0001212 HROFDY 33 27 27 27 20 13
EMISFACT L0001212 HROFDY 13 20 27 33 33 50
EMISFACT L0001212 HROFDY 67 33 33 60 50 27
EMISFACT L0001213 HROFDY 13 13 7 7 17 33
EMISFACT L0001213 HROFDY 33 27 27 27 20 13
EMISFACT L0001213 HROFDY 13 20 27 33 33 50
EMISFACT L0001213 HROFDY 67 33 33 60 50 27
EMISFACT L0001214 HROFDY 13 13 7 7 17 33
EMISFACT L0001214 HROFDY 33 27 27 27 20 13
EMISFACT L0001214 HROFDY 13 20 27 33 33 50
EMISFACT L0001214 HROFDY 67 33 33 60 50 27
EMISFACT L0001215 HROFDY 13 13 7 7 17 33
EMISFACT L0001215 HROFDY 33 27 27 27 20 13
EMISFACT L0001215 HROFDY 13 20 27 33 33 50
EMISFACT L0001215 HROFDY 67 33 33 60 50 27
EMISFACT L0001216 HROFDY 13 13 7 7 17 33
EMISFACT L0001216 HROFDY 33 27 27 27 20 13
EMISFACT L0001216 HROFDY 13 20 27 33 33 50
EMISFACT L0001216 HROFDY 67 33 33 60 50 27
EMISFACT L0001217 HROFDY 13 13 7 7 17 33
EMISFACT L0001217 HROFDY 33 27 27 27 20 13
EMISFACT L0001217 HROFDY 13 20 27 33 33 50
EMISFACT L0001217 HROFDY 67 33 33 60 50 27
EMISFACT L0001218 HROFDY 13 13 7 7 17 33
EMISFACT L0001218 HROFDY 33 27 27 27 20 13
EMISFACT L0001218 HROFDY 13 20 27 33 33 50
EMISFACT L0001218 HROFDY 67 33 33 60 50 27
EMISFACT L0001219 HROFDY 13 13 7 7 17 33
EMISFACT L0001219 HROFDY 33 27 27 27 20 13
EMISFACT L0001219 HROFDY 13 20 27 33 33 50
EMISFACT L0001219 HROFDY 67 33 33 60 50 27
EMISFACT L0001220 HROFDY 13 13 7 7 17 33
EMISFACT L0001220 HROFDY 33 27 27 27 20 13
EMISFACT L0001220 HROFDY 13 20 27 33 33 50
EMISFACT L0001220 HROFDY 67 33 33 60 50 27
EMISFACT L0001221 HROFDY 13 13 7 7 17 33
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EMISFACT L0001221 HROFDY 67 33 33 60 50 27
EMISFACT L0001222 HROFDY 13 13 7 7 17 33
EMISFACT L0001222 HROFDY 33 27 27 27 20 13
EMISFACT L0001222 HROFDY 13 20 27 33 33 50
EMISFACT L0001222 HROFDY 67 33 33 60 50 27
EMISFACT L0001223 HROFDY 13 13 7 7 17 33
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EMISFACT L0001224 HROFDY 13 13 7 7 17 33
EMISFACT L0001224 HROFDY 33 27 27 27 20 13
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EMISFACT L0001224 HROFDY 67 33 33 60 50 27
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EMISFACT L0001225 HROFDY 13 20 27 33 33 50
EMISFACT L0001225 HROFDY 67 33 33 60 50 27
EMISFACT L0001226 HROFDY 13 13 7 7 17 33
EMISFACT L0001226 HROFDY 33 27 27 27 20 13
EMISFACT L0001226 HROFDY 13 20 27 33 33 50
EMISFACT L0001226 HROFDY 67 33 33 60 50 27
EMISFACT L0001227 HROFDY 13 13 7 7 17 33
EMISFACT L0001227 HROFDY 33 27 27 27 20 13
EMISFACT L0001227 HROFDY 13 20 27 33 33 50
EMISFACT L0001227 HROFDY 67 33 33 60 50 27
EMISFACT L0001228 HROFDY 13 13 7 7 17 33
EMISFACT L0001228 HROFDY 33 27 27 27 20 13
EMISFACT L0001228 HROFDY 13 20 27 33 33 50
EMISFACT L0001228 HROFDY 67 33 33 60 50 27
EMISFACT L0001229 HROFDY 13 13 7 7 17 33
EMISFACT L0001229 HROFDY 33 27 27 27 20 13
EMISFACT L0001229 HROFDY 13 20 27 33 33 50
EMISFACT L0001229 HROFDY 67 33 33 60 50 27
EMISFACT L0001230 HROFDY 13 13 7 7 17 33
EMISFACT L0001230 HROFDY 33 27 27 27 20 13
EMISFACT L0001230 HROFDY 13 20 27 33 33 50
EMISFACT L0001230 HROFDY 67 33 33 60 50 27

** Variable Emissions Type: "By Hour-of-Day"
** Variable Emission Scenario: "Scenario 6"
EMISFACT L0001341 HROFDY 5 5 2 2 6 12
EMISFACT L0001341 HROFDY 12 10 10 10 7 5
EMISFACT L0001341 HROFDY 5 7 10 12 12 19
EMISFACT L0001341 HROFDY 25 12 12 22 19 10
EMISFACT L0001342 HROFDY 5 5 2 2 6 12
EMISFACT L0001342 HROFDY 12 10 10 10 7 5
EMISFACT L0001342 HROFDY 5 7 10 12 12 19
EMISFACT L0001342 HROFDY 25 12 12 22 19 10
EMISFACT L0001343 HROFDY 5 5 2 2 6 12
EMISFACT L0001343 HROFDY 12 10 10 10 7 5
EMISFACT L0001343 HROFDY 5 7 10 12 12 19
EMISFACT L0001343 HROFDY 25 12 12 22 19 10
EMISFACT L0001344 HROFDY 5 5 2 2 6 12
EMISFACT L0001344 HROFDY 12 10 10 10 7 5

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  EMISFACT L0001344 HROFDY 5 7 10 12 12 19
  EMISFACT L0001344 HROFDY 25 12 12 22 19 10
  EMISFACT L0001345 HROFDY 5 5 2 2 6 12
  EMISFACT L0001345 HROFDY 12 10 10 10 7 5
  EMISFACT L0001345 HROFDY 5 7 10 12 12 19
  EMISFACT L0001345 HROFDY 25 12 12 22 19 10
  EMISFACT L0001346 HROFDY 5 5 2 2 6 12
  EMISFACT L0001346 HROFDY 12 10 10 10 7 5
  EMISFACT L0001346 HROFDY 5 7 10 12 12 19
  EMISFACT L0001346 HROFDY 25 12 12 22 19 10
  EMISFACT L0001347 HROFDY 5 5 2 2 6 12
  EMISFACT L0001347 HROFDY 12 10 10 10 7 5
  EMISFACT L0001347 HROFDY 5 7 10 12 12 19
  EMISFACT L0001347 HROFDY 25 12 12 22 19 10
  EMISFACT L0001348 HROFDY 5 5 2 2 6 12
  EMISFACT L0001348 HROFDY 12 10 10 10 7 5
  EMISFACT L0001348 HROFDY 5 7 10 12 12 19
  EMISFACT L0001348 HROFDY 25 12 12 22 19 10
  EMISFACT L0001349 HROFDY 5 5 2 2 6 12
  EMISFACT L0001349 HROFDY 12 10 10 10 7 5
  EMISFACT L0001349 HROFDY 5 7 10 12 12 19
  EMISFACT L0001349 HROFDY 25 12 12 22 19 10
  EMISFACT L0001350 HROFDY 5 5 2 2 6 12
  EMISFACT L0001350 HROFDY 12 10 10 10 7 5
  EMISFACT L0001350 HROFDY 5 7 10 12 12 19
  EMISFACT L0001350 HROFDY 25 12 12 22 19 10
  EMISFACT L0001351 HROFDY 5 5 2 2 6 12
  EMISFACT L0001351 HROFDY 12 10 10 10 7 5
  EMISFACT L0001351 HROFDY 5 7 10 12 12 19
  EMISFACT L0001351 HROFDY 25 12 12 22 19 10
  EMISFACT L0001352 HROFDY 5 5 2 2 6 12
  EMISFACT L0001352 HROFDY 12 10 10 10 7 5
  EMISFACT L0001352 HROFDY 5 7 10 12 12 19
  EMISFACT L0001352 HROFDY 25 12 12 22 19 10
  EMISFACT L0001353 HROFDY 5 5 2 2 6 12
  EMISFACT L0001353 HROFDY 12 10 10 10 7 5
  EMISFACT L0001353 HROFDY 5 7 10 12 12 19
  EMISFACT L0001353 HROFDY 25 12 12 22 19 10
  EMISFACT L0001354 HROFDY 5 5 2 2 6 12
  EMISFACT L0001354 HROFDY 12 10 10 10 7 5
  EMISFACT L0001354 HROFDY 5 7 10 12 12 19
  EMISFACT L0001354 HROFDY 25 12 12 22 19 10
  EMISFACT L0001355 HROFDY 5 5 2 2 6 12
  EMISFACT L0001355 HROFDY 12 10 10 10 7 5
  EMISFACT L0001355 HROFDY 5 7 10 12 12 19
  EMISFACT L0001355 HROFDY 25 12 12 22 19 10
  EMISFACT L0001356 HROFDY 5 5 2 2 6 12
  EMISFACT L0001356 HROFDY 12 10 10 10 7 5
  EMISFACT L0001356 HROFDY 5 7 10 12 12 19
  EMISFACT L0001356 HROFDY 25 12 12 22 19 10
  EMISFACT L0001357 HROFDY 5 5 2 2 6 12
  EMISFACT L0001357 HROFDY 12 10 10 10 7 5
  EMISFACT L0001357 HROFDY 5 7 10 12 12 19
  EMISFACT L0001357 HROFDY 25 12 12 22 19 10
  EMISFACT L0001358 HROFDY 5 5 2 2 6 12
  EMISFACT L0001358 HROFDY 12 10 10 10 7 5
  EMISFACT L0001358 HROFDY 5 7 10 12 12 19
  EMISFACT L0001358 HROFDY 25 12 12 22 19 10
  EMISFACT L0001359 HROFDY 5 5 2 2 6 12
  EMISFACT L0001359 HROFDY 12 10 10 10 7 5
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  EMISFACT L0001359 HROFDY 25 12 12 22 19 10
  SRCGROUP ALL
SO FINISHED
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** ISCST3 Receptor Pathway
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RE STARTING
** DESCRREC "UPOL1" "Receptors generated from Uniform Polar Grid"
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  DISCCART   485024.23  3755640.51   1.50
  DISCCART   485024.23  3755740.51   1.50
  DISCCART   485024.23  3755840.51   1.50
  DISCCART   485024.23  3755940.51   1.50
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  DISCCART   485024.23  3756140.51   1.50
  DISCCART   485024.23  3756240.51   1.50
  DISCCART   485024.23  3756340.51   1.50
  DISCCART   485024.23  3756440.51   1.50
  DISCCART   485024.23  3756540.51   1.50
  DISCCART   485024.23  3756640.51   1.50
  DISCCART   485024.23  3756740.51   1.50
  DISCCART   485024.23  3756840.51   1.50
  DISCCART   485024.23  3756940.51   1.50
  DISCCART   485024.23  3757040.51   1.50
  DISCCART   485024.23  3757140.51   1.50
  DISCCART   485024.23  3757240.51   1.50
  DISCCART   485024.23  3757340.51   1.50
  DISCCART   485024.23  3757440.51   1.50
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  DISCCART   485024.23  3757640.51   1.50
  DISCCART   485024.23  3757740.51   1.50
  DISCCART   485024.23  3757840.51   1.50
  DISCCART   485024.23  3757940.51   1.50
  DISCCART   485024.23  3758040.51   1.50
  DISCCART   485024.23  3758140.51   1.50
  DISCCART   485024.23  3758240.51   1.50
  DISCCART   485076.32  3755535.95   1.50
  DISCCART   485093.69  3755634.43   1.50
  DISCCART   485111.05  3755732.91   1.50
  DISCCART   485128.42  3755831.39   1.50
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  DISCCART   485163.15  3756028.36   1.50
  DISCCART   485180.51  3756126.84   1.50
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  DISCCART   485232.61  3756422.28   1.50
  DISCCART   485249.97  3756520.76   1.50
  DISCCART   485267.34  3756619.24   1.50
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  DISCCART   485319.43  3756914.68   1.50
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  DISCCART   485371.53  3757210.13   1.50
  DISCCART   485388.89  3757308.61   1.50
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  DISCCART   485423.62  3757505.57   1.50
  DISCCART   485440.99  3757604.05   1.50
  DISCCART   485458.35  3757702.53   1.50
  DISCCART   485475.72  3757801.01   1.50
  DISCCART   485493.08  3757899.49   1.50
  DISCCART   485510.44  3757997.97   1.50
  DISCCART   485527.81  3758096.45   1.50
  DISCCART   485545.17  3758194.93   1.50
  DISCCART   485126.84  3755522.42   1.50
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  DISCCART   485195.24  3755710.36   1.50
  DISCCART   485229.44  3755804.33   1.50
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DISCCART	485468.86	3756462.11	1.50
DISCCART	485503.06	3756556.08	1.50
DISCCART	485537.26	3756650.05	1.50
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DISCCART	485674.07	3757025.93	1.50
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DISCCART	486274.23	3757405.57	1.50
DISCCART	486324.23	3757492.18	1.50
DISCCART	486374.23	3757578.78	1.50
DISCCART	486424.23	3757665.38	1.50
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DISCCART	485345.62	3755623.53	1.50
DISCCART	485409.90	3755700.14	1.50
DISCCART	485474.18	3755776.74	1.50
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DISCCART	485731.30	3756083.16	1.50
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DISCCART	485859.85	3756236.37	1.50
DISCCART	485924.13	3756312.97	1.50
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DISCCART	486116.97	3756542.79	1.50
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DISCCART	486245.53	3756695.99	1.50
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DISCCART	486502.64	3757002.41	1.50
DISCCART	486566.92	3757079.02	1.50
DISCCART	486631.20	3757155.62	1.50
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DISCCART	486862.74	3756783.20	1.50
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DISCCART	487169.15	3757040.32	1.50
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DISCCART	485890.26	3755740.51	1.50
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DISCCART	486150.06	3755890.51	1.50
DISCCART	486236.67	3755940.51	1.50
DISCCART	486323.27	3755990.51	1.50
DISCCART	486409.87	3756040.51	1.50
DISCCART	486496.47	3756090.51	1.50
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DISCCART	486929.49	3756340.51	1.50
DISCCART	487016.09	3756390.51	1.50
DISCCART	487102.69	3756440.51	1.50
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DISCCART	487449.10	3756640.51	1.50
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RE FINISHED
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** ISCST3 Meteorology Pathway
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ME STARTING
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  ANEMHGHT 10 METERS
  SURFDATA 54161 1981
  UAIRDATA 99999 1981
ME FINISHED
**
****************************************
** ISCST3 Output Pathway
****************************************
**
**
OU STARTING
** Auto-Generated Plotfiles
  PLOTFILE ANNUAL ALL WORKER.IS\AN00GALL.PLT
OU FINISHED

***********************************
*** SETUP Finishes Successfully ***
***********************************
```

```
 *** ISCST3 - VERSION 02035 ***    *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc          ***       10/08/09
                    *** West Ridge HRA                                        ***        12:10:05
**MODELOPTs:                                                                          PAGE   1
CONC              URBAN FLAT  FLGPOL                    NOCALM                    NOCMPL

                              ***    MODEL SETUP OPTIONS SUMMARY      ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

**Simple Terrain Model is Selected

**Model Is Setup For Calculation of Average CONCentration Values.

  --  SCAVENGING/DEPOSITION LOGIC --
**Model Uses NO DRY DEPLETION.  DDPLETE =  F
**Model Uses NO WET DEPLETION.  WDPLETE =  F
**NO WET SCAVENGING Data Provided.
**NO GAS DRY DEPOSITION Data Provided.
**Model Does NOT Use GRIDDED TERRAIN Data for Depletion Calculations

**Model Uses URBAN Dispersion.

**Model Uses User-Specified Options:
        1. Final Plume Rise.
        2. Stack-tip Downwash.
        3. Buoyancy-induced Dispersion.
        4. Not Use Calms Processing Routine.
        5. Not Use Missing Data Processing Routine.
        6. Default Wind Profile Exponents.
        7. Default Vertical Potential Temperature Gradients.

**Model Assumes Receptors on FLAT Terrain.

**Model Accepts FLAGPOLE Receptor Heights.

**Model Calculates ANNUAL Averages Only

**This Run Includes:   156 Source(s);     1 Source Group(s); and     985 Receptor(s)

**The Model Assumes A Pollutant Type of:  DPM

**Model Set To Continue RUNning After the Setup Testing.

**Output Options Selected:
       Model Outputs Tables of ANNUAL Averages by Receptor
       Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**Misc. Inputs:  Anem. Hgt. (m) =    10.00 ;   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 =     1.4 MB of RAM.

**Input Runstream File:        WORKER.INP
**Output Print File:           WORKER.OUT
```

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001206	0	0.57600E-06	485514.0	3755433.5	0.0	4.00	12.43	1.86	HROFDY
L0001207	0	0.57600E-06	485514.0	3755406.8	0.0	4.00	12.43	1.86	HROFDY
L0001208	0	0.57600E-06	485513.9	3755380.0	0.0	4.00	12.43	1.86	HROFDY
L0001209	0	0.57600E-06	485513.8	3755353.3	0.0	4.00	12.43	1.86	HROFDY
L0001210	0	0.57600E-06	485513.8	3755326.5	0.0	4.00	12.43	1.86	HROFDY
L0001211	0	0.57600E-06	485513.7	3755299.8	0.0	4.00	12.43	1.86	HROFDY
L0001212	0	0.57600E-06	485513.6	3755273.0	0.0	4.00	12.43	1.86	HROFDY
L0001213	0	0.57600E-06	485513.5	3755246.3	0.0	4.00	12.43	1.86	HROFDY
L0001214	0	0.57600E-06	485513.4	3755219.8	0.0	4.00	12.43	1.86	HROFDY
L0001215	0	0.57600E-06	485513.4	3755193.0	0.0	4.00	12.43	1.86	HROFDY
L0001216	0	0.57600E-06	485513.3	3755166.3	0.0	4.00	12.43	1.86	HROFDY
L0001217	0	0.57600E-06	485513.2	3755139.5	0.0	4.00	12.43	1.86	HROFDY
L0001218	0	0.57600E-06	485513.2	3755112.8	0.0	4.00	12.43	1.86	HROFDY
L0001219	0	0.57600E-06	485513.1	3755086.0	0.0	4.00	12.43	1.86	HROFDY
L0001220	0	0.57600E-06	485513.0	3755059.3	0.0	4.00	12.43	1.86	HROFDY
L0001221	0	0.57600E-06	485512.9	3755032.5	0.0	4.00	12.43	1.86	HROFDY
L0001222	0	0.57600E-06	485494.2	3755025.5	0.0	4.00	11.94	1.86	HROFDY
L0001223	0	0.57600E-06	485468.5	3755025.5	0.0	4.00	11.94	1.86	HROFDY
L0001224	0	0.57600E-06	485442.9	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001225	0	0.57600E-06	485417.2	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001226	0	0.57600E-06	485391.5	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001227	0	0.57600E-06	485365.8	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001228	0	0.57600E-06	485340.2	3755025.8	0.0	4.00	11.94	1.86	HROFDY
L0001229	0	0.57600E-06	485314.5	3755026.0	0.0	4.00	11.94	1.86	HROFDY
L0001230	0	0.57600E-06	485288.8	3755026.0	0.0	4.00	11.94	1.86	HROFDY
L0001231	0	0.62000E-06	485265.3	3755112.8	0.0	4.00	7.15	1.86	HROFDY
L0001232	0	0.62000E-06	485249.9	3755113.0	0.0	4.00	7.15	1.86	HROFDY
L0001233	0	0.62000E-06	485234.5	3755113.0	0.0	4.00	7.15	1.86	HROFDY
L0001234	0	0.62000E-06	485219.2	3755113.0	0.0	4.00	7.15	1.86	HROFDY
L0001235	0	0.62000E-06	485203.8	3755113.3	0.0	4.00	7.15	1.86	HROFDY
L0001236	0	0.64200E-06	485281.9	3755043.8	0.0	4.00	7.53	1.86	HROFDY
L0001237	0	0.64200E-06	485281.7	3755060.0	0.0	4.00	7.53	1.86	HROFDY
L0001238	0	0.64200E-06	485281.4	3755076.3	0.0	4.00	7.53	1.86	HROFDY
L0001239	0	0.64200E-06	485281.3	3755092.3	0.0	4.00	7.53	1.86	HROFDY
L0001240	0	0.64200E-06	485281.0	3755108.5	0.0	4.00	7.53	1.86	HROFDY
L0001241	0	0.74737E-06	485280.8	3755119.8	0.0	4.00	8.82	1.86	HROFDY
L0001242	0	0.74737E-06	485280.0	3755138.8	0.0	4.00	8.82	1.86	HROFDY
L0001243	0	0.74737E-06	485279.3	3755157.8	0.0	4.00	8.82	1.86	HROFDY
L0001244	0	0.74737E-06	485278.4	3755176.5	0.0	4.00	8.82	1.86	HROFDY
L0001245	0	0.74737E-06	485277.7	3755195.5	0.0	4.00	8.82	1.86	HROFDY

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001246	0	0.74737E-06	485276.9	3755214.5	0.0	4.00	8.82	1.86	HROFDY
L0001247	0	0.74737E-06	485276.1	3755233.5	0.0	4.00	8.82	1.86	HROFDY
L0001248	0	0.74737E-06	485275.3	3755252.3	0.0	4.00	8.82	1.86	HROFDY
L0001249	0	0.74737E-06	485274.5	3755271.3	0.0	4.00	8.82	1.86	HROFDY
L0001250	0	0.74737E-06	485273.7	3755290.3	0.0	4.00	8.82	1.86	HROFDY
L0001251	0	0.74737E-06	485272.9	3755309.3	0.0	4.00	8.82	1.86	HROFDY
L0001252	0	0.74737E-06	485272.1	3755328.0	0.0	4.00	8.82	1.86	HROFDY
L0001253	0	0.74737E-06	485271.3	3755347.0	0.0	4.00	8.82	1.86	HROFDY
L0001254	0	0.74737E-06	485270.6	3755366.0	0.0	4.00	8.82	1.86	HROFDY
L0001255	0	0.74737E-06	485262.3	3755374.5	0.0	4.00	6.41	1.86	HROFDY
L0001256	0	0.74737E-06	485247.2	3755376.5	0.0	4.00	7.22	1.86	HROFDY
L0001257	0	0.74737E-06	485231.7	3755376.3	0.0	4.00	7.22	1.86	HROFDY
L0001258	0	0.74737E-06	485216.2	3755376.3	0.0	4.00	7.22	1.86	HROFDY
L0001259	0	0.74737E-06	485200.7	3755376.0	0.0	4.00	7.22	1.86	HROFDY
L0001260	0	0.56833E-06	483513.9	3755430.3	0.0	4.00	11.63	1.86	HROFDY
L0001261	0	0.56833E-06	483515.1	3755405.3	0.0	4.00	11.63	1.86	HROFDY
L0001262	0	0.56833E-06	483516.3	3755380.3	0.0	4.00	11.63	1.86	HROFDY
L0001263	0	0.56833E-06	483517.5	3755355.3	0.0	4.00	11.63	1.86	HROFDY
L0001264	0	0.56833E-06	483518.7	3755330.5	0.0	4.00	11.63	1.86	HROFDY
L0001265	0	0.56833E-06	483519.9	3755305.5	0.0	4.00	11.63	1.86	HROFDY
L0001266	0	0.56833E-06	483521.1	3755280.5	0.0	4.00	11.63	1.86	HROFDY
L0001267	0	0.56833E-06	483522.3	3755255.5	0.0	4.00	11.63	1.86	HROFDY
L0001268	0	0.56833E-06	483523.5	3755230.5	0.0	4.00	11.63	1.86	HROFDY
L0001269	0	0.56833E-06	483544.2	3755223.5	0.0	4.00	12.74	1.86	HROFDY
L0001270	0	0.56833E-06	483571.6	3755223.5	0.0	4.00	12.74	1.86	HROFDY
L0001271	0	0.56833E-06	483599.0	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001272	0	0.56833E-06	483626.4	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001273	0	0.56833E-06	483653.8	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001274	0	0.56833E-06	483681.1	3755223.3	0.0	4.00	12.74	1.86	HROFDY
L0001275	0	0.56833E-06	483708.5	3755223.0	0.0	4.00	12.74	1.86	HROFDY
L0001276	0	0.56833E-06	483735.9	3755223.0	0.0	4.00	12.74	1.86	HROFDY
L0001277	0	0.56833E-06	483763.3	3755223.0	0.0	4.00	12.74	1.86	HROFDY
L0001278	0	0.56833E-06	483790.7	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001279	0	0.56833E-06	483818.0	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001280	0	0.56833E-06	483845.4	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001281	0	0.56833E-06	483872.8	3755222.8	0.0	4.00	12.74	1.86	HROFDY
L0001282	0	0.56833E-06	483900.2	3755222.5	0.0	4.00	12.74	1.86	HROFDY
L0001283	0	0.56833E-06	483927.6	3755222.5	0.0	4.00	12.74	1.86	HROFDY
L0001284	0	0.56833E-06	483954.9	3755222.5	0.0	4.00	12.74	1.86	HROFDY
L0001285	0	0.56833E-06	483982.3	3755222.5	0.0	4.00	12.74	1.86	HROFDY

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001286	0	0.56833E-06	484009.7	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001287	0	0.56833E-06	484037.1	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001288	0	0.56833E-06	484064.5	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001289	0	0.56833E-06	484091.9	3755222.3	0.0	4.00	12.74	1.86	HROFDY
L0001290	0	0.56833E-06	484119.3	3755222.0	0.0	4.00	12.74	1.86	HROFDY
L0001291	0	0.56833E-06	484146.6	3755222.0	0.0	4.00	12.74	1.86	HROFDY
L0001292	0	0.56833E-06	484172.9	3755216.8	0.0	4.00	12.55	1.86	HROFDY
L0001293	0	0.56833E-06	484199.0	3755209.8	0.0	4.00	12.55	1.86	HROFDY
L0001294	0	0.56833E-06	484225.1	3755202.8	0.0	4.00	12.55	1.86	HROFDY
L0001295	0	0.56833E-06	484251.1	3755195.8	0.0	4.00	12.55	1.86	HROFDY
L0001296	0	0.56833E-06	484277.2	3755188.8	0.0	4.00	12.55	1.86	HROFDY
L0001297	0	0.56833E-06	484296.1	3755176.3	0.0	4.00	10.81	1.86	HROFDY
L0001298	0	0.56833E-06	484313.3	3755160.5	0.0	4.00	10.81	1.86	HROFDY
L0001299	0	0.56833E-06	484330.6	3755145.0	0.0	4.00	10.81	1.86	HROFDY
L0001300	0	0.56833E-06	484347.9	3755129.5	0.0	4.00	10.81	1.86	HROFDY
L0001301	0	0.56833E-06	484365.2	3755114.0	0.0	4.00	10.81	1.86	HROFDY
L0001302	0	0.56833E-06	484386.2	3755100.8	0.0	4.00	11.58	1.86	HROFDY
L0001303	0	0.56833E-06	484408.2	3755089.3	0.0	4.00	11.58	1.86	HROFDY
L0001304	0	0.56833E-06	484430.1	3755077.5	0.0	4.00	11.58	1.86	HROFDY
L0001305	0	0.56833E-06	484452.1	3755065.8	0.0	4.00	11.58	1.86	HROFDY
L0001306	0	0.56833E-06	484474.1	3755054.0	0.0	4.00	11.58	1.86	HROFDY
L0001307	0	0.56833E-06	484496.0	3755042.3	0.0	4.00	11.58	1.86	HROFDY
L0001308	0	0.56833E-06	484517.0	3755036.0	0.0	4.00	10.25	1.86	HROFDY
L0001309	0	0.56833E-06	484538.6	3755031.8	0.0	4.00	10.25	1.86	HROFDY
L0001310	0	0.56833E-06	484560.2	3755027.3	0.0	4.00	10.25	1.86	HROFDY
L0001311	0	0.56833E-06	484581.8	3755023.0	0.0	4.00	10.25	1.86	HROFDY
L0001312	0	0.56833E-06	484605.9	3755021.3	0.0	4.00	11.29	1.86	HROFDY
L0001313	0	0.56833E-06	484630.2	3755021.3	0.0	4.00	11.29	1.86	HROFDY
L0001314	0	0.56833E-06	484654.4	3755021.0	0.0	4.00	11.29	1.86	HROFDY
L0001315	0	0.56833E-06	484678.7	3755020.8	0.0	4.00	11.29	1.86	HROFDY
L0001316	0	0.56833E-06	484703.0	3755020.5	0.0	4.00	11.29	1.86	HROFDY
L0001317	0	0.56833E-06	484727.3	3755020.3	0.0	4.00	11.29	1.86	HROFDY
L0001318	0	0.56833E-06	484751.5	3755020.0	0.0	4.00	11.29	1.86	HROFDY
L0001319	0	0.56833E-06	484775.8	3755021.0	0.0	4.00	11.31	1.86	HROFDY
L0001320	0	0.67667E-06	484781.4	3755040.5	0.0	4.00	8.84	1.86	HROFDY
L0001321	0	0.67667E-06	484781.2	3755059.5	0.0	4.00	8.84	1.86	HROFDY
L0001322	0	0.67667E-06	484780.9	3755078.5	0.0	4.00	8.84	1.86	HROFDY
L0001323	0	0.75000E-06	484780.2	3755088.0	0.0	4.00	8.78	1.86	HROFDY
L0001324	0	0.75000E-06	484780.0	3755106.8	0.0	4.00	8.78	1.86	HROFDY
L0001325	0	0.75000E-06	484779.8	3755125.8	0.0	4.00	8.78	1.86	HROFDY

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
L0001326	0	0.75000E-06	484779.7	3755144.5	0.0	4.00	8.78	1.86	HROFDY
L0001327	0	0.75000E-06	484779.5	3755163.5	0.0	4.00	8.78	1.86	HROFDY
L0001328	0	0.75000E-06	484779.3	3755182.3	0.0	4.00	8.78	1.86	HROFDY
L0001329	0	0.75000E-06	484779.2	3755201.3	0.0	4.00	8.78	1.86	HROFDY
L0001330	0	0.75000E-06	484779.0	3755220.0	0.0	4.00	8.78	1.86	HROFDY
L0001331	0	0.75000E-06	484778.8	3755239.0	0.0	4.00	8.78	1.86	HROFDY
L0001332	0	0.75000E-06	484778.7	3755257.8	0.0	4.00	8.78	1.86	HROFDY
L0001333	0	0.75000E-06	484778.5	3755276.8	0.0	4.00	8.78	1.86	HROFDY
L0001334	0	0.75000E-06	484778.3	3755295.5	0.0	4.00	8.78	1.86	HROFDY
L0001335	0	0.75000E-06	484778.2	3755314.5	0.0	4.00	8.78	1.86	HROFDY
L0001336	0	0.75000E-06	484778.0	3755333.3	0.0	4.00	8.78	1.86	HROFDY
L0001337	0	0.75000E-06	484777.8	3755352.3	0.0	4.00	8.78	1.86	HROFDY
L0001338	0	0.75000E-06	484777.7	3755371.0	0.0	4.00	8.78	1.86	HROFDY
L0001339	0	0.75000E-06	484783.3	3755375.8	0.0	4.00	4.99	1.86	HROFDY
L0001340	0	0.75000E-06	484794.1	3755375.5	0.0	4.00	4.99	1.86	HROFDY
L0001341	0	0.57895E-06	485270.4	3755024.5	0.0	4.00	12.33	1.86	HROFDY
L0001342	0	0.57895E-06	485243.8	3755024.3	0.0	4.00	12.33	1.86	HROFDY
L0001343	0	0.57895E-06	485217.3	3755024.0	0.0	4.00	12.33	1.86	HROFDY
L0001344	0	0.57895E-06	485190.8	3755023.8	0.0	4.00	12.33	1.86	HROFDY
L0001345	0	0.57895E-06	485164.3	3755023.5	0.0	4.00	12.33	1.86	HROFDY
L0001346	0	0.57895E-06	485137.8	3755023.3	0.0	4.00	12.33	1.86	HROFDY
L0001347	0	0.57895E-06	485111.3	3755023.0	0.0	4.00	12.33	1.86	HROFDY
L0001348	0	0.57895E-06	485084.8	3755022.8	0.0	4.00	12.33	1.86	HROFDY
L0001349	0	0.57895E-06	485058.3	3755022.5	0.0	4.00	12.33	1.86	HROFDY
L0001350	0	0.57895E-06	485031.7	3755022.3	0.0	4.00	12.33	1.86	HROFDY
L0001351	0	0.57895E-06	485005.2	3755022.0	0.0	4.00	12.33	1.86	HROFDY
L0001352	0	0.57895E-06	484978.7	3755021.8	0.0	4.00	12.33	1.86	HROFDY
L0001353	0	0.57895E-06	484952.2	3755021.5	0.0	4.00	12.33	1.86	HROFDY
L0001354	0	0.57895E-06	484925.7	3755021.3	0.0	4.00	12.33	1.86	HROFDY
L0001355	0	0.57895E-06	484899.1	3755021.0	0.0	4.00	12.33	1.86	HROFDY
L0001356	0	0.57895E-06	484872.6	3755020.8	0.0	4.00	12.33	1.86	HROFDY
L0001357	0	0.57895E-06	484846.1	3755020.5	0.0	4.00	12.33	1.86	HROFDY
L0001358	0	0.57895E-06	484819.6	3755020.3	0.0	4.00	12.33	1.86	HROFDY
L0001359	0	0.57895E-06	484793.1	3755020.0	0.0	4.00	12.33	1.86	HROFDY

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
NORTH	0	0.34100E-09	484851.9	3755334.0	0.0	4.00	11	1.86	HROFDY
SOUTH	0	0.37320E-09	484832.9	3755147.5	0.0	4.00	10	1.86	HROFDY

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID SOURCE IDs

ALL NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210, L0001211, L0001212, L0001213, L0001214, L0001215,
L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222, L0001223, L0001224, L0001225, L0001226, L0001227,
L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, L0001234, L0001235, L0001236, L0001237, L0001238, L0001239,
L0001240, L0001241, L0001242, L0001243, L0001244, L0001245, L0001246, L0001247, L0001248, L0001249, L0001250, L0001251,
L0001252, L0001253, L0001254, L0001255, L0001256, L0001257, L0001258, L0001259, L0001260, L0001261, L0001262, L0001263,
L0001264, L0001265, L0001266, L0001267, L0001268, L0001269, L0001270, L0001271, L0001272, L0001273, L0001274, L0001275,
L0001276, L0001277, L0001278, L0001279, L0001280, L0001281, L0001282, L0001283, L0001284, L0001285, L0001286, L0001287,
L0001288, L0001289, L0001290, L0001291, L0001292, L0001293, L0001294, L0001295, L0001296, L0001297, L0001298, L0001299,
L0001300, L0001301, L0001302, L0001303, L0001304, L0001305, L0001306, L0001307, L0001308, L0001309, L0001310, L0001311,
L0001312, L0001313, L0001314, L0001315, L0001316, L0001317, L0001318, L0001319, L0001320, L0001321, L0001322, L0001323,
L0001324, L0001325, L0001326, L0001327, L0001328, L0001329, L0001330, L0001331, L0001332, L0001333, L0001334, L0001335,
L0001336, L0001337, L0001338, L0001339, L0001340, L0001341, L0001342, L0001343, L0001344, L0001345, L0001346, L0001347,
L0001348, L0001349, L0001350, L0001351, L0001352, L0001353, L0001354, L0001355, L0001356, L0001357, L0001358, L0001359,

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = NORTH ; SOURCE TYPE = AREAPOLY :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = SOUTH ; SOURCE TYPE = AREAPOLY :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001206 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001207 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001208 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001209 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001210 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001211 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001212 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001213 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0001214 ; SOURCE TYPE = VOLUME :
1 .13000E+02 2 .13000E+02 3 .70000E+01 4 .70000E+01 5 .17000E+02 6 .33000E+02
7 .33000E+02 8 .27000E+02 9 .27000E+02 10 .27000E+02 11 .20000E+02 12 .13000E+02
13 .13000E+02 14 .20000E+02 15 .27000E+02 16 .33000E+02 17 .33000E+02 18 .50000E+02
19 .67000E+02 20 .33000E+02 21 .33000E+02 22 .60000E+02 23 .50000E+02 24 .27000E+02

SOURCE ID = L0001215 ; SOURCE TYPE = VOLUME :
1 .13000E+02 2 .13000E+02 3 .70000E+01 4 .70000E+01 5 .17000E+02 6 .33000E+02
7 .33000E+02 8 .27000E+02 9 .27000E+02 10 .27000E+02 11 .20000E+02 12 .13000E+02
13 .13000E+02 14 .20000E+02 15 .27000E+02 16 .33000E+02 17 .33000E+02 18 .50000E+02
19 .67000E+02 20 .33000E+02 21 .33000E+02 22 .60000E+02 23 .50000E+02 24 .27000E+02

SOURCE ID = L0001216 ; SOURCE TYPE = VOLUME :
1 .13000E+02 2 .13000E+02 3 .70000E+01 4 .70000E+01 5 .17000E+02 6 .33000E+02
7 .33000E+02 8 .27000E+02 9 .27000E+02 10 .27000E+02 11 .20000E+02 12 .13000E+02
13 .13000E+02 14 .20000E+02 15 .27000E+02 16 .33000E+02 17 .33000E+02 18 .50000E+02
19 .67000E+02 20 .33000E+02 21 .33000E+02 22 .60000E+02 23 .50000E+02 24 .27000E+02

SOURCE ID = L0001217 ; SOURCE TYPE = VOLUME :
1 .13000E+02 2 .13000E+02 3 .70000E+01 4 .70000E+01 5 .17000E+02 6 .33000E+02
7 .33000E+02 8 .27000E+02 9 .27000E+02 10 .27000E+02 11 .20000E+02 12 .13000E+02
13 .13000E+02 14 .20000E+02 15 .27000E+02 16 .33000E+02 17 .33000E+02 18 .50000E+02
19 .67000E+02 20 .33000E+02 21 .33000E+02 22 .60000E+02 23 .50000E+02 24 .27000E+02

SOURCE ID = L0001218 ; SOURCE TYPE = VOLUME :
1 .13000E+02 2 .13000E+02 3 .70000E+01 4 .70000E+01 5 .17000E+02 6 .33000E+02
7 .33000E+02 8 .27000E+02 9 .27000E+02 10 .27000E+02 11 .20000E+02 12 .13000E+02
13 .13000E+02 14 .20000E+02 15 .27000E+02 16 .33000E+02 17 .33000E+02 18 .50000E+02
19 .67000E+02 20 .33000E+02 21 .33000E+02 22 .60000E+02 23 .50000E+02 24 .27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0001219 ; SOURCE TYPE = VOLUME :
1 .13000E+02 2 .13000E+02 3 .70000E+01 4 .70000E+01 5 .17000E+02 6 .33000E+02
7 .33000E+02 8 .27000E+02 9 .27000E+02 10 .27000E+02 11 .20000E+02 12 .13000E+02
13 .13000E+02 14 .20000E+02 15 .27000E+02 16 .33000E+02 17 .33000E+02 18 .50000E+02
19 .67000E+02 20 .33000E+02 21 .33000E+02 22 .60000E+02 23 .50000E+02 24 .27000E+02

SOURCE ID = L0001220 ; SOURCE TYPE = VOLUME :
1 .13000E+02 2 .13000E+02 3 .70000E+01 4 .70000E+01 5 .17000E+02 6 .33000E+02
7 .33000E+02 8 .27000E+02 9 .27000E+02 10 .27000E+02 11 .20000E+02 12 .13000E+02
13 .13000E+02 14 .20000E+02 15 .27000E+02 16 .33000E+02 17 .33000E+02 18 .50000E+02
19 .67000E+02 20 .33000E+02 21 .33000E+02 22 .60000E+02 23 .50000E+02 24 .27000E+02

SOURCE ID = L0001221 ; SOURCE TYPE = VOLUME :
1 .13000E+02 2 .13000E+02 3 .70000E+01 4 .70000E+01 5 .17000E+02 6 .33000E+02
7 .33000E+02 8 .27000E+02 9 .27000E+02 10 .27000E+02 11 .20000E+02 12 .13000E+02
13 .13000E+02 14 .20000E+02 15 .27000E+02 16 .33000E+02 17 .33000E+02 18 .50000E+02
19 .67000E+02 20 .33000E+02 21 .33000E+02 22 .60000E+02 23 .50000E+02 24 .27000E+02

SOURCE ID = L0001222 ; SOURCE TYPE = VOLUME :
1 .13000E+02 2 .13000E+02 3 .70000E+01 4 .70000E+01 5 .17000E+02 6 .33000E+02
7 .33000E+02 8 .27000E+02 9 .27000E+02 10 .27000E+02 11 .20000E+02 12 .13000E+02
13 .13000E+02 14 .20000E+02 15 .27000E+02 16 .33000E+02 17 .33000E+02 18 .50000E+02
19 .67000E+02 20 .33000E+02 21 .33000E+02 22 .60000E+02 23 .50000E+02 24 .27000E+02

SOURCE ID = L0001223 ; SOURCE TYPE = VOLUME :
1 .13000E+02 2 .13000E+02 3 .70000E+01 4 .70000E+01 5 .17000E+02 6 .33000E+02
7 .33000E+02 8 .27000E+02 9 .27000E+02 10 .27000E+02 11 .20000E+02 12 .13000E+02
13 .13000E+02 14 .20000E+02 15 .27000E+02 16 .33000E+02 17 .33000E+02 18 .50000E+02
19 .67000E+02 20 .33000E+02 21 .33000E+02 22 .60000E+02 23 .50000E+02 24 .27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001224 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001225 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001226 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001227 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001228 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001229 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001230 ; SOURCE TYPE = VOLUME :

1	.13000E+02	2	.13000E+02	3	.70000E+01	4	.70000E+01	5	.17000E+02	6	.33000E+02
7	.33000E+02	8	.27000E+02	9	.27000E+02	10	.27000E+02	11	.20000E+02	12	.13000E+02
13	.13000E+02	14	.20000E+02	15	.27000E+02	16	.33000E+02	17	.33000E+02	18	.50000E+02
19	.67000E+02	20	.33000E+02	21	.33000E+02	22	.60000E+02	23	.50000E+02	24	.27000E+02

SOURCE ID = L0001231 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001232 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001233 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001234 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001235 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001236 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001237 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001238 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001239 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001240 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001241 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001242 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001243 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001244 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001245 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001246 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001247 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001248 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001249 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001250 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001251 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001252 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001253 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001254 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001255 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001256 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001257 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001258 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001259 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001260 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001261 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001262 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001263 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001264 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001265 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001266 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001267 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001268 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001269 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001270 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001271 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001272 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001273 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001274 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001275 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001276 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001277 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001278 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001279 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001280 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001281 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001282 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001283 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001284 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001285 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001286 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001287 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001288 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 12:10:05

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001289 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001290 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001291 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001292 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001293 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001294 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001295 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001296 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001297 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001298 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001299 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001300 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001301 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001302 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001303 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001304 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001305 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001306 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001307 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001308 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001309 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001310 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001311 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001312 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001313 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001314 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001315 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001316 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001317 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001318 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001319 ; SOURCE TYPE = VOLUME :

1	.30000E+01	2	.30000E+01	3	.20000E+01	4	.20000E+01	5	.40000E+01	6	.80000E+01
7	.80000E+01	8	.70000E+01	9	.70000E+01	10	.70000E+01	11	.50000E+01	12	.30000E+01
13	.30000E+01	14	.50000E+01	15	.70000E+01	16	.80000E+01	17	.80000E+01	18	.13000E+02
19	.17000E+02	20	.80000E+01	21	.80000E+01	22	.15000E+02	23	.13000E+02	24	.70000E+01

SOURCE ID = L0001320 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001321 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001322 ; SOURCE TYPE = VOLUME :

1	.80000E+01	2	.80000E+01	3	.40000E+01	4	.40000E+01	5	.10000E+02	6	.21000E+02
7	.21000E+02	8	.17000E+02	9	.17000E+02	10	.17000E+02	11	.13000E+02	12	.80000E+01
13	.80000E+01	14	.13000E+02	15	.17000E+02	16	.21000E+02	17	.21000E+02	18	.31000E+02
19	.42000E+02	20	.21000E+02	21	.21000E+02	22	.38000E+02	23	.31000E+02	24	.17000E+02

SOURCE ID = L0001323 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001324 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001325 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001326 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001327 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001328 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001329 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001330 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001331 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001332 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001333 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001334 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001335 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001336 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001337 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001338 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001339 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001340 ; SOURCE TYPE = VOLUME :

1	.40000E+01	2	.40000E+01	3	.20000E+01	4	.20000E+01	5	.50000E+01	6	.10000E+02
7	.10000E+02	8	.80000E+01	9	.80000E+01	10	.80000E+01	11	.60000E+01	12	.40000E+01
13	.40000E+01	14	.60000E+01	15	.80000E+01	16	.10000E+02	17	.10000E+02	18	.16000E+02
19	.21000E+02	20	.10000E+02	21	.10000E+02	22	.19000E+02	23	.16000E+02	24	.80000E+01

SOURCE ID = L0001341 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001342 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001343 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001344 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001345 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001346 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001347 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001348 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001349 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001350 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001351 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001352 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001353 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001354 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001355 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001356 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001357 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

SOURCE ID = L0001358 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0001359 ; SOURCE TYPE = VOLUME :

1	.50000E+01	2	.50000E+01	3	.20000E+01	4	.20000E+01	5	.60000E+01	6	.12000E+02
7	.12000E+02	8	.10000E+02	9	.10000E+02	10	.10000E+02	11	.70000E+01	12	.50000E+01
13	.50000E+01	14	.70000E+01	15	.10000E+02	16	.12000E+02	17	.12000E+02	18	.19000E+02
19	.25000E+02	20	.12000E+02	21	.12000E+02	22	.22000E+02	23	.19000E+02	24	.10000E+02

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485024.2, 3755540.5,	0.0,	1.5);	(485024.2, 3755640.5,	0.0,	1.5);
(485024.2, 3755740.5,	0.0,	1.5);	(485024.2, 3755840.5,	0.0,	1.5);
(485024.2, 3755940.5,	0.0,	1.5);	(485024.2, 3756040.5,	0.0,	1.5);
(485024.2, 3756140.5,	0.0,	1.5);	(485024.2, 3756240.5,	0.0,	1.5);
(485024.2, 3756340.5,	0.0,	1.5);	(485024.2, 3756440.5,	0.0,	1.5);
(485024.2, 3756540.5,	0.0,	1.5);	(485024.2, 3756640.5,	0.0,	1.5);
(485024.2, 3756740.5,	0.0,	1.5);	(485024.2, 3756840.5,	0.0,	1.5);
(485024.2, 3756940.5,	0.0,	1.5);	(485024.2, 3757040.5,	0.0,	1.5);
(485024.2, 3757140.5,	0.0,	1.5);	(485024.2, 3757240.5,	0.0,	1.5);
(485024.2, 3757340.5,	0.0,	1.5);	(485024.2, 3757440.5,	0.0,	1.5);
(485024.2, 3757540.5,	0.0,	1.5);	(485024.2, 3757640.5,	0.0,	1.5);
(485024.2, 3757740.5,	0.0,	1.5);	(485024.2, 3757840.5,	0.0,	1.5);
(485024.2, 3757940.5,	0.0,	1.5);	(485024.2, 3758040.5,	0.0,	1.5);
(485024.2, 3758140.5,	0.0,	1.5);	(485024.2, 3758240.5,	0.0,	1.5);
(485076.3, 3755536.0,	0.0,	1.5);	(485093.7, 3755634.5,	0.0,	1.5);
(485111.1, 3755733.0,	0.0,	1.5);	(485128.4, 3755831.5,	0.0,	1.5);
(485145.8, 3755930.0,	0.0,	1.5);	(485163.2, 3756028.3,	0.0,	1.5);
(485180.5, 3756126.8,	0.0,	1.5);	(485197.9, 3756225.3,	0.0,	1.5);
(485215.3, 3756323.8,	0.0,	1.5);	(485232.6, 3756422.3,	0.0,	1.5);
(485250.0, 3756520.8,	0.0,	1.5);	(485267.3, 3756619.3,	0.0,	1.5);
(485284.7, 3756717.8,	0.0,	1.5);	(485302.1, 3756816.3,	0.0,	1.5);
(485319.4, 3756914.8,	0.0,	1.5);	(485336.8, 3757013.3,	0.0,	1.5);
(485354.2, 3757111.8,	0.0,	1.5);	(485371.5, 3757210.3,	0.0,	1.5);
(485388.9, 3757308.5,	0.0,	1.5);	(485406.3, 3757407.0,	0.0,	1.5);
(485423.6, 3757505.5,	0.0,	1.5);	(485441.0, 3757604.0,	0.0,	1.5);
(485458.3, 3757702.5,	0.0,	1.5);	(485475.7, 3757801.0,	0.0,	1.5);
(485493.1, 3757899.5,	0.0,	1.5);	(485510.4, 3757998.0,	0.0,	1.5);
(485527.8, 3758096.5,	0.0,	1.5);	(485545.2, 3758195.0,	0.0,	1.5);
(485126.8, 3755522.5,	0.0,	1.5);	(485161.0, 3755616.5,	0.0,	1.5);
(485195.3, 3755710.3,	0.0,	1.5);	(485229.4, 3755804.3,	0.0,	1.5);
(485263.6, 3755898.3,	0.0,	1.5);	(485297.8, 3755992.3,	0.0,	1.5);
(485332.1, 3756086.3,	0.0,	1.5);	(485366.3, 3756180.3,	0.0,	1.5);
(485400.4, 3756274.3,	0.0,	1.5);	(485434.7, 3756368.3,	0.0,	1.5);
(485468.9, 3756462.0,	0.0,	1.5);	(485503.1, 3756556.0,	0.0,	1.5);
(485537.3, 3756650.0,	0.0,	1.5);	(485571.5, 3756744.0,	0.0,	1.5);
(485605.7, 3756838.0,	0.0,	1.5);	(485639.9, 3756932.0,	0.0,	1.5);
(485674.1, 3757026.0,	0.0,	1.5);	(485708.3, 3757120.0,	0.0,	1.5);
(485742.5, 3757213.8,	0.0,	1.5);	(485776.7, 3757307.8,	0.0,	1.5);
(485810.9, 3757401.8,	0.0,	1.5);	(485845.1, 3757495.8,	0.0,	1.5);
(485879.3, 3757589.8,	0.0,	1.5);	(485913.5, 3757683.8,	0.0,	1.5);
(485947.7, 3757777.8,	0.0,	1.5);	(485981.9, 3757871.8,	0.0,	1.5);
(486016.1, 3757965.5,	0.0,	1.5);	(486050.3, 3758059.5,	0.0,	1.5);
(485174.2, 3755500.3,	0.0,	1.5);	(485224.2, 3755587.0,	0.0,	1.5);
(485274.2, 3755673.5,	0.0,	1.5);	(485324.2, 3755760.3,	0.0,	1.5);
(485374.2, 3755846.8,	0.0,	1.5);	(485424.2, 3755933.3,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485474.2, 3756020.0,	0.0,	1.5);	(485524.2, 3756106.5,	0.0,	1.5);
(485574.2, 3756193.3,	0.0,	1.5);	(485624.2, 3756279.8,	0.0,	1.5);
(485674.2, 3756366.3,	0.0,	1.5);	(485724.2, 3756453.0,	0.0,	1.5);
(485774.2, 3756539.5,	0.0,	1.5);	(485824.2, 3756626.3,	0.0,	1.5);
(485874.2, 3756712.8,	0.0,	1.5);	(485924.2, 3756799.3,	0.0,	1.5);
(485974.2, 3756886.0,	0.0,	1.5);	(486024.2, 3756972.5,	0.0,	1.5);
(486074.2, 3757059.3,	0.0,	1.5);	(486124.2, 3757145.8,	0.0,	1.5);
(486174.2, 3757232.3,	0.0,	1.5);	(486224.2, 3757319.0,	0.0,	1.5);
(486274.2, 3757405.5,	0.0,	1.5);	(486324.2, 3757492.3,	0.0,	1.5);
(486374.2, 3757578.8,	0.0,	1.5);	(486424.2, 3757665.5,	0.0,	1.5);
(486474.2, 3757752.0,	0.0,	1.5);	(486524.2, 3757838.5,	0.0,	1.5);
(485217.1, 3755470.3,	0.0,	1.5);	(485281.3, 3755547.0,	0.0,	1.5);
(485345.6, 3755623.5,	0.0,	1.5);	(485409.9, 3755700.3,	0.0,	1.5);
(485474.2, 3755776.8,	0.0,	1.5);	(485538.5, 3755853.3,	0.0,	1.5);
(485602.8, 3755930.0,	0.0,	1.5);	(485667.0, 3756006.5,	0.0,	1.5);
(485731.3, 3756083.3,	0.0,	1.5);	(485795.6, 3756159.8,	0.0,	1.5);
(485859.8, 3756236.3,	0.0,	1.5);	(485924.1, 3756313.0,	0.0,	1.5);
(485988.4, 3756389.5,	0.0,	1.5);	(486052.7, 3756466.3,	0.0,	1.5);
(486117.0, 3756542.8,	0.0,	1.5);	(486181.3, 3756619.5,	0.0,	1.5);
(486245.5, 3756696.0,	0.0,	1.5);	(486309.8, 3756772.5,	0.0,	1.5);
(486374.1, 3756849.3,	0.0,	1.5);	(486438.4, 3756925.8,	0.0,	1.5);
(486502.6, 3757002.5,	0.0,	1.5);	(486566.9, 3757079.0,	0.0,	1.5);
(486631.2, 3757155.5,	0.0,	1.5);	(486695.5, 3757232.3,	0.0,	1.5);
(486759.8, 3757308.8,	0.0,	1.5);	(486824.0, 3757385.5,	0.0,	1.5);
(486888.3, 3757462.0,	0.0,	1.5);	(486952.6, 3757538.8,	0.0,	1.5);
(485330.7, 3755497.8,	0.0,	1.5);	(485407.3, 3755562.0,	0.0,	1.5);
(485483.9, 3755626.3,	0.0,	1.5);	(485560.5, 3755690.5,	0.0,	1.5);
(485637.1, 3755754.8,	0.0,	1.5);	(485713.7, 3755819.0,	0.0,	1.5);
(485790.3, 3755883.3,	0.0,	1.5);	(485866.9, 3755947.5,	0.0,	1.5);
(485943.5, 3756011.8,	0.0,	1.5);	(486020.1, 3756076.3,	0.0,	1.5);
(486096.7, 3756140.5,	0.0,	1.5);	(486173.3, 3756204.8,	0.0,	1.5);
(486249.9, 3756269.0,	0.0,	1.5);	(486326.5, 3756333.3,	0.0,	1.5);
(486403.1, 3756397.5,	0.0,	1.5);	(486479.7, 3756461.8,	0.0,	1.5);
(486556.3, 3756526.0,	0.0,	1.5);	(486632.9, 3756590.3,	0.0,	1.5);
(486709.5, 3756654.8,	0.0,	1.5);	(486786.1, 3756719.0,	0.0,	1.5);
(486862.8, 3756783.3,	0.0,	1.5);	(486939.3, 3756847.5,	0.0,	1.5);
(487015.9, 3756911.8,	0.0,	1.5);	(487092.6, 3756976.0,	0.0,	1.5);
(487169.2, 3757040.3,	0.0,	1.5);	(487245.8, 3757104.5,	0.0,	1.5);
(487322.4, 3757168.8,	0.0,	1.5);	(485457.3, 3755490.5,	0.0,	1.5);
(485543.8, 3755540.5,	0.0,	1.5);	(485630.4, 3755590.5,	0.0,	1.5);
(485717.1, 3755640.5,	0.0,	1.5);	(485803.7, 3755690.5,	0.0,	1.5);
(485890.3, 3755740.5,	0.0,	1.5);	(485976.9, 3755790.5,	0.0,	1.5);
(486063.5, 3755840.5,	0.0,	1.5);	(486150.1, 3755890.5,	0.0,	1.5);
(486236.7, 3755940.5,	0.0,	1.5);	(486323.3, 3755990.5,	0.0,	1.5);
(486409.9, 3756040.5,	0.0,	1.5);	(486496.5, 3756090.5,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(486583.1, 3756140.5,	0.0,	1.5);	(486669.7, 3756190.5,	0.0,	1.5);
(486756.3, 3756240.5,	0.0,	1.5);	(486842.9, 3756290.5,	0.0,	1.5);
(486929.5, 3756340.5,	0.0,	1.5);	(487016.1, 3756390.5,	0.0,	1.5);
(487102.7, 3756440.5,	0.0,	1.5);	(487189.3, 3756490.5,	0.0,	1.5);
(487275.9, 3756540.5,	0.0,	1.5);	(487362.5, 3756590.5,	0.0,	1.5);
(487449.1, 3756640.5,	0.0,	1.5);	(487535.7, 3756690.5,	0.0,	1.5);
(487622.3, 3756740.5,	0.0,	1.5);	(485400.1, 3755377.3,	0.0,	1.5);
(485494.1, 3755411.5,	0.0,	1.5);	(485268.9, 3755002.0,	0.0,	1.5);
(485682.0, 3755480.0,	0.0,	1.5);	(485776.0, 3755514.3,	0.0,	1.5);
(485869.9, 3755548.3,	0.0,	1.5);	(485963.9, 3755582.5,	0.0,	1.5);
(486057.9, 3755616.8,	0.0,	1.5);	(486151.9, 3755651.0,	0.0,	1.5);
(486245.8, 3755685.3,	0.0,	1.5);	(486339.8, 3755719.3,	0.0,	1.5);
(486433.8, 3755753.5,	0.0,	1.5);	(486527.8, 3755787.8,	0.0,	1.5);
(486621.7, 3755822.0,	0.0,	1.5);	(486715.7, 3755856.3,	0.0,	1.5);
(486809.7, 3755890.3,	0.0,	1.5);	(486903.6, 3755924.5,	0.0,	1.5);
(486997.6, 3755958.8,	0.0,	1.5);	(487091.6, 3755993.0,	0.0,	1.5);
(487185.5, 3756027.3,	0.0,	1.5);	(487279.5, 3756061.3,	0.0,	1.5);
(487373.5, 3756095.5,	0.0,	1.5);	(487467.4, 3756129.8,	0.0,	1.5);
(487561.4, 3756164.0,	0.0,	1.5);	(487655.4, 3756198.3,	0.0,	1.5);
(487749.3, 3756232.3,	0.0,	1.5);	(487843.3, 3756266.5,	0.0,	1.5);
(485418.2, 3755310.0,	0.0,	1.5);	(485615.1, 3755344.8,	0.0,	1.5);
(485713.6, 3755362.0,	0.0,	1.5);	(485812.1, 3755379.5,	0.0,	1.5);
(485910.6, 3755396.8,	0.0,	1.5);	(486009.0, 3755414.3,	0.0,	1.5);
(486107.5, 3755431.5,	0.0,	1.5);	(486206.0, 3755449.0,	0.0,	1.5);
(486304.5, 3755466.3,	0.0,	1.5);	(486403.0, 3755483.5,	0.0,	1.5);
(486501.4, 3755501.0,	0.0,	1.5);	(486599.9, 3755518.3,	0.0,	1.5);
(486698.4, 3755535.8,	0.0,	1.5);	(486796.9, 3755553.0,	0.0,	1.5);
(486895.4, 3755570.5,	0.0,	1.5);	(486993.8, 3755587.8,	0.0,	1.5);
(487092.3, 3755605.3,	0.0,	1.5);	(487190.8, 3755622.5,	0.0,	1.5);
(487289.3, 3755640.0,	0.0,	1.5);	(487387.8, 3755657.3,	0.0,	1.5);
(487486.3, 3755674.8,	0.0,	1.5);	(487584.7, 3755692.0,	0.0,	1.5);
(487683.2, 3755709.3,	0.0,	1.5);	(487781.7, 3755726.8,	0.0,	1.5);
(487880.2, 3755744.0,	0.0,	1.5);	(487978.7, 3755761.5,	0.0,	1.5);
(485324.2, 3755240.5,	0.0,	1.5);	(485424.2, 3755240.5,	0.0,	1.5);
(485524.2, 3755240.5,	0.0,	1.5);	(485624.2, 3755240.5,	0.0,	1.5);
(485724.2, 3755240.5,	0.0,	1.5);	(485824.2, 3755240.5,	0.0,	1.5);
(485924.2, 3755240.5,	0.0,	1.5);	(486024.2, 3755240.5,	0.0,	1.5);
(486124.2, 3755240.5,	0.0,	1.5);	(486224.2, 3755240.5,	0.0,	1.5);
(486324.2, 3755240.5,	0.0,	1.5);	(486424.2, 3755240.5,	0.0,	1.5);
(486524.2, 3755240.5,	0.0,	1.5);	(486624.2, 3755240.5,	0.0,	1.5);
(486724.2, 3755240.5,	0.0,	1.5);	(486824.2, 3755240.5,	0.0,	1.5);
(486924.2, 3755240.5,	0.0,	1.5);	(487024.2, 3755240.5,	0.0,	1.5);
(487124.2, 3755240.5,	0.0,	1.5);	(487224.2, 3755240.5,	0.0,	1.5);
(487324.2, 3755240.5,	0.0,	1.5);	(487424.2, 3755240.5,	0.0,	1.5);
(487524.2, 3755240.5,	0.0,	1.5);	(487624.2, 3755240.5,	0.0,	1.5);

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 12:10:05

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(487724.2, 3755240.5,	0.0,	1.5);	(487824.2, 3755240.5,	0.0,	1.5);
(487924.2, 3755240.5,	0.0,	1.5);	(488024.2, 3755240.5,	0.0,	1.5);
(485418.2, 3755171.0,	0.0,	1.5);	(485615.1, 3755136.3,	0.0,	1.5);
(485713.6, 3755119.0,	0.0,	1.5);	(485812.1, 3755101.5,	0.0,	1.5);
(485910.6, 3755084.3,	0.0,	1.5);	(486009.0, 3755066.8,	0.0,	1.5);
(486107.5, 3755049.5,	0.0,	1.5);	(486206.0, 3755032.3,	0.0,	1.5);
(486304.5, 3755014.8,	0.0,	1.5);	(486403.0, 3754997.5,	0.0,	1.5);
(486501.4, 3754980.0,	0.0,	1.5);	(486599.9, 3754962.8,	0.0,	1.5);
(486698.4, 3754945.3,	0.0,	1.5);	(486796.9, 3754928.0,	0.0,	1.5);
(486895.4, 3754910.5,	0.0,	1.5);	(486993.8, 3754893.3,	0.0,	1.5);
(487092.3, 3754875.8,	0.0,	1.5);	(487190.8, 3754858.5,	0.0,	1.5);
(487289.3, 3754841.0,	0.0,	1.5);	(487387.8, 3754823.8,	0.0,	1.5);
(487486.3, 3754806.5,	0.0,	1.5);	(487584.7, 3754789.0,	0.0,	1.5);
(487683.2, 3754771.8,	0.0,	1.5);	(487781.7, 3754754.3,	0.0,	1.5);
(487880.2, 3754737.0,	0.0,	1.5);	(487978.7, 3754719.5,	0.0,	1.5);
(485400.1, 3755103.8,	0.0,	1.5);	(485494.1, 3755069.5,	0.0,	1.5);
(485588.1, 3755035.3,	0.0,	1.5);	(485682.0, 3755001.0,	0.0,	1.5);
(485776.0, 3754967.0,	0.0,	1.5);	(485869.9, 3754932.8,	0.0,	1.5);
(485963.9, 3754898.5,	0.0,	1.5);	(486057.9, 3754864.3,	0.0,	1.5);
(486151.9, 3754830.0,	0.0,	1.5);	(486245.8, 3754796.0,	0.0,	1.5);
(486339.8, 3754761.8,	0.0,	1.5);	(486433.8, 3754727.5,	0.0,	1.5);
(486527.8, 3754693.3,	0.0,	1.5);	(486621.7, 3754659.0,	0.0,	1.5);
(486715.7, 3754624.8,	0.0,	1.5);	(486809.7, 3754590.8,	0.0,	1.5);
(486903.6, 3754556.5,	0.0,	1.5);	(486997.6, 3754522.3,	0.0,	1.5);
(487091.6, 3754488.0,	0.0,	1.5);	(487185.5, 3754453.8,	0.0,	1.5);
(487279.5, 3754419.8,	0.0,	1.5);	(487373.5, 3754385.5,	0.0,	1.5);
(487467.4, 3754351.3,	0.0,	1.5);	(487561.4, 3754317.0,	0.0,	1.5);
(487655.4, 3754282.8,	0.0,	1.5);	(487749.3, 3754248.8,	0.0,	1.5);
(487843.3, 3754214.5,	0.0,	1.5);	(485457.3, 3754990.5,	0.0,	1.5);
(485543.8, 3754940.5,	0.0,	1.5);	(485630.4, 3754890.5,	0.0,	1.5);
(485717.1, 3754840.5,	0.0,	1.5);	(485803.7, 3754790.5,	0.0,	1.5);
(485890.3, 3754740.5,	0.0,	1.5);	(485976.9, 3754690.5,	0.0,	1.5);
(486063.5, 3754640.5,	0.0,	1.5);	(486150.1, 3754590.5,	0.0,	1.5);
(486236.7, 3754540.5,	0.0,	1.5);	(486323.3, 3754490.5,	0.0,	1.5);
(486409.9, 3754440.5,	0.0,	1.5);	(486496.5, 3754390.5,	0.0,	1.5);
(486583.1, 3754340.5,	0.0,	1.5);	(486669.7, 3754290.5,	0.0,	1.5);
(486756.3, 3754240.5,	0.0,	1.5);	(486842.9, 3754190.5,	0.0,	1.5);
(486929.5, 3754140.5,	0.0,	1.5);	(487016.1, 3754090.5,	0.0,	1.5);
(487102.7, 3754040.5,	0.0,	1.5);	(487189.3, 3753990.5,	0.0,	1.5);
(487275.9, 3753940.5,	0.0,	1.5);	(487362.5, 3753890.5,	0.0,	1.5);
(487449.1, 3753840.5,	0.0,	1.5);	(487535.7, 3753790.5,	0.0,	1.5);
(487622.3, 3753740.5,	0.0,	1.5);	(485330.7, 3754983.5,	0.0,	1.5);
(485407.3, 3754919.0,	0.0,	1.5);	(485483.9, 3754854.8,	0.0,	1.5);
(485560.5, 3754790.5,	0.0,	1.5);	(485637.1, 3754726.3,	0.0,	1.5);
(485713.7, 3754662.0,	0.0,	1.5);	(485790.3, 3754597.8,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485866.9, 3754533.5,	0.0,	1.5);	(485943.5, 3754469.3,	0.0,	1.5);
(486020.1, 3754405.0,	0.0,	1.5);	(486096.7, 3754340.5,	0.0,	1.5);
(486173.3, 3754276.3,	0.0,	1.5);	(486249.9, 3754212.0,	0.0,	1.5);
(486326.5, 3754147.8,	0.0,	1.5);	(486403.1, 3754083.5,	0.0,	1.5);
(486479.7, 3754019.3,	0.0,	1.5);	(486556.3, 3753955.0,	0.0,	1.5);
(486632.9, 3753890.8,	0.0,	1.5);	(486709.5, 3753826.5,	0.0,	1.5);
(486786.1, 3753762.0,	0.0,	1.5);	(486862.8, 3753697.8,	0.0,	1.5);
(486939.3, 3753633.5,	0.0,	1.5);	(487015.9, 3753569.3,	0.0,	1.5);
(487092.6, 3753505.0,	0.0,	1.5);	(487169.2, 3753440.8,	0.0,	1.5);
(487245.8, 3753376.5,	0.0,	1.5);	(487322.4, 3753312.3,	0.0,	1.5);
(485217.1, 3755010.8,	0.0,	1.5);	(485281.3, 3754934.0,	0.0,	1.5);
(485345.6, 3754857.5,	0.0,	1.5);	(485409.9, 3754781.0,	0.0,	1.5);
(485474.2, 3754704.3,	0.0,	1.5);	(485538.5, 3754627.8,	0.0,	1.5);
(485602.8, 3754551.0,	0.0,	1.5);	(485667.0, 3754474.5,	0.0,	1.5);
(485731.3, 3754397.8,	0.0,	1.5);	(485795.6, 3754321.3,	0.0,	1.5);
(485859.8, 3754244.8,	0.0,	1.5);	(485924.1, 3754168.0,	0.0,	1.5);
(485988.4, 3754091.5,	0.0,	1.5);	(486052.7, 3754014.8,	0.0,	1.5);
(486117.0, 3753938.3,	0.0,	1.5);	(486181.3, 3753861.8,	0.0,	1.5);
(486245.5, 3753785.0,	0.0,	1.5);	(486309.8, 3753708.5,	0.0,	1.5);
(486374.1, 3753631.8,	0.0,	1.5);	(486438.4, 3753555.3,	0.0,	1.5);
(486502.6, 3753478.5,	0.0,	1.5);	(486566.9, 3753402.0,	0.0,	1.5);
(486631.2, 3753325.5,	0.0,	1.5);	(486695.5, 3753248.8,	0.0,	1.5);
(486759.8, 3753172.3,	0.0,	1.5);	(486824.0, 3753095.5,	0.0,	1.5);
(486888.3, 3753019.0,	0.0,	1.5);	(486952.6, 3752942.5,	0.0,	1.5);
(485174.2, 3754980.8,	0.0,	1.5);	(485224.2, 3754894.0,	0.0,	1.5);
(485274.2, 3754807.5,	0.0,	1.5);	(485324.2, 3754721.0,	0.0,	1.5);
(485374.2, 3754634.3,	0.0,	1.5);	(485424.2, 3754547.8,	0.0,	1.5);
(485474.2, 3754461.0,	0.0,	1.5);	(485524.2, 3754374.5,	0.0,	1.5);
(485574.2, 3754288.0,	0.0,	1.5);	(485624.2, 3754201.3,	0.0,	1.5);
(485674.2, 3754114.8,	0.0,	1.5);	(485724.2, 3754028.0,	0.0,	1.5);
(485774.2, 3753941.5,	0.0,	1.5);	(485824.2, 3753854.8,	0.0,	1.5);
(485874.2, 3753768.3,	0.0,	1.5);	(485924.2, 3753681.8,	0.0,	1.5);
(485974.2, 3753595.0,	0.0,	1.5);	(486024.2, 3753508.5,	0.0,	1.5);
(486074.2, 3753421.8,	0.0,	1.5);	(486124.2, 3753335.3,	0.0,	1.5);
(486174.2, 3753248.8,	0.0,	1.5);	(486224.2, 3753162.0,	0.0,	1.5);
(486274.2, 3753075.5,	0.0,	1.5);	(486324.2, 3752988.8,	0.0,	1.5);
(486374.2, 3752902.3,	0.0,	1.5);	(486424.2, 3752815.8,	0.0,	1.5);
(486474.2, 3752729.0,	0.0,	1.5);	(486524.2, 3752642.5,	0.0,	1.5);
(485126.8, 3754958.5,	0.0,	1.5);	(485161.0, 3754864.8,	0.0,	1.5);
(485195.3, 3754770.8,	0.0,	1.5);	(485229.4, 3754676.8,	0.0,	1.5);
(485263.6, 3754582.8,	0.0,	1.5);	(485297.8, 3754488.8,	0.0,	1.5);
(485332.1, 3754394.8,	0.0,	1.5);	(485366.3, 3754300.8,	0.0,	1.5);
(485400.4, 3754206.8,	0.0,	1.5);	(485434.7, 3754113.0,	0.0,	1.5);
(485468.9, 3754019.0,	0.0,	1.5);	(485503.1, 3753925.0,	0.0,	1.5);
(485537.3, 3753831.0,	0.0,	1.5);	(485571.5, 3753737.0,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(485605.7, 3753643.0,	0.0,	1.5);	(485639.9, 3753549.0,	0.0,	1.5);
(485674.1, 3753455.0,	0.0,	1.5);	(485708.3, 3753361.0,	0.0,	1.5);
(485742.5, 3753267.3,	0.0,	1.5);	(485776.7, 3753173.3,	0.0,	1.5);
(485810.9, 3753079.3,	0.0,	1.5);	(485845.1, 3752985.3,	0.0,	1.5);
(485879.3, 3752891.3,	0.0,	1.5);	(485913.5, 3752797.3,	0.0,	1.5);
(485947.7, 3752703.3,	0.0,	1.5);	(485981.9, 3752609.3,	0.0,	1.5);
(486016.1, 3752515.5,	0.0,	1.5);	(486050.3, 3752421.5,	0.0,	1.5);
(485076.3, 3754945.0,	0.0,	1.5);	(485093.7, 3754846.5,	0.0,	1.5);
(485111.1, 3754748.0,	0.0,	1.5);	(485128.4, 3754649.8,	0.0,	1.5);
(485145.8, 3754551.3,	0.0,	1.5);	(485163.2, 3754452.8,	0.0,	1.5);
(485180.5, 3754354.3,	0.0,	1.5);	(485197.9, 3754255.8,	0.0,	1.5);
(485215.3, 3754157.3,	0.0,	1.5);	(485232.6, 3754058.8,	0.0,	1.5);
(485250.0, 3753960.3,	0.0,	1.5);	(485267.3, 3753861.8,	0.0,	1.5);
(485284.7, 3753763.3,	0.0,	1.5);	(485302.1, 3753664.8,	0.0,	1.5);
(485319.4, 3753566.3,	0.0,	1.5);	(485336.8, 3753467.8,	0.0,	1.5);
(485354.2, 3753369.5,	0.0,	1.5);	(485371.5, 3753271.0,	0.0,	1.5);
(485388.9, 3753172.5,	0.0,	1.5);	(485406.3, 3753074.0,	0.0,	1.5);
(485423.6, 3752975.5,	0.0,	1.5);	(485441.0, 3752877.0,	0.0,	1.5);
(485458.3, 3752778.5,	0.0,	1.5);	(485475.7, 3752680.0,	0.0,	1.5);
(485493.1, 3752581.5,	0.0,	1.5);	(485510.4, 3752483.0,	0.0,	1.5);
(485527.8, 3752384.5,	0.0,	1.5);	(485545.2, 3752286.0,	0.0,	1.5);
(485024.2, 3754940.5,	0.0,	1.5);	(485024.2, 3754840.5,	0.0,	1.5);
(485024.2, 3754740.5,	0.0,	1.5);	(485024.2, 3754640.5,	0.0,	1.5);
(485024.2, 3754540.5,	0.0,	1.5);	(485024.2, 3754440.5,	0.0,	1.5);
(485024.2, 3754340.5,	0.0,	1.5);	(485024.2, 3754240.5,	0.0,	1.5);
(485024.2, 3754140.5,	0.0,	1.5);	(485024.2, 3754040.5,	0.0,	1.5);
(485024.2, 3753940.5,	0.0,	1.5);	(485024.2, 3753840.5,	0.0,	1.5);
(485024.2, 3753740.5,	0.0,	1.5);	(485024.2, 3753640.5,	0.0,	1.5);
(485024.2, 3753540.5,	0.0,	1.5);	(485024.2, 3753440.5,	0.0,	1.5);
(485024.2, 3753340.5,	0.0,	1.5);	(485024.2, 3753240.5,	0.0,	1.5);
(485024.2, 3753140.5,	0.0,	1.5);	(485024.2, 3753040.5,	0.0,	1.5);
(485024.2, 3752940.5,	0.0,	1.5);	(485024.2, 3752840.5,	0.0,	1.5);
(485024.2, 3752740.5,	0.0,	1.5);	(485024.2, 3752640.5,	0.0,	1.5);
(485024.2, 3752540.5,	0.0,	1.5);	(485024.2, 3752440.5,	0.0,	1.5);
(485024.2, 3752340.5,	0.0,	1.5);	(485024.2, 3752240.5,	0.0,	1.5);
(484972.1, 3754945.0,	0.0,	1.5);	(484954.8, 3754846.5,	0.0,	1.5);
(484937.4, 3754748.0,	0.0,	1.5);	(484920.0, 3754649.8,	0.0,	1.5);
(484902.7, 3754551.3,	0.0,	1.5);	(484885.3, 3754452.8,	0.0,	1.5);
(484867.9, 3754354.3,	0.0,	1.5);	(484850.6, 3754255.8,	0.0,	1.5);
(484833.2, 3754157.3,	0.0,	1.5);	(484815.8, 3754058.8,	0.0,	1.5);
(484798.5, 3753960.3,	0.0,	1.5);	(484781.1, 3753861.8,	0.0,	1.5);
(484763.8, 3753763.3,	0.0,	1.5);	(484746.4, 3753664.8,	0.0,	1.5);
(484729.0, 3753566.3,	0.0,	1.5);	(484711.7, 3753467.8,	0.0,	1.5);
(484694.3, 3753369.5,	0.0,	1.5);	(484676.9, 3753271.0,	0.0,	1.5);
(484659.6, 3753172.5,	0.0,	1.5);	(484642.2, 3753074.0,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(484624.8, 3752975.5,	0.0,	1.5);	(484607.5, 3752877.0,	0.0,	1.5);
(484590.1, 3752778.5,	0.0,	1.5);	(484572.8, 3752680.0,	0.0,	1.5);
(484555.4, 3752581.5,	0.0,	1.5);	(484538.0, 3752483.0,	0.0,	1.5);
(484520.7, 3752384.5,	0.0,	1.5);	(484503.3, 3752286.0,	0.0,	1.5);
(484921.6, 3754958.5,	0.0,	1.5);	(484887.4, 3754864.8,	0.0,	1.5);
(484853.2, 3754770.8,	0.0,	1.5);	(484819.0, 3754676.8,	0.0,	1.5);
(484784.8, 3754582.8,	0.0,	1.5);	(484750.6, 3754488.8,	0.0,	1.5);
(484716.4, 3754394.8,	0.0,	1.5);	(484682.2, 3754300.8,	0.0,	1.5);
(484648.0, 3754206.8,	0.0,	1.5);	(484613.8, 3754113.0,	0.0,	1.5);
(484579.6, 3754019.0,	0.0,	1.5);	(484545.4, 3753925.0,	0.0,	1.5);
(484511.2, 3753831.0,	0.0,	1.5);	(484477.0, 3753737.0,	0.0,	1.5);
(484442.8, 3753643.0,	0.0,	1.5);	(484408.6, 3753549.0,	0.0,	1.5);
(484374.4, 3753455.0,	0.0,	1.5);	(484340.2, 3753361.0,	0.0,	1.5);
(484306.0, 3753267.3,	0.0,	1.5);	(484271.8, 3753173.3,	0.0,	1.5);
(484237.6, 3753079.3,	0.0,	1.5);	(484203.4, 3752985.3,	0.0,	1.5);
(484169.2, 3752891.3,	0.0,	1.5);	(484135.0, 3752797.3,	0.0,	1.5);
(484100.8, 3752703.3,	0.0,	1.5);	(484066.6, 3752609.3,	0.0,	1.5);
(484032.4, 3752515.5,	0.0,	1.5);	(483998.2, 3752421.5,	0.0,	1.5);
(484874.2, 3754980.8,	0.0,	1.5);	(484824.2, 3754894.0,	0.0,	1.5);
(484774.2, 3754807.5,	0.0,	1.5);	(484724.2, 3754721.0,	0.0,	1.5);
(484674.2, 3754634.3,	0.0,	1.5);	(484624.2, 3754547.8,	0.0,	1.5);
(484574.2, 3754461.0,	0.0,	1.5);	(484524.2, 3754374.5,	0.0,	1.5);
(484474.2, 3754288.0,	0.0,	1.5);	(484424.2, 3754201.3,	0.0,	1.5);
(484374.2, 3754114.8,	0.0,	1.5);	(484324.2, 3754028.0,	0.0,	1.5);
(484274.2, 3753941.5,	0.0,	1.5);	(484224.2, 3753854.8,	0.0,	1.5);
(484174.2, 3753768.3,	0.0,	1.5);	(484124.2, 3753681.8,	0.0,	1.5);
(484074.2, 3753595.0,	0.0,	1.5);	(484024.2, 3753508.5,	0.0,	1.5);
(483974.2, 3753421.8,	0.0,	1.5);	(483924.2, 3753335.3,	0.0,	1.5);
(483874.2, 3753248.8,	0.0,	1.5);	(483824.2, 3753162.0,	0.0,	1.5);
(483774.2, 3753075.5,	0.0,	1.5);	(483724.2, 3752988.8,	0.0,	1.5);
(483674.2, 3752902.3,	0.0,	1.5);	(483624.2, 3752815.8,	0.0,	1.5);
(483574.2, 3752729.0,	0.0,	1.5);	(483524.2, 3752642.5,	0.0,	1.5);
(484767.1, 3754934.0,	0.0,	1.5);	(484702.8, 3754857.5,	0.0,	1.5);
(484638.6, 3754781.0,	0.0,	1.5);	(484574.3, 3754704.3,	0.0,	1.5);
(484510.0, 3754627.8,	0.0,	1.5);	(484445.7, 3754551.0,	0.0,	1.5);
(484381.4, 3754474.5,	0.0,	1.5);	(484317.2, 3754397.8,	0.0,	1.5);
(484252.9, 3754321.3,	0.0,	1.5);	(484188.6, 3754244.8,	0.0,	1.5);
(484124.3, 3754168.0,	0.0,	1.5);	(484060.1, 3754091.5,	0.0,	1.5);
(483995.8, 3754014.8,	0.0,	1.5);	(483931.5, 3753938.3,	0.0,	1.5);
(483867.2, 3753861.8,	0.0,	1.5);	(483802.9, 3753785.0,	0.0,	1.5);
(483738.7, 3753708.5,	0.0,	1.5);	(483674.4, 3753631.8,	0.0,	1.5);
(483610.1, 3753555.3,	0.0,	1.5);	(483545.8, 3753478.5,	0.0,	1.5);
(483481.5, 3753402.0,	0.0,	1.5);	(483417.3, 3753325.5,	0.0,	1.5);
(483353.0, 3753248.8,	0.0,	1.5);	(483288.7, 3753172.3,	0.0,	1.5);
(483224.4, 3753095.5,	0.0,	1.5);	(483160.2, 3753019.0,	0.0,	1.5);

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 12:10:05

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483095.9, 3752942.5,	0.0,	1.5);	(484717.8, 3754983.5,	0.0,	1.5);
(484641.2, 3754919.0,	0.0,	1.5);	(484564.6, 3754854.8,	0.0,	1.5);
(484488.0, 3754790.5,	0.0,	1.5);	(484411.4, 3754726.3,	0.0,	1.5);
(484334.8, 3754662.0,	0.0,	1.5);	(484258.2, 3754597.8,	0.0,	1.5);
(484181.6, 3754533.5,	0.0,	1.5);	(484105.0, 3754469.3,	0.0,	1.5);
(484028.4, 3754405.0,	0.0,	1.5);	(483951.8, 3754340.5,	0.0,	1.5);
(483875.2, 3754276.3,	0.0,	1.5);	(483798.6, 3754212.0,	0.0,	1.5);
(483721.9, 3754147.8,	0.0,	1.5);	(483645.3, 3754083.5,	0.0,	1.5);
(483568.8, 3754019.3,	0.0,	1.5);	(483492.1, 3753955.0,	0.0,	1.5);
(483415.5, 3753890.8,	0.0,	1.5);	(483338.9, 3753826.5,	0.0,	1.5);
(483262.3, 3753762.0,	0.0,	1.5);	(483185.7, 3753697.8,	0.0,	1.5);
(483109.1, 3753633.5,	0.0,	1.5);	(483032.5, 3753569.3,	0.0,	1.5);
(482955.9, 3753505.0,	0.0,	1.5);	(482879.3, 3753440.8,	0.0,	1.5);
(482802.7, 3753376.5,	0.0,	1.5);	(482726.1, 3753312.3,	0.0,	1.5);
(484677.8, 3755040.5,	0.0,	1.5);	(484591.2, 3754990.5,	0.0,	1.5);
(484504.6, 3754940.5,	0.0,	1.5);	(484418.0, 3754890.5,	0.0,	1.5);
(484331.4, 3754840.5,	0.0,	1.5);	(484244.8, 3754790.5,	0.0,	1.5);
(484158.2, 3754740.5,	0.0,	1.5);	(484071.6, 3754690.5,	0.0,	1.5);
(483985.0, 3754640.5,	0.0,	1.5);	(483898.4, 3754590.5,	0.0,	1.5);
(483811.8, 3754540.5,	0.0,	1.5);	(483725.2, 3754490.5,	0.0,	1.5);
(483638.6, 3754440.5,	0.0,	1.5);	(483552.0, 3754390.5,	0.0,	1.5);
(483465.4, 3754340.5,	0.0,	1.5);	(483378.8, 3754290.5,	0.0,	1.5);
(483292.2, 3754240.5,	0.0,	1.5);	(483205.6, 3754190.5,	0.0,	1.5);
(483119.0, 3754140.5,	0.0,	1.5);	(483032.4, 3754090.5,	0.0,	1.5);
(482945.8, 3754040.5,	0.0,	1.5);	(482859.2, 3753990.5,	0.0,	1.5);
(482772.6, 3753940.5,	0.0,	1.5);	(482686.0, 3753890.5,	0.0,	1.5);
(482599.4, 3753840.5,	0.0,	1.5);	(482512.8, 3753790.5,	0.0,	1.5);
(482426.2, 3753740.5,	0.0,	1.5);	(484648.3, 3755103.8,	0.0,	1.5);
(484554.4, 3755069.5,	0.0,	1.5);	(484460.4, 3755035.3,	0.0,	1.5);
(484366.4, 3755001.0,	0.0,	1.5);	(484272.5, 3754967.0,	0.0,	1.5);
(484178.5, 3754932.8,	0.0,	1.5);	(484084.5, 3754898.5,	0.0,	1.5);
(483990.6, 3754864.3,	0.0,	1.5);	(483896.6, 3754830.0,	0.0,	1.5);
(483802.6, 3754796.0,	0.0,	1.5);	(483708.7, 3754761.8,	0.0,	1.5);
(483614.7, 3754727.5,	0.0,	1.5);	(483520.7, 3754693.3,	0.0,	1.5);
(483426.8, 3754659.0,	0.0,	1.5);	(483332.8, 3754624.8,	0.0,	1.5);
(483238.8, 3754590.8,	0.0,	1.5);	(483144.8, 3754556.5,	0.0,	1.5);
(483050.9, 3754522.3,	0.0,	1.5);	(482956.9, 3754488.0,	0.0,	1.5);
(482862.9, 3754453.8,	0.0,	1.5);	(482769.0, 3754419.8,	0.0,	1.5);
(482675.0, 3754385.5,	0.0,	1.5);	(482581.0, 3754351.3,	0.0,	1.5);
(482487.1, 3754317.0,	0.0,	1.5);	(482393.1, 3754282.8,	0.0,	1.5);
(482299.1, 3754248.8,	0.0,	1.5);	(482205.2, 3754214.5,	0.0,	1.5);
(484630.3, 3755171.0,	0.0,	1.5);	(484531.8, 3755153.8,	0.0,	1.5);
(484433.3, 3755136.3,	0.0,	1.5);	(484334.9, 3755119.0,	0.0,	1.5);
(484236.4, 3755101.5,	0.0,	1.5);	(484137.9, 3755084.3,	0.0,	1.5);
(484039.4, 3755066.8,	0.0,	1.5);	(483940.9, 3755049.5,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483842.5, 3755032.3,	0.0,	1.5);	(483744.0, 3755014.8,	0.0,	1.5);
(483645.5, 3754997.5,	0.0,	1.5);	(483547.0, 3754980.0,	0.0,	1.5);
(483448.5, 3754962.8,	0.0,	1.5);	(483350.1, 3754945.3,	0.0,	1.5);
(483251.6, 3754928.0,	0.0,	1.5);	(483153.1, 3754910.5,	0.0,	1.5);
(483054.6, 3754893.3,	0.0,	1.5);	(482956.1, 3754875.8,	0.0,	1.5);
(482857.7, 3754858.5,	0.0,	1.5);	(482759.2, 3754841.0,	0.0,	1.5);
(482660.7, 3754823.8,	0.0,	1.5);	(482562.2, 3754806.5,	0.0,	1.5);
(482463.7, 3754789.0,	0.0,	1.5);	(482365.3, 3754771.8,	0.0,	1.5);
(482266.8, 3754754.3,	0.0,	1.5);	(482168.3, 3754737.0,	0.0,	1.5);
(482069.8, 3754719.5,	0.0,	1.5);	(484624.2, 3755240.5,	0.0,	1.5);
(484524.2, 3755240.5,	0.0,	1.5);	(484424.2, 3755240.5,	0.0,	1.5);
(484324.2, 3755240.5,	0.0,	1.5);	(484224.2, 3755240.5,	0.0,	1.5);
(484124.2, 3755240.5,	0.0,	1.5);	(484024.2, 3755240.5,	0.0,	1.5);
(483924.2, 3755240.5,	0.0,	1.5);	(483824.2, 3755240.5,	0.0,	1.5);
(483724.2, 3755240.5,	0.0,	1.5);	(483624.2, 3755240.5,	0.0,	1.5);
(485270.1, 3754972.8,	0.0,	1.5);	(483424.2, 3755240.5,	0.0,	1.5);
(483324.2, 3755240.5,	0.0,	1.5);	(483224.2, 3755240.5,	0.0,	1.5);
(483124.2, 3755240.5,	0.0,	1.5);	(483024.2, 3755240.5,	0.0,	1.5);
(482924.2, 3755240.5,	0.0,	1.5);	(482824.2, 3755240.5,	0.0,	1.5);
(482724.2, 3755240.5,	0.0,	1.5);	(482624.2, 3755240.5,	0.0,	1.5);
(482524.2, 3755240.5,	0.0,	1.5);	(482424.2, 3755240.5,	0.0,	1.5);
(482324.2, 3755240.5,	0.0,	1.5);	(482224.2, 3755240.5,	0.0,	1.5);
(482124.2, 3755240.5,	0.0,	1.5);	(482024.2, 3755240.5,	0.0,	1.5);
(484630.3, 3755310.0,	0.0,	1.5);	(484531.8, 3755327.3,	0.0,	1.5);
(484433.3, 3755344.8,	0.0,	1.5);	(484334.9, 3755362.0,	0.0,	1.5);
(484236.4, 3755379.5,	0.0,	1.5);	(484137.9, 3755396.8,	0.0,	1.5);
(484039.4, 3755414.3,	0.0,	1.5);	(483940.9, 3755431.5,	0.0,	1.5);
(485244.8, 3754972.8,	0.0,	1.5);	(483744.0, 3755466.3,	0.0,	1.5);
(483645.5, 3755483.5,	0.0,	1.5);	(483547.0, 3755501.0,	0.0,	1.5);
(483448.5, 3755518.3,	0.0,	1.5);	(483350.1, 3755535.8,	0.0,	1.5);
(483251.6, 3755553.0,	0.0,	1.5);	(483153.1, 3755570.5,	0.0,	1.5);
(483054.6, 3755587.8,	0.0,	1.5);	(482956.1, 3755605.3,	0.0,	1.5);
(482857.7, 3755622.5,	0.0,	1.5);	(482759.2, 3755640.0,	0.0,	1.5);
(482660.7, 3755657.3,	0.0,	1.5);	(482562.2, 3755674.8,	0.0,	1.5);
(482463.7, 3755692.0,	0.0,	1.5);	(482365.3, 3755709.3,	0.0,	1.5);
(482266.8, 3755726.8,	0.0,	1.5);	(482168.3, 3755744.0,	0.0,	1.5);
(482069.8, 3755761.5,	0.0,	1.5);	(484648.3, 3755377.3,	0.0,	1.5);
(484554.4, 3755411.5,	0.0,	1.5);	(485246.7, 3755001.8,	0.0,	1.5);
(484366.4, 3755480.0,	0.0,	1.5);	(484272.5, 3755514.3,	0.0,	1.5);
(484178.5, 3755548.3,	0.0,	1.5);	(484084.5, 3755582.5,	0.0,	1.5);
(483990.6, 3755616.8,	0.0,	1.5);	(483896.6, 3755651.0,	0.0,	1.5);
(483802.6, 3755685.3,	0.0,	1.5);	(483708.7, 3755719.3,	0.0,	1.5);
(483614.7, 3755753.5,	0.0,	1.5);	(483520.7, 3755787.8,	0.0,	1.5);
(483426.8, 3755822.0,	0.0,	1.5);	(483332.8, 3755856.3,	0.0,	1.5);
(483238.8, 3755890.3,	0.0,	1.5);	(483144.8, 3755924.5,	0.0,	1.5);

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 12:10:05

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483050.9, 3755958.8,	0.0,	1.5);	(482956.9, 3755993.0,	0.0,	1.5);
(482862.9, 3756027.3,	0.0,	1.5);	(482769.0, 3756061.3,	0.0,	1.5);
(482675.0, 3756095.5,	0.0,	1.5);	(482581.0, 3756129.8,	0.0,	1.5);
(482487.1, 3756164.0,	0.0,	1.5);	(482393.1, 3756198.3,	0.0,	1.5);
(482299.1, 3756232.3,	0.0,	1.5);	(482205.2, 3756266.5,	0.0,	1.5);
(484591.2, 3755490.5,	0.0,	1.5);	(484504.6, 3755540.5,	0.0,	1.5);
(484418.0, 3755590.5,	0.0,	1.5);	(484331.4, 3755640.5,	0.0,	1.5);
(484244.8, 3755690.5,	0.0,	1.5);	(484158.2, 3755740.5,	0.0,	1.5);
(484071.6, 3755790.5,	0.0,	1.5);	(483985.0, 3755840.5,	0.0,	1.5);
(483898.4, 3755890.5,	0.0,	1.5);	(483811.8, 3755940.5,	0.0,	1.5);
(483725.2, 3755990.5,	0.0,	1.5);	(483638.6, 3756040.5,	0.0,	1.5);
(483552.0, 3756090.5,	0.0,	1.5);	(483465.4, 3756140.5,	0.0,	1.5);
(483378.8, 3756190.5,	0.0,	1.5);	(483292.2, 3756240.5,	0.0,	1.5);
(483205.6, 3756290.5,	0.0,	1.5);	(483119.0, 3756340.5,	0.0,	1.5);
(483032.4, 3756390.5,	0.0,	1.5);	(482945.8, 3756440.5,	0.0,	1.5);
(482859.2, 3756490.5,	0.0,	1.5);	(482772.6, 3756540.5,	0.0,	1.5);
(482686.0, 3756590.5,	0.0,	1.5);	(482599.4, 3756640.5,	0.0,	1.5);
(482512.8, 3756690.5,	0.0,	1.5);	(482426.2, 3756740.5,	0.0,	1.5);
(484717.8, 3755497.8,	0.0,	1.5);	(484641.2, 3755562.0,	0.0,	1.5);
(484564.6, 3755626.3,	0.0,	1.5);	(484488.0, 3755690.5,	0.0,	1.5);
(484411.4, 3755754.8,	0.0,	1.5);	(484334.8, 3755819.0,	0.0,	1.5);
(484258.2, 3755883.3,	0.0,	1.5);	(484181.6, 3755947.5,	0.0,	1.5);
(484105.0, 3756011.8,	0.0,	1.5);	(484028.4, 3756076.3,	0.0,	1.5);
(483951.8, 3756140.5,	0.0,	1.5);	(483875.2, 3756204.8,	0.0,	1.5);
(483798.6, 3756269.0,	0.0,	1.5);	(483721.9, 3756333.3,	0.0,	1.5);
(483645.3, 3756397.5,	0.0,	1.5);	(483568.8, 3756461.8,	0.0,	1.5);
(483492.1, 3756526.0,	0.0,	1.5);	(483415.5, 3756590.3,	0.0,	1.5);
(483338.9, 3756654.8,	0.0,	1.5);	(483262.3, 3756719.0,	0.0,	1.5);
(483185.7, 3756783.3,	0.0,	1.5);	(483109.1, 3756847.5,	0.0,	1.5);
(483032.5, 3756911.8,	0.0,	1.5);	(482955.9, 3756976.0,	0.0,	1.5);
(482879.3, 3757040.3,	0.0,	1.5);	(482802.7, 3757104.5,	0.0,	1.5);
(482726.1, 3757168.8,	0.0,	1.5);	(484831.4, 3755470.3,	0.0,	1.5);
(484767.1, 3755547.0,	0.0,	1.5);	(484702.8, 3755623.5,	0.0,	1.5);
(484638.6, 3755700.3,	0.0,	1.5);	(484574.3, 3755776.8,	0.0,	1.5);
(484510.0, 3755853.3,	0.0,	1.5);	(484445.7, 3755930.0,	0.0,	1.5);
(484381.4, 3756006.5,	0.0,	1.5);	(484317.2, 3756083.3,	0.0,	1.5);
(484252.9, 3756159.8,	0.0,	1.5);	(484188.6, 3756236.3,	0.0,	1.5);
(484124.3, 3756313.0,	0.0,	1.5);	(484060.1, 3756389.5,	0.0,	1.5);
(483995.8, 3756466.3,	0.0,	1.5);	(483931.5, 3756542.8,	0.0,	1.5);
(483867.2, 3756619.5,	0.0,	1.5);	(483802.9, 3756696.0,	0.0,	1.5);
(483738.7, 3756772.5,	0.0,	1.5);	(483674.4, 3756849.3,	0.0,	1.5);
(483610.1, 3756925.8,	0.0,	1.5);	(483545.8, 3757002.5,	0.0,	1.5);
(483481.5, 3757079.0,	0.0,	1.5);	(483417.3, 3757155.5,	0.0,	1.5);
(483353.0, 3757232.3,	0.0,	1.5);	(483288.7, 3757308.8,	0.0,	1.5);
(483224.4, 3757385.5,	0.0,	1.5);	(483160.2, 3757462.0,	0.0,	1.5);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(483095.9, 3757538.8,	0.0,	1.5);	(484874.2, 3755500.3,	0.0,	1.5);
(484824.2, 3755587.0,	0.0,	1.5);	(484774.2, 3755673.5,	0.0,	1.5);
(484724.2, 3755760.3,	0.0,	1.5);	(484674.2, 3755846.8,	0.0,	1.5);
(484624.2, 3755933.3,	0.0,	1.5);	(484574.2, 3756020.0,	0.0,	1.5);
(484524.2, 3756106.5,	0.0,	1.5);	(484474.2, 3756193.3,	0.0,	1.5);
(484424.2, 3756279.8,	0.0,	1.5);	(484374.2, 3756366.3,	0.0,	1.5);
(484324.2, 3756453.0,	0.0,	1.5);	(484274.2, 3756539.5,	0.0,	1.5);
(484224.2, 3756626.3,	0.0,	1.5);	(484174.2, 3756712.8,	0.0,	1.5);
(484124.2, 3756799.3,	0.0,	1.5);	(484074.2, 3756886.0,	0.0,	1.5);
(484024.2, 3756972.5,	0.0,	1.5);	(483974.2, 3757059.3,	0.0,	1.5);
(483924.2, 3757145.8,	0.0,	1.5);	(483874.2, 3757232.3,	0.0,	1.5);
(483824.2, 3757319.0,	0.0,	1.5);	(483774.2, 3757405.5,	0.0,	1.5);
(483724.2, 3757492.3,	0.0,	1.5);	(483674.2, 3757578.8,	0.0,	1.5);
(483624.2, 3757665.5,	0.0,	1.5);	(483574.2, 3757752.0,	0.0,	1.5);
(483524.2, 3757838.5,	0.0,	1.5);	(484921.6, 3755522.5,	0.0,	1.5);
(484887.4, 3755616.5,	0.0,	1.5);	(484853.2, 3755710.3,	0.0,	1.5);
(484819.0, 3755804.3,	0.0,	1.5);	(484784.8, 3755898.3,	0.0,	1.5);
(484750.6, 3755992.3,	0.0,	1.5);	(484716.4, 3756086.3,	0.0,	1.5);
(484682.2, 3756180.3,	0.0,	1.5);	(484648.0, 3756274.3,	0.0,	1.5);
(484613.8, 3756368.3,	0.0,	1.5);	(484579.6, 3756462.0,	0.0,	1.5);
(484545.4, 3756556.0,	0.0,	1.5);	(484511.2, 3756650.0,	0.0,	1.5);
(484477.0, 3756744.0,	0.0,	1.5);	(484442.8, 3756838.0,	0.0,	1.5);
(484408.6, 3756932.0,	0.0,	1.5);	(484374.4, 3757026.0,	0.0,	1.5);
(484340.2, 3757120.0,	0.0,	1.5);	(484306.0, 3757213.8,	0.0,	1.5);
(484271.8, 3757307.8,	0.0,	1.5);	(484237.6, 3757401.8,	0.0,	1.5);
(484203.4, 3757495.8,	0.0,	1.5);	(484169.2, 3757589.8,	0.0,	1.5);
(484135.0, 3757683.8,	0.0,	1.5);	(484100.8, 3757777.8,	0.0,	1.5);
(484066.6, 3757871.8,	0.0,	1.5);	(484032.4, 3757965.5,	0.0,	1.5);
(483998.2, 3758059.5,	0.0,	1.5);	(484972.1, 3755536.0,	0.0,	1.5);
(484954.8, 3755634.5,	0.0,	1.5);	(484937.4, 3755733.0,	0.0,	1.5);
(484920.0, 3755831.5,	0.0,	1.5);	(484902.7, 3755930.0,	0.0,	1.5);
(484885.3, 3756028.3,	0.0,	1.5);	(484867.9, 3756126.8,	0.0,	1.5);
(484850.6, 3756225.3,	0.0,	1.5);	(484833.2, 3756323.8,	0.0,	1.5);
(484815.8, 3756422.3,	0.0,	1.5);	(484798.5, 3756520.8,	0.0,	1.5);
(484781.1, 3756619.3,	0.0,	1.5);	(484763.8, 3756717.8,	0.0,	1.5);
(484746.4, 3756816.3,	0.0,	1.5);	(484729.0, 3756914.8,	0.0,	1.5);
(484711.7, 3757013.3,	0.0,	1.5);	(484694.3, 3757111.8,	0.0,	1.5);
(484676.9, 3757210.3,	0.0,	1.5);	(484659.6, 3757308.5,	0.0,	1.5);
(484642.2, 3757407.0,	0.0,	1.5);	(484624.8, 3757505.5,	0.0,	1.5);
(484607.5, 3757604.0,	0.0,	1.5);	(484590.1, 3757702.5,	0.0,	1.5);
(484572.8, 3757801.0,	0.0,	1.5);	(484555.4, 3757899.5,	0.0,	1.5);
(484538.0, 3757998.0,	0.0,	1.5);	(484520.7, 3758096.5,	0.0,	1.5);
(484503.3, 3758195.0,	0.0,	1.5);			

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
L0001207	485494.1	3755411.5	-6.29
L0001213	485524.2	3755240.5	-14.59
L0001214	485524.2	3755240.5	-3.34
L0001219	485494.1	3755069.5	-1.58
L0001220	485494.1	3755069.5	-5.22
L0001272	483624.2	3755240.5	-10.01
L0001275	483724.2	3755240.5	-3.89
L0001276	483724.2	3755240.5	-6.35
L0001279	483824.2	3755240.5	-8.59
L0001280	483824.2	3755240.5	0.27
L0001283	483924.2	3755240.5	-9.08
L0001286	484024.2	3755240.5	-4.08
L0001287	484024.2	3755240.5	-5.06
L0001290	484124.2	3755240.5	-8.24
L0001300	484334.9	3755119.0	-6.51
L0001306	484460.4	3755035.3	-1.70
L0001315	484677.8	3755040.5	-4.50
L0001341	485268.9	3755002.0	-3.96
L0001342	485246.7	3755001.8	-3.83
L0001343	485217.1	3755010.8	-13.26

*** ISCST3 - VERSION 02035 ***   *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc   ***   10/08/09
*** West Ridge HRA   ***   12:10:05
**MODELOPTs: PAGE 52
CONC   URBAN FLAT FLGPOL   NOCALM   NOCMPL

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

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1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
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1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1
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NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** WIND PROFILE EXPONENTS ***

STABILITY	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
B	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
C	.20000E+00	.20000E+00	.20000E+00	.20000E+00	.20000E+00	.20000E+00
D	.25000E+00	.25000E+00	.25000E+00	.25000E+00	.25000E+00	.25000E+00
E	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00
F	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00

*** VERTICAL POTENTIAL TEMPERATURE GRADIENTS ***
(DEGREES KELVIN PER METER)

STABILITY	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
B	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
C	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
D	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
E	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01
F	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01

*** ISCST3 - VERSION 02035 ***   *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc   ***   10/08/09
*** West Ridge HRA   ***   12:10:05
**MODELOPTs: PAGE 53
CONC   URBAN FLAT FLGPOL   NOCALM   NOCMPL

*** THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

FILE: U:\UcAir\METDAT~1\REDLANDS.ASC
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 54161   UPPER AIR STATION NO.: 99999
NAME: UNKNOWN   NAME: UNKNOWN
YEAR: 1981   YEAR: 1981

YR MN DY HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL	URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
81 01 01 01	292.3	1.00	284.3	7	522.6	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 02	282.4	0.00	284.3	7	507.0	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 03	287.5	0.00	283.1	7	491.4	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 04	301.0	0.00	283.1	7	475.8	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 05	286.5	0.00	282.6	7	460.3	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 06	297.0	0.00	283.1	7	444.7	170.0	0.0000	0.0	0.0000	0	0.00
81 01 01 07	297.0	0.00	285.4	6	1.4	170.7	0.0000	0.0	0.0000	0	0.00
81 01 01 08	314.6	1.00	287.6	5	47.0	192.0	0.0000	0.0	0.0000	0	0.00
81 01 01 09	299.0	1.00	289.8	4	92.5	213.3	0.0000	0.0	0.0000	0	0.00
81 01 01 10	54.2	1.34	291.5	3	138.0	234.7	0.0000	0.0	0.0000	0	0.00
81 01 01 11	89.1	1.79	294.3	3	183.5	256.0	0.0000	0.0	0.0000	0	0.00
81 01 01 12	103.1	1.34	297.6	2	229.0	277.3	0.0000	0.0	0.0000	0	0.00
81 01 01 13	87.2	1.34	298.7	2	274.5	298.7	0.0000	0.0	0.0000	0	0.00
81 01 01 14	124.2	1.79	299.8	3	320.0	320.0	0.0000	0.0	0.0000	0	0.00
81 01 01 15	134.8	2.24	299.3	3	320.0	320.0	0.0000	0.0	0.0000	0	0.00
81 01 01 16	98.2	2.24	298.7	4	320.0	320.0	0.0000	0.0	0.0000	0	0.00
81 01 01 17	110.1	2.24	295.4	5	325.6	318.5	0.0000	0.0	0.0000	0	0.00
81 01 01 18	210.1	1.00	291.5	6	357.2	310.3	0.0000	0.0	0.0000	0	0.00
81 01 01 19	268.0	1.00	289.8	7	388.8	302.1	0.0000	0.0	0.0000	0	0.00
81 01 01 20	303.2	1.00	287.0	7	420.4	293.9	0.0000	0.0	0.0000	0	0.00
81 01 01 21	291.1	1.34	286.5	7	452.0	285.7	0.0000	0.0	0.0000	0	0.00
81 01 01 22	294.5	1.34	287.0	7	483.5	277.4	0.0000	0.0	0.0000	0	0.00
81 01 01 23	293.2	0.00	285.9	7	515.1	269.2	0.0000	0.0	0.0000	0	0.00
81 01 01 24	292.2	0.00	285.4	7	546.7	261.0	0.0000	0.0	0.0000	0	0.00

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	
485024.22	3755540.50	0.00873	485024.22	3755640.50	0.00471	
485024.22	3755740.50	0.00267	485024.22	3755840.50	0.00166	
485024.22	3755940.50	0.00120	485024.22	3756040.50	0.00094	
485024.22	3756140.50	0.00076	485024.22	3756240.50	0.00064	
485024.22	3756340.50	0.00055	485024.22	3756440.50	0.00048	
485024.22	3756540.50	0.00042	485024.22	3756640.50	0.00037	
485024.22	3756740.50	0.00034	485024.22	3756840.50	0.00031	
485024.22	3756940.50	0.00028	485024.22	3757040.50	0.00025	
485024.22	3757140.50	0.00023	485024.22	3757240.50	0.00022	
485024.22	3757340.50	0.00020	485024.22	3757440.50	0.00018	
485024.22	3757540.50	0.00017	485024.22	3757640.50	0.00016	
485024.22	3757740.50	0.00015	485024.22	3757840.50	0.00014	
485024.22	3757940.50	0.00013	485024.22	3758040.50	0.00013	
485024.22	3758140.50	0.00012	485024.22	3758240.50	0.00011	
485076.31	3755536.00	0.00834	485093.69	3755634.50	0.00453	
485111.06	3755733.00	0.00243	485128.41	3755831.50	0.00156	
485145.78	3755930.00	0.00113	485163.16	3756028.25	0.00088	
485180.50	3756126.75	0.00071	485197.88	3756225.25	0.00060	
485215.25	3756323.75	0.00052	485232.63	3756422.25	0.00045	
485249.97	3756520.75	0.00039	485267.34	3756619.25	0.00035	
485284.69	3756717.75	0.00031	485302.06	3756816.25	0.00028	
485319.44	3756914.75	0.00025	485336.81	3757013.25	0.00023	
485354.16	3757111.75	0.00021	485371.53	3757210.25	0.00019	
485388.88	3757308.50	0.00018	485406.25	3757407.00	0.00016	
485423.63	3757505.50	0.00015	485441.00	3757604.00	0.00014	
485458.34	3757702.50	0.00013	485475.72	3757801.00	0.00012	
485493.09	3757899.50	0.00012	485510.44	3757998.00	0.00011	
485527.81	3758096.50	0.00011	485545.16	3758195.00	0.00010	
485126.84	3755522.50	0.00865	485161.03	3755616.50	0.00470	
485195.25	3755710.25	0.00239	485229.44	3755804.25	0.00153	
485263.63	3755898.25	0.00112	485297.84	3755992.25	0.00089	
485332.06	3756086.25	0.00073	485366.25	3756180.25	0.00061	
485400.44	3756274.25	0.00051	485434.66	3756368.25	0.00043	
485468.88	3756462.00	0.00037	485503.06	3756556.00	0.00033	
485537.25	3756650.00	0.00029	485571.47	3756744.00	0.00026	
485605.66	3756838.00	0.00023	485639.88	3756932.00	0.00021	
485674.06	3757026.00	0.00019	485708.28	3757120.00	0.00018	
485742.47	3757213.75	0.00016	485776.66	3757307.75	0.00015	
485810.88	3757401.75	0.00014	485845.09	3757495.75	0.00013	
485879.28	3757589.75	0.00012	485913.47	3757683.75	0.00011	

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*** West Ridge HRA *** 12:10:05

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
485947.69	3757777.75	0.00011	485981.88	3757871.75	0.00010
486016.09	3757965.50	0.00009	486050.28	3758059.50	0.00009
485174.22	3755500.25	0.00973	485224.22	3755587.00	0.00534
485274.22	3755673.50	0.00249	485324.22	3755760.25	0.00161
485374.22	3755846.75	0.00122	485424.22	3755933.25	0.00095
485474.22	3756020.00	0.00075	485524.22	3756106.50	0.00061
485574.22	3756193.25	0.00051	485624.22	3756279.75	0.00044
485674.22	3756366.25	0.00038	485724.22	3756453.00	0.00033
485774.22	3756539.50	0.00029	485824.22	3756626.25	0.00026
485874.22	3756712.75	0.00023	485924.22	3756799.25	0.00021
485974.22	3756886.00	0.00019	486024.22	3756972.50	0.00017
486074.22	3757059.25	0.00016	486124.22	3757145.75	0.00014
486174.22	3757232.25	0.00013	486224.22	3757319.00	0.00012
486274.22	3757405.50	0.00012	486324.22	3757492.25	0.00011
486374.22	3757578.75	0.00010	486424.22	3757665.50	0.00010
486474.22	3757752.00	0.00009	486524.22	3757838.50	0.00009
485217.06	3755470.25	0.01176	485281.34	3755547.00	0.00678
485345.63	3755623.50	0.00286	485409.91	3755700.25	0.00186
485474.19	3755776.75	0.00136	485538.47	3755853.25	0.00102
485602.75	3755930.00	0.00081	485667.03	3756006.50	0.00066
485731.31	3756083.25	0.00054	485795.59	3756159.75	0.00046
485859.84	3756236.25	0.00039	485924.13	3756313.00	0.00034
485988.41	3756389.50	0.00031	486052.69	3756466.25	0.00027
486116.97	3756542.75	0.00025	486181.25	3756619.50	0.00023
486245.53	3756696.00	0.00021	486309.81	3756772.50	0.00019
486374.09	3756849.25	0.00018	486438.38	3756925.75	0.00017
486502.63	3757002.50	0.00016	486566.91	3757079.00	0.00015
486631.19	3757155.50	0.00014	486695.47	3757232.25	0.00013
486759.75	3757308.75	0.00012	486824.03	3757385.50	0.00012
486888.31	3757462.00	0.00011	486952.59	3757538.75	0.00011
485330.66	3755497.75	0.01023	485407.25	3755562.00	0.00388
485483.88	3755626.25	0.00236	485560.47	3755690.50	0.00161
485637.06	3755754.75	0.00118	485713.66	3755819.00	0.00091
485790.28	3755883.25	0.00074	485866.88	3755947.50	0.00062
485943.47	3756011.75	0.00054	486020.09	3756076.25	0.00047
486096.69	3756140.50	0.00042	486173.31	3756204.75	0.00037
486249.91	3756269.00	0.00033	486326.50	3756333.25	0.00030
486403.13	3756397.50	0.00027	486479.72	3756461.75	0.00025
486556.31	3756526.00	0.00023	486632.91	3756590.25	0.00021
486709.53	3756654.75	0.00020	486786.13	3756719.00	0.00018

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
486862.75	3756783.25	0.00017	486939.34	3756847.50	0.00016
487015.94	3756911.75	0.00015	487092.56	3756976.00	0.00014
487169.16	3757040.25	0.00014	487245.75	3757104.50	0.00013
487322.38	3757168.75	0.00012	485457.25	3755490.50	0.00903
485543.84	3755540.50	0.00336	485630.44	3755590.50	0.00207
485717.06	3755640.50	0.00150	485803.66	3755690.50	0.00117
485890.25	3755740.50	0.00095	485976.88	3755790.50	0.00079
486063.47	3755840.50	0.00067	486150.06	3755890.50	0.00057
486236.66	3755940.50	0.00050	486323.28	3755990.50	0.00044
486409.88	3756040.50	0.00039	486496.47	3756090.50	0.00035
486583.09	3756140.50	0.00032	486669.69	3756190.50	0.00029
486756.28	3756240.50	0.00027	486842.88	3756290.50	0.00024
486929.50	3756340.50	0.00023	487016.09	3756390.50	0.00021
487102.69	3756440.50	0.00020	487189.28	3756490.50	0.00018
487275.91	3756540.50	0.00017	487362.50	3756590.50	0.00016
487449.09	3756640.50	0.00015	487535.69	3756690.50	0.00014
487622.31	3756740.50	0.00014	485400.13	3755377.25	0.02267
485494.09	3755411.50	0.01554	485268.91	3755002.00	0.02359
485682.00	3755480.00	0.00351	485775.97	3755514.25	0.00229
485869.94	3755548.25	0.00168	485963.91	3755582.50	0.00131
486057.88	3755616.75	0.00106	486151.88	3755651.00	0.00088
486245.84	3755685.25	0.00074	486339.81	3755719.25	0.00064
486433.78	3755753.50	0.00056	486527.75	3755787.75	0.00049
486621.72	3755822.00	0.00044	486715.69	3755856.25	0.00040
486809.66	3755890.25	0.00036	486903.63	3755924.50	0.00033
486997.59	3755958.75	0.00030	487091.56	3755993.00	0.00028
487185.53	3756027.25	0.00026	487279.50	3756061.25	0.00024
487373.47	3756095.50	0.00022	487467.44	3756129.75	0.00021
487561.41	3756164.00	0.00019	487655.38	3756198.25	0.00018
487749.34	3756232.25	0.00017	487843.31	3756266.50	0.00016
485418.16	3755310.00	0.02683	485615.13	3755344.75	0.01234
485713.59	3755362.00	0.00618	485812.09	3755379.50	0.00379
485910.56	3755396.75	0.00267	486009.03	3755414.25	0.00203
486107.53	3755431.50	0.00163	486206.00	3755449.00	0.00135
486304.47	3755466.25	0.00114	486402.97	3755483.50	0.00099
486501.44	3755501.00	0.00087	486599.91	3755518.25	0.00077
486698.41	3755535.75	0.00069	486796.88	3755553.00	0.00062
486895.38	3755570.50	0.00057	486993.84	3755587.75	0.00052
487092.34	3755605.25	0.00048	487190.81	3755622.50	0.00045
487289.28	3755640.00	0.00042	487387.78	3755657.25	0.00039

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
487486.25	3755674.75	0.00037	487584.72	3755692.00	0.00034
487683.22	3755709.25	0.00033	487781.69	3755726.75	0.00031
487880.16	3755744.00	0.00029	487978.66	3755761.50	0.00028
485324.22	3755240.50	0.02684	485424.22	3755240.50	0.02833
485524.22	3755240.50	0.01179	485624.22	3755240.50	0.01325
485724.22	3755240.50	0.00789	485824.22	3755240.50	0.00540
485924.22	3755240.50	0.00395	486024.22	3755240.50	0.00305
486124.22	3755240.50	0.00246	486224.22	3755240.50	0.00204
486324.22	3755240.50	0.00173	486424.22	3755240.50	0.00149
486524.22	3755240.50	0.00130	486624.22	3755240.50	0.00115
486724.22	3755240.50	0.00103	486824.22	3755240.50	0.00093
486924.22	3755240.50	0.00084	487024.22	3755240.50	0.00077
487124.22	3755240.50	0.00070	487224.22	3755240.50	0.00065
487324.22	3755240.50	0.00060	487424.22	3755240.50	0.00056
487524.22	3755240.50	0.00052	487624.22	3755240.50	0.00049
487724.22	3755240.50	0.00046	487824.22	3755240.50	0.00043
487924.22	3755240.50	0.00040	488024.22	3755240.50	0.00038
485418.16	3755171.00	0.02893	485615.13	3755136.25	0.01513
485713.59	3755119.00	0.00922	485812.09	3755101.50	0.00656
485910.56	3755084.25	0.00496	486009.03	3755066.75	0.00390
486107.53	3755049.50	0.00315	486206.00	3755032.25	0.00260
486304.47	3755014.75	0.00219	486402.97	3754997.50	0.00188
486501.44	3754980.00	0.00164	486599.91	3754962.75	0.00144
486698.41	3754945.25	0.00128	486796.88	3754928.00	0.00115
486895.38	3754910.50	0.00104	486993.84	3754893.25	0.00095
487092.34	3754875.75	0.00087	487190.81	3754858.50	0.00080
487289.28	3754841.00	0.00074	487387.78	3754823.75	0.00069
487486.25	3754806.50	0.00065	487584.72	3754789.00	0.00060
487683.22	3754771.75	0.00057	487781.69	3754754.25	0.00053
487880.16	3754737.00	0.00051	487978.66	3754719.50	0.00048
485400.13	3755103.75	0.03401	485494.09	3755069.50	0.02212
485588.06	3755035.25	0.02000	485682.00	3755001.00	0.01024
485775.97	3754967.00	0.00678	485869.94	3754932.75	0.00502
485963.91	3754898.50	0.00394	486057.88	3754864.25	0.00322
486151.88	3754830.00	0.00270	486245.84	3754796.00	0.00231
486339.81	3754761.75	0.00201	486433.78	3754727.50	0.00177
486527.75	3754693.25	0.00158	486621.72	3754659.00	0.00141
486715.69	3754624.75	0.00128	486809.66	3754590.75	0.00116
486903.63	3754556.50	0.00106	486997.59	3754522.25	0.00098
487091.56	3754488.00	0.00090	487185.53	3754453.75	0.00084

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
487279.50	3754419.75	0.00078	487373.47	3754385.50	0.00073
487467.44	3754351.25	0.00068	487561.41	3754317.00	0.00064
487655.38	3754282.75	0.00060	487749.34	3754248.75	0.00057
487843.31	3754214.50	0.00054	485457.25	3754990.50	0.02372
485543.84	3754940.50	0.01047	485630.44	3754890.50	0.00656
485717.06	3754840.50	0.00466	485803.66	3754790.50	0.00356
485890.25	3754740.50	0.00286	485976.88	3754690.50	0.00236
486063.47	3754640.50	0.00200	486150.06	3754590.50	0.00172
486236.66	3754540.50	0.00151	486323.28	3754490.50	0.00133
486409.88	3754440.50	0.00119	486496.47	3754390.50	0.00108
486583.09	3754340.50	0.00098	486669.69	3754290.50	0.00089
486756.28	3754240.50	0.00082	486842.88	3754190.50	0.00076
486929.50	3754140.50	0.00071	487016.09	3754090.50	0.00066
487102.69	3754040.50	0.00061	487189.28	3753990.50	0.00058
487275.91	3753940.50	0.00054	487362.50	3753890.50	0.00051
487449.09	3753840.50	0.00049	487535.69	3753790.50	0.00046
487622.31	3753740.50	0.00044	485330.66	3754983.50	0.01860
485407.25	3754919.00	0.00720	485483.88	3754854.75	0.00440
485560.47	3754790.50	0.00314	485637.06	3754726.25	0.00240
485713.66	3754662.00	0.00191	485790.28	3754597.75	0.00156
485866.88	3754533.50	0.00131	485943.47	3754469.25	0.00111
486020.09	3754405.00	0.00096	486096.69	3754340.50	0.00084
486173.31	3754276.25	0.00074	486249.91	3754212.00	0.00066
486326.50	3754147.75	0.00059	486403.13	3754083.50	0.00053
486479.72	3754019.25	0.00049	486556.31	3753955.00	0.00044
486632.91	3753890.75	0.00041	486709.53	3753826.50	0.00037
486786.13	3753762.00	0.00034	486862.75	3753697.75	0.00032
486939.34	3753633.50	0.00030	487015.94	3753569.25	0.00028
487092.56	3753505.00	0.00026	487169.16	3753440.75	0.00024
487245.75	3753376.50	0.00023	487322.38	3753312.25	0.00021
485217.06	3755010.75	0.02704	485281.34	3754934.00	0.00741
485345.63	3754857.50	0.00389	485409.91	3754781.00	0.00255
485474.19	3754704.25	0.00182	485538.47	3754627.75	0.00139
485602.75	3754551.00	0.00110	485667.03	3754474.50	0.00090
485731.31	3754397.75	0.00075	485795.59	3754321.25	0.00064
485859.84	3754244.75	0.00055	485924.13	3754168.00	0.00048
485988.41	3754091.50	0.00042	486052.69	3754014.75	0.00037
486116.97	3753938.25	0.00033	486181.25	3753861.75	0.00030
486245.53	3753785.00	0.00027	486309.81	3753708.50	0.00025
486374.09	3753631.75	0.00023	486438.38	3753555.25	0.00021

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*** West Ridge HRA *** 12:10:05

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
486502.63	3753478.50	0.00019	486566.91	3753402.00	0.00018
486631.19	3753325.50	0.00017	486695.47	3753248.75	0.00016
486759.75	3753172.25	0.00015	486824.03	3753095.50	0.00014
486888.31	3753019.00	0.00013	486952.59	3752942.50	0.00012
485174.22	3754980.75	0.01445	485224.22	3754894.00	0.00501
485274.22	3754807.50	0.00267	485324.22	3754721.00	0.00171
485374.22	3754634.25	0.00121	485424.22	3754547.75	0.00091
485474.22	3754461.00	0.00070	485524.22	3754374.50	0.00056
485574.22	3754288.00	0.00046	485624.22	3754201.25	0.00039
485674.22	3754114.75	0.00033	485724.22	3754028.00	0.00029
485774.22	3753941.50	0.00025	485824.22	3753854.75	0.00022
485874.22	3753768.25	0.00020	485924.22	3753681.75	0.00018
485974.22	3753595.00	0.00016	486024.22	3753508.50	0.00014
486074.22	3753421.75	0.00013	486124.22	3753335.25	0.00012
486174.22	3753248.75	0.00011	486224.22	3753162.00	0.00010
486274.22	3753075.50	0.00009	486324.22	3752988.75	0.00009
486374.22	3752902.25	0.00008	486424.22	3752815.75	0.00008
486474.22	3752729.00	0.00007	486524.22	3752642.50	0.00007
485126.84	3754958.50	0.00999	485161.03	3754864.75	0.00388
485195.25	3754770.75	0.00206	485229.44	3754676.75	0.00127
485263.63	3754582.75	0.00087	485297.84	3754488.75	0.00064
485332.06	3754394.75	0.00049	485366.25	3754300.75	0.00038
485400.44	3754206.75	0.00031	485434.66	3754113.00	0.00025
485468.88	3754019.00	0.00021	485503.06	3753925.00	0.00018
485537.25	3753831.00	0.00016	485571.47	3753737.00	0.00014
485605.66	3753643.00	0.00012	485639.88	3753549.00	0.00011
485674.06	3753455.00	0.00010	485708.28	3753361.00	0.00009
485742.47	3753267.25	0.00008	485776.66	3753173.25	0.00008
485810.88	3753079.25	0.00007	485845.09	3752985.25	0.00007
485879.28	3752891.25	0.00006	485913.47	3752797.25	0.00006
485947.69	3752703.25	0.00005	485981.88	3752609.25	0.00005
486016.09	3752515.50	0.00005	486050.28	3752421.50	0.00005
485076.31	3754945.00	0.00825	485093.69	3754846.50	0.00325
485111.06	3754748.00	0.00170	485128.41	3754649.75	0.00103
485145.78	3754551.25	0.00069	485163.16	3754452.75	0.00049
485180.50	3754354.25	0.00037	485197.88	3754255.75	0.00029
485215.25	3754157.25	0.00023	485232.63	3754058.75	0.00019
485249.97	3753960.25	0.00016	485267.34	3753861.75	0.00013
485284.69	3753763.25	0.00012	485302.06	3753664.75	0.00010
485319.44	3753566.25	0.00009	485336.81	3753467.75	0.00008

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
485354.16	3753369.50	0.00007	485371.53	3753271.00	0.00006
485388.88	3753172.50	0.00006	485406.25	3753074.00	0.00005
485423.63	3752975.50	0.00005	485441.00	3752877.00	0.00004
485458.34	3752778.50	0.00004	485475.72	3752680.00	0.00004
485493.09	3752581.50	0.00004	485510.44	3752483.00	0.00003
485527.81	3752384.50	0.00003	485545.16	3752286.00	0.00003
485024.22	3754940.50	0.00769	485024.22	3754840.50	0.00292
485024.22	3754740.50	0.00153	485024.22	3754640.50	0.00090
485024.22	3754540.50	0.00059	485024.22	3754440.50	0.00042
485024.22	3754340.50	0.00032	485024.22	3754240.50	0.00025
485024.22	3754140.50	0.00020	485024.22	3754040.50	0.00016
485024.22	3753940.50	0.00013	485024.22	3753840.50	0.00011
485024.22	3753740.50	0.00010	485024.22	3753640.50	0.00009
485024.22	3753540.50	0.00008	485024.22	3753440.50	0.00007
485024.22	3753340.50	0.00006	485024.22	3753240.50	0.00005
485024.22	3753140.50	0.00005	485024.22	3753040.50	0.00004
485024.22	3752940.50	0.00004	485024.22	3752840.50	0.00004
485024.22	3752740.50	0.00003	485024.22	3752640.50	0.00003
485024.22	3752540.50	0.00003	485024.22	3752440.50	0.00003
485024.22	3752340.50	0.00003	485024.22	3752240.50	0.00002
484972.13	3754945.00	0.00795	484954.78	3754846.50	0.00286
484937.41	3754748.00	0.00148	484920.03	3754649.75	0.00088
484902.69	3754551.25	0.00058	484885.31	3754452.75	0.00041
484867.94	3754354.25	0.00030	484850.59	3754255.75	0.00023
484833.22	3754157.25	0.00018	484815.84	3754058.75	0.00015
484798.50	3753960.25	0.00012	484781.13	3753861.75	0.00011
484763.75	3753763.25	0.00009	484746.38	3753664.75	0.00008
484729.03	3753566.25	0.00007	484711.66	3753467.75	0.00007
484694.31	3753369.50	0.00006	484676.94	3753271.00	0.00005
484659.56	3753172.50	0.00005	484642.19	3753074.00	0.00004
484624.84	3752975.50	0.00004	484607.47	3752877.00	0.00004
484590.13	3752778.50	0.00004	484572.75	3752680.00	0.00003
484555.38	3752581.50	0.00003	484538.03	3752483.00	0.00003
484520.66	3752384.50	0.00003	484503.28	3752286.00	0.00003
484921.63	3754958.50	0.00925	484887.41	3754864.75	0.00308
484853.22	3754770.75	0.00154	484819.03	3754676.75	0.00093
484784.81	3754582.75	0.00063	484750.63	3754488.75	0.00045
484716.41	3754394.75	0.00033	484682.22	3754300.75	0.00025
484648.00	3754206.75	0.00020	484613.81	3754113.00	0.00016
484579.59	3754019.00	0.00014	484545.41	3753925.00	0.00012

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484511.19	3753831.00	0.00010	484477.00	3753737.00	0.00009
484442.81	3753643.00	0.00008	484408.59	3753549.00	0.00007
484374.38	3753455.00	0.00006	484340.19	3753361.00	0.00005
484306.00	3753267.25	0.00005	484271.78	3753173.25	0.00005
484237.59	3753079.25	0.00004	484203.38	3752985.25	0.00004
484169.19	3752891.25	0.00004	484134.97	3752797.25	0.00003
484100.78	3752703.25	0.00003	484066.56	3752609.25	0.00003
484032.38	3752515.50	0.00003	483998.16	3752421.50	0.00003
484874.22	3754980.75	0.01303	484824.22	3754894.00	0.00371
484774.22	3754807.50	0.00178	484724.22	3754721.00	0.00109
484674.22	3754634.25	0.00075	484624.22	3754547.75	0.00054
484574.22	3754461.00	0.00040	484524.22	3754374.50	0.00031
484474.22	3754288.00	0.00025	484424.22	3754201.25	0.00020
484374.22	3754114.75	0.00017	484324.22	3754028.00	0.00014
484274.22	3753941.50	0.00012	484224.22	3753854.75	0.00011
484174.22	3753768.25	0.00009	484124.22	3753681.75	0.00008
484074.22	3753595.00	0.00007	484024.22	3753508.50	0.00007
483974.22	3753421.75	0.00006	483924.22	3753335.25	0.00006
483874.22	3753248.75	0.00005	483824.22	3753162.00	0.00005
483774.22	3753075.50	0.00004	483724.22	3752988.75	0.00004
483674.22	3752902.25	0.00004	483624.22	3752815.75	0.00004
483574.22	3752729.00	0.00003	483524.22	3752642.50	0.00003
484767.13	3754934.00	0.00528	484702.84	3754857.50	0.00240
484638.56	3754781.00	0.00139	484574.28	3754704.25	0.00094
484510.00	3754627.75	0.00068	484445.72	3754551.00	0.00052
484381.44	3754474.50	0.00041	484317.16	3754397.75	0.00033
484252.88	3754321.25	0.00028	484188.63	3754244.75	0.00023
484124.34	3754168.00	0.00020	484060.06	3754091.50	0.00017
483995.78	3754014.75	0.00015	483931.50	3753938.25	0.00013
483867.22	3753861.75	0.00012	483802.94	3753785.00	0.00011
483738.66	3753708.50	0.00010	483674.38	3753631.75	0.00009
483610.09	3753555.25	0.00008	483545.81	3753478.50	0.00007
483481.53	3753402.00	0.00007	483417.25	3753325.50	0.00006
483352.97	3753248.75	0.00006	483288.69	3753172.25	0.00006
483224.41	3753095.50	0.00005	483160.16	3753019.00	0.00005
483095.88	3752942.50	0.00005	484717.81	3754983.50	0.01065
484641.22	3754919.00	0.00390	484564.59	3754854.75	0.00208
484488.00	3754790.50	0.00136	484411.38	3754726.25	0.00097
484334.78	3754662.00	0.00072	484258.19	3754597.75	0.00057
484181.59	3754533.50	0.00046	484104.97	3754469.25	0.00039

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484028.38	3754405.00	0.00033	483951.78	3754340.50	0.00029
483875.16	3754276.25	0.00025	483798.56	3754212.00	0.00023
483721.94	3754147.75	0.00020	483645.34	3754083.50	0.00018
483568.75	3754019.25	0.00017	483492.13	3753955.00	0.00015
483415.53	3753890.75	0.00014	483338.94	3753826.50	0.00013
483262.34	3753762.00	0.00012	483185.72	3753697.75	0.00011
483109.13	3753633.50	0.00011	483032.50	3753569.25	0.00010
482955.91	3753505.00	0.00009	482879.31	3753440.75	0.00009
482802.69	3753376.50	0.00008	482726.09	3753312.25	0.00008
484677.81	3755040.50	0.02555	484591.22	3754990.50	0.01022
484504.63	3754940.50	0.00374	484418.00	3754890.50	0.00233
484331.41	3754840.50	0.00164	484244.81	3754790.50	0.00120
484158.19	3754740.50	0.00091	484071.59	3754690.50	0.00072
483985.00	3754640.50	0.00058	483898.41	3754590.50	0.00048
483811.78	3754540.50	0.00041	483725.19	3754490.50	0.00036
483638.59	3754440.50	0.00032	483552.00	3754390.50	0.00028
483465.38	3754340.50	0.00026	483378.78	3754290.50	0.00023
483292.19	3754240.50	0.00021	483205.59	3754190.50	0.00020
483118.97	3754140.50	0.00018	483032.38	3754090.50	0.00017
482945.78	3754040.50	0.00016	482859.16	3753990.50	0.00015
482772.56	3753940.50	0.00014	482685.97	3753890.50	0.00013
482599.38	3753840.50	0.00012	482512.75	3753790.50	0.00012
482426.16	3753740.50	0.00011	484648.34	3755103.75	0.02353
484554.38	3755069.50	0.01979	484460.41	3755035.25	0.01516
484366.44	3755001.00	0.00511	484272.47	3754967.00	0.00332
484178.50	3754932.75	0.00243	484084.53	3754898.50	0.00184
483990.56	3754864.25	0.00143	483896.59	3754830.00	0.00114
483802.63	3754796.00	0.00093	483708.66	3754761.75	0.00078
483614.69	3754727.50	0.00067	483520.72	3754693.25	0.00058
483426.75	3754659.00	0.00052	483332.78	3754624.75	0.00046
483238.81	3754590.75	0.00041	483144.84	3754556.50	0.00037
483050.88	3754522.25	0.00033	482956.91	3754488.00	0.00030
482862.94	3754453.75	0.00028	482768.97	3754419.75	0.00026
482675.00	3754385.50	0.00024	482581.03	3754351.25	0.00022
482487.06	3754317.00	0.00020	482393.09	3754282.75	0.00019
482299.13	3754248.75	0.00018	482205.16	3754214.50	0.00017
484630.31	3755171.00	0.02178	484531.84	3755153.75	0.01588
484433.34	3755136.25	0.01551	484334.88	3755119.00	0.02165
484236.38	3755101.50	0.00867	484137.91	3755084.25	0.00540
484039.41	3755066.75	0.00399	483940.94	3755049.50	0.00313

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
483842.47	3755032.25	0.00247	483743.97	3755014.75	0.00196
483645.50	3754997.50	0.00161	483547.03	3754980.00	0.00139
483448.53	3754962.75	0.00123	483350.06	3754945.25	0.00111
483251.59	3754928.00	0.00101	483153.09	3754910.50	0.00092
483054.63	3754893.25	0.00084	482956.13	3754875.75	0.00077
482857.66	3754858.50	0.00071	482759.16	3754841.00	0.00066
482660.69	3754823.75	0.00061	482562.22	3754806.50	0.00057
482463.72	3754789.00	0.00054	482365.25	3754771.75	0.00050
482266.78	3754754.25	0.00048	482168.28	3754737.00	0.00045
482069.81	3754719.50	0.00042	484624.22	3755240.50	0.02132
484524.22	3755240.50	0.01615	484424.22	3755240.50	0.01320
484324.22	3755240.50	0.01212	484224.22	3755240.50	0.01581
484124.22	3755240.50	0.02085	484024.22	3755240.50	0.01790
483924.22	3755240.50	0.01779	483824.22	3755240.50	0.01490
483724.22	3755240.50	0.01521	483624.22	3755240.50	0.01639
485270.06	3754972.75	0.01278	483424.22	3755240.50	0.00652
483324.22	3755240.50	0.00357	483224.22	3755240.50	0.00257
483124.22	3755240.50	0.00205	483024.22	3755240.50	0.00171
482924.22	3755240.50	0.00148	482824.22	3755240.50	0.00130
482724.22	3755240.50	0.00116	482624.22	3755240.50	0.00104
482524.22	3755240.50	0.00095	482424.22	3755240.50	0.00087
482324.22	3755240.50	0.00080	482224.22	3755240.50	0.00074
482124.22	3755240.50	0.00069	482024.22	3755240.50	0.00064
484630.31	3755310.00	0.02049	484531.84	3755327.25	0.01601
484433.34	3755344.75	0.01299	484334.88	3755362.00	0.01091
484236.38	3755379.50	0.00937	484137.91	3755396.75	0.00825
484039.41	3755414.25	0.00747	483940.94	3755431.50	0.00699
485244.81	3754972.75	0.01279	483743.97	3755466.25	0.00619
483645.50	3755483.50	0.00582	483547.03	3755501.00	0.00548
483448.53	3755518.25	0.00516	483350.06	3755535.75	0.00503
483251.59	3755553.00	0.00468	483153.09	3755570.50	0.00426
483054.63	3755587.75	0.00384	482956.13	3755605.25	0.00345
482857.66	3755622.50	0.00309	482759.16	3755640.00	0.00278
482660.69	3755657.25	0.00251	482562.22	3755674.75	0.00228
482463.72	3755692.00	0.00208	482365.25	3755709.25	0.00192
482266.78	3755726.75	0.00177	482168.28	3755744.00	0.00164
482069.81	3755761.50	0.00153	484648.34	3755377.25	0.02184
484554.38	3755411.50	0.01602	485246.72	3755001.75	0.02350
484366.44	3755480.00	0.01075	484272.47	3755514.25	0.00924
484178.50	3755548.25	0.00808	484084.53	3755582.50	0.00716

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
483990.56	3755616.75	0.00642	483896.59	3755651.00	0.00580
483802.63	3755685.25	0.00527	483708.66	3755719.25	0.00482
483614.69	3755753.50	0.00445	483520.72	3755787.75	0.00412
483426.75	3755822.00	0.00384	483332.78	3755856.25	0.00357
483238.81	3755890.25	0.00334	483144.84	3755924.50	0.00314
483050.88	3755958.75	0.00296	482956.91	3755993.00	0.00279
482862.94	3756027.25	0.00264	482768.97	3756061.25	0.00250
482675.00	3756095.50	0.00237	482581.03	3756129.75	0.00226
482487.06	3756164.00	0.00215	482393.09	3756198.25	0.00206
482299.13	3756232.25	0.00196	482205.16	3756266.50	0.00188
484591.22	3755490.50	0.01496	484504.63	3755540.50	0.01132
484418.00	3755590.50	0.00914	484331.41	3755640.50	0.00765
484244.81	3755690.50	0.00656	484158.19	3755740.50	0.00572
484071.59	3755790.50	0.00505	483985.00	3755840.50	0.00451
483898.41	3755890.50	0.00407	483811.78	3755940.50	0.00369
483725.19	3755990.50	0.00338	483638.59	3756040.50	0.00311
483552.00	3756090.50	0.00287	483465.38	3756140.50	0.00266
483378.78	3756190.50	0.00247	483292.19	3756240.50	0.00231
483205.59	3756290.50	0.00216	483118.97	3756340.50	0.00203
483032.38	3756390.50	0.00191	482945.78	3756440.50	0.00181
482859.16	3756490.50	0.00171	482772.56	3756540.50	0.00162
482685.97	3756590.50	0.00155	482599.38	3756640.50	0.00147
482512.75	3756690.50	0.00141	482426.16	3756740.50	0.00134
484717.81	3755497.75	0.01424	484641.22	3755562.00	0.01002
484564.59	3755626.25	0.00762	484488.00	3755690.50	0.00605
484411.38	3755754.75	0.00494	484334.78	3755819.00	0.00412
484258.19	3755883.25	0.00348	484181.59	3755947.50	0.00298
484104.97	3756011.75	0.00258	484028.38	3756076.25	0.00225
483951.78	3756140.50	0.00198	483875.16	3756204.75	0.00176
483798.56	3756269.00	0.00157	483721.94	3756333.25	0.00141
483645.34	3756397.50	0.00128	483568.75	3756461.75	0.00116
483492.13	3756526.00	0.00105	483415.53	3756590.25	0.00096
483338.94	3756654.75	0.00089	483262.34	3756719.00	0.00082
483185.72	3756783.25	0.00075	483109.13	3756847.50	0.00070
483032.50	3756911.75	0.00065	482955.91	3756976.00	0.00060
482879.31	3757040.25	0.00056	482802.69	3757104.50	0.00053
482726.09	3757168.75	0.00049	484831.38	3755470.25	0.01730
484767.13	3755547.00	0.01058	484702.84	3755623.50	0.00723
484638.56	3755700.25	0.00522	484574.28	3755776.75	0.00392
484510.00	3755853.25	0.00304	484445.72	3755930.00	0.00241

*** ISCST3 - VERSION 02035 *** *** C:\Documents and Settings\staff\Desktop\06192 HRA\HRA.isc *** 10/08/09
*** West Ridge HRA *** 12:10:05

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484381.44	3756006.50	0.00195	484317.16	3756083.25	0.00161
484252.88	3756159.75	0.00135	484188.63	3756236.25	0.00115
484124.34	3756313.00	0.00098	484060.06	3756389.50	0.00086
483995.78	3756466.25	0.00075	483931.50	3756542.75	0.00067
483867.22	3756619.50	0.00060	483802.94	3756696.00	0.00055
483738.66	3756772.50	0.00050	483674.38	3756849.25	0.00046
483610.09	3756925.75	0.00042	483545.81	3757002.50	0.00039
483481.53	3757079.00	0.00036	483417.25	3757155.50	0.00034
483352.97	3757232.25	0.00032	483288.69	3757308.75	0.00030
483224.41	3757385.50	0.00028	483160.16	3757462.00	0.00027
483095.88	3757538.75	0.00025	484874.22	3755500.25	0.01371
484824.22	3755587.00	0.00813	484774.22	3755673.50	0.00527
484724.22	3755760.25	0.00363	484674.22	3755846.75	0.00262
484624.22	3755933.25	0.00196	484574.22	3756020.00	0.00150
484524.22	3756106.50	0.00119	484474.22	3756193.25	0.00097
484424.22	3756279.75	0.00081	484374.22	3756366.25	0.00069
484324.22	3756453.00	0.00060	484274.22	3756539.50	0.00053
484224.22	3756626.25	0.00048	484174.22	3756712.75	0.00043
484124.22	3756799.25	0.00039	484074.22	3756886.00	0.00036
484024.22	3756972.50	0.00033	483974.22	3757059.25	0.00030
483924.22	3757145.75	0.00028	483874.22	3757232.25	0.00026
483824.22	3757319.00	0.00024	483774.22	3757405.50	0.00023
483724.22	3757492.25	0.00021	483674.22	3757578.75	0.00020
483624.22	3757665.50	0.00019	483574.22	3757752.00	0.00018
483524.22	3757838.50	0.00017	484921.63	3755522.50	0.01143
484887.41	3755616.50	0.00632	484853.22	3755710.25	0.00397
484819.03	3755804.25	0.00266	484784.81	3755898.25	0.00185
484750.63	3755992.25	0.00135	484716.41	3756086.25	0.00105
484682.22	3756180.25	0.00085	484648.00	3756274.25	0.00071
484613.81	3756368.25	0.00061	484579.59	3756462.00	0.00053
484545.41	3756556.00	0.00046	484511.19	3756650.00	0.00041
484477.00	3756744.00	0.00036	484442.81	3756838.00	0.00033
484408.59	3756932.00	0.00030	484374.38	3757026.00	0.00027
484340.19	3757120.00	0.00025	484306.00	3757213.75	0.00023
484271.78	3757307.75	0.00021	484237.59	3757401.75	0.00019
484203.38	3757495.75	0.00018	484169.19	3757589.75	0.00017
484134.97	3757683.75	0.00016	484100.78	3757777.75	0.00015
484066.56	3757871.75	0.00014	484032.38	3757965.50	0.00013
483998.16	3758059.50	0.00013	484972.13	3755536.00	0.00981
484954.78	3755634.50	0.00521	484937.41	3755733.00	0.00318

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): NORTH , SOUTH , L0001206, L0001207, L0001208, L0001209, L0001210,
L0001211, L0001212, L0001213, L0001214, L0001215, L0001216, L0001217, L0001218, L0001219, L0001220, L0001221, L0001222,
L0001223, L0001224, L0001225, L0001226, L0001227, L0001228, L0001229, L0001230, L0001231, L0001232, L0001233, . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
484920.03	3755831.50	0.00202	484902.69	3755930.00	0.00140
484885.31	3756028.25	0.00106	484867.94	3756126.75	0.00085
484850.59	3756225.25	0.00070	484833.22	3756323.75	0.00059
484815.84	3756422.25	0.00051	484798.50	3756520.75	0.00044
484781.13	3756619.25	0.00039	484763.75	3756717.75	0.00035
484746.38	3756816.25	0.00032	484729.03	3756914.75	0.00029
484711.66	3757013.25	0.00026	484694.31	3757111.75	0.00024
484676.94	3757210.25	0.00022	484659.56	3757308.50	0.00021
484642.19	3757407.00	0.00020	484624.84	3757505.50	0.00018
484607.47	3757604.00	0.00017	484590.13	3757702.50	0.00016
484572.75	3757801.00	0.00015	484555.38	3757899.50	0.00015
484538.03	3757998.00	0.00014	484520.66	3758096.50	0.00013
484503.28	3758195.00	0.00013			

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** THE SUMMARY OF MAXIMUM ANNUAL (1 YRS) RESULTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	NETWORK RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	0.03401 AT (485400.13, 3755103.75, 0.00, 1.50)	DC	NA
	2ND HIGHEST VALUE IS	0.02893 AT (485418.16, 3755171.00, 0.00, 1.50)	DC	NA
	3RD HIGHEST VALUE IS	0.02833 AT (485424.22, 3755240.50, 0.00, 1.50)	DC	NA
	4TH HIGHEST VALUE IS	0.02704 AT (485217.06, 3755010.75, 0.00, 1.50)	DC	NA
	5TH HIGHEST VALUE IS	0.02684 AT (485324.22, 3755240.50, 0.00, 1.50)	DC	NA
	6TH HIGHEST VALUE IS	0.02683 AT (485418.16, 3755310.00, 0.00, 1.50)	DC	NA
	7TH HIGHEST VALUE IS	0.02555 AT (484677.81, 3755040.50, 0.00, 1.50)	DC	NA
	8TH HIGHEST VALUE IS	0.02372 AT (485457.25, 3754990.50, 0.00, 1.50)	DC	NA
	9TH HIGHEST VALUE IS	0.02359 AT (485268.91, 3755002.00, 0.00, 1.50)	DC	NA
	10TH HIGHEST VALUE IS	0.02353 AT (484648.34, 3755103.75, 0.00, 1.50)	DC	NA

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR
BD = BOUNDARY

CONC URBAN FLAT FLGPOL NOCALM NOCMPL

*** Message Summary : ISCST3 Model Execution ***

-------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 1398 Informational Message(s)

A Total of 1398 Calm Hours Identified

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
*** NONE ***

****
*** ISCST3 Finishes Successfully ***
****

ATTACHMENT B

EMISSIONS RATE AND RISK CALCULATIONS

AVERAGE EMISSION FACTOR
RIVERSIDE COUNTY 2011-2080

Speed	LHD2	MHD	HHD
0	0.80483	0.81603	0.26064
10	0.04871	0.30746	0.17806
25	0.02680	0.17001	0.09957

Speed	Weighted Average Emissions
0	**0.46505**
10	**0.19666**
25	**0.10943**

Year	Speed	LHD2	MHD	HHD
2011	0 mph	0.865	0.958	1.599
	10 mph	0.09	0.494	1.404
	25 mph	0.05	0.273	0.542
2012	0 mph	0.852	0.938	1.431
	10 mph	0.086	0.468	1.202
	25 mph	0.048	0.259	0.47
2013	0 mph	0.845	0.921	1.271
	10 mph	0.083	0.446	1.013
	25 mph	0.046	0.246	0.403
2014	0 mph	0.838	0.905	1.118
	10 mph	0.081	0.427	0.843
	25 mph	0.045	0.236	0.342
2015	0 mph	0.833	0.893	0.98
	10 mph	0.078	0.41	0.697
	25 mph	0.043	0.227	0.29
2016	0 mph	0.829	0.883	0.857
	10 mph	0.075	0.394	0.576
	25 mph	0.042	0.218	0.247
2017	0 mph	0.825	0.873	0.746
	10 mph	0.073	0.379	0.477
	25 mph	0.04	0.209	0.211
2018	0 mph	0.819	0.864	0.65
	10 mph	0.069	0.365	0.396
	25 mph	0.038	0.201	0.182
2019	0 mph	0.816	0.856	0.567
	10 mph	0.066	0.351	0.33
	25 mph	0.037	0.194	0.158
2020	0 mph	0.812	0.849	0.494
	10 mph	0.064	0.339	0.276
	25 mph	0.035	0.187	0.139
2021	0 mph	0.809	0.843	0.431
	10 mph	0.062	0.33	0.232
	25 mph	0.034	0.182	0.123
2022	0 mph	0.807	0.837	0.377
	10 mph	0.059	0.323	0.197
	25 mph	0.033	0.178	0.11
2023	0 mph	0.806	0.832	0.33
	10 mph	0.057	0.316	0.168
	25 mph	0.032	0.175	0.1
2024	0 mph	0.805	0.827	0.291
	10 mph	0.055	0.31	0.147
	25 mph	0.03	0.171	0.091
2025	0 mph	0.804	0.822	0.258
	10 mph	0.053	0.304	0.13
	25 mph	0.029	0.168	0.085

2026	0 mph	0.804	0.818	0.231
	10 mph	0.052	0.298	0.116
	25 mph	0.028	0.165	0.08
2027	0 mph	0.805	0.815	0.208
	10 mph	0.05	0.294	0.107
	25 mph	0.028	0.162	0.076
2028	0 mph	0.805	0.812	0.191
	10 mph	0.048	0.289	0.099
	25 mph	0.027	0.16	0.072
2029	0 mph	0.805	0.81	0.175
	10 mph	0.047	0.285	0.093
	25 mph	0.026	0.157	0.07
2030	0 mph	0.804	0.807	0.161
	10 mph	0.046	0.281	0.089
	25 mph	0.025	0.155	0.068
2031	0 mph	0.801	0.805	0.15
	10 mph	0.045	0.28	0.085
	25 mph	0.025	0.154	0.066
2032	0 mph	0.801	0.803	0.142
	10 mph	0.045	0.28	0.083
	25 mph	0.025	0.155	0.065
2033	0 mph	0.8	0.801	0.136
	10 mph	0.044	0.282	0.081
	25 mph	0.024	0.155	0.064
2034	0 mph	0.799	0.8	0.131
	10 mph	0.044	0.284	0.079
	25 mph	0.024	0.157	0.063
2035	0 mph	0.797	0.798	0.126
	10 mph	0.044	0.287	0.078
	25 mph	0.024	0.158	0.063
2036	0 mph	0.798	0.798	0.123
	10 mph	0.043	0.288	0.078
	25 mph	0.024	0.159	0.062
2037	0 mph	0.798	0.798	0.121
	10 mph	0.043	0.289	0.077
	25 mph	0.024	0.16	0.062
2038	0 mph	0.798	0.798	0.118
	10 mph	0.043	0.29	0.077
	25 mph	0.024	0.16	0.062
2039	0 mph	0.799	0.799	0.117
	10 mph	0.043	0.29	0.077
	25 mph	0.023	0.16	0.062
2040	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2041	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2042	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2043	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2044	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2045	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2046	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2047	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2048	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2049	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2050	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062

2051	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2052	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2053	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2054	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2055	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2056	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2057	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2058	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2059	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2060	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2061	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2062	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2063	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2064	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2065	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2066	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2067	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2068	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2069	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2070	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2071	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2072	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2073	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2074	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2075	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2076	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2077	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2078	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2079	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2080	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062

AVERAGE EMISSION FACTOR
RIVERSIDE COUNTY 2011-2050

Speed	LHD2	MHD	HHD
0	0.8092	0.8288	0.36988
10	0.05375	0.3213	0.25385
25	0.02965	0.17753	0.12775

Speed	Weighted Average Emissions
0	**0.53761**
10	**0.24851**
25	**0.12943**

Year	Speed	LHD2	MHD	HHD
2011	0 mph	0.865	0.958	1.599
	10 mph	0.09	0.494	1.404
	25 mph	0.05	0.273	0.542
2012	0 mph	0.852	0.938	1.431
	10 mph	0.086	0.468	1.202
	25 mph	0.048	0.259	0.47
2013	0 mph	0.845	0.921	1.271
	10 mph	0.083	0.446	1.013
	25 mph	0.046	0.246	0.403
2014	0 mph	0.838	0.905	1.118
	10 mph	0.081	0.427	0.843
	25 mph	0.045	0.236	0.342
2015	0 mph	0.833	0.893	0.98
	10 mph	0.078	0.41	0.697
	25 mph	0.043	0.227	0.29
2016	0 mph	0.829	0.883	0.857
	10 mph	0.075	0.394	0.576
	25 mph	0.042	0.218	0.247
2017	0 mph	0.825	0.873	0.746
	10 mph	0.073	0.379	0.477
	25 mph	0.04	0.209	0.211
2018	0 mph	0.819	0.864	0.65
	10 mph	0.069	0.365	0.396
	25 mph	0.038	0.201	0.182
2019	0 mph	0.816	0.856	0.567
	10 mph	0.066	0.351	0.33
	25 mph	0.037	0.194	0.158
2020	0 mph	0.812	0.849	0.494
	10 mph	0.064	0.339	0.276
	25 mph	0.035	0.187	0.139
2021	0 mph	0.809	0.843	0.431
	10 mph	0.062	0.33	0.232
	25 mph	0.034	0.182	0.123
2022	0 mph	0.807	0.837	0.377
	10 mph	0.059	0.323	0.197
	25 mph	0.033	0.178	0.11
2023	0 mph	0.806	0.832	0.33
	10 mph	0.057	0.316	0.168
	25 mph	0.032	0.175	0.1
2024	0 mph	0.805	0.827	0.291
	10 mph	0.055	0.31	0.147
	25 mph	0.03	0.171	0.091
2025	0 mph	0.804	0.822	0.258
	10 mph	0.053	0.304	0.13
	25 mph	0.029	0.168	0.085
2026	0 mph	0.804	0.818	0.231
	10 mph	0.052	0.298	0.116
	25 mph	0.028	0.165	0.08
2027	0 mph	0.805	0.815	0.208
	10 mph	0.05	0.294	0.107
	25 mph	0.028	0.162	0.076
2028	0 mph	0.805	0.812	0.191
	10 mph	0.048	0.289	0.099
	25 mph	0.027	0.16	0.072
2029	0 mph	0.805	0.81	0.175
	10 mph	0.047	0.285	0.093
	25 mph	0.026	0.157	0.07
2030	0 mph	0.804	0.807	0.161
	10 mph	0.046	0.281	0.089
	25 mph	0.025	0.155	0.068
2031	0 mph	0.801	0.805	0.15
	10 mph	0.045	0.28	0.085
	25 mph	0.025	0.154	0.066
2032	0 mph	0.801	0.803	0.142
	10 mph	0.045	0.28	0.083
	25 mph	0.025	0.155	0.065
2033	0 mph	0.8	0.801	0.136
	10 mph	0.044	0.282	0.081
	25 mph	0.024	0.155	0.064
2034	0 mph	0.799	0.8	0.131
	10 mph	0.044	0.284	0.079
	25 mph	0.024	0.157	0.063
2035	0 mph	0.797	0.798	0.126
	10 mph	0.044	0.287	0.078
	25 mph	0.024	0.158	0.063
2036	0 mph	0.798	0.798	0.123
	10 mph	0.043	0.288	0.078
	25 mph	0.024	0.159	0.062
2037	0 mph	0.798	0.798	0.121
	10 mph	0.043	0.289	0.077
	25 mph	0.024	0.16	0.062
2038	0 mph	0.798	0.798	0.118
	10 mph	0.043	0.29	0.077
	25 mph	0.024	0.16	0.062
2039	0 mph	0.799	0.799	0.117
	10 mph	0.043	0.29	0.077
	25 mph	0.023	0.16	0.062
2040	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062

2041	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2042	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2043	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2044	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062

2045	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2046	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2047	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2048	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2049	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062
2050	0 mph	0.799	0.799	0.115
	10 mph	0.042	0.289	0.077
	25 mph	0.023	0.16	0.062

Distribution Facility
(HHD Emissions)

OPERATIONAL RELATED ACTIVITY

On-Site Trucking Activity: Area

Vehicle Idle Time (sec)	900
Number of Daily Trucks	1

Emissions Factors[1]:

Particulates (PM10)

0.465048 Idle (g/hour)

Idle *Grams = (A x B)*

Where:

A = $EF_{(idle)}$

B = idle time (hrs)

Total 0.116 g/hour

Composite 0.116 g/hour

Model Emission Rate 3.2295E-05 g/sec/truck

Model Emission Rate 3.2295E-05 g/sec/day

Distribution Facility
(HHD Emissions)

OPERATIONAL RELATED ACTIVITY

On-Site Trucking Activity: Area (MITIGATED)

Vehicle Idle Time (sec)	180
Number of Daily Trucks	1

Emissions Factors[1]:

Particulates (PM10)

0.465048 Idle (g/hour)

Idle *Grams = (A x B)*

Where:

A = $EF_{(idle)}$

B = idle time (hrs)

Total 0.023 g/hour

Composite 0.023 g/hour

Model Emission Rate 6.459E-06 g/sec/truck

Model Emission Rate 6.459E-06 g/sec/day

Particulate (PM10)

Number of Sources	1
Link Length (meters)	1525.9
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.109

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	2.88E-05
Pollutant Emission Rate (gr/sec/source)	2.88E-05

Particulate (PM10)

Number of Sources	1
Link Length (meters)	47.3
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.197

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	1.61E-06
Pollutant Emission Rate (gr/sec/source)	1.61E-06

Particulate (PM10)

Number of Sources	1
Link Length (meters)	313.8
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.197

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	1.07E-05
Pollutant Emission Rate (gr/sec/source)	1.07E-05

Particulate (PM10)

Number of Sources	1
Link Length (meters)	490.9
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.109

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	9.27E-06
Pollutant Emission Rate (gr/sec/source)	9.27E-06

Particulate (PM10)

Number of Sources	1
Link Length (meters)	74.9
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.197

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	2.54E-06
Pollutant Emission Rate (gr/sec/source)	2.54E-06

Particulate (PM10)

Number of Sources	1
Link Length (meters)	72.2
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.197

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	2.45E-06
Pollutant Emission Rate (gr/sec/source)	2.45E-06

Particulate (PM10)

Number of Sources	1
Link Length (meters)	332
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.197

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	1.13E-05
Pollutant Emission Rate (gr/sec/source)	1.13E-05

Particulate (PM10)

Number of Sources	1
Link Length (meters)	646.3
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.109

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	1.22E-05
Pollutant Emission Rate (gr/sec/source)	1.22E-05

Distribution Facility
(HHD Emissions)

OPERATIONAL RELATED ACTIVITY

On-Site Trucking Activity: Area

Vehicle Idle Time (sec)	900
Number of Daily Trucks	1

Emissions Factors[1]:

Particulates (PM10)

0.537606 Idle (g/hour)

Idle *Grams = (A x B)*

Where:

A = $EF_{(idle)}$

B = idle time (hrs)

Total 0.134 g/hour

Composite 0.134 g/hour

Model Emission Rate 3.73338E-05 g/sec/truck

Model Emission Rate 3.73338E-05 g/sec/day

Distribution Facility
(HHD Emissions)

OPERATIONAL RELATED ACTIVITY

On-Site Trucking Activity: Area (MITIGATED)

Vehicle Idle Time (sec)	180
Number of Daily Trucks	1

Emissions Factors[1]:

Particulates (PM10)

0.537606 Idle (g/hour)

Idle *Grams = (A x B)*

Where:

A = $EF_{(idle)}$

B = idle time (hrs)

Total 0.027 g/hour

Composite 0.027 g/hour

Model Emission Rate 7.46675E-06 g/sec/truck

Model Emission Rate 7.46675E-06 g/sec/day

Particulate (PM10)

Number of Sources	1
Link Length (meters)	1525.9
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.129

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	3.41E-05
Pollutant Emission Rate (gr/sec/source)	3.41E-05

Particulate (PM10)

Number of Sources	1
Link Length (meters)	47.3
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.249

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	2.03E-06
Pollutant Emission Rate (gr/sec/source)	2.03E-06

Particulate (PM10)

Number of Sources	1
Link Length (meters)	313.8
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.249

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	1.35E-05
Pollutant Emission Rate (gr/sec/source)	1.35E-05

Particulate (PM10)

Number of Sources	1
Link Length (meters)	490.9
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.129

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	1.10E-05
Pollutant Emission Rate (gr/sec/source)	1.10E-05

Particulate (PM10)

Number of Sources	1
Link Length (meters)	74.9
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.249

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	3.21E-06
Pollutant Emission Rate (gr/sec/source)	3.21E-06

Particulate (PM10)

Number of Sources	1
Link Length (meters)	72.2
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.249

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	3.10E-06
Pollutant Emission Rate (gr/sec/source)	3.10E-06

Particulate (PM10)

Number of Sources	1
Link Length (meters)	332
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.249

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	1.42E-05
Pollutant Emission Rate (gr/sec/source)	1.42E-05

Particulate (PM10)

Number of Sources	1
Link Length (meters)	646.3
Volume/Baseline (VPH)	1
PM10 Vehicular Mass Emission Rate (gr/mi)	0.129

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	1.44E-05
Pollutant Emission Rate (gr/sec/source)	1.44E-05

UNMITIGATED

QUANTIFICATION OF CARCINOGENIC RISKS AND NONCARCINOGENIC HAZARDS

PMI RESIDENTIAL EXPOSURE SCENARIO (70-YEAR)

Source	Maximum Concentration		Weight Fraction	Contaminant	Carcinogenic Risk			Noncarcinogenic Hazards		
	(ug/m3)	(mg/m3)			URF (ug/m3)	CPF (mg/kg/day)	RISK	REL (ug/m3)	RfD (mg/kg/day)	Index
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Diesel	0.0441	4.4E-05	1.00E+00	Particulates	3.0E-04	1.1E+00	13.4	5.0E+00	1.4E-03	8.8E-03

Note: Exposure factors used to calculate contaminant intake

Exposure Frequency (days/year)	350
Exposure Duration (years)	70
Inhalation Rate (m3/day)*	21.14
Average Body Weight (kg)	70
Averaging Time $_{(cancer)}$ (days)	25550
Averaging Time $_{(non\text{-}cancer)}$ (days)	25550

*Inhalation Rate of 21.14 m3/day equates to the ARB breathing 302 liters per kilogram-day

E= 10^{X}, i.e. E-02 = 10^{-2}

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MITIGATED

QUANTIFICATION OF CARCINOGENIC RISKS AND NONCARCINOGENIC HAZARDS

PMI RESIDENTIAL EXPOSURE SCENARIO (70-YEAR)

Source	Maximum Concentration		Weight Fraction	Contaminant	Carcinogenic Risk			Noncarcinogenic Hazards		
	(ug/m3)	(mg/m3)			URF (ug/m3)	CPF (mg/kg/day)	RISK	REL (ug/m3)	RfD (mg/kg/day)	Index
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Diesel	0.02842	2.8E-05	1.00E+00	Particulates	3.0E-04	1.1E+00	8.6	5.0E+00	1.4E-03	5.7E-03

Note: Exposure factors used to calculate contaminant intake

Exposure Frequency (days/year)	350
Exposure Duration (years)	70
Inhalation Rate (m3/day)*	21.14
Average Body Weight (kg)	70
Averaging Time $_{(cancer)}$ (days)	25550
Averaging Time $_{(non\text{-}cancer)}$ (days)	25550

*Inhalation Rate of 21.14 m3/day equates to the ARB breathing 302 liters per kilogram-day

$E= 10^{X}$, i.e. E-02 = 10^{-2}

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UNMITIGATED

QUANTIFICATION OF CARCINOGENIC RISKS AND NONCARCINOGENIC HAZARDS

RESIDENTIAL EXPOSURE SCENARIO (70-YEAR)

Source	Maximum Concentration		Weight Fraction	Contaminant	Carcinogenic Risk			Noncarcinogenic Hazards		
	(ug/m3)	(mg/m3)			URF (ug/m3)	CPF (mg/kg/day)	RISK	REL (ug/m3)	RfD (mg/kg/day)	Index
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Diesel	0.03309	3.3E-05	1.00E+00	Particulates	3.0E-04	1.1E+00	10.1	5.0E+00	1.4E-03	6.6E-03

Note: Exposure factors used to calculate contaminant intake

Exposure Frequency (days/year)	350
Exposure Duration (years)	70
Inhalation Rate (m3/day)*	21.14
Average Body Weight (kg)	70
Averaging Time $_{(cancer)}$ (days)	25550
Averaging Time $_{(non\text{-}cancer)}$ (days)	25550

*Inhalation Rate of 21.14 m3/day equates to the ARB breathing 302 liters per kilogram-day

E= 10^{X}, i.e. E-02 = 10^{-2}

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MITIGATED

QUANTIFICATION OF CARCINOGENIC RISKS AND NONCARCINOGENIC HAZARDS

RESIDENTIAL EXPOSURE SCENARIO (70-YEAR)

Source	Maximum Concentration		Weight Fraction	Contaminant	Carcinogenic Risk			Noncarcinogenic Hazards		
	(ug/m3)	(mg/m3)			URF (ug/m3)	CPF (mg/kg/day)	RISK	REL (ug/m3)	RfD (mg/kg/day)	Index
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Diesel	0.02275	2.3E-05	1.00E+00	Particulates	3.0E-04	1.1E+00	6.9	5.0E+00	1.4E-03	4.6E-03

Note: Exposure factors used to calculate contaminant intake

Exposure Frequency (days/year)	350
Exposure Duration (years)	70
Inhalation Rate (m3/day)*	21.14
Average Body Weight (kg)	70
Averaging Time $_{(cancer)}$ (days)	25550
Averaging Time $_{(non\text{-}cancer)}$ (days)	25550

*Inhalation Rate of 21.14 m3/day equates to the ARB breathing 302 liters per kilogram-day

$E= 10^{X}$, i.e. E-02 = 10^{-2}

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UNMITIGATED

QUANTIFICATION OF CARCINOGENIC RISKS AND NONCARCINOGENIC HAZARDS

WORKER EXPOSURE SCENARIO 40-YEAR EXPOSURE

Source	Maximum Concentration		Weight Fraction	Contaminant	Carcinogenic Risk			Noncarcinogenic Hazards		
	(ug/m3)	(mg/m3)			URF (ug/m3)	CPF (mg/kg/day)	RISK	REL (ug/m3)	RfD (mg/kg/day)	Index
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Diesel	0.05145	5.1E-05	1.00E+00	Particulates	3.0E-04	1.1E+00	3.1	5.0E+00	1.4E-03	1.0E-02

Note: Exposure factors used to calculate contaminant intake

Exposure Frequency (days/year)	245
Exposure Duration (years)	40
Inhalation Rate (m3/day)*	10.43
Average Body Weight (kg)	70
Averaging Time $_{(cancer)}$ (days)	25550
Averaging Time $_{(non\text{-}cancer)}$ (days)	14600

*Inhalation Rate of 10.43 m3/day equates to the ARB breathing 149 liters per kilogram-day

E= 10^{X}, i.e. E-02 = 10^{-2}

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MITIGATED

QUANTIFICATION OF CARCINOGENIC RISKS AND NONCARCINOGENIC HAZARDS

WORKER EXPOSURE SCENARIO 40-YEAR EXPOSURE

Source	Maximum Concentration		Weight Fraction	Contaminant	Carcinogenic Risk			Noncarcinogenic Hazards		
	(ug/m3)	(mg/m3)			URF (ug/m3)	CPF (mg/kg/day)	RISK	REL (ug/m3)	RfD (mg/kg/day)	Index
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Diesel	0.03401	3.4E-05	1.00E+00	Particulates	3.0E-04	1.1E+00	2.0	5.0E+00	1.4E-03	6.8E-03

Note: Exposure factors used to calculate contaminant intake

Exposure Frequency (days/year)	245
Exposure Duration (years)	40
Inhalation Rate (m3/day)*	10.43
Average Body Weight (kg)	70
Averaging Time $_{(cancer)}$ (days)	25550
Averaging Time $_{(non\text{-}cancer)}$ (days)	14600

*Inhalation Rate of 10.43 m3/day equates to the ARB breathing 149 liters per kilogram-day

E= 10^{X}, i.e. E-02 = 10^{-2}

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MSHCP Consistency Analysis and Burrowing Owl Habitat Assessment and Focused Survey for the Eucalyptus Industrial Development (PA07-0083)

City of Moreno Valley, County of Riverside, California

Total Area Surveyed: 121.33 Acres. Sunnymead USGS 7.5-minute Topographic Map, Township 3 South, Range 3 West, Section 2. Survey Dates: July 1, 11, 12, 13, 14, 2011.

Prepared for:

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July 2011

ICF International. 2011. *MSHCP Consistency Analysis and Burrowing Owl Habitat Assessment and Focused Survey for the Eucalyptus Industrial Development*. July. (ICF 00442.11.) Redlands, CA. Prepared for Prologis, Newport Beach, CA.

Contents

Tables and Figures

Table

Figure **Follows Page**

Acronyms and Abbreviations

CBOC	California Burrowing Owl Consortium
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
FESA	federal Endangered Species Act
GIS	geographic information systems
GPS	Global Positioning System
MBTA	Migratory Bird Treaty Act
MSHCP	Multiple Species Habitat Conservation Plan
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

Chapter 1
Introduction

This report contains the results of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis and the burrowing owl (*Athene cunicularia hypugaea*) habitat assessment and focused survey that took place on a 121.33-acre property located in the city of Moreno Valley, Riverside County, California. The property, hereinafter referred to as project site, is within the Reche Canyon/Badlands Area Plan of the MSHCP; however, it does not fall within any criteria cells.

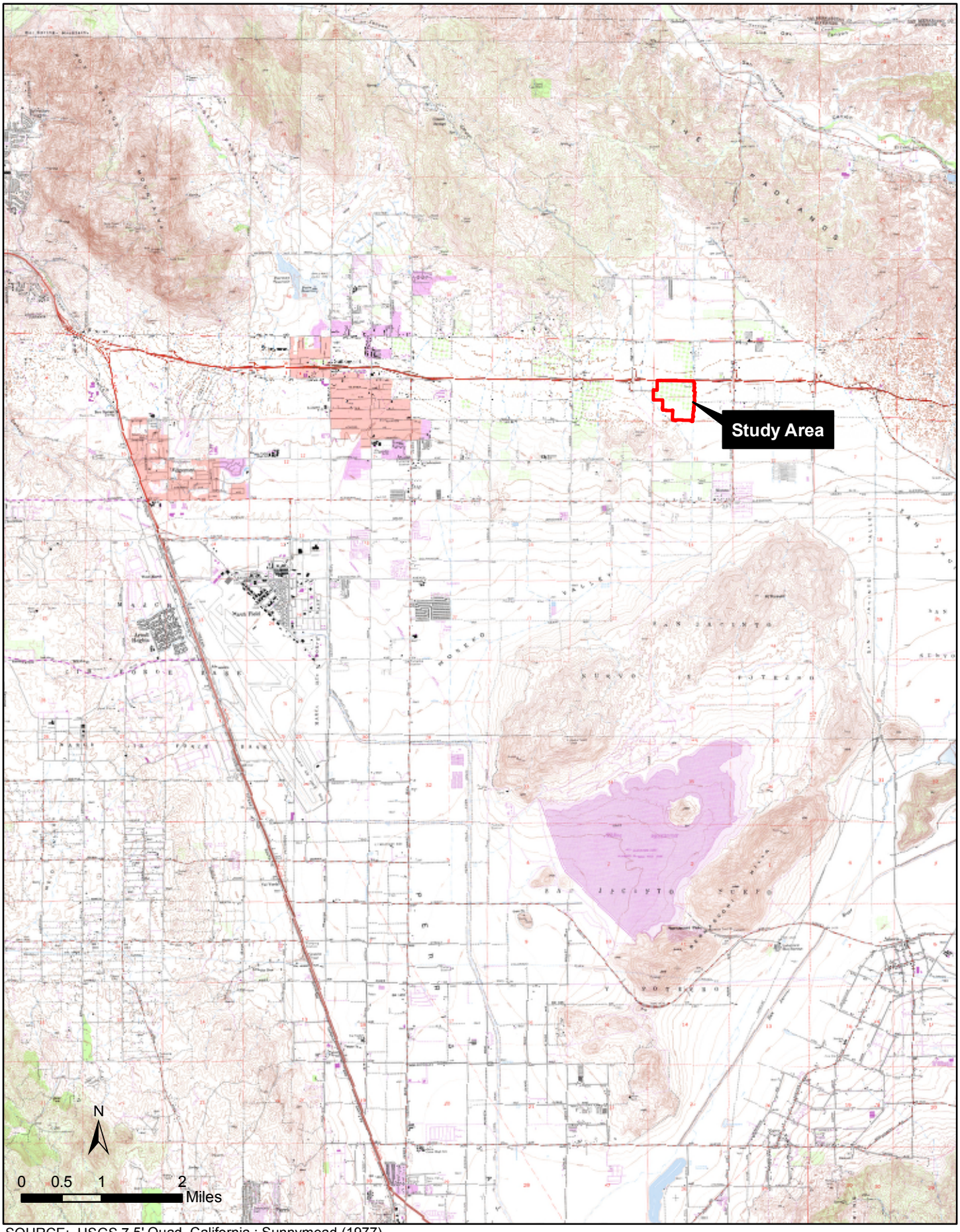
1.1 Project Location

The project site consists of approximately 121.33 acres which are identified as Assessor's Parcel Numbers (APNs) 488-330-011, -012, -013, -017, -018, -019, -022, -023, and -024. Pettit Street forms part of the western boundary of the project site, Fir Avenue forms part of the southern boundary, the Moreno Valley Freeway (SR 60) forms the northern boundary, and an unnamed drainage borders the eastern boundary. The project site is located in Township 3 South, Range 3 West, Section 2 of the Sunnymead U.S. Geological Survey (USGS) 7.5-minute topographic map (1980) (refer to Figure 1 and Figure 2).

1.2 Project Site Description

The ProLogis Park facility proposes 2,244,638 square feet of industrial uses. The proposed project site consists of approximately 121.29 acres and is located directly south of SR 60 between Pettit Street and Quincy Street (refer to Figure 3). Development in the northern portion of the project site, south of SR 60 and north of Eucalyptus Avenue, would provide approximately 1,030,377 square feet of industrial space within two buildings. Development in the southern portion of the site, south of Eucalyptus Avenue, would provide approximately 1,214,261 square feet of industrial space within four buildings.

Stormwater runoff would be routed and treated through and by a combination of detention basins, vegetated swales, and sand filters. These detention basins, swales, and sand filters would also be used to detain the incremental increase in flows as well as handle Water Quality Management Plan (WQMP) treatment requirements per the City of Moreno Valley. Landscape improvements would be installed throughout the parking area and would utilize a varied selection of low-water-demand plants and include a water-efficient irrigation system. As part of the proposed project, water quality basins would be developed along the southern portions of Building 1, Building 2, Building 4, Building 5, and Building 6. A bridge would also be built across Quincy Channel to connect the existing Eucalyptus Avenue to the adjacent parcel (Figure 3). Appendix C contains photographs of the project site.



SOURCE: USGS 7.5' Quad, California : Sunnymead (1977)

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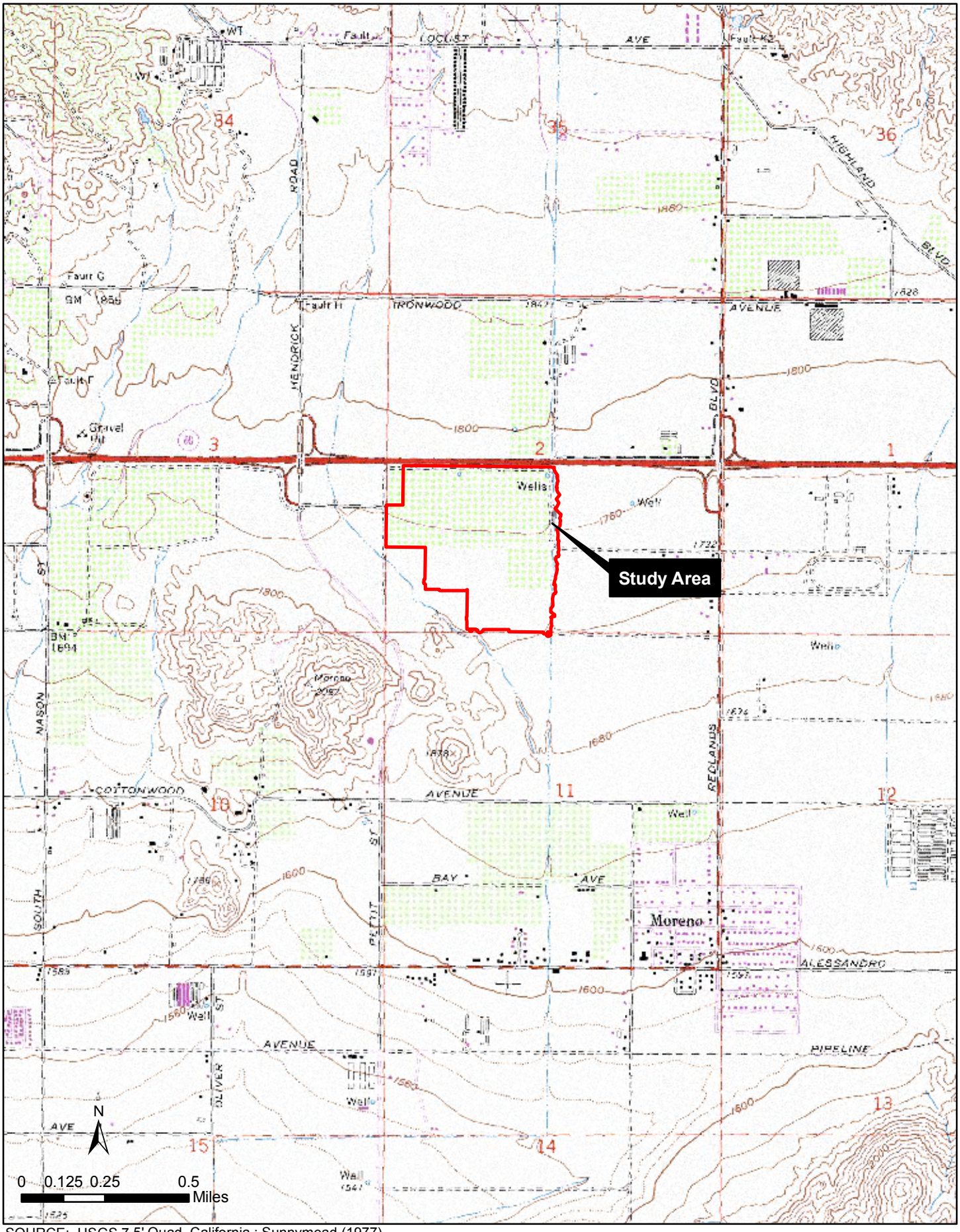
Figure 1
Regional Vicinity Map
ProLogis Eucalyptus Project



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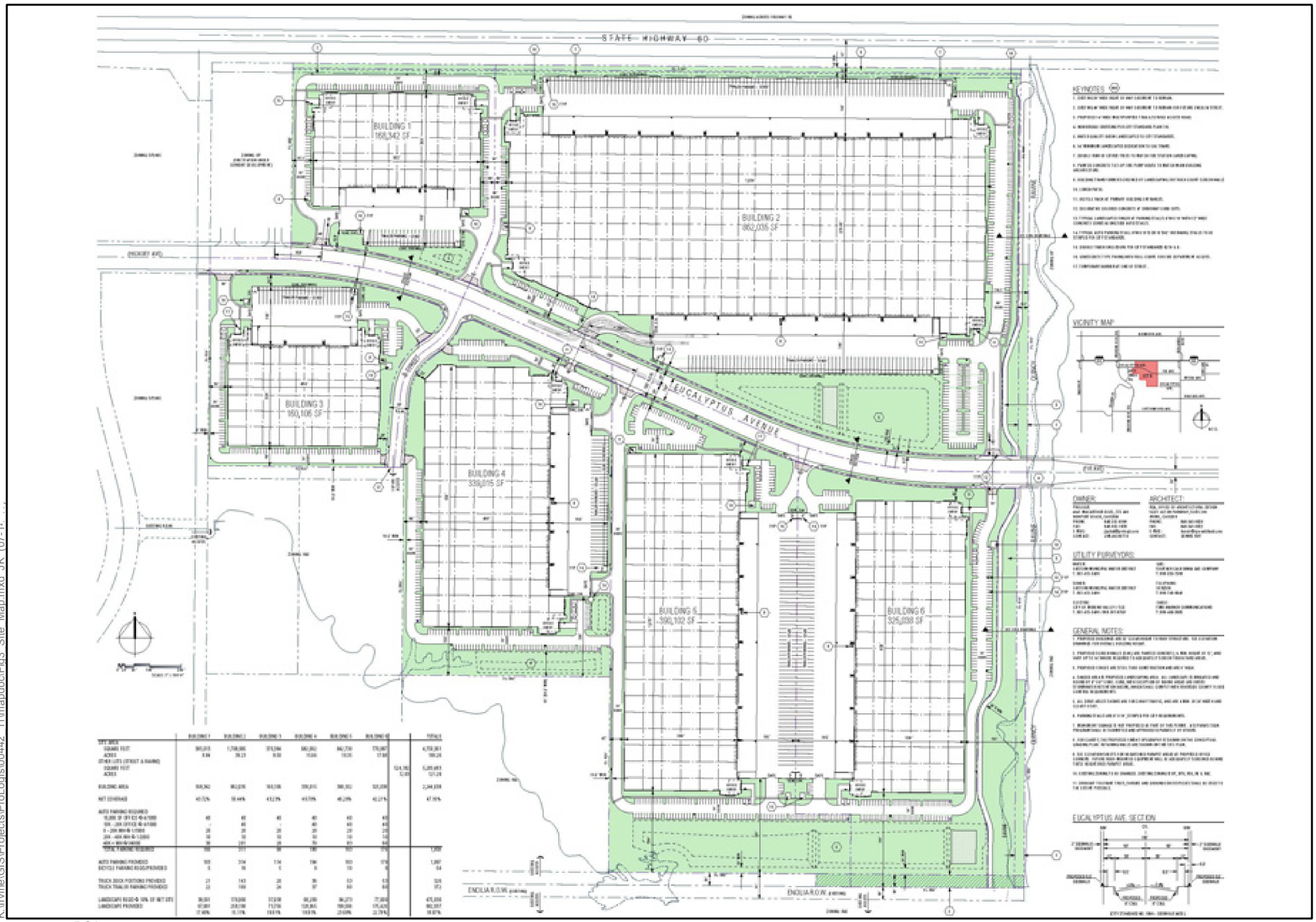
SOURCE: USGS 7.5' Quad, California : Sunnymead (1977)

Figure 2
USGS Map
ProLogis Eucalyptus Project



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SOURCE: RGA

ICF INTERNATIONAL

Figure 3
Site Map
ProLogis Eucalyptus Project

Chapter 2
Methodology

2.1 Habitat Assessment

2.1.1 Literature Review

Prior to the field visit, a literature review was conducted to evaluate environmental conditions on the project site. The literature reviewed included the U.S. Department of Agriculture Soil Survey (1971). In addition, the Riverside County Integrated Project Conservation Summary Report (Riverside County Land Information System 2011) was reviewed to assess the habitat and determine survey requirements for the site (Appendix A). To ensure consistency with the requirements set forth in the Western Riverside County MSHCP (Riverside County 2003), including survey requirements for inadequately covered species, the project site was assessed, and geographic information systems (GIS) software was used to map the site in relation to MSHCP areas, including criteria cells, conservation areas, and wildlife movement corridors and linkages; survey areas for plant, bird, mammal, and amphibian species; and the narrow endemic plant survey area.

The MSHCP requires an assessment to determine the potentially significant effects of a project on riparian/riverine areas and vernal pools. According to the MSHCP, documentation for the assessment should include mapping and a description of the functions and values of the mapped areas with respect to the species listed in MSHCP Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools. To that end, the California Natural Diversity Database (California Department of Fish and Game 2011a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPS 2011a) were consulted for the project site and a 5-mile radius. CNPS species descriptions were also reviewed (CNPS 2011b). The MSHCP was also reviewed to determine habitat assessment requirements as well as the habitat suitability elements for sensitive wildlife species, narrow endemic plant species, and criteria area plant species. The primary objective of the review was to determine the potential for suitable habitat for sensitive plant and wildlife species to be present and the applicability of other MSHCP and California Environmental Quality Act (CEQA) biological resource requirements.

2.1.2 Jurisdictional Areas

A formal assessment and delineation of jurisdictional waters and wetlands was conducted and a report was prepared, which is provided under separate cover (ICF International [ICF] 2011). Methodologies practiced during the delineation of jurisdictional waters and wetlands are detailed in the report.

2.1.3 General Biological Resources Field Investigation

Mikael Romich, biologist for ICF, performed a habitat assessment of the project site on July 1, 2011, between the hours of 6:00 a.m. and 9:00 a.m. Weather conditions were favorable, with clear skies, no appreciable wind, and a temperature of 52 degrees Fahrenheit. The physical parameters assessed included vegetation composition, soil substrate conditions, slope, aspect, hydrology, and disturbance to the land. Special attention was directed toward determining the plant communities that occur on

and in the immediate vicinity of the project site in an effort to qualify its suitability for the sensitive plant and wildlife species that are known to occur in the region.

ICF conducted a riparian/riverine habitat assessment of the project site concurrent with the jurisdictional field delineation (June 30, 2011). The riparian/riverine habitat assessment focused on all drainage features on the project site. Special attention was directed toward features that meet the minimum criteria to be considered riparian/riverine habitat per the definition provided within the MSHCP. All targeted drainage features were carefully inspected to verify the presence of riparian habitat characteristics and evaluate their ability to support associated species (e.g., dominant hydrophytic vegetation, suitable topography and hydrology, and suitable soil substrate). Hydrophytic vegetation in riparian habitats typically consists of trees, shrubs, persistent emergents, or emergent mosses and lichens that occur within or near permanent watersheds or occupy areas with moist soils that occur nearby a freshwater source, as defined in Section 6.1.2 of the MSHCP (page 6-21). The assessment was based on an analysis of the functions and values of these features, including hydrologic regime, flood storage and flood flow modification, nutrient retention and transformation, sediment trapping and transport, toxicant trapping, public use, wildlife habitat, and aquatic habitat.

Plant communities within the project site were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities within the project site were classified according to descriptions provided in Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (1986 and 1992 update).

Common plant species observed during the field survey were identified by visual characteristics and morphology and recorded in a field notebook. Unusual and less familiar plants were identified in the office using taxonomical guides. A comprehensive list of all plant species observed on the project site was compiled from the survey data and is provided in Appendix B of this report.

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded in a field notebook. Field guides were used to assist with identification of species during surveys. Although common names of wildlife species are fairly well standardized, scientific names are used in this report and are provided in Appendix B.

Representative photographs of the study area are provided in Appendix C.

Taxonomy and nomenclature used in this report follow Hickman (1993) for plants, Collins and Taggart (2009) for native herpetiles (amphibians, reptiles, and relatives), American Ornithologists' Union (1998) and 2010 supplement for birds, and Wilson and Reeder (2005) for mammals. . In this report, scientific names are provided immediately following common names of plant species for the first reference only.

2.1.4 Burrowing Owl Habitat Assessment and Focused Survey

2.1.4.1 Habitat Assessment and Burrow Mapping

Mikael Romich, biologist for ICF, performed a habitat assessment and burrow mapping for burrowing owl on the project site on July 1, 2011, between the hours of 6:00 a.m. and 9:00 a.m. Weather conditions were favorable, with clear skies, no appreciable wind, and a temperature of 52 degrees Fahrenheit.

Habitat assessment and burrow mapping used a systematic approach to survey burrows. This involved walking through potentially suitable habitat within the survey area (i.e., the project site and a 500-foot buffer, where accessible) to have 100 percent visual coverage of the ground surface. The distance between transect center lines was no more than 30 meters (approximately 100 feet), which was reduced to account for differences in terrain, vegetation density, and ground surface visibility. The locations of all suitable burrowing owl habitat, potential owl burrows, burrowing owl sign, and any owls observed were recorded and mapped, including Global Positioning System (GPS) coordinates. Natural or man-made structures and debris piles that could support burrowing owls were also noted and mapped. Soil conditions, topography, vegetative communities, and habitat quality were also documented. All encountered burrows were checked for the presence of feathers, scat, pellets, tracks, or other indications of use by burrowing owls.

2.1.4.2 Focused Survey

Instructions for burrowing owl surveys from the Western Riverside MSHCP (March 29, 2006) were followed. Four site visits occurred during the nesting season (March through August). Surveys were conducted from 2 hours before sunset to 1 hour after or from 1 hour before sunrise to 2 hours after and during weather that was conducive to observing owls outside their burrows and detecting burrowing owl sign. Surveys are not conducted during rain, high winds (> 20 mph), dense fog, or temperatures above 90 degrees Fahrenheit. All areas within the project site and a 500-foot buffer where suitable habitat and mapped burrows occur were included in the focused survey. Table 1 summarizes the focused burrowing owl surveys.

Table 1. Date, Time, and Conditions for Burrowing Owl Focused Surveys

Date	Time	Biologist	Conditions
7/1/2011	0740 to 1050	Mikael Romich	Temperature 72°F to 85°F, high fog, calm, visibility very good, no dew
7/11/2011	0550 to 0735	Mikael Romich	Temperature 60°F, high fog, calm, visibility good, no dew, sunrise at 0546
7/12/2011	0550 to 0800	Mikael Romich	Temperature 61°F, high fog, calm, visibility good, no dew, sunrise at 0547
7/13/2011	0545 to 0750	Lisa Franklin	Temperature 62°F, high fog, calm, visibility good, no dew, sunrise at 0547
7/14/2011	0540 to 0740	Lisa Franklin	Temperature 60°F, high fog, calm, visibility good, no dew, sunrise at 0548

Chapter 3
Existing Conditions

3.1 Topography and Soils

The project site is located within the Moreno Valley, south of the Badlands. Overall, it is relatively flat, with a slight southward grade. The elevation range is approximately 1,724 to 1,788 feet above mean sea level. The dominant vegetation on the site consists of agricultural (citrus) and ruderal species. Two unnamed blue-line streams occur on and near the project site, on both the western and eastern boundaries.

The site is mapped as containing six separate soil-mapping units belonging to three separate soil series (Figure 4). A soil series is a group of soils with similar profiles. These profiles include major horizons with similar thicknesses, arrangements, and other important characteristics. The site is mapped as being dominated by San Emigdio loam. The site is also mapped as containing Hanford coarse sandy loam and Metz loamy fine sand (U.S. Department of Agriculture 1971). No other mapped soil series is present on site. The observed surface soils on the project site contain evidence of heavy disturbance from agriculturally related activities.

The San Emigdio series consists of very deep, well-drained soils that formed in predominantly sedimentary alluvium. San Emigdio soils are on fans and floodplains and have slopes of 0 to 15 percent. The Hanford series consists of very deep, well-drained soils that formed in moderately coarse textured alluvium, predominantly from granite. Hanford soils are on stream bottoms, floodplains, and alluvial fans and have slopes of 0 to 15 percent. The Metz series consists of very deep, somewhat excessively drained soils that formed in alluvial material from mixed but predominantly sedimentary rocks. Metz soils are on floodplains and alluvial fans and have slopes of 0 to 15 percent.

None of the soils present are considered sensitive by the MSHCP.

3.2 Plant Communities

Figure 5 shows that the project site consists of four plant communities: agriculture, ruderal, non-native grassland, and mule fat scrub. See Appendix B for a complete list of plant species identified in the study area, including nonnative and invasive species.

3.2.1 Agriculture

The northern and eastern 55.67 acres of the project site contains citrus trees (orange and grapefruit). They are currently leafy and green.

3.2.2 Ruderal

The 48.15-acre ruderal plant community on the project site is dominated by weedy vegetation, which is typically associated with past disturbance. Disturbances that create ruderal areas are commonly a result of anthropogenic impacts or, as is the case in this situation, attributed to past

agricultural activities and regular disking (the site was partially disked between July 1 and 11). The ruderal plant community on the project site is dominated by several mustard species (*Brassica* spp.), annual bur ragweed (*Ambrosia acanthicarpa*), Russian thistle (*Salsola tragus*), cheeseweed (*Malva parviflora*), and non-native grass species.

3.2.3 Non-Native Grassland

Non-native grassland, a prevalent community throughout California, is generally characterized by a dense-to-sparse cover of non-native annual grasses and often associated with numerous weedy species as well as some native annual forbs, such as wildflowers that emerge, especially in years of plentiful rain. Seed germination occurs with the onset of winter rains. Some plant growth occurs in winter, but most growth and flowering occurs in the spring. Plants then die in the summer but persist as seeds in the uppermost layers of the soil until the next rainy season. Dominant plant species typically found within non-native grassland include bromes (*Bromus* spp.), wild oats (*Avena* spp.), fescues (*Vulpia* spp.), and barleys (*Hordeum* spp.).

Non-native grassland occurs on 18.45 acres in the southern portion of the project site. Because of the presence of wild oat species, this may have been part of an agricultural crop in the past.

3.2.4 Disturbed Mule Fat Scrub

A degraded drainage channel occurs along the eastern boundary of the project site. It appears to be severely eroded, perhaps a result of nearby agricultural activities. The area is heavily disturbed and contains a number of non-native species, including Peruvian pepper (*Schinus molle*), tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), eucalyptus (*Eucalyptus* spp.), and tree of heaven (*Ailanthus altissima*). However, patches of mule fat (*Baccharis salicifolia*), one Goodding's black willow tree (*Salix gooddingii*), and several California black walnuts (*Jugulans californica*) also occur within the drainage. In addition, large amounts of trash are found within and adjacent to the drainage. In total, approximately 4.59 acres of disturbed mule fat vegetation overlaps the project site.

3.2.5 Non-Native Woodland

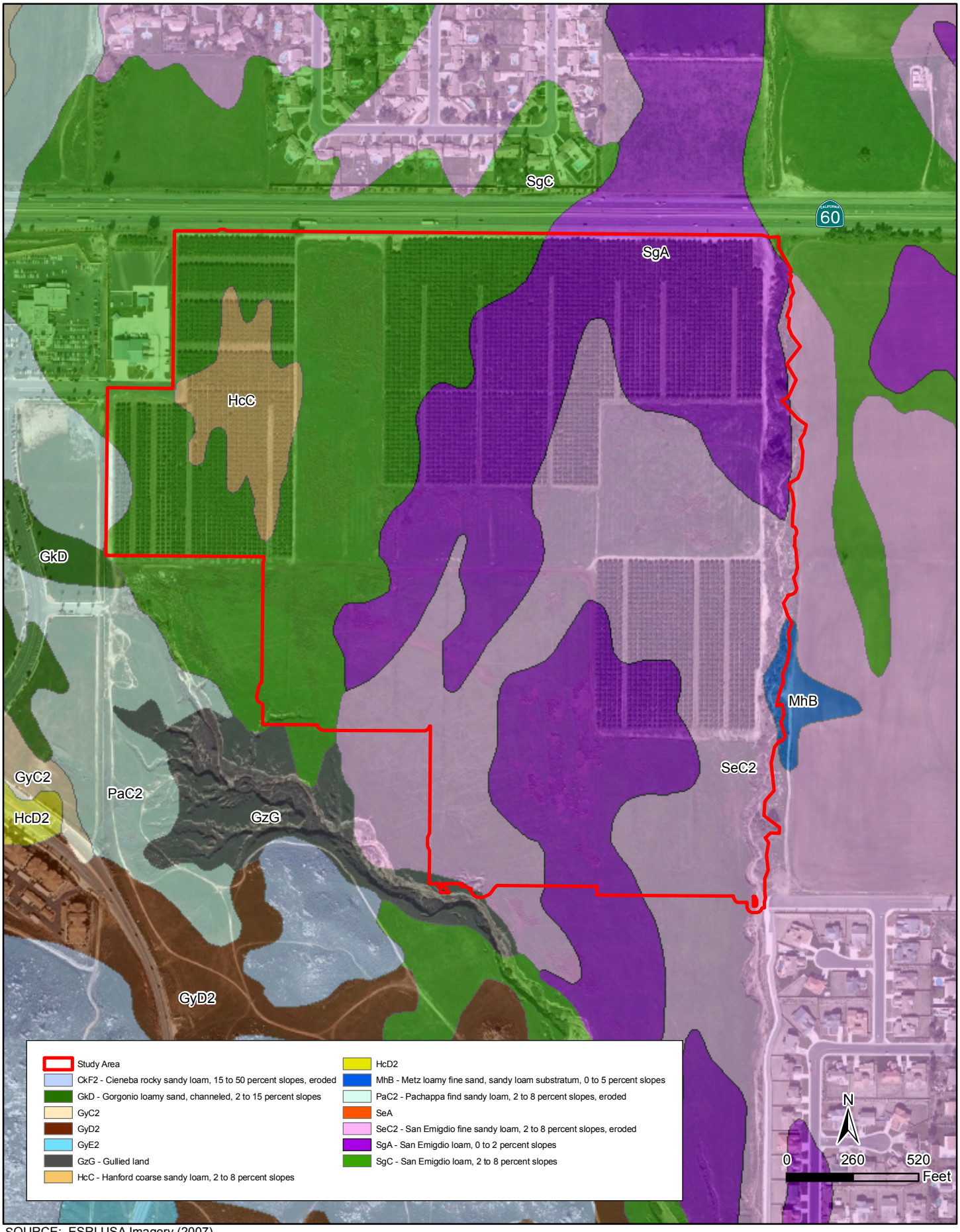
Several patches of non-native woodland occur within and adjacent to the degraded drainage channel. These consist of eucalyptus trees and Peruvian pepper. Non-native woodland occurs on approximately 0.06 acre of the project site.

3.2.6 Unvegetated Streambed

Several patches of sands with little to very sparse vegetation occur within the drainage channel that occurs along the eastern boundary of the project site. For the purposes of this report these have been classified as unvegetated streambed. Unvegetated streambed occurs on approximately 0.08 acre of the project site.

3.2.7 Channel-Upland Vegetation

There are several eroded channels that occur within the project site on the western boundary. These are somewhat steep sided and are dominated by upland species, predominantly non-native grassland, that are interspersed with open unvegetated areas. For the purposes of this report these



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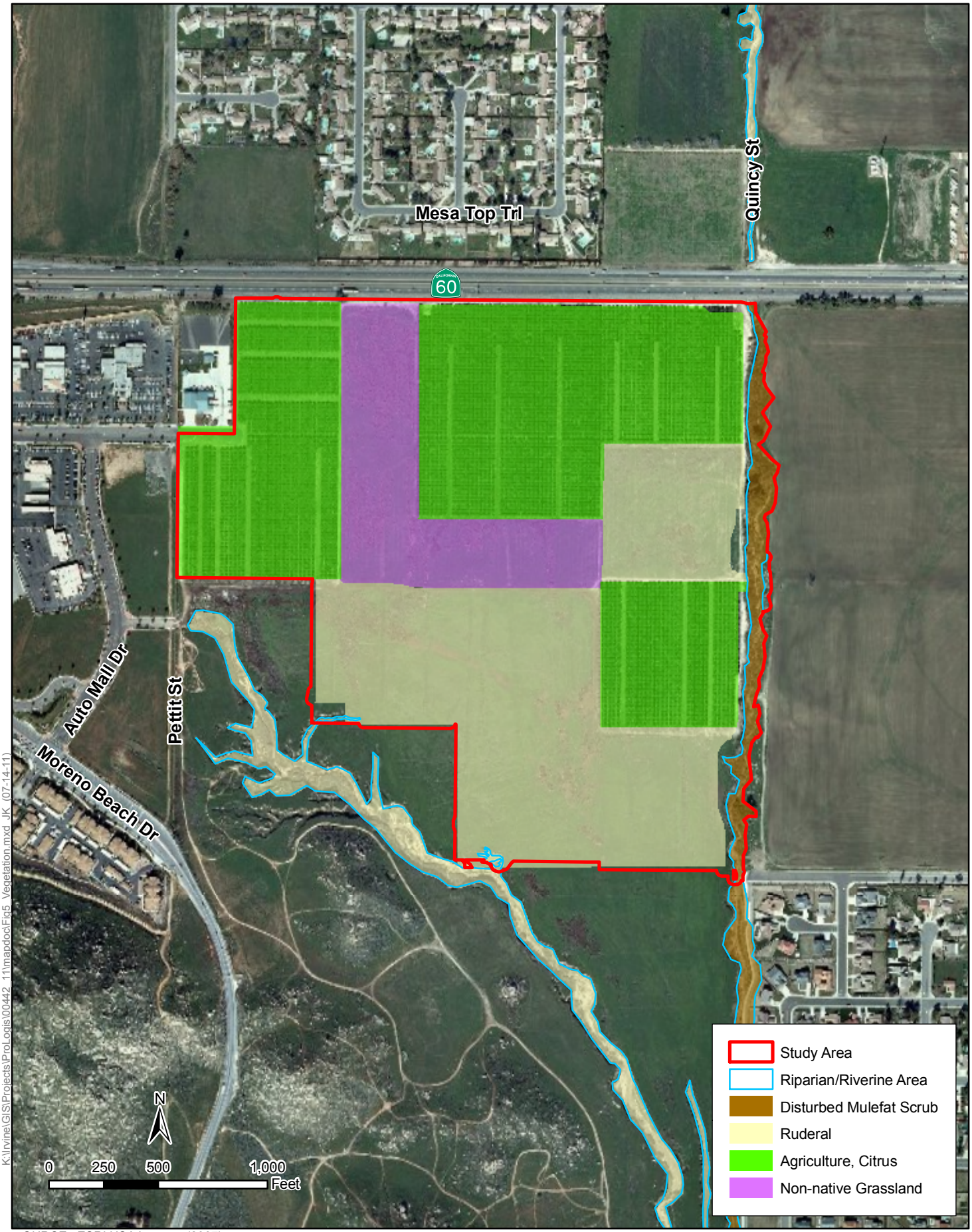
SOURCE: ESRI USA Imagery (2007)

ICF INTERNATIONAL

Figure 4
Soil Map
ProLogis Eucalyptus Project



SOURCE: ESRI USA Imagery (2007)

ICF INTERNATIONAL

Figure 5
Riparian/Riverine Area
Vegetation Map
ProLogis Eucalyptus Project

have been classified as channel-upland vegetation. Channel-upland vegetation occurs on approximately 0.14 acre of the project site.

3.3 Jurisdictional Waters

Two ephemeral drainages that occur on the project site show evidence of a bed and bank and may be considered jurisdictional by regulatory agencies. One occurs along the eastern boundary, also known as Quincy Channel and one along the western boundary. The eroded channel that occurs within the project site on the western boundary is dominated by upland species. Quincy Channel has some disturbed mule fat scrub habitat. These drainages meet south of the project site and appear to drain to the San Jacinto River. Because of the presence of these potential jurisdictional features, a formal jurisdictional delineation was recommended and prepared by ICF (2011).

3.4 Nesting Birds

Avian nesting habitat occurs throughout the project site. Bird species that nest on the project site, which were seen and heard, include Bullock's oriole (*Icterus bullockii*), song sparrow (*Melospiza melodia*), blue grosbeak (*Guiraca caerulea*), California towhee (*Pipilo crissalis*), and Bewick's wren (*Thryomanes bewickii*). A red-tailed hawk (*Buteo jamaicensis*) nest exists within one of the eucalyptus trees on the eastern boundary of the site. Potential impacts on nests of these species are not covered by the MSHCP and must be analyzed separately in the CEQA document.

Chapter 4

Western Riverside County MSHCP Consistency Analysis

4.1 MSHCP Requirements

The project site is located in the Reche Canyon/Badlands Area Plan of the MSHCP; however it does not overlap a MSHCP criteria cell (Riparian/Riverine Map - Figure 6). The nearest MSHCP criteria cell is 841 (of cell group T), located approximately 1 mile to the northeast.

The MSHCP establishes habitat assessment requirements for certain plant, bird, mammal, and amphibian species. The project site overlaps only the habitat assessment area for burrowing owl. Therefore, all other species requiring a habitat assessment, as well as fully covered MSHCP species, are not discussed further in this report, although a small number of species that are not covered by the MSHCP are discussed in Section 4.2.5, below. The MSHCP has no survey area map for species associated with riparian/riverine areas. Potential survey areas for these species will be derived from project-specific riparian/riverine area mapping.

No riparian habitat occurs on the project site that would be suitable for MSHCP riparian species (see Appendix D for the required MSHCP forms).

4.1.1 Urban/Wildlands Interface Guidelines

According to the Section 6.1.4 of the MSHCP, the Urban/Wildlands Interface Guidelines are intended to address indirect effects associated with locating development in proximity to MSHCP conservation areas (Riverside County 2003). The project site is not adjacent to any MSHCP conservation areas. Consequently, the Urban/Wildlife Interface Guidelines would not need to be incorporated into the project.

4.2 Habitat Assessment

4.2.1 Burrowing Owl

The entire project site is included in the MSHCP habitat assessment area for burrowing owl. Because of its decline in the state of California over the past 30 years, burrowing owl is a state species of concern. It occurs in grasslands, lowland scrub, agricultural lands (particularly rangelands), and some artificial open areas as a year-long resident. Burrowing owl may also use golf courses, cemeteries, rights-of-way for roads within cities, airports, vacant lots in residential areas and university campuses, fairgrounds, abandoned buildings, and irrigation ditches. As a critical need with respect to habitat features, burrowing owl requires rodent or other fossorial burrows for roosting and nesting cover, with the preferred burrow being that of the California ground squirrel (*Spermophilus beecheyi*). Burrowing owl may also use pipes, culverts, and nest boxes where burrows are scarce. One burrow is typically selected for use as the nest; however, satellite burrows are usually found within the defended territory (Haug et al. 1993).

The nearest burrowing owl record occurs approximately 5 miles southwest of the project site (California Department of Fish and Game 2011b). The project site is highly suitable for burrowing owl because of the presence of eroded channel banks, burrows, and abundant foraging habitat. However, no burrowing owls were observed during the habitat assessment. Although an approximately 54-acre citrus orchard exists on the project site, this area is not considered suitable for foraging or burrowing by burrowing owl. Most of the non-native grassland and ruderal plant communities are also not suitable because of the height and density of the non-native vegetation. However, along the western drainage channel, numerous suitable burrows and debris piles with surrounding vegetation were found. This vegetation is lower in height. There are also several burrows and debris piles along the eastern drainage channel, although it is less suitable because of taller vegetation. Finally, several scattered burrows, which could be suitable for burrowing owl, were found along existing dirt roads. Figure 7 shows the suitable burrowing owl features that were identified. Because of the presence of suitable burrowing owl habitat, a focused burrowing owl survey was conducted in July 2011 to determine if the species is present (see Section 4.3, below).

4.2.2 Riparian/Riverine Habitat

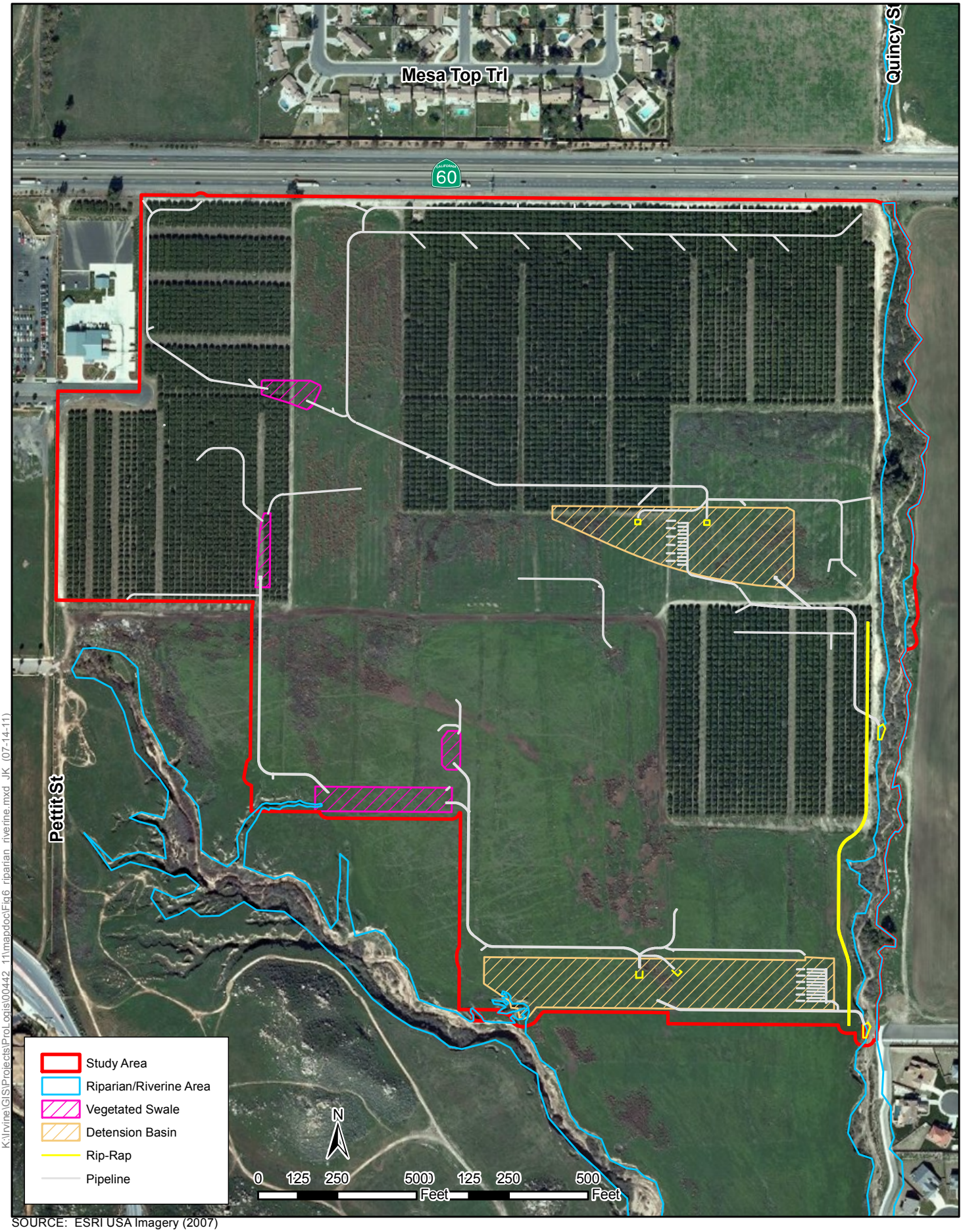
Section 6.1.2 of the Western Riverside County MSHCP describes the process to protect species associated with riparian/riverine areas and vernal pools. As defined in the MSHCP, riparian/riverine areas are lands that contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens that occur close to or depend on a nearby freshwater source or areas that contain a freshwater flow during all or a portion of the year. These habitats may support one or more of the species listed in Section 6.1.2 of the MSHCP.

An unnamed drainage feature traverses the western boundary of the site. The unnamed drainage feature originates in the northwest quadrant of the site, runs from northwest to southeast, then eventually exits the site along the southern boundary. The feature, which is deeply incised and heavily eroded, is vegetated by upland plant species. No riparian vegetation exists within this feature on the project site.

Quincy Channel traverses the eastern boundary of the site. It originates in the northeast quadrant of the site, runs from north to south, then eventually exits the site along the southern boundary. The feature contains heavily disturbed riparian habitat (i.e., 0.6-acre of a mule fat scrub community). Because Quincy Channel, including the mule fat scrub community, will be affected by the proposed project, a determination of a biologically equivalent or superior preservation (DBESP) analysis has been prepared (ICF 2011).

4.2.3 Riparian/Riverine Species

The riparian/riverine habitat that occurs on the project site is very small in area and heavily disturbed, perhaps due to the proximity of agriculture (Figure 5). Mule fat, as well as a number of non-native species and a large amount of trash, occurs in a channel that supports riparian vegetation. However, because of the lack of vertical complexity, the existing riparian habitat does not provide suitable habitat for any of the bird species listed in Section 6.1.2 of the MSHCP. No additional focused surveys will be necessary.



SOURCE: ESRI USA Imagery (2007)

Figure 6
Riparian/Riverine Area Impact Map
ProLogis Eucalyptus Project

k:\irvine\gis\projects\prologis\00442_11\mapdoc\bio\mshep\fig7_burrow_locations.mxd JFC & SM (08-23-11)

SOURCE: ESRI USA Imagery (2007)

Figure 7
Biological Resource Map
ProLogis Eucalyptus Project

4.2.4 Vernal Pools/Fairy Shrimp Habitat

Vernal pools are seasonal wetlands that occur in depression areas and have wetland indicators that represent all three parameters (i.e., soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators associated with vegetation and/or hydrology during the drier portion of the growing season. No area of ponding or evidence of standing water was observed during the site assessment. The site consists of sandy loam and loamy sand substrates, which are well drained and thus would not support vernal pools or vernal pool species. In addition, no areas that support hydrophytic vegetation were observed on site, except within the eastern channel where a small amount of mule fat scrub was present. No vernal pool or fairy shrimp habitat occurs on the project site, and no further actions related to vernal pools are required pursuant to the MSHCP.

4.2.5 Species Not Covered under the MSHCP

The project site supports grasshopper sparrow (*Ammodramus savannarum*), which was observed during the focused burrowing owl surveys. Grasshopper sparrow is a California species of special concern. It is not considered adequately conserved under the MSHCP. Removal of habitat with a low-density grasshopper sparrow population would be considered a less-than-significant impact under CEQA. The MSHCP, in Table 9-3, states that for this species to become a "covered species, adequately conserved," the following conservation must be demonstrated:

- Include within the MSHCP conservation area at least 8,000 acres in seven core areas.

The project site provides potentially suitable habitat for American badger (*Taxidea taxus*), a California species of special concern. During the habitat assessment and focused surveys for burrowing owl, badger den sites were not observed on the project site. Although badger could use the site periodically during movement, because of the proximity of urban development, city streets, and SR 60, the likelihood of finding the species on site would be low. The removal of habitat with a low potential to support movement habitat for American badger would be considered a less-than-significant impact under CEQA.

No special-status bat species are covered under the MSHCP. Habitat on the project site may be used occasionally by foraging bat species; however, because no potential roosting habitat is present within the development footprint, impacts on bat species would be limited to potential foraging habitat. The removal of potential bat foraging habitat would be considered a less-than-significant impact under CEQA.

The project site does not provide suitable habitat for any other species that is not covered under the MSHCP.

4.3 Burrowing Owl Focused Survey

Although no burrowing owls or burrowing owl sign was detected during the focused surveys, the study area does support suitable features, such as California ground squirrel burrows and debris piles (see Figure 7).

Because no burrowing owls were observed using any of the suitable burrows during the focused breeding survey, it was concluded that they are absent from the project site and the 500-foot buffer. To confirm the continued absence of burrowing owls at the project site, a MSHCP 30-day

preconstruction protocol survey is recommended and is included as mitigation measure MM-2, described below.

Chapter 5
Mitigation Measures

5.1 Western Riverside County MSHCP

The project site falls within the MSHCP fee area and the Stephens' kangaroo rat (*Dipodomys stephensi*) fee area. Payment of these development mitigation fees, as well as compliance with the requirements of Section 6.0 of the MSHCP, is intended to provide full mitigation under CEQA, the National Environmental Policy Act, the California Endangered Species Act (CESA), and the federal Endangered Species Act (FESA) for impacts on species and habitats covered by the MSHCP, pursuant to agreements with the U.S. Fish and Wildlife Service and the California Department of Fish and Game (CDFG), as set forth in the implementing agreement for the MSHCP.

The following measures, which are standard conditions required under the MSHCP, would reduce project-related impacts on species covered under the MSHCP to less than significant:

MM-1 The project applicant will pay the development mitigation fees associated with the MSHCP (MSHCP fee and Stephens' kangaroo rat fee), which will be based on the number of acres affected. The fee will be paid to the city of Moreno Valley during the processing of the proposed project. Payment of SKR impact fees is made before issuance of a grading permit, while MSHCP fees are paid before issuance of building permits.

MM-2 A preconstruction survey is required for burrowing owl to confirm the continued absence of this species from the site. The survey will be conducted by a qualified biologist 30 days prior to ground disturbance in accordance with MSHCP survey requirements to avoid direct take of burrowing owls. If burrowing owls are determined to occupy the project site or the immediate vicinity, the city of Moreno Valley Planning Department will be notified, and avoidance measures will be implemented. Implementation of avoidance measures will be executed pursuant to the MSHCP, California Fish and Game Code, the Migratory Bird Treaty Act (MBTA), and the Burrowing Owl Survey and Mitigation Guidelines prepared by the California Burrowing Owl Consortium (CBOC) (CBOC 1993) and reviewed by CDFG.

A burrow is considered occupied when there is confirmed use by burrowing owl. If a burrow is found to be occupied by burrowing owl during the preconstruction survey, consultation with the city and/or the county would be required.

The following measures are recommended in the CBOC guidelines to avoid an occupied burrow (CBOC 1993):

- No disturbance within approximately 160 feet of an occupied burrow during the non-breeding season (September 1 to January 31), or
- No disturbance within approximately 250 feet of an occupied burrow during the breeding season (February 1 to August 31).

For unavoidable impacts, passive or active relocation of burrowing owls would be implemented. Passive relocation would be conducted by a qualified biologist in accordance with procedures set forth by the MSHCP and the CBOC. Passive relocation of occupied burrows would be conducted outside the breeding season, pursuant to the California Fish and Game Code and the MBTA.

MM-3 If impacts are to occur on MSHCP-defined riparian/riverine areas, which are found within the eastern drainage, a DBESP must be prepared. The DBESP will detail the level of disturbance/removal of riparian/riverine habitat; the consequential impacts, if any, on riparian/riverine species; and mitigation measures to reduce impacts to a negligible level. The DBESP must also document in detail why full avoidance of this resource cannot be accomplished.

5.2 Jurisdictional Waters

MM-4 Two drainage features occur within the project site, and impacts resulting from the proposed project may require permits from the U.S. Army Corps of Engineers (USACE), CDFG, and the Regional Water Quality Control Board. If it is determined that impacts on jurisdictional features will occur, the following permits will be required and submitted to the city of Moreno Valley:

- A permit from USACE pursuant to Section 404 of the Clean Water Act,
- Water quality certification pursuant to Section 401 of the Clean Water Act, and
- A Streambed Alteration Agreement from CDFG.

5.3 Nesting Birds

Under CEQA, the proposed project may result in significant impacts on nesting bird species that are protected under the California Fish and Game Code and the MBTA. Therefore, ICF recommends that clearing and grubbing activities avoid the general avian nesting season (i.e., from February 1 to August 31). If clearing and grubbing must take place during the nesting season, the following preconstruction survey will be implemented to ensure that no significant impacts on nesting birds occur as a result of the proposed project:

MM-5 If clearing and grubbing occurs during the nesting season (February to August), a nesting bird survey will be conducted approximately 7 days prior to any vegetation disturbance activities. If bird nests are found or there is evidence of nesting behavior inside the impact area, an exclusion buffer, as determined by the wildlife biologist, will be set in place around the nest, and no vegetation disturbance will be permitted. For raptor species, such as hawks and owls, this buffer can be as large as 500 feet. A qualified biologist will closely monitor nests until it is determined that they are no longer active, at which time construction activity can continue.

Chapter 6
Conclusions

A Western Riverside County MSHCP consistency analysis and a burrowing owl habitat assessment and focused survey took place on a 121.3-acre property located in the city of Moreno Valley, Riverside County, California. With payment of development mitigation fees and implementation of the proposed mitigation measures for potential project-related impacts on burrowing owl, riparian/riverine habitat, jurisdictional waters, and nesting birds, the project will fulfill the requirements related to biological resources pursuant to CEQA, FESA, CESA, and the MSHCP.

Chapter 7
Certification

I hereby certify that the statements furnished above and in the attached figures present data and information required for this habitat assessment and that the facts, statements, and information presented in this habitat assessment are true and correct to the best of my knowledge and belief.

7/27/11

Mikael Romich

Date

Senior Biologist

Chapter 8
References

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Appendix A

Conservation Summary Report

Riverside County Transporation and Land Management Agency - TLMA

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

APN	Cell	Cell Group	Acres	Area Plan	Sub Unit
488330011	Not A Part	Independent	9.27	Reche Canyon / Badlands	Not a Part
488330012	Not A Part	Independent	9.38	Reche Canyon / Badlands	Not a Part
488330013	Not A Part	Independent	8.91	Reche Canyon / Badlands	Not a Part
488330017	Not A Part	Independent	9.35	Reche Canyon / Badlands	Not a Part
488330018	Not A Part	Independent	8.9	Reche Canyon / Badlands	Not a Part
488330019	Not A Part	Independent	33.04	Reche Canyon / Badlands	Not a Part
488330022	Not A Part	Independent	17.91	Reche Canyon / Badlands	Not a Part
488330023	Not A Part	Independent	9.58	Reche Canyon / Badlands	Not a Part
488330024	Not A Part	Independent	8.93	Reche Canyon / Badlands	Not a Part

HABITAT ASSESSMENTS

Habitat assessment shall be required and should address at a minimum potential habitat for the following species:

APN	Amphibia Species	Burrowing Owl	Criteria Area Species	Mammalian Species	Narrow Endemic Plant Species	Special Linkage Area
488330011	NO	**YES**	NO	NO	NO	NO
488330012	NO	**YES**	NO	NO	NO	NO
488330013	NO	**YES**	NO	NO	NO	NO
488330017	NO	**YES**	NO	NO	NO	NO
488330018	NO	**YES**	NO	NO	NO	NO
488330019	NO	**YES**	NO	NO	NO	NO
488330022	NO	**YES**	NO	NO	NO	NO
488330023	NO	**YES**	NO	NO	NO	NO
488330024	NO	**YES**	NO	NO	NO	NO

Burrowing Owl

Burrowing owl.

If potential habitat for these species is determined to be located on the property, focused surveys may be required during the appropriate season.

Background

The final MSHCP was approved by the County Board of Supervisors on June 17, 2003. The federal and state permits were issued on June 22, 2004 and implementation of the MSHCP began on June 23, 2004.

For more information concerning the MSHCP, contact your local city or the County of Riverside for the unincorporated areas. Additionally, the Western Riverside County Regional Conservation Authority (RCA), which oversees all the cities and County

implementation of the MSHCP, can be reached at:

Western Riverside County Regional Conservation Authority
3403 10th Street, Suite 320
Riverside, CA 92501

Phone: 951-955-9700
Fax: 951-955-8873

www.wrc-rca.org

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Appendix B

Floral and Faunal Compendium

KINGDOM PLANTAE – PLANTS

PHYLUM ANTHOPHYTA – ANGIOSPERMS

CLASS MAGNOLIOPSIDA – DICOTYLEDONS

Adoxaceae – Elderberry Family
Sambucus Mexicana
Mexican elderberry

Anacardiaceae - Sumac Family
** *Schinus molle*
Peruvian Pepper-tree

Asteraceae - Sunflower Family
Ambrosia acanthicarpa
Annual Bur-sage
Baccharis salicifolia
Mule Fat
Deinandra kelloggii
Kellogg's tarplant
Encelia californica
California Bush Sunflower
Ericameria palmeri
Grassland Goldenbush
Lactuca serriola
Wild Lettuce

Boraginaceae - Borage Family
Amsinckia menziesii
Menzies' Fiddleneck

Brassicaceae - Mustard Family
** *Brassica geniculata*
Short-podded Mustard

** *Brassica nigra*
Black Mustard
** *Raphanus sativus*
Radish

Cactaceae - Cactus Family
* *Opuntia ficus-indica*
Indian-fig Cactus

Capparaceae - Caper Family
(*) *Isomeris arboria*
Bladderpod

Chenopodiaceae - Goosefoot Family
* *Salsola tragus*
Prickly Russian-thistle

Euphorbiaceae - Spurge Family
** *Ricinus communis*
Castor-bean

Juglandaceae - Walnut Family
Juglans californica
Southern California Black Walnut

Lamiaceae - Mint Family
** *Marrubium vulgare*
White Horehound

Rutaceae - Rue Family
Citrus sinensis
orange tree
Citrus paradise
grapefruit tree

Simaroubaceae - Quassia Family
** *Ailanthus altissima*
Tree-of-heaven

Solanaceae - Nightshade Family
** *Nicotiana glauca*
Tree Tobacco

CLASS LILIOPSIDA - MONOCOTYLEDONS

Poaceae - Grass Family
** *Bromus madritensis*
Foxtail Chess

KINGDOM ANIMALIA – ANIMALS

PHYLUM CHORDATA – CHORDATES

CLASS AVES – BIRDS

Accipitridae - Hawk Family
Accipiter cooperii
Cooper's hawk
Buteo jamaicensis
Red-tailed Hawk

Columbidae - Pigeon and Dove Family
Zenaida macroura
Mourning Dove

Picidae – Woodpeckers
Picoides nuttallii
Nutall's Woodpecker

Tyrannidae - Tyrant Flycatcher Family
Sayornis nigricans
Black Phoebe
Sayornis saya
Say's Phoebe
Myiarchus cinerascens
Ash-throated Flycatcher
Tyrannus verticalis
Western Kingbird

Corvidae - Jay and Crow Family
Corvus brachyrhynchos
American Crow
Corvus corax
Common Raven

Hirundinidae - Swallow Family
Hirundo rustica
Barn Sallow
Petrochelidon pyrrhonota
Cliff Swallow
Stelgidopteryx serripennis
Northern Rough-winged Swallow

Troglodytidae - Wren Family
Salpinctes obsoletus
Rock Wren
Thryomanes bewickii
Bewick's Wren

Trochilidae – Hummingbirds
Calypte anna
Anna's Hummingbird

Cuculidae - Cuckoos
Geococcyx californianus
Greater Roadrunner

Emberizidae - Sparrow Family
Pipilo crissalis
California Towhee
Pipilo maculates
Spotted Towhee
Melospiza melodia
Song Sparrow

Grosbeak and Bunting Family
Passerina caerulea
Blue Grosbeak

Icteridae - Blackbird, Cowbird and Oriole Family
Icterus cucullatus
Hooded Oriole
Icterus bullockii
Bullock's Oriole

Fringillidae - Finch Family
Carpodacus mexicanus
House Finch
Carduelis psaltria
Lesser Goldfinch
Carduelis tristis
American Goldfinch

CLASS MAMMALIA – MAMMALS

Canidea-Wolves and Foxes
Canis latrans
Coyote

Leporidae - Rabbits and Hares
Sylvilagus audubonii
Desert Cottontail

Sciuridae-Squirrels
Otospermophilus beecheyi
California ground squirrel

Appendix C

Site Photographs

Ruderal vegetation present in the south central portion of the project site.

Eroded channel on the western portion of the project site.

Appendix C
Site Photographs

Southern portion of the eastern drainage channel.

Central portion of the eastern drainage channel.

Appendix C
Site Photographs

Eucalyptus tree with raptor nest present along the eastern drainage.

Central portion of the project site with agriculture (citrus) and ruderal vegetation.

Appendix C
Site Photographs

Appendix D

Riverside County Attachments E-3 and E-4

NOTIFICATION TO COUNTY OF RIVERSIDE OF CONSULTANT TO PREPARE ARCHAEOLOGICAL OR BIOLOGICAL REPORT

Notification to the County of Riverside is hereby made that ProLogis, (project sponsor), has entered into a contract with ICF (consulting firm) for the preparation of an X (•) biological, ____(•) archaeological report to be submitted to the County of Riverside in satisfaction of a request made by the County for additional environmental information prior to completion of an environmental assessment for the property and development proposal described below:

Assessor's Parcel Number(s) (APN) **[*Required]**: 488-330-011:-013, 488-330-017:-019, -022:-024

Development Proposal Case Number(s) **[*Required]**: **PA07-0083**

In accordance with the notice of additional environmental information provided by the County, the scope of work for the report will be as follows:

For Archaeological Reports (Standardized - Check those that apply):
_____ Phase 1 _____Phase 2 _____Phase 3 _____Phase 4

For Biological Reports (check all that apply):
☒ General Biological Assessment
☒ Jurisdictional Waters/Wetlands Delineation
☒ Habitat Assessment for species burrowing owl
❑ Rare plant survey for species _____
☒ Focused survey for species burrowing owl
❑ Other: Describe _____

Both the Consultant and the project sponsor acknowledge that the consultant may not submit reports to the County for use in completing initial environmental assessments or EIRs for development proposals unless the consultant has been previously qualified by the County to submit such reports and unless the consultant has entered into a Memorandum of Understanding (MOU) with the County governing the preparation and handling of such reports. The project sponsor hereby acknowledges that they have been furnished a copy of the MOU, have read it, and understand the responsibilities of both the County and the consultant as set forth therein.

Project sponsor acknowledges that the report for which notification is hereby made is the:

_____1st,_____X_____2nd or _____ (specify number) archaeological, or biological report for which contractual arrangements have been made under the direction of the project sponsor for the property described above.

PROJECT SPONSOR AND CONSULTANT are to execute the following:
I hereby affirm that all information provided above, is, to the best of my knowledge, true, correct, and complete.

Project sponsor: _ProLogis_____ Dated:_August 10, 2011_____

Consultant: ICF Dated: July 12, 2011

Note: **Send Attachment D at the time contract is entered and with the final Biological or Archaeological Report.** A Riverside County Planning Department "Date Received" stamp hereon shall acknowledge receipt of this Notice by the County. * Required for project processing. If case number not known, contact County Planning Dept. If no development case has yet been filed with County, write "No Case". An additional County fee may be assessed to project if no case number is provided on this form.

Last Revised January 2001

BIOLOGICAL REPORT SUMMARY SHEET
(Must be attached to biological report)

Applicant Name: ProLogis
Assessor's Parcel Number(s) (APN): 488-330-011:-013, 488-330-017:-019, -022:-024
APN cont. :
Site Location: **Section:** 2 **Township:** 3 South **Range:** 3 West
Site Address: SR 60 and Petit St., Moreno Valley, CA
Related Case Number(s): PA07-0083 **PDB Number:**

Check ITEM(S) Habitat Assessment	*Check ITEM(S)* * Focused Survey	SPECIES or HABITAT OF CONCERN	(Circle whether a potential for significant impact to species or resource exists **)	
		Arroyo Southwestern Toad	Yes	No
◯		Drainages/Waters of U.S.	(Yes)	No
		Coachella Valley Fringed-Toed Lizard	Yes	No
		Coastal California Gnatcatcher	Yes	No
◯		Coastal Sage Scrub	Yes	(No)
		Delhi Sands Flower-Loving Fly	Yes	No
		Desert Pupfish	Yes	No
		Desert Slender Salamander	Yes	No
		Desert Tortoise	Yes	No
		Flat-Tailed Horned Lizard	Yes	No
◯		Least Bell's Vireo	Yes	(No)
◯		Oak Woodlands	Yes	(No)
		Quino Checkerspot Butterfly	Yes	No
◯		Riverside Fairy Shrimp	Yes	(No)
		Santa Ana River Woolystar	Yes	No
		San Bernardino Kangaroo Rat	Yes	No
		Slender Horned Spineflower	Yes	No
		Stephens' Kangaroo Rat	Yes	No
◯		Vernal Pools	Yes	(No)

Check ITEM(S) Habitat Assessment	*Check ITEM(S)* * Focused Survey	SPECIES or HABITAT OF CONCERN	(Circle whether a potential for significant impact to species or resource exists **)	
◯		Wetlands	Yes	(No)
◯		Riparian Habitat	(Yes)	No
◯	◯	Burrowing Owl	Yes	(No)
		Bighorn Sheep	Yes	No
		Red-legged Frog	Yes	No
		Other	Yes	No
		Other	Yes	No
		Other	Yes	No
		Other	Yes	No
		Other	Yes	No

* Focused Survey: a) Survey on a listed species performed per USFWS or CDFG protocol by licensed individual (i.e., CaGn, SKR, QCB), OR b) For non-listed spp., survey performed per protocol recognized by USFWS or CDFG, or other applicable agency (i.e., Burrowing Owl), OR c) For jurisdictional waters, wetlands, & riparian areas, following protocol of U.S.Army Corp of Engineers.

** Species of concern are any unique, rare, endangered, or threatened species; species used to delineate wetlands and riparian corridors; and any hosts, perching, or food plants used by any animals listed as rare, endangered, threatened or candidate species by either State or Federal regulations, or those tracked by the California Department of Fish and Game Natural Diversity Data Base (NDDB).

I declare under penalty of perjury that the information provided on this summary sheet is in accordance with the information provided in the biological report.

Senior Biologist — 7/12/11

Signature and Title — Date Report Prepared

10(a) Permit Number (if applicable) — 10(a) Permit Expiration Date

County Use Only

Received by:_____ **Date:**_____

PD-B#_____ **Related Case #:**_____

LEVEL OF SIGNIFICANCE CHECKLIST
FOR BIOLOGICAL RESOURCES
(Must be attached to report)

488-330-011:-013, 488-330-017:-019, -022:-024

APN *: _____Riverside County Case No.*: PA07-0083 EA Number:_____

Wildlife & Vegetation

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

(*Check the level of impact that applies to the following questions*)

a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?

• ⊙ • •

b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?

• • • ⊙

c) 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. Wildlife Service?

• • ⊙ •

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?

• • ⊙ •

e) 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?

• ⊙ • •

f) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act or Section 1600 of the California Fish and Game Code (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

• • • ⊙

g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

• • • ⊙

h) Create any impact which is individually limited, but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in Section 15130 (14 Calif. Code of Regs).

• • ⊙ •

* Required

LEVEL OF SIGNIFICANCE CHECKLIST FOR BIOLOGICAL RESOURCES

Findings of Fact:

Burrowing owls were not observed during a focused survey. Eastern drainage has some riparian/riverine habitat as defined by the MSHCP, but is highly disturbed by non-native vegetation and trash.

Proposed Mitigation:

30-day pre-construction survey for burrowing owl
Nesting bird survey if clearing and grubbing occurs Feb 1 to August 31

Monitoring Recommended:

None

Prepared By: Mikael Romich Date: July 12, 2011

County Use Only

Received by:_____ Date:_____

PD-B#_____ Related Case #:

HARMSWORTH ASSOCIATES
Environmental Consultants

November 8, 2013

Ross Geller
Applied Planning, Inc
5817 Pine Avenue, Suite A
Chino Hills, CA 91709

Dear Mr. Geller:

Re: ProLogis Eucalyptus Biological Review

This letter report presents the findings a biological survey and site assessment for the ProLogis Eucalyptus project site, Riverside County, California. The purpose of the survey is to provide information on the current status of the site. The surveys were conducted under contract to Applied Planning. Surveys were conducted on November 7 2013, by Paul Galvin.

Prior to conducting the site visit the existing biological reports for the project site, the proposed development plans and the projects EIR biological conditions were reviewed. The site review consisted of traversing the site on foot, documenting current site conditions and comparing site conditions, vegetation communities and biological resources with the past reports and the proposed development plan.

The current survey found no significant difference with the site conditions compared to the past reports.

Quincy Channel is unchanged and still consists of a narrow sandy creek supporting mulefat scrub and supporting significant amounts of exotic non-native weeds. The citrus groves are unchanged.

The ruderal and non-native grasslands are located in the same areas. Both ruderal and non-native grassland were disked this summer and currently are essentially devoid of vegetation. A few non-native weeds (barnyard grass, Russian thistle and cheeseweed) occur where there is run-off from the citrus irrigation but otherwise these areas are bare ground. The non-native grasses and weed will return to these areas after the winter rains.

The two small tributaries near the southern boundary of the site that flow into the channel located to the southwest of the project site still support ruderal vegetation (summer mustard).

29 Vacaville, Irvine, California 92602 – (714) 389-9527 – Cell (714) 287-4986 – pgalvin9@cox.net

The channel itself; which is located outside the project site, should be mapped as mulefat scrub rather than ruderal. This channel has a sandy bottom and supports willows, cottonwood and mulefat at the upper end and sparse mulefat and tarragon throughout the rest of the channel. Since this channel is outside the project site this mapping oversight in the original biological reports is not significant.

Wildlife was sparse at the site during the survey. No nesting birds were detected, as expected, since November is outside the bird nesting season.

No burrowing owl (*Athene cunicularia*) or their sign were detected during the site survey; however potential owl burrows were present onsite.

This letter confirms that current site conditions at the ProLogis Eucalyptus project site are not significantly different from the past biological reports and no additional biological work is required for the CEQA analysis.

If you have any questions or require additional information, please call me at (714) 389-9527.

Sincerely
Harmsworth Associates

Paul Galvin, M.S.
Vice President

Photograph 1: East side of site looking west, showing disked ruderal/non-native grassland, November 2013.

Photograph 2: East side of site looking north, showing disked ruderal/non-native grassland and citrus orchards, November 2013.

Photograph 3: Northeast corner of site looking south, showing Quincy Channel and citrus orchards, November 2013.

Photograph 4: Southwest boundary of the site looking east, showing ruderal vegetation in channel, November 2013.

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CITY OF MORENO VALLEY
CONDITIONS OF APPROVAL FOR P13-111
AMENDED PLOT PLAN FOR A WAREHOUSE DISTRIBUTION FACILITY
ASSESSOR'S PARCEL NUMBERS: 488-330-003 TO -006 AND -026

APPROVAL DATE:
EXPIRATION DATE:

_X_ Planning (P), including Building (B), School District (S), Post Office (PO)
_X_ Fire Prevention Bureau (F)
_X_ Public Works Dept. – Land Development (LD)
_X_ Public Works Dept. – Transportation Engineering (TE)
_X_ Public Works Dept. – Moreno Valley Utilities (MVU)
_X_ Financial & Management Service Dept. – Special Districts (SD)
_X_ Parks & Community Services (PCS)
_X_ Police (PD)

Note: All Special conditions are in bold lettering. All other conditions are standard to all or most development projects.

COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT

Planning Division

P1. Amended Plot Plan P13-111 has been approved for development of an 800,430 square foot refrigerated warehouse distribution facility, to be built on a 55 acre site within Assessor's Parcel Numbers 488-330-003 to -006 and -026. The facility includes the following:

- **263,800 square feet of perishable area;**
- **506,380 square feet of warehouse;**
- **5,250 square feet mechanical room;**
- **25,000 square feet of 1st floor office and 25,000 square of 2nd floor office.**

Based upon the results of a parking study prepared per Municipal Code Section 9.11.070 a total of 313 employee spaces is needed for the operation of the proposed warehouse. The project design provides 374 employee/visitor spaces.

P2. The facility is approved for the installation of generators at two locations.

P3. Roof mounted refrigeration units to be screened from view and painted to match the building.

P4. Development of the warehouse facility is subject to approval of Tentative

Timing Mechanisms for Conditions (see abbreviation at beginning of affected condition):

R - Map Recordation | GP - Grading Permits | CO - Certificate of Occupancy or building final
WP - Water Improvement Plans | BP - Building Permits | P - Any permit

Governing Document (see abbreviation at the end of the affected condition):

GP - General Plan | MC - Municipal Code | CEQA - California Environmental Quality Act
Ord - Ordinance | DG - Design Guidelines | Ldscp - Landscape Development Guidelines and Specs
Res - Resolution | UFC - Uniform Fire Code | UBC - Uniform Building Code
SBM - Subdivision I

Parcel Map No. 36207 and the subsequent recordation of this map.

P5. Bicycle racks shall be provided at a minimum of five (5) percent of the required vehicular parking and shall be located near the designated office area(s).

P6. The gates into truck loading and parking areas that are within view of a public street shall be of solid metal construction or wrought iron with mesh to screen the interior of the loading area.

P7. This project shall comply with South Coast Air Quality Management District (SCAQMD) rules related to dust generation (Rule 403) and the use of architectural coatings (Rule 1113).

P8. The design of all swales and basins that are visible from the public right-of-way shall be integrated with the surrounding landscape areas.

P9. Screening walls of decorative block or concrete tilt-up construction shall be provided to fully screen the truck loading and parking area for from view from Fir/Eucalyptus Avenue.

P10. Enhanced landscape shall be provided in the planter areas near each driveway and near the office portions of the facilities.

P11. All loudspeakers, bells, gongs, buzzers or other noise attention devices installed on the project site shall be designed to ensure that the noise level at all property lines will be at or below 55 dBA for consistency with the Municipal Code.

P12. Loading or unloading activities shall be conducted from the truck bays or designated loading areas only. (MC 9.10.140, CEQA)

P13. No outdoor storage is permitted on the project site, except for truck and trailer storage in designated areas within the screened truck courts.

P14. If the proposed project requires blasting, it shall be used only as a last resort. In such cases, it shall be approved by the Fire Marshall, and the developer shall comply with the current City ordinance governing blasting. (Ord)

P15. This approval shall expire three years after the approval date of this project unless used or extended as provided for by the City of Moreno Valley Municipal Code; otherwise it shall become null and void and of no effect whatsoever. Use means the beginning of substantial construction contemplated by this approval within the three-year period, which is thereafter pursued to completion, or the beginning of substantial utilization contemplated by this approval. (MC 9.02.230)

P16. P13-111 shall be developed in accordance with the approved plans on file in the

Community & Economic 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 City Planning Official. (MC 9.14.020)

P17. The developer, or the developer's successor-in-interest, shall be responsible for maintaining any undeveloped portion of the project site in a manner that provides for the control of weeds, erosion and dust. (MC 9.02.030)

P18. A drought tolerant, low water using landscape palette shall be utilized throughout the project to the extent feasible.

P19. All landscaped areas shall be maintained in a healthy and thriving condition, free from weeds, trash and debris. (MC 9.02.030)

P20. Any signs indicated on the submitted plans are not included with this approval. Any signs proposed for this development shall be designed in conformance with the sign provisions of the Municipal Code or approved sign program, if applicable, and shall require separate application and approval by the Community & Economic Development Department - Planning Division. (MC 9.12.020)

Prior to Issuance of Grading Permits

P21. (GP) All site plans, grading plans, landscape and irrigation plans, fence/wall plans, lighting plans and street improvement plans shall be coordinated for consistency with this approval.

P22. (GP) If potential historic, archaeological, or paleontological resources are uncovered during excavation or construction activities at the project site, work in the affected area will cease immediately and a qualified person (meeting the Secretary of the Interior's standards (36CFR61)) shall be consulted by the applicant to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, prehistoric, or paleontological resource. Determinations and recommendations by the consultant shall be implemented as deemed appropriate by the Community & Economic Development Director, in consultation with the State Historic Preservation Officer (SHPO) and any and all affected Native American Tribes before any further work commences in the affected area.

If human remains are discovered, work in the affected area shall cease immediately and the County Coroner shall be notified. If it is determined that the remains are potentially Native American, the California Native American Heritage Commission and any and all affected Native American Indians tribes such as the Morongo Band of Mission Indians or the Pechanga Band of Luiseno Indians shall be notified and appropriate measures provided by State law shall be

implemented. (GP Objective 23.3, DG, CEQA).

P23. (GP) 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 the Planning Division for review and approval for the phase in process. The plans shall be designed in accordance with the slope erosion plan as required by the City Engineer for that phase. 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)

P24. (GP) Prior to approval of any grading permit, the developer shall submit for review and approval of a tree plan to the Planning Division. The plan shall identify all mature trees (4 inch trunk diameter or larger) on the subject property, City right-of-way or Caltrans right-of-way. Using the grading plan as a base, the plan shall indicate trees to be relocated, retained, and removed. Replacement trees shall be: shown on the plan; be a minimum size of 24 inch box; and meet a ratio of three replacement trees for each mature tree removed or as approved by the Community Development Director. (GP Objective 4.4, 4.5, DG)

P25. (GP) Prior to approval of any grading permit, local and master-planned multi-use trail easements shall be shown in accordance with the City's Master Trail Plan.

P26. (GP) Prior to issuance of grading permits, the developer shall pay the applicable Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan mitigation fee. (Ord)

P27. (GP) For projects abutting State Highway 60, a sixteen foot reservation for future right-of-way shall be provided.

P28. (GP) Prior to approval of any grading permits, plans for any security gate system shall be submitted to the Community Development Department - Planning Division for review and approval.

P29. (GP) If a median is required, then prior to approval of any grading permits, final median enhancement/landscape/irrigation plans shall be submitted to the Community Development Department - Planning Division and Public Works Department – Special Districts for review and approval by each division. Timing of installation shall be determined by PW- Special Districts. (GP - Circulation Master Plan)

P30. (GP) Prior to issuance of any grading permits, mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein.

P31. (GP) Prior to the issuance of grading permits, the grading plan shall show decorative concrete pavers for all driveway ingress/egress locations of the project. Accessible pedestrian pathways interior to the site cannot be painted. If delineation is necessary, then an alternative material is

required.

P32. (GP) Prior to the issuance of a grading permit, all required planter areas, curbs, including twelve-inch concrete step outs, and required parking space striping shall be shown on the precise grading plan.

P33. (GP) Prior to the issuance of grading permits, the following burrowing owl survey requirements shall be incorporated into the grading plans in accordance with the Riverside County Multi-species Habitat Conservation Plan: Within 30 days of and prior to disturbance, a burrowing owl focused survey shall be conducted by a qualified biologist using accepted protocols. The survey shall be submitted to the Planning Division for review and approval.

P34. (GP) Prior to the issuance of grading permits, a "no touch" area shall be staked along the westerly limit of project development as defined by the scour wall and a City approved Biologist be retained to monitor construction activities to ensure protection and preservation of Channel areas. Upon the completion of the above mitigation measure an on-site grading permit may be issued for project work to commence.

P35. (GP) 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)

P36. (GP) Prior to the approval of any precise grading permits, the developer shall submit written documentation and a planting coverage map/plan to the Planning and Land Development Divisions for all parcels identified as future State Highway 60 right-of-way as well as specifications for an erosion control/wildflower hydroseed mixture appropriate to the site's climate zones and soils to be applied at a time and in a manner that optimizes germination and coverage of the parcels consistent with the erosion control requirements for the site. Said landscape shall be maintained free of weeds and overgrowth by the developer or successor in interest until such time as the parcels are transferred to the City or Caltrans.

P37. (GP) Prior to issuance of grading permits, landscape plans (trees, shrubs and groundcover) for basins maintained by an POA or other private entity shall be submitted to the Planning Division for review and approval for the sides and/or slopes. A hydroseed mix with irrigation is acceptable for the bottom of all the basin areas. All detention basins shall include trees,

shrubs and groundcover up to the concreted portion of the basin. A solid decorative wall with pilasters, tubular steel fence with pilasters or other fence or wall approved by the Community Development Director is required to secure all water quality and detention basins more than 18 inches in depth.

P38. (GP) Prior to issuance of grading permits, the developer shall submit wall/fence plans to the Planning Division for review and approval as follows:

A. A maximum 3 foot high decorative wall in lieu of a hedge or berm may be placed in setback areas adjacent to a parking lot.
B. Any proposed retaining walls shall also be decorative in nature, while the combination of retaining and other walls on top shall not exceed the height requirement for the specific plan and/or Municipal Code.
C. A 14 foot tall solid wall of decorative block with pilasters and a cap or concrete tilt-up construction shall be provided to screen the trucks, parked trailers and the loading areas and loading docks from view from Fir/Eucalyptus Avenue and at the northeast corner of the site.
D. Wrought iron/tubular steel fence is required along portions of the northern, western and eastern property lines.
E. A four foot tall three rail fence to match adjacent trail fencing is required to enclose the basins located along Fir/Eucalyptus Avenue.

Prior to Issuance of Building Permits

P39. (BP) Prior to issuance of building permits, the Community & Economic Development Department - 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 with 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 that will provide complete screening upon maturity. (GP Objective 43.30, DG)

P40. (BP) Prior to issuance of building permits, screening details shall be addressed on plans for roof top equipment and trash enclosures submitted for Community & Economic Development Department - Planning Division review and approval. All equipment shall be completely screened so as not to be visible from public view, and the screening shall be an integral part of the building. For trash enclosures, landscaping shall be included on at least three sides. The trash enclosure,

including any roofing, shall be compatible with the architecture for the building(s). (GP Objective 43.6, DG)

P41. (BP) Prior to issuance of building permits, two copies of a detailed, on-site, computer generated, point-by-point comparison lighting plan, including exterior building, parking lot, and landscaping lighting, shall be submitted to the Community & Economic Development Department - Planning Division for review and approval. The lighting plan shall be generated on the plot plan and shall be integrated with the final landscape plan. The plan shall indicate the manufacturer's specifications for light fixtures used and shall include style, illumination, location, height and method of shielding. The lighting shall be designed in such a manner so that it does not exceed 0.5 foot candles illumination beyond at the property line. The lighting level for all parking lots or structures shall be a minimum coverage of one foot-candle of light with a maximum of eight foot-candles. After the third plan check review for lighting plans, an additional plan check fee will apply. (MC 9.08.100, DG)

P42. (BP) Prior to issuance of building permits or as permitted by current City policy, the developer or developer's successor-in-interest shall pay all applicable impact fees, including but not limited to Transportation Uniform Mitigation fees (TUMF), Multi-species Habitat Conservation Plan (MSHCP) mitigation fees, and the City's adopted Development Impact Fees. (Ord)

P43. (BP) Prior to issuance of building permits, final landscaping and irrigation plans shall be submitted to the Community & Economic Development Department - Planning Division for review. All landscape plans shall be approved prior to the release of any building permits for the site. After the third plan check review for landscape plans, an additional plan check fee shall apply. The plans shall be prepared in accordance with the City's Landscape Standards and Specifications and shall include:

A. A landscape berm, hedge or a maximum 3 foot decorative wall is required adjacent to parking areas along public rights-of-way.
B. All finger and end planters shall be included at an interval of one per 12 parking stalls, be a minimum 5' x 16', and include additional 12" concrete step-outs and 6" curbing. (MC9.08.230, City's Landscape Standards)
C. All diamond planters shall be included at an interval of one per 3 parking stalls.
D. Drought tolerant landscape shall be provided. Sod shall be limited to public gathering areas only and not be included along the perimeter of the project site.
E. On site trees shall be planted at an equivalent of one (1) tree per thirty (30) linear feet of building dimension. Trees may be massed for pleasing aesthetic effects.
F. **Enhanced landscaping shall be included at all driveway and corner locations as well as along Highway 60 to provide proper screening of trucks.**

G. All site perimeter and parking lot landscape and irrigation shall be installed prior to the release of certificate of any occupancy permits for the site or pad in question.

H. The review of all utility boxes, transformers etc. shall be coordinated to provide adequate screening from public view. (Landscape Guidelines)

I. Landscaping on three sides of trash enclosures shall be provided.

J. **Dense landscape (spacing of one tree per 20 feet) shall be placed in front of the wall along all designated yard areas and vines shall be planted at the base of the wall and be directed along said wall.**

K. **A minimum size of 24" box mature trees shall be placed along the freeway or northern elevations of the building. Trees shall be in a double row or closely spaced as shown on the preliminary landscape plan.**

L. **Minimum 24 inch box Eucalyptus Nicholii shall be used for the street trees along the Eucalyptus Avenue frontage. Spacing of trees shall be limited to 80 foot on center for parkways and medians in sight line distance areas noted on the plans; however trees to the equivalency of 40 foot on center shall be planted in the parkway for the entire site. Additional denser parkway tree placement (between 25 to 30 feet on center) would be required for areas outside of the line of sight. A preferred alternative to placing trees only on the designated parkway landscape areas would be to widen the four foot landscape separation between the sidewalk and trail to 8 feet and reduce the parkway landscape to 8 feet in site line distance areas to provide additional trees within the designated line of sight areas alternating at 80 foot spacing to achieve the overall 40 foot spacing requirement.**

M. **Focal entries of the site on Eucalyptus Avenue are void of trees and or shrubs on the preliminary landscape plan and they shall be shown on the plans, or alternatively document on the landscape and tree plans that the equivalency of one tree per 30 linear feet of building dimension visible from the parking lot and all public rights of away in addition to on tree per 30 linear feet of parking lot adjacent to the interior property is being met.**

N. **The design of all swales and basins that are visible from the public right-of-way shall be integrated with the surrounding landscape areas.**

O. **Minimum container size for required trees planted along the SR-60 frontage shall be 36 inch box**

P44. (BP) Prior to the issuance of building permits, the landscape plans shall include landscape treatment for trash enclosures located outside of a truck court, to include landscape on three sides, and trash enclosures shall include decorative enhancements such as an enclosed roof and other decorative features that are consistent with the architecture of the proposed commercial buildings on the site, subject to the approval of the Community & Economic Development Director.

P45. (BP) Prior to the issuance of building permits, all fences and walls required or proposed on site, shall be approved by the Community & Economic Development Director. (MC 9.08.070)

P46. (BP) Prior to the issuance of building permits, downspouts will be interior to the building, or if exterior, integrated into the architecture of the building to include compatible colors and materials to the satisfaction of the Community & Economic Development Director.

P47. (BP) Prior to the issuance of building permits the building site plan shall include decorative concrete or pavers for all driveway ingress/egress locations for the project.

P48. (BP) Prior to issuance of any building permits, mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein. (CEQA)

Prior to Issuance of Certificate of Occupancy or Building Final

P49. (CO) Prior to issuance of any Certificates of Occupancy or building final, mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein. (CEQA) (Advisory)

P50. (CO) Prior to the issuance of Certificates of Occupancy or building final, all required and proposed fences and walls shall be constructed according to the approved plans on file in the Community & Economic Development Department – Planning Division. (MC 9.080.070).

P51. (CO) Prior to issuance of Certificate of Occupancy or building final, installed landscaping and irrigation shall be reviewed by the Community & Economic Development Department - Planning Division. The landscaping shall be installed in accordance with the City's Landscape Standards and the approved landscape plans.

P52. (CO) All rooftop equipment shall be appropriately screened from the Highway 60 or Eucalyptus/Fir Avenue rights of way.

MITIGATION MEASURES

P53. MM 4.2.1 Redlands Boulevard at SR-60 Westbound Ramps Improvements:
• Install a traffic signal. If not otherwise completed prior to Project opening, the required traffic signal shall be constructed by the Applicant prior to issuance of the first Certificate of Occupancy.

P54. MM 4.2.2 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements:

Prior to issuance of the first Certificate of Occupancy, the Applicant shall construct the following improvements:
• Install a traffic signal;
• Construct a southbound right turn auxiliary lane which extends the full length of the segment of Redlands Boulevard between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue for a southbound lane configuration of one shared left-through lane and one right turn lane; and
• Construct an eastbound left-turn lane with 300 feet of storage for an eastbound lane configuration of one left-turn lane and one shared through-or-right-turn-lane.

P55. MM 4.2.3 Moreno Beach Drive at SR-60 Eastbound Ramps Improvements:
• Construct an eastbound right-turn lane and re-stripe the shared left-or-right turn lane as an exclusive left-turn lane, for an eastbound lane configuration of one left-turn lane and one right-turn lane. These improvements would require the dedication of right-of-way from the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection. These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps.

P56. MM 4.2.4 Moreno Beach Drive at SR-60 Westbound Ramps Improvements:
• Coordinate traffic signal timing with the signal at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Moreno Beach Drive at SR-60 Westbound Ramps.

P57. MM 4.2.5 Redlands Boulevard at SR-60 Westbound Ramps Improvements:
• Install a traffic signal (a TUMF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.1);
• Construct a second northbound through lane and a right-turn lane with overlap phasing, for a northbound lane configuration of one left-turn lane, two through lanes and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way on the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection; and
• Construct a second southbound through lane, for a southbound lane configuration of one left-turn lane and two through lanes. These improvements would require the dedication of right-of-way on the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection. The traffic signal noted above will be constructed by the Project pursuant to Mitigation Measure 4.2.1. The remaining improvements would be funded through participation in the TUMF Program. The Project will pay

required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Redlands Boulevard at SR-60 Westbound Ramps.

P58. MM 4.2.6 Redlands Boulevard at SR-60 Eastbound Ramps Improvements:

• Construct a second northbound through lane for a northbound lane configuration of one left turn lane and two through lanes. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and restriping of all lanes on the south leg of the intersection;

• Construct a second southbound through lane, for a southbound lane configuration of one left-turn lane and two through lanes. These improvements would require the dedication of right-of-way on the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and

• Construct an eastbound right-turn lane and re-stripe the shared left-or-right turn lane as an exclusive left-turn lane, for an eastbound lane configuration of one left-turn lane and one right-turn lane. These improvements would require the dedication of right-of-way on the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection. These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts at the intersection of Redlands Boulevard at SR-60 Eastbound Ramps.

P59. MM 4.2.7 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements:

• Install a traffic signal (a DIF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.2);

• Construct a northbound left-turn lane with 200 feet of storage and a second through lane, for a northbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and restriping of all lanes on the south leg of the intersection.

• Construct a southbound left-turn lane with 250 feet of storage, a second left-turn lane that extends back to the SR-60 Eastbound Ramps, a second through lane, and a right-turn lane with overlap phasing and a pocket length that is the full length of the segment, for a southbound lane configuration of two left-turn lanes, two through lanes, and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. The noted right-turn southbound lane would be constructed by the Project pursuant to Mitigation Measure 4.2.2. Overlap phasing to this right-turn lane will be added when determined appropriate by the City Traffic Engineer,

- **Construct dual eastbound left-turn lanes with 300 feet of storage and a second through lane, for an eastbound lane configuration of two left-turn lanes, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the west leg of the intersection. A single eastbound turn with 300 feet of storage will be constructed by the Project under Opening Year Ambient Conditions pursuant to Mitigation Measure 4.2.2.**
- **Construct a westbound left-turn lane, a second through lane, and a right-turn lane with overlap phasing, providing 200 feet of storage for both the left-turn and right-turn lanes, for a westbound lane configuration of one left-turn lane, two through lanes, and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the north side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the east leg of the intersection. Construction of the westbound left and through lanes would be funded through participation in the DIF Program; remaining improvements would be funded through fair share fee participation.**

P60. MM 4.2.8 Quincy Street at Fir (future Eucalyptus) Avenue Improvements:
• Install a stop-control on the south leg of the intersection;
• Construct a northbound shared left-or-right-turn lane. Quincy Street should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction;
• Construct an eastbound shared through-or-right-turn lane. The Fir (future Eucalyptus) Avenue extension should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction; and
• Construct a westbound left-turn lane and through lane. The Fir (future Eucalyptus) Avenue extension should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction. These improvements would be funded through participation in the DIF Program. The Project will pay required DIF, facilitating construction of new intersection improvements at Quincy Street at Fir (future Eucalyptus) Avenue.

P61. MM 4.2.9 Moreno Beach Drive at SR-60 Eastbound Ramps Improvements:
• Construct the SR-60 eastbound on- and off-ramps, designed as a standard diamond and consistent with the proposed SR-60 Freeway/Moreno Beach Drive interchange design, and install a traffic signal at the new intersection;
• Construct a third northbound through lane, for a northbound lane configuration of three through lanes and a right-turn lane. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection;
• Construct the SR-60 eastbound off-ramp with an eastbound lane configuration of one left-turn lane and dual right-turn lanes; and
• Construct the SR-60 eastbound on-ramp on Moreno Beach Drive with a

minimum of two travel lanes. These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps.

P62. MM 4.2.10 Moreno Beach Drive at SR-60 Westbound Ramps Improvements:
• Construct a second northbound through lane, for a northbound lane configuration of two through lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection;
• In addition to the planned on-ramp for southbound vehicles which is part of the future SR-60/Moreno Beach Drive interchange design, a second southbound through lane and a right-turn lane, for a southbound lane configuration of two through lanes and a right-turn lane. These improvements would require dedication on the west side of Moreno Beach Drive and re-striping of all lanes on the north leg of the intersection;
• Construct the SR-60 westbound on-ramp for vehicles traveling southbound on Moreno Beach Drive with a minimum of one travel lane; and
• Construct a second westbound left-turn lane, for a westbound lane configuration of two left-turn lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the north side of the SR-60 Westbound Ramps and re-striping of all lanes on the east leg of the intersection. These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at SR-60 Westbound Ramps.

P63. MM 4.2.11 Moreno Beach Drive at Fir (future Eucalyptus) Avenue Improvements:
• Construct dual northbound left-turn lanes and re-stripe the northbound right-turn lane as a shared through-or-right turn lane for a northbound lane configuration of two left-turn lanes, two through lanes and a shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection. Restriping of the northbound right-turn lane as a shared through-or-right turn lane would be funded through participation in the DIF Program. Remaining improvements would be funded through fair share fee participation;
• Construct a southbound left-turn lane and a right-turn lane with overlap phasing, for a southbound lane configuration of two left-turn lanes, three through lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the west side of Moreno Beach Drive and re-striping of all lanes on the north leg of the intersection, and would be funded through fair share fee participation;
• Construct the new eastbound leg of this intersection with dual left-turn

lanes, a through lane, and a shared through-or-right-turn lane. Construction of one eastbound left-turn lane, the eastbound through lane, and the eastbound shared through-or-right-turn lane would be funded through participation in the DIF Program. Remaining improvements would be funded through fair share fee participation; and

• Construct a westbound through lane and implement overlap phasing on the right-turn movement, for a westbound lane configuration of one left-turn lane, two through lanes, and a right-turn lane with overlap phasing. This improvement would be funded through fair share fee participation. The Project will pay required DIF and fair share fees, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at Fir (future Eucalyptus) Avenue.

P64. MM 4.2.12 Quincy Street at Fir (future Eucalyptus) Avenue Improvements:

• Install a stop-control on the south leg of the intersection;

• Construct a northbound shared left-or-right-turn lane;

• Construct the eastbound approach of the Fir (future Eucalyptus) Avenue extension with a through lane and a shared through-or-right-turn lane; and

• Construct the westbound approach of the Fir (future Eucalyptus) Avenue extension with a left-turn lane, a through lane, and a shared through-or-right-turn lane. These improvements would be funded through participation in the DIF Program. The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Quincy Street at Fir (future Eucalyptus) Avenue

P65. MM 4.2.13 Redlands Boulevard at SR-60 Westbound Ramps Improvements:

• Install a traffic signal (a TUMF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.1);

• Construct a northbound through lane and a right-turn lane with overlap phasing, for a northbound lane configuration of one left-turn lane, two through lanes and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection;

• Construct a southbound left-turn lane and a through lane, for a southbound lane configuration of two left-turn lanes and a through lane, and a shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and

• Construct a westbound left-turn lane and a right-turn lane, for a westbound lane configuration of one left-turn lane, one shared left-through lane and a right-turn lane. These improvements would require the dedication of right-of-way from the north side of the SR-60 Westbound Ramps and re-striping of all lanes on the east leg of the intersection. The traffic signal noted above will be constructed by the Project pursuant to Mitigation Measure 4.2.1. The traffic signal noted above will be constructed by the Project pursuant to Mitigation Measure

4.2.1. The remaining improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at Redlands Boulevard at SR-60 Westbound Ramps.

P66. MM 4.2.14 Redlands Boulevard at SR-60 Eastbound Ramps Improvements:
• Construct two northbound through lanes, for a northbound lane configuration of one left-turn lane and three through lanes, with the pocket length for the northbound left-turn lane at the full length of the segment. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and restriping of all lanes on the south leg of the intersection;
• Construct two southbound through lanes, for a southbound lane configuration of two through lanes and a shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and
• Re-stripe the shared eastbound left-or-right-turn lane as an exclusive left-turn lane, for an eastbound lane configuration of two left-turn lanes and one right-turn lane. These improvements would require the dedication of right-of-way on the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection. These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at SR-60 Eastbound Ramps.

P67. MM 4.2.15 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements:
• Install a traffic signal (a DIF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.2);
• Construct a left-turn lane with 200 feet of storage and a second through lane for a northbound lane configuration of one left-turn lane, one through lane and one shared through right-turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard. Restriping of all lanes on the south leg of the intersection, and construction of the northbound through lane would be funded through participation in the TUMF Program. Remaining improvements would be funded through participation in the DIF Program;
• Construct a southbound left turn lane with 250 feet of storage, a second left-turn lane that extends back to the SR-60 Eastbound ramps, a second through lane and a right turn lane with overlap phasing for a southbound lane configuration of two left turn lanes, two through lanes and one right turn lane with overlap phasing, with a right turn pocket length that extends the full length of the segment. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the

TUMF Program. Construction of one southbound left-turn lane would be funded through participation in the DIF program. The noted right-turn southbound lane would be constructed by the Project pursuant to Mitigation Measure 4.2.2. Overlap phasing for this right-turn lane will be added when determined appropriate by the City Traffic Engineer, and will be funded through fair share fee participation. Remaining improvements would also be funded through fair share fees;

• Construct dual eastbound left-turn lanes with 300 feet of storage and a second through lane, for an eastbound lane configuration of two left-turn lanes, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the west leg of the intersection. A single eastbound turn lane with 300 feet of storage will be constructed by the Project under Opening Year Ambient Conditions pursuant to Mitigation Measure 4.2.2.; and

• Construct a westbound left-turn lane, one through lane, and a right-turn lane with overlap phasing, for a westbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane with overlap phasing [these improvements would require the dedication of right-of-way from the north side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the east leg of the intersection]. Construction of the westbound left and through lanes would be funded through participation in the DIF Program; remaining improvements would be funded through participation in the fair share fee assessments. The Project will pay required TUMF, DIF and fair share fees, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Fir (future Eucalyptus) Avenue.

P68. MM 4.2.16 Redlands Boulevard at Eucalyptus (future Encilia) Avenue Improvements:

• Install a traffic signal. This improvement would be funded through participation in the DIF Program;

• Construct a northbound left-turn lane and a shared through-or-right-turn lane, for a northbound lane configuration of one left-turn lane, one through lane and one shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection. Construction of the northbound left-turn lane would be funded through participation in the DIF Program; remaining improvements would be funded through participation in the TUMF Program;

• Construct a southbound left-turn lane, a through lane, and a right-turn lane, for a southbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF

program;
• Re-stripe the eastbound right-turn lane as a through lane and construct an additional shared through-or-right-turn lane, for an eastbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Eucalyptus (future Encilia) Avenue and the re-striping of all lanes on the west leg of the intersection, and would be funded through participation in the DIF Program; and
• Construct the westbound approach with one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the north side of Eucalyptus (future Encilia) Avenue, and the re-striping of all lanes on the east leg of the intersection, and would be funded through participation in the DIF Program. The Project will pay required TUMF and DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Eucalyptus (future Encilia) Avenue.

P69. MM 4.2.17 Redlands Boulevard at Cottonwood Avenue Improvements:
• Construct a northbound through lane, for a northbound lane configuration of one left-turn lane, one through lane and one shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and the re-striping of all lanes on the south leg of the intersection, and would be funded through participation in the TUMF Program;
• Construct a southbound left-turn lane and a through lane, for a southbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and the restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF Program;
• Re-stripe the eastbound right-turn lane as a through lane, and construct an additional through-or-right-turn lane, for an eastbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Cottonwood Avenue, and the re-striping of all lanes on the west leg of the intersection, and would be funded through participation in the DIF Program; and
• Construct the westbound approach with one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the north side of Cottonwood Avenue, and the re-striping of all lanes on the east leg of the intersection, and would be funded through participation in the DIF Program. The Project will pay required TUMF and DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General

Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Cottonwood Avenue.

P70. MM 4.2.18 Quincy Street south of Fir (future Eucalyptus) Avenue Improvements:

• Construct Quincy Street south of Eucalyptus Avenue as a two-lane undivided roadway with a minimum of one travel lane in each direction. The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts at the segment of Quincy Street south of Fir (future Eucalyptus) Avenue.

P71. MM 4.2.19 Fir (future Eucalyptus) Avenue west of Quincy Street to the westerly Project boundary and Fir (future Eucalyptus) east of Redlands Boulevard Improvements:

• Construct the Fir (future Eucalyptus) Avenue extension from the current terminus near the Auto Mall to Quincy Street, and connecting to Fir (future Eucalyptus) Avenue at the westerly project boundary. Continue Fir (future Eucalyptus) Avenue east of Redlands Boulevard. Fir (future Eucalyptus) Avenue is to be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction. The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts affecting the segment of Fir (future Eucalyptus) Avenue between the Auto Mall and the westerly Project Boundary, and Fir (future Eucalyptus) Avenue east of Redlands Boulevard.

P72. MM 4.3.1 Consistent with URBEMIS modeling inputs and to effect implementation of SCAQMD Rule 403, the following measures shall be incorporated :

• All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.

• The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.

• The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less to reduce PM10 and PM2.5 fugitive dust haul road emissions.

• Site disturbance during mass grading and fine grading activities shall not exceed 13.66 acres per day.

• Ground cover shall be replaced, and/or non-toxic soil stabilizers shall be applied (according to manufacturers' specifications) to any inactive construction areas (previously graded areas inactive for ten days or more).

• In support of Project plan specifications and contract document

language; and as means of controlling on-site construction vehicle speeds, for the duration of Project construction activities, speed limit signs (15 mph maximum) shall be posted at entry points to the Project site, and along any unpaved roads providing access to or within the Project site and/or any unpaved designated on-site travel routes.

P73. MM 4.3.2 The contractor shall minimize pollutant emissions by maintaining equipment engines in good condition and in proper tune according to manufacturer's specifications and during smog season (May through October) by not allowing construction equipment to be left idling for more than five minutes (per California law).

P74. MM 4.3.3 The contractor shall ensure use of low-sulfur diesel fuel in construction equipment as required by the California Air Resources Board (CARB) (diesel fuel with sulfur content of 15 ppm by weight or less).

P75. MM 4.3.4 Contractor(s) shall ensure that all off-road heavy-duty construction equipment utilized during construction activity shall be CARB Tier 2 Certified or better.

P76. MM 4.3.5 In order to reduce localized Project impacts to sensitive receptors in the Project vicinity during construction, construction equipment staging areas shall be located at least 300 feet away from sensitive receptors.

P77. MM 4.3.6 During Project construction, existing electrical power sources (e.g., power poles) shall be utilized to power electric construction tools including saws, drills and compressors, to minimize the need for diesel or gasoline powered electric generators.

P78. MM 4.3.7 The Applicant shall use "Zero-Volatile Organic Compounds" paints, coatings, and solvents with a VOC content lower than required under Rule 1113 (not to exceed 150 grams/liter; 1.25 pounds/gallon). High Pressure Low Volume (HPLV) applications of paints, coatings, and solvents shall be consistent with South Coast Air Quality Management District Rule 1113. Alternatively, the Applicant shall use materials that do not require painting or are pre-painted.

P79. MM 4.3.8 Grading plans, construction specifications and bid documents shall also include the following notations:

- **Off-road construction equipment shall utilize alternative fuels e.g., biodiesel fuel (a minimum of B20), natural gas (CNG), liquefied natural gas (LNG), propane, except for equipment where use of such fuels would void the equipment warranty;**
- **Gravel pads shall be provided at all access points to prevent tracking of mud onto public roads;**
- **Install and maintain trackout control devices at all access points where paved and unpaved access or travel routes intersect;**

- **The contractor or builder shall designate a person or person(s) to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite;**
- **The contractor or builder shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The contact person shall take corrective action within 24 hours;**
- **High pressure injectors shall be provided on diesel construction equipment where feasible;**
- **Engine size of construction equipment shall be limited to the minimum practical size;**
- **Substitute gasoline-powered for diesel powered construction equipment where feasible;**
- **Use electric construction equipment where feasible;**
- **Install catalytic converters on gasoline-powered equipment where feasible;**
- **Ride-sharing program for the construction crew shall be encouraged and shall be supported by contractor(s) via incentives or other inducement;**
- **Documentation shall be provided to the City of Moreno Valley indicating that construction workers have been encouraged to carpool or otherwise reduce VMT to the greatest extent practical, including providing information on available park and ride programs;**
- **Lunch services shall be provided onsite during construction to minimize the need for offsite vehicle trips;**
- **All forklifts used during construction and in subsequent operation of the Project shall be electric or natural gas powered.**

P80. MM 4.3.9 Throughout Project construction, a construction relations officer/community liaison, appointed by the Applicant, shall be retained on-site. In coordination and cooperation with the City, the construction relations officer/community liaison shall respond to any concerns related to PM10 (fugitive dust) generation or other construction-related air quality issues.

P81. MM 4.3.10 All Project entrances shall be posted with signs which state:
- **Truck drivers shall turn off engines when not in use;**
- **Diesel delivery trucks servicing the Project shall not idle for more than three (3) minutes; and**
- **Telephone numbers of the building facilities manager and CARB, to report violations.**

These measures shall be enforced by the on-site facilities manager (or equivalent).

P82. MM 4.3.11 Buildings shall surpass incumbent California Title 24 Energy Efficiency performance standards by a minimum of 20 percent for water heating and space heating and cooling. Verification of increased energy efficiencies shall be documented in Title 24 Compliance Reports provided by the Applicant, and reviewed and approved by the City prior to the issuance of the first building permit. Any combination of the following

design features may be used to fulfill this mitigation measure provided that the total increase in efficiency meets or exceeds 20 percent.
• Increase in insulation such that heat transfer and thermal bridging is minimized;
• Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption;
• Incorporate dual-paned or other energy efficient windows;
• Incorporate energy efficient space heating and cooling equipment;
• Interior and exterior energy efficient lighting which exceeds the California Title 24 Energy Efficiency performance standards shall be installed, as deemed acceptable by the City of Moreno Valley. Automatic devices to turn off lights when they are not needed shall be implemented;
• To the extent that they are compatible with landscaping guidelines established by the City of Moreno Valley, shade producing trees, particularly those that shade buildings and paved surfaces such as streets and parking lots and buildings shall be planted at the Project site.
• Paint and surface color palette for the Project shall emphasize light and off-white colors which will reflect heat away from the buildings.
All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design.

P83. MM 4.3.12 The Project shall be designed to facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills by providing easily accessible areas that are dedicated to the collection and storage of recyclable materials including: paper, cardboard, glass, plastics, and metals. Locations of proposed recyclable materials collection areas are subject to review and approval by the City. Prior to Final Site Plan approval, locations of proposed recyclable materials collection areas shall be delineated on the Project Site Plan.

P84. MM 4.3.13 GHG emissions reductions measures shall also include the following:
• The Project shall provide secure, weather-protected on-site bicycle storage/parking consistent with City of Moreno Valley requirements;
• The Project shall provide pedestrian and bicycle connections to surrounding areas, consistent with provisions of the City of Moreno Valley General Plan. Location and configurations of proposed pedestrian and bicycle connections are subject to review and approval by the City. Prior to Final Site Plan approval, pedestrian and bicycle connections shall be indicated on the Project Site Plan;
• The Project shall provide onsite showers (one for males and one for females). Lockers for employees shall be provided.
• Any traffic signals installed as part of the Project will utilize light emitting diodes (LEDs);
• The Project will establish a Transportation Management Association (TMA). The TMA will coordinate with other TMAs within the City to encourage and coordinate carpooling among building occupants. The TMA will advertise its services to building occupants, and offer transit and/or

other incentives to reduce GHG emissions. Additionally, a shuttle will be provided during any one hour period where more than 20 employees or construction workers utilize public transit. A plan will be submitted by the TMA to the City within two months of Project completion that outlines the measures implemented by the TMA, as well as contact information; The Project shall provide preferential parking for carpools and vanpool. Locations and configurations of proposed preferential parking for carpools and vanpools are subject to review and approval by the City. Prior to Final Site Plan approval, preferential parking for carpools and vanpools shall be delineated on the Project Site Plan;

• The Project shall provide at least two electric vehicle charging stations. Locations and configurations of proposed charging stations are subject to review and approval by the City. Prior to issuance of the first building permit, stub outs for charging stations shall be indicated on the Project building plans.

• Lease/purchase documents shall identify that tenants are encouraged to provide incentives to realize the following:

- **Implementation of compressed workweek schedules;**
- **SmartWay partnership;**
- **Achievement of at least 20% per year (as a percentage of previous percentage, not total trips) increase in percentage of consolidated trips carried by SmartWay carriers until it reaches a minimum of 90% of all long haul trips carried by SmartWay 1.0 or greater carriers.**
- **Achievement of at least 15% per year (as a percentage of previous percentage, not total trips) increase in percentage of long haul trips carried by SmartWay carriers until it reaches a minimum of 85% of all consolidator trips carried by SmartWay 1.0 or greater carriers.**
- **Use of fleet vehicles conforming to 2010 air quality standards or better.**
- **Installation of catalytic converters on gasoline-powered equipment.**
- **Inclusion of electric powered and/or compressed natural gas fueled trucks and/or vehicles in fleets;**
- **Establishment and use of carpool/vanpool programs, complemented by parking fees for single-occupancy vehicles;**
- **Provision of preferential parking for EV and CNG vehicles;**
- **Use of electrical equipment (instead of gasoline-powered equipment) for landscape maintenance;**
- **Use of electric (instead of diesel or gasoline-powered) yard trucks;**
- **Use of SmartWay 1.25 rated trucks.**

P85. MM 4.4.1 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that during all Project site construction, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. And further that the construction contractor shall place all stationary construction equipment so that emitted noise is directed away from off-site receptors nearest the Project site. The statement in the plans and specifications shall

be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.

P86. MM 4.4.2 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that the construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and off-site receptors nearest the Project site during all Project construction. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.

P87. MM 4.4.3 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that construction activities, including haul truck operations, shall be limited to the hours between 7:00 a.m. and 8:00 p.m. Monday through Friday. No Project-related construction activities shall occur on weekends or Federal holidays. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.

P88. MM 4.4.4 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that for the duration of grading and site preparation activities, temporary construction noise curtains or similar line-of-sight noise reduction measures shall be installed along the Project's southerly boundary. Noise curtains shall be installed so as to provide maximum reduction for noise sensitive uses (at present a single residence located southerly of the Project site) and shown on the grading plans prepared for the Project.

P89. MM 4.5.1 Prior to the issuance of building permits, the Project Applicant shall contribute funding toward the acquisition of new water supplies, new treatment or recycled water facilities, and water efficiency measures for existing customers to develop new water supplies. The extent of additional funding shall be determined by the EMWD and may take the form of a new component of connection fees or a separate charge.

P90. MM 4.5.2 The Applicant shall install water efficient devices and landscaping according to the requirements of EMWD's water use efficiency ordinance(s) effective at the time of Project construction.

P91. MM 4.5.3 The Applicant shall meet with EMWD staff at the earliest feasible date to develop a Plan of Service (POS) for the Project. The POS shall detail water, wastewater and recycled water facilities requirements to serve the Project, to be constructed by the Applicant.

P92. MM 4.5.4 Until the Project begins construction, the Project Water Supply

Assessment shall be reviewed for its continued accuracy and adequacy every three (3) years, commencing on the WSA approval date of June 4, 2008. The Project Applicant shall maintain communication with EMWD on the status of the Project, and the lead agency shall request the referenced three-year periodic review and update of the WSA. If neither the Project applicant nor the lead agency contacts EMWD within three (3) years of approval of this WSA, it shall be assumed that the Project no longer requires the estimated water demand as calculated in the WSA. The demand for the Project will not be considered in assessments for future projects, and the assessment provided within the Project WSA shall be considered invalid.

P93. MM 4.7.1 A professional cultural resources monitor (Project Paleontological Monitor) shall conduct full-time monitoring throughout site excavation and grading activities. The monitor shall be equipped to salvage and/or record the location of historic and/or archaeological resources as they may be unearthed to avoid construction delays, consistent with the requirements of California Public Resources Code Section 21083.2. The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens or finds and to allow the preparation of recovered resources to a point of identification. One monitor for both archaeological and paleontological resources is sufficient if the monitor is qualified in both disciplines to the satisfaction of the City of Moreno Valley.

P94. MM 4.7.2 Should historic or prehistoric resources of potential significance be identified, a qualified archaeologist shall be contacted to assess the find(s) and make recommendations in regard to further monitoring. Resources shall be left in an undisturbed state where feasible. Where preservation in place is infeasible, all recovered resources shall then be curated in an established, accredited museum repository with permanent retrievable archaeological/historic resource storage. A report of findings shall also be prepared by a qualified archaeologist, and shall include an itemized inventory of any specimens recovered. The report and confirmation of curation of any recovered resources from an accredited museum repository shall signify completion of the program to mitigate impacts to archaeological/ historic resources. If disturbed resources are required to be collected and preserved, the applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2.

P95. MM 4.7.3 Prior to the issuance of a grading permit, a City-approved Project Paleontologist shall be retained to initiate and supervise paleontological mitigation-monitoring in all areas of the Project site, subject to the following certain constraints:

- **Once excavations reach ten (10) feet in depth, monitoring of excavation in areas identified as likely to contain paleontological resources by a qualified paleontological monitor or his/her representative must take place;**
- **A paleontological mitigation-monitoring plan shall be developed before**

grading begins;
• Paleontological monitors shall be equipped to salvage and/or record the location of 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; and
• Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources

P96. MM 4.8.1 Prior to the issuance of a grading permit, a "no touch" area shall be staked along the westerly limit of Project development as defined by the alignment of the scour wall proposed along the Quincy Channel. Importantly, the westerly limits of development shall be established so as to preclude potential permanent impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Prior to the issuance of a grading permit, a City-approved Project biologist shall be retained to initiate and supervise monitoring of construction activities to ensure protection and preservation of adjacent Channel areas.

P97. MM 4.8.2 Prior to issuance of a grading permit, the proposed scour wall to be located between the developed Project site and the Quincy Channel shall be shown on the grading plans. Alignment of the scour wall shall be field-determined and physically delineated by the Project biologist in consultation with the City. Importantly, the scour wall alignment shall be established so as to preclude potential impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Ongoing monitoring of construction activities shall be maintained throughout implementation of the scour wall to ensure protection and preservation of adjacent Channel areas.

P98. MM 4.8.3 Prior to issuance of a building permit, landscape and irrigation plans shall be approved which demonstrate that no invasive, non-native plants will be planted or seeded within 150 feet of the avoided riparian habitat along the Quincy Channel.

P99. MM 4.8.4 Prior to the issuance of <u>any</u> grading permits and prior to any physical disturbance of any jurisdictional areas, 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 the Community Development Department - Planning Division and the Public Works Department - Land Development Division.

P100. MM 4.8.5 Prior to issuance of a grading permit, the Applicant shall develop

and implement a Habitat Mitigation and Monitoring Plan (HMMP) to restore impacted riparian (mulefat) habitat. Prior to implementation, the HMMP shall be reviewed and approved by the CDFG. If in its final design, the CDFG-approved HMMP involves use or restoration of USACE or RWQCB jurisdictional areas, USACE and/or RWQCB approval shall also be obtained. The HMMP shall, at a minimum, meet the following requirements:
• A habitat replacement and/or enhancement ratio of at least 1:1 for temporary impact;
• A success criterion of at least 80 percent cover of native riparian vegetation for replaced habitat; and
• Additional requirements, including a 3-year establishment period for the replacement habitat, regular trash removal, native plant re-vegetation for areas temporarily disturbed by construction and regular maintenance and monitoring activities to ensure the success of the mitigation plan; and
• Prior to the issuance of a grading permit, as part of the Project HMMP, appropriate maintenance and monitoring protocols will be developed in concert with CDFG based on final Project designs, and the ultimate scope, location, and type of mitigation reflected in the HMMP as approved by CDFG.

P101. MM 4.8.6 If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season (February 15 – July 31), all suitable habitat will be thoroughly surveyed for the presence of nesting birds within 72 hours prior to clearing. All surveys shall be performed by a qualified Project biologist to be retained by the Applicant and vetted by the City. The survey results shall be submitted by the Project Applicant to the Planning Division. If any active nests are detected, the nest(s) shall be flagged in the field and mapped on the construction plans along with a minimum 50-foot buffer and up to 300 feet for raptors, with the final buffer distance to be determined by the Project biologist. The buffer area shall be avoided until the nesting cycle is complete or it is determined that the nest has failed. In addition, the Project biologist will be present on the site to monitor vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.

P102. MM 4.8.7 Within 30 days of site clearing activities, a pre-construction burrowing owl survey shall be conducted to document the presence/absence of any occupied owl burrows. Any owls present shall be passively or actively relocated following CDFG approved protocols, and with CDFG permission, prior to commencement of clearing. The survey shall be submitted to the Planning Division prior to issuance of a grading permit.

P103. (CO) Prior to issuance of a certificate of occupancy or building final, the project shall install a photovoltaic array (solar panels) or other source of renewable energy generation on-site, or otherwise acquire energy from the local utility that has been generated by renewable resources, to meet the project's office electricity needs.

P104. The applicant shall pay City development impact fees at the "full nexus study rate".

P105. (CO) Prior to issuance of a certificate of occupancy, the applicant shall demonstrate that the building qualifies for Silver LEED certification

Building and Safety Division

B1. The above project shall comply with the current California Codes (CBC, CEC, CMC, CPC and Green Building Standards) as well as City ordinances. All new projects shall provide a soils report as well. Plans shall be submitted to the Building Division as a separate submittal. The 2010 Edition of the California Codes are currently in effect. Building permit applications (plan review) made on or after January 1, 2014, will be subject to the 2013 Edition of the California Building Standards Code.

B2. Prior to final inspection, all plans will be placed on a CD Rom for reference and verification. Plans will include "as built" plans, revisions and changes. The CD will also include Title 24 energy calculations, structural calculations and all other pertinent information. It will be the responsibility of the developer and or the building or property owner(s) to bear all costs required for this process. The CD will be presented to the Building and Safety Division for review prior to final inspection and building occupancy. The CD will become the property of the Moreno Valley Building and Safety Division at that time. In addition, a site plan showing the path of travel from public right of way and building to building access with elevations will be required.

B3. (BP) Prior to the issuance of a building permit, the applicant shall submit a properly completed "Waste Management Plan" (WMP), as required, to the Compliance Official (Building Official) as a portion of the building or demolition permit process.

B4. (BP) Prior to the issuance of a building permit, show on the plans that all exterior doors comply with the requirements of CBC 1133B.1.1.1 for accessible path of travel from every exit door, especially in consideration of doors that may be designated as exits due to interior obstructions to path of travel due to racks, equipment and other interior obstruction to the exit path of travel.

B5. (BP) Prior to the issuance of a building permit, show on the plans that no gutter, drainage feature, swale or other deviation in the flat level surface at the accessible parking spaces exists within and for a minimum four foot extension

beyond the outer dimensions of the parking space, loading zone and path of travel.

B6. (BP) Plans shall be prepared, stamped and signed by a licensed Architect or Registered Civil Engineer for submission for plan check review.

B7. (BP) Plumbing plans shall be prepared, including isometrics, for required plumbing fixtures based on California Plumbing Code, Chapter 4 and Table 4-1.

SCHOOL DISTRICT

S1. (BP) Prior to issuance of building permits, the developer shall provide to the Community Development Director a written certification by the affected school district that either: (1) the project has complied with the fee or other exaction levied on the project by the governing board of the district, pursuant to Government Code Section 65996; or (2) the fee or other requirement does not apply to the project.

UNITED STATES POSTAL SERVICE

PO1. (BP) Prior to the issuance of building permits, the developer shall contact the U.S. Postal Service to determine the appropriate type and location of mailboxes.

FIRE PREVENTION BUREAU

1. **City will issue grading and partial building permits allowing construction of foundations, slabs, wall and erection of concrete walls, even if the offsite water lines and fire hydrants along Eucalyptus adjacent to the site have not been constructed. Roof construction will not begin until waterlines and hydrants are operational (complete the proposed pipeline improvements shown on EMWD WO#12713. These improvements include proposed pipeline additions on site and off).**
2. **The following Standard Conditions shall apply.**

With respect to the conditions of approval, the following fire protection measures shall be provided in accordance with Moreno Valley City Ordinances and/or recognized fire protection standards:

F1. 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 force at the time of building plan submittal.

F2. 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 4000 GPM for 4 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 the project will be determined at time of submittal. (CFC 508.3, Appendix B and MVMC 8.36.100 Section D) A 50% reduction in fire flow was granted for the use of fire sprinklers throughout the facility. The reduction shall only apply to fire flow; hydrant spacing shall be per the fire flow requirements listed in CFC Appendix B and C prior to credits being granted. **EMWD Work Order 12713 is required in order to meet this fire flow.**

F3. Industrial, Commercial, Multi-family, Apartment, Condominium, Townhouse or Mobile Home Parks. A combination of on-site and off super enhanced fire hydrants (6" x 4" x 4" x 2 ½") shall not be closer than 40 feet and more than 150 feet from any portion of the building as measured along approved emergency vehicular travel ways. The required fire flow shall be available from any adjacent fire hydrant(s) in the system. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, super or enhanced fire hydrants as determined by the fire code official

shall be provided at spacing not to exceed 500 feet of frontage for transportation hazards. (CFC 508.5.7 & MVMC 8.36.050 Section O and 8.36.100 Section E)

F4. Prior to issuance of Building Permits, the applicant/developer shall provide the Fire Prevention Bureau with an approved site plan for Fire Lanes and signage. (MVMC 8.36.050 and CFC 501.3)

F5. Prior to construction and issuance of building permits, all locations where structures are to be built shall have an approved Fire Department emergency vehicular access road (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. (CFC 501.4 and MVMC 8.36.050 Section A)

F6. Prior to construction and issuance of Building Permits, fire lanes and fire apparatus access roads shall have an unobstructed width of not less than or thirty (30) feet as approved by the Fire Prevention Bureau and an unobstructed vertical clearance of not less the thirteen (13) feet six (6) inches. (CFC 503.2.1.1 and MVMC 8.36.050)

F7. Prior to construction, all roads, driveways and private roads shall not exceed 12 percent grade. (CFC 503.2.7 and MVMC 8.36.050)

F8. 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 and MVMC 8.36.050 Section A)

F9. 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 501.3 and MVMC 8.36.050)

F10. Prior to building construction, dead end roadways and streets which have not been completed shall have a turnaround capable of accommodating fire apparatus. (CFC 503.2.5 and MVMC 8.36.050)

F11. Prior to issuance of Building Permits, the applicant/developer shall participate in the Fire Impact Mitigation Program. (Fee Resolution as adopted by City Council)

F12. 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.

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.

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 508.1 and MVMC 8.36.100)

F13. 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 510.1)

F14. 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 (12) inches in height for buildings and six (6) inches in height for suite identification on a contrasting background. Unobstructed lighting of the address(s) shall be by means approved by the Fire Prevention Bureau and Police Department. In multiple suite centers (strip malls), businesses shall post the name of the business on the rear door(s). (CFC 505.1)

F15. 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)

F16. 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 8.36.070)

F17. 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 Chief. The Knox-Box shall be supervised by the alarm system and 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)

F18. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall be responsible for obtaining underground and/or above ground tank permits for the storage of combustible liquids, flammable liquids, or any other hazardous materials from both the County of Riverside Community Health Agency Department of Environmental Health and the Fire Prevention Bureau. (CFC 3401.4 and 2701.5)

F19. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer must submit a simple plot plan, a simple floor plan, and other plans as requested, each as an electronic file in .dwg format, to the Fire Prevention Bureau. Alternate file formats may be acceptable with approval by the Fire Chief.

F20. 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 503.2.7 and MVMC 8.36.050 Section I)

F21. 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 8.36.050) **An approved all weather access to the site during construction shall be provided and shall be maintained at all times during construction. Prior to issuance of Building permit a temporary construction access plan shall will be provided and approved by the Fire Prevention Bureau.**

F22. Complete plans and specifications for fire alarm systems, fire-extinguishing systems (including automatic sprinklers or standpipe systems), clean agent systems (or other special types of automatic fire-extinguishing systems), as well as other fire-protection systems and appurtenances thereto shall be submitted to the Moreno Valley Fire Prevention Bureau for review and approval prior to system installation. Submittals shall be in accordance with CFC Chapter 9 and associated accepted national standards.

F23. A permit is required to maintain, store, use or handle materials, or to conduct processes which produce conditions hazardous to life or property, or to install equipment used in connection with such activities. Such permits shall not be construed as authority to violate, cancel or set aside any of the provisions of this code. Such permit shall not take the place of any license required by law. Applications for permits shall be made to the Fire Prevention Bureau in such form and detail as prescribed by the Bureau. Applications for permits shall be accompanied by such plans as required by the Bureau. Permits shall be kept on the premises designated therein at all times and shall be posted in a conspicuous

location on the premises or shall be kept on the premises in a location designated by the Fire Chief. Permits shall be subject to inspection at all times by an officer of the fire department or other persons authorized by the Fire Chief in accordance with Appendix Chapter 1 and MVMC 8.36.100.

F24. Approval of the safety precautions required for buildings being constructed, altered or demolished shall be required by the Fire Chief in addition to other approvals required for specific operations or processes associated with such construction, alteration or demolition. (CFC Chapter 14 & CBC Chapter 33)

F25. Prior to issuance of Certificate of Occupancy, permits are required to store, dispense, use or handle hazardous material. Each application for a permit shall include a hazardous materials management plan (HMMP). The location of the HMMP shall be posted adjacent to (other) permits when an HMMP is provided. The HMMP shall include a facility site plan designating the following:

a) Storage and use areas;
b) Maximum amount of each material stored or used in each area;
c) Range of container sizes;
d) Locations of emergency isolation and mitigation valves and devises;
e) Product conveying piping containing liquids or gases, other than utility-owned fuel gas lines and low-pressure fuel gas lines;
f) On and off positions of valves for valves which are of the self-indicating type;
g) Storage plan showing the intended storage arrangement, including the location and dimensions of aisles. The plans shall be legible and approximately to scale. Separate distribution systems are allowed to be shown on separate pages; and
h) Site plan showing all adjacent/neighboring structures and use.

NOTE: Each application for a permit shall include a hazardous materials inventory statement (HMIS).

F26. Before a Hazardous Materials permit is issued, the Fire Chief shall inspect and approve the receptacles, vehicles, buildings, devices, premises, storage spaces or areas to be used. In instances where laws or regulations are enforceable by departments other than the Fire Prevention Bureau, joint approval shall be obtained from all departments concerned. (CFC Appendix H)

F27. Construction or work for which the Fire Prevention Bureau's approval is required shall be subject to inspection by the Fire Chief and such construction or work shall remain accessible and exposed for inspection purposes until approved. (CFC Section 106)

F28. The Fire Prevention Bureau shall maintain the authority to inspect, as often as necessary, buildings and premises, including such other hazards or appliances designated by the Fire Chief for the purpose of ascertaining and causing to be

corrected any conditions which would reasonably tend to cause fire or contribute to its spread, or any violation of the purpose or provisions of this code and of any other law or standard affecting fire safety. (CFC Section 106)

F29. Permit requirements issued, which designate specific occupancy requirements for a particular dwelling, occupancy, or use, shall remain in effect until such time as amended by the Fire Chief. (CFC Section 104)

F30. In accordance with the California Fire Code Appendix Chapter 1, where no applicable standards or requirements are set forth in this code, or contained within other laws, codes, regulations, ordinances or bylaws adopted by the jurisdiction, compliance with applicable standards of the National Fire Protection Association or other nationally recognized fire safety standards as are approved shall be deemed as prima facie evidence of compliance with the intent of this code as approved by the Fire Chief. (CFC Section 102.7)

F31. Any alterations, demolitions, or change in design, occupancy and use of buildings or site will require plan submittal to the Fire Prevention Bureau with review and approval prior to installation. (CFC Appendix Chapter 1)

F32. Emergency and Fire Protection Plans shall be provided when required by the Fire Prevention Bureau. (CFC Section 105)

F33. Prior to construction, all traffic calming designs/devices must be approved by the Fire Marshal and City Engineer.

PUBLIC WORKS DEPARTMENT – LAND DEVELOPMENT DIVISION

The following are the Public Works Department – Land Development Division Conditions of Approval for this project and shall be completed at no cost to any government agency. All questions regarding the intent of the following conditions shall be referred to the Public Works Department – Land Development Division.

General Conditions

LD1. (G) 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)

LD2. (G) If the project involves the subdivision of land, maps may be developed in phases with the approval of the City Engineer. Financial security shall be provided for all improvements associated with each phase of the map. The boundaries of any multiple map increment shall be subject to the approval of the City Engineer. The City Engineer may require the dedication and construction of

necessary utilities, streets or other improvements outside the area of any particular map, if the improvements are needed for circulation, parking, access, or for the welfare or safety of the public. (MC 9.14.080, GC 66412 and 66462.5) If the project does not involve the subdivision of land and it is necessary to dedicate right-of-way/easements, the developer shall make the appropriate offer of dedication by separate instrument. The City Engineer may require the construction of necessary utilities, streets or other improvements beyond the project boundary, if the improvements are needed for circulation, parking, access, or for the welfare or safety of the public.

LD3. (G) It is understood that the tentative map and plot plan correctly shows all existing easements, traveled ways, and drainage courses, and that their omission may require the map or plans associated with this application to be resubmitted for further consideration. (MC 9.14.040)

LD4. (G) 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. In the event that the developer is unsuccessful, he 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)

LD5. (G) If improvements associated with this project are not initiated within two years of the date of approval of the Public Improvement Agreement, the City Engineer may require that the improvement cost estimate 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 Public Improvement Agreement or issuance of a permit.

LD6. (G) The developer shall monitor, supervise and control all construction and construction supportive 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 Public Works Department.

(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 shall be adhered to during the grading operations.

Violation of any condition or restriction or prohibition set forth in these conditions shall subject the owner, applicant, developer or contractor(s) to remedies as noted in the 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.

LD7. (G) The developer shall protect downstream properties from damage caused by alteration of drainage patterns, i.e., concentration or diversion of flow. 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)

LD8. (G) A detailed drainage study shall be submitted to the City Engineer for review and approval at the time of any improvement or grading plan submittal. The study shall be prepared by a registered civil engineer and shall include existing and proposed hydrologic conditions. Hydraulic calculations are required for all drainage control devices and storm drain lines. (MC 9.14.110). Prior to approval of the related improvement or grading plans, the developer shall submit the approved drainage study, on compact disk, in (.pdf) digital format to the Land Development Division of the Public Works Department.

LD9. (G) Prior to final map approval, commencing applicable street improvements, or obtaining the first building permit, the developer shall enter into a Development Impact Fee (DIF) Improvement Credit Agreement to secure credit and reimbursement for the construction of applicable arterial street, traffic signal, and/or interchange improvements. If the developer fails to complete this agreement prior to the timing as specified above, no credits or reimbursements will be given. The applicant shall pay Arterial Streets, Traffic Signals, and Interchange Improvements development impact fees adopted by the City Council by resolution. (Ord. 695 § 1.1 (part), 2005) (MC 3.38.030, .040, .050)

LD10. (G) The final conditions of approval issued by the Planning Division subsequent to Planning Commission approval shall be photographically or electronically placed on mylar sheets and included in the Grading and Street Improvement plan sets on twenty-four (24) inch by thirty-six (36) inch mylar and submitted with the plans for plan check. These conditions of approval shall become part of these plan sets and the approved plans shall be available in the field during grading and construction.

LD11. (G) Upon approval of the tentative tract map and plot plan by the Planning Commission, the Developer shall submit the approved tentative tract map or plot plan on compact disk in (.dxf) digital format to the Land Development Division of the Public Works Department.

Prior to Grading Plan Approval or Grading Permit

LD12. (GPA) Prior to approval of the grading plans, plans shall be drawn on twenty-four (24) inch by thirty-six (36) inch mylar and signed by a registered civil engineer and other registered/licensed professional as required.

LD13. (GPA) Prior to approval of grading plans, 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. A grading permit shall be obtained from the Public Works Department Land Development Division prior to commencement of any grading outside of the City maintained road right-of-way.

d. All improvement plans are substantially complete and appropriate clearance and at-risk letters are provided to the City. (MC 9.14.030)

e. The developer shall submit a soils and geologic report to the Public Works Department – Land Development Division. The report shall address the soil's stability and geological conditions of the site.

LD14. (GPA) Prior to grading plan approval, the developer shall select and implement treatment control best management practices (BMPs) that are medium to highly effective for treating Pollutants of Concern (POC) for the project. Projects where National Pollution Discharge Elimination System (NPDES) mandates water quality treatment control best management practices (BMPs) shall be designed per the City of Moreno Valley guidelines or as approved by the City Engineer.

LD15. (GPA) Prior to approval of the grading plans 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). The WDID# shall be noted on the grading plans prior to issuance of the first grading permit.

LD16. (GPA) Prior to the grading plan approval, or issuance of a building permit, if a grading permit is not required, the Developer shall submit two (2) copies of the final project-specific Water Quality Management Plan (WQMP) for review by the City Engineer that :

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. Incorporates Treatment Control BMPs and provides information regarding design considerations;
d. Describes the long-term operation and maintenance requirements for BMPs requiring maintenance; and
e. 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 of the Public Works Department.

LD17. (GPA) Prior to the grading plan approval, or issuance of a building permit, if a grading permit is not required, the Developer shall record a "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant," to provide public notice of the requirement to implement the approved final project-specific WQMP and the maintenance requirements associated with the WQMP.

A boilerplate copy of the "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant," can be obtained by contacting the Land Development Division of the Public Works Department

LD18. (GPA) Prior to the grading plan approval, or issuance of a building permit, if a grading permit is not required, the Developer shall secure approval of the final project-specific WQMP from the City Engineer. The final project-specific WQMP shall be submitted at the same time of grading plan submittal. The approved final WQMP shall be submitted to the Storm Water Program Manager on compact disk(s) in Microsoft Word format prior to grading plan approval.

LD19. (GPA) Prior to the grading plan approval, or issuance of a building permit as determined by the City Engineer, the approved final project-specific WQMP shall be incorporated by reference or attached to the project's Storm Water Pollution Prevention Plan as the Post-Construction Management Plan.

LD20. (GPA) Prior to grading plan approval, the developer shall prepare a Storm Water Pollution Prevention Plan (SWPPP) in conformance with the state's 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. The SWPPP shall be submitted to the Storm Water Program Manager on compact disk(s) in Microsoft Word format.

LD21. (GPA) Prior to the approval of the grading plans, the developer shall pay applicable remaining grading plan check fees.

LD22. (GPA/MA) Prior to the later of either grading plan or final map approval, resolution of all drainage issues shall be as approved by the City Engineer.

LD23. (GP) Prior to issuance of a grading permit, or building permit when a grading permit is not required, for projects that require a project-specific Water Quality Management Plan (WQMP), a project-specific final WQMP (F-WQMP) shall be approved. Upon approval, a WQMP Identification Number is issued by the Storm Water Management Section and shall be noted on the rough grading plans as confirmation that a project-specific F-WQMP approval has been obtained.

LD24. (GP) Prior to the issuance of a grading permit the developer shall submit recorded slope easements from adjacent landowners in any areas where grading resulting in slopes is proposed to take place outside of the project boundaries. For all other offsite grading, written permission from adjacent property owners shall be submitted.

LD25. (GP) Prior to issuance of a grading permit, if the fee has not already been paid prior to map approval or prior to issuance of a building permit if a grading permit is not required, the developer shall pay Area Drainage Plan (ADP) fees. The developer shall provide a receipt to the City showing that ADP fees have been paid to Riverside County Flood Control and Water Conservation District. (MC 9.14.100)

LD26. (GP) Prior to issuance of a grading permit, security, in the form of a cash deposit (preferable), letter of credit, or performance bond shall be required to be submitted as a guarantee of the completion of the grading required as a condition of approval of the project.

LD27. (GP) Prior to issuance of a grading permit, the developer shall pay the applicable grading inspection fees.

Prior to Map Approval or Recordation

LD28. (MA) Prior to approval of the map, all street dedications shall be 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. All dedications shall be free of all encumbrances as approved by the City Engineer.

LD29. (MA) Prior to approval of the map, security shall be required to be submitted as a guarantee of the completion of the improvements required as a condition of approval of the project. A public improvement agreement will be required to be executed.

LD30. (MA) Prior to approval of the map, the developer shall enter into an 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. (MC 9.14.110)

LD31. (MR) Prior to recordation of the map 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. (MC 9.14.110)

LD32. (MR) Prior to recordation of the final map, this project is subject to requirements 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. 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 recordation. Following are the requirements:

a. Select one of the following options to meet the financial responsibility to provide storm water utilities services for the required operation and maintenance monitoring and system evaluations 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 record the final map 90 days prior to City Council action authorizing recordation of the final map and the financial option selected. (California Government Code & Municipal Code)

LD33. (MR) Prior to recordation of the Final Map, the Grading Plan (s) and Landscape and Irrigation Plan (s) prepared for the "Water Quality Ponds/Bio-Swales" shall be drawn on twenty-four (24) inch by thirty-six (36) inch mylar and signed by a registered civil engineer or other registered/licensed professional as required. The developer, or the developer's successors or assignees shall secure the initials of the Engineering Division Manager or his designee on the mylars prior to the plans being approved by the City Engineer. (MC 9.14.100.C.2)

LD34. (MR) Prior to recordation of the map, the developer shall submit the map, on compact disks, in (.dxf) digital format to the Land Development Division of the Public Works Department.

Prior to Improvement Plan Approval or Construction Permit

LD35. (IPA) Prior to approval of the improvement plans, the improvement plans shall be drawn on twenty-four (24) inch by thirty-six (36) inch mylar and signed by a registered civil engineer and other registered/licensed professional as required.

LD36. (IPA) Prior to approval of the improvement plans, the developer shall submit clearances from all applicable agencies, and pay all outstanding plan check fees. (MC 9.14.210)

LD37. (IPA) All public improvement plans prepared and signed by a registered civil engineer in accordance with City standards, policies and requirements shall be approved by the City Engineer in order for the Public Improvement Agreement and accompanying security to be executed.

LD38. (IPA) Prior to approval of the improvement plans, securities and a public improvement agreement shall be required to be submitted and executed as a guarantee of the completion of the improvements required as a condition of approval of the project.

LD39. (IPA) The street improvement plans shall comply with all applicable City standards and the following design standards throughout this project:

a. Corner cutbacks in conformance with City Standard 208 shall be shown on the final map or, if no map is to be recorded, offered for dedication by separate instrument.

b. Lot access to major thoroughfares shall be restricted except at intersections and approved entrances and shall be so noted on the final map. (MC 9.14.100)

c. The minimum centerline and flow line grades shall be one percent unless otherwise approved by the City Engineer. (MC 9.14.020)

LD40. (IPA) Prior to approval of the improvement plans, the plans shall be based upon a centerline profile, extending beyond the project boundaries a minimum distance of 300 feet at a grade and alignment approved by the City Engineer. Design plan and profile information shall include the minimum 300 feet beyond the project boundaries.

LD41. (IPA) Prior to approval of the improvement plans, 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 years old and recently

slurry sealed streets less than one year old. Pavement cuts for trench repairs may be allowed for emergency repairs or as specifically approved in writing by the City Engineer.

LD42. (IPA) Prior to approval of the improvement plans, 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, those access ramps in that intersection shall be retrofitted to comply with current ADA requirements, unless approved otherwise by the City Engineer.

LD43. (IPA) Prior to approval of the improvement plans, any drainage facilities with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided. (MC 9.14.110)

LD44. (IPA) Prior to the approval of the improvement plans, the hydrology study shall show that the 10-year storm flow will be contained within the curb and the 100-year storm flow shall be contained within the street right-of-way. In addition, one lane in each direction shall not be used to carry surface flows during any storm event for street sections equal to or larger than a minor arterial. When any of these criteria is exceeded, additional drainage facilities shall be installed. (MC 9.14.110 A.2)

LD45. (IPA) The project shall be designed to accept and properly convey all off-site drainage flowing onto or through the site. All storm drain design and improvements shall be subject to review and approval of the City Engineer. In the event that the City Engineer permits the use of streets for drainage purposes, the provisions of the Development Code will 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 Public Works Department – Land Development Division. (MC 9.14.110)

LD46. (CP) All work performed within the City right-of-way requires a construction permit. As determined by the City Engineer, security may be required for work within the right-of-way. Security shall be in the form of a cash deposit or other approved means. The City Engineer may require the execution of a public improvement agreement as a condition of the issuance of the construction permit. All inspection fees shall be paid prior to issuance of construction permit. (MC 9.14.100)

LD47. (CP) Prior to issuance of a construction permit, all public improvement plans prepared and signed by a registered civil engineer in accordance with City standards, policies and requirements shall be approved by the City Engineer.

LD48. (CP) Prior to issuance of construction permits, the developer shall submit all improvement plans on compact disks, in (.dxf) digital format to the Land Development Division of the Public Works Department.

LD49. (CP) Prior to issuance of construction permits, the developer shall pay all applicable inspection fees.

Prior to Building Permit

LD50. (BP) Prior to issuance of a building permit (excluding model homes), an approval by the City Engineer is required of the water quality control basin(s). The developer shall provide certification to the line, grade, flow test and system invert elevations.

LD51. (BP) Prior to issuance of a building permit, all pads shall meet pad elevations per approved plans as noted by the setting of "Blue-top" markers installed by a registered land surveyor or licensed engineer.

LD52. (BP) Prior to issuance of a building permit, the developer shall submit for review and approval, a Waste Management Plan (WMP) that shows data of waste tonnage, supported by original or certified photocopies of receipts and weight tags or other records of measurement from recycling companies and/or landfill and disposal companies. The Waste Management Plan shall contain the following:

a. The estimated volume or weight of project waste to be generated by material type. Project waste or debris may consist of vegetative materials including trees, tree parts, shrubs, stumps, logs, brush, or any other type of plants that are cleared from a site. Project waste may also include roadwork removal, rocks, soils, concrete and other material that normally results from land clearing.
b. The maximum volume or weight of such materials that can be feasibly diverted via reuse and recycling.
c. The vendor(s) that the applicant proposes to use to haul the materials.
d. Facility(s) the materials will be hauled to, and their expected diversion rates.
e. Estimated volume or weight of clearing, grubbing, and grading debris that will be landfilled .

Approval of the WMP requires that at least fifty (50) percent of all clearing, grubbing, and grading debris generated by the project shall be diverted, unless the developer is granted an exemption. Exemptions for diversions of less than fifty (50) percent will be reviewed on a case by case basis. (AB939, MC 8.80)

Prior to Certificate of Occupancy

LD53. (CO) Prior to issuance of a certificate of occupancy, if the project involves a non-residential subdivision, the map shall be recorded.

LD54. (CO) Prior to issuance of the last certificate of occupancy or building final, the developer shall pay all outstanding fees.

LD55. (CO) The City of Moreno Valley has an adopted Development Impact Fee (DIF) nexus study. All projects unless otherwise exempted shall be subject to the payment of the DIF prior to issuance of occupancy. The fees are subject to the provisions of the enabling ordinance and the fee schedule in effect at the time of occupancy.

LD56. (CO) The City of Moreno Valley has an adopted area wide Transportation Uniform Mitigation Fee (TUMF). All projects unless otherwise exempted shall be subject to the payment of the TUMF prior to issuance of occupancy. The fees are subject to the provisions of the enabling ordinance and the fee schedule in effect at the time of occupancy.

LD57. (CO) Prior to issuance of a certificate of occupancy or building final, the developer shall construct all public improvements in conformance with applicable City standards, except as noted in the Special Conditions, including but not limited to the following applicable improvements:

a. Street improvements including, but not limited to: pavement, base, curb and/or gutter, cross gutters, spandrel, sidewalks, drive approaches, pedestrian ramps, street lights, signing, striping, under sidewalk drains, landscaping and irrigation, medians, redwood header boards, 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 existing and proposed utility lines less than 115,000 volts.

f. Relocation of overhead electrical utility lines including, but not limited to: electrical, cable and telephone.

LD58. (CO) Prior to issuance of a certificate of occupancy or building final, all existing and new utilities adjacent to and on-site shall be placed underground in accordance with City of Moreno Valley ordinances. (MC 9.14.130)

LD59. (CO) Prior to issuance of a certificate of occupancy or building final, in order to treat for water quality the sub-area tributary to the basin, the Developer must comply with the following:

a. The water quality basin and all associated treatment control BMPs and all hardware per the approved civil drawing must be constructed, certified and approved by the City Engineer including, but not limited to, piping, forebay, aftbay, trash rack, etc.) Landscape and irrigation plans are not approved for installation at this time.
b. Provide the City with an Engineer's Line and Grade Certification.
c. Perform and pass a flow test per City test procedures.

LD60. (CO) Prior to issuance of a certificate of occupancy or building final for any Commercial/Industrial facility, whichever occurs first, the owner may have to secure coverage under the State's General Industrial Activities Storm Water Permit as issued by the State Water Resources Control Board.

Prior to Acceptance of Streets into the City Maintained Road System

LD61. (AOS) Aggregate slurry, as defined in Section 203-5 of Standard Specifications for Public Works Construction, may be required just prior to acceptance of the entire tract street(s) into the City maintained road system at the discretion of the City Engineer. If slurry is required, the developer/contractor must provide a slurry mix design submittal for City Engineer approval. The latex additive shall be Ultra Pave 70 (for anionic – per project geotechnical report) or Ultra Pave 65 K (for cationic – per project geotechnical report) or an approved equal. 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.

SPECIAL CONDITIONS

LD62. Prior to approval of the rough grading plan, this project shall demonstrate, via a final drainage study, that the increased runoff resulting from the development of this site is mitigated. During no storm event shall the flow leaving the site in the developed condition be larger than that of the pre-developed condition. The drainage study shall analyze the following events: 1, 3, 6 and 24-hour duration events for the 2, 5, 10 and 100-year storm events. The applicant understands that additional detention measures, beyond those shown on the tentative map and preliminary drainage study, may be required.

LD63. Prior to approval of the precise grading plan, the developer shall obtain the following offsite dedications from the adjacent property owner(s), per separate instrument, and submitted to the City for review and approval. The offsite area referenced is located between the project's east boundary line and Redlands Boulevard.

a. A 10-foot street right-of-way dedication on the north side of Eucalyptus Avenue (formerly Fir Avenue) starting from this project's east boundary line east to Redlands Boulevard to ensure a centerline to north right-of-way distance of 50 feet for an Arterial, City Standard 104A.

b. A 39-foot half street right-of-way dedication on the entire east side of "A" Street within the adjacent offsite properties 488-330-027 and 488-330-028 to ensure a centerline to east right-of-way distance of 39 feet for an Industrial Collector, City Standard 106.

c. A 2-foot public access easement for the portions of sidewalk which are outside of the public right-of-way, along the north side of Eucalyptus Avenue from this project's east property line east to Redlands Boulevard.

d. An 11-foot multi-use trail easement to the City adjoining and north of the 2-foot public access easement listed above for trail purposes, along the north side of Eucalyptus Avenue from this project's east property line east to Redlands Boulevard.

e. Any necessary corner cutback right-of-way dedications per City Standard 208.

LD64. Prior to approval of the precise grading plans, the plans shall show any proposed trash enclosure as dual bin; one bin for trash and one bin for recyclables. The trash enclosure shall be per City Standard Plan 627.

LD65. Prior to approval of the precise grading plans, the grading plans shall clearly show that the parking lot conforms to current City and ADA standards. The parking lot shall be 5% maximum, 1% minimum, 2% maximum at or near any disabled parking stall and travel way. Ramps, curb openings and travel paths shall all conform to current ADA standards as outlined in Department of Justice's "ADA Standards for Accessible Design", Excerpt from 28 CFR Part 36. (www.usdoj.gov) and as approved by the City's Building and Safety Division.

LD66. Prior to precise grading plan approval, the plans shall show roof drains directed to a landscaped area rather than being routed directly to the parking lot. Alternatively, roof drain flows can be directed to private storm drains which will connect to the treatment control best management practice. This shall be shown in the approved F-WQMP.

LD67. Prior to approval of the grading and/or improvement plans, the plans shall show the relocation of the existing water line near State Highway 60 so that it is located outside of the lettered lot being conveyed to the City for future highway expansion purposes. Ideally, the water line shall be relocated within the Eucalyptus Avenue right-of-way. The developer shall coordinate with the utility purveyor Eastern Municipal Water District (EMWD) and the City. The developer will be responsible for quitclaiming the existing abandoned easement as well as obtaining any necessary new easements.

LD68. Prior to approval of the grading and/or improvement plans, the plans will be required to show the design for any proposed improvements to the existing Quincy Channel, along the entire west side of the project and any off-site upstream or downstream improvements, as necessary. The design may require the approval of both the Riverside County Flood Control and Water Conservation District (RCFC&WCD) and the City. The improvements may require, but not be limited to, construction of a scour wall including soil removal and recompaction and a maintenance access road including a driveway approach from Eucalyptus Avenue. The developer will be responsible for obtaining the appropriate permit(s) and clearance(s).

LD69. Prior to approval of the grading and/or improvement plans, the plans shall show the design for the proposed improvements to the existing ditch located on the west side of Redlands Boulevard. Improvements may include, but not be limited to, the reconstruction of the existing headwall, the installation of energy dissipater(s), and a proposed pipe culvert under Eucalyptus Avenue.

LD70. Prior to the issuance of a grading permit, the developer shall secure all necessary off-site drainage easements for the proposed offsite drainage improvements. All easements shall be plotted and labeled on the design plans. Written permission must be obtained from off-site property owner(s) for all off-site grading and easements.

LD71. Prior to approval of the improvement plans, the plans shall show the design for the installation of storm drain Line D-3 of RCFC&WCD's Moreno Area Drainage Plan (ADP). The plans shall show all accompanying drainage improvements such as catch basins, laterals, etc. to properly collect and convey storm flows to Line D-3. Line D-3 shall connect to the existing ditch located on the west side of Redlands Boulevard. The design shall be approved by both RCFC&WCD and the City.

LD72. Prior to approval of the parcel map, the map shall show the appropriate dedication along State Highway 60, shown as a lettered lot, and conveyed to the City, for future highway expansion, consistent with Caltrans' current expansion plans, as approved by the City Engineer.

LD73. Prior to the approval of the parcel map, the map shall show the area near Qunicy Channel as a lettered lot or a "Private Drainage Easement". If the subject area is to be maintained by RCFC&WCD, then the lettered lot shall be dedicated to the City and the City will quitclaim the area to RCFC&WCD according to a Cooperative Agreement between RCFC&WCD, the City and property owner. If the subject area is to remain unimproved, then a "Private Drainage Easement" shall be shown on the map. The easement shall be coordinated with the City and acknowledged in the Owner's Statement, of the parcel map, as being "reserved for ourselves, assigns, or successors for drainage purposes".

LD74. Prior to approval of the parcel map, the map shall show the following:

a. A 10-foot street right-of-way dedication on the north side of Eucalyptus Avenue (formerly Fir Avenue) along project's south frontage to ensure a centerline to north right-of-way distance of 50 feet for an Arterial, City Standard 104A.

b. A 39-foot half street right-of-way dedication on the entire west side of "A" Street along this project's east frontage to ensure a centerline to west right-of-way distance of 39 feet for an Industrial Collector, City Standard 106.

c. The appropriate street right-of-way dedication for a cul-de-sac at the northern terminus of "A" Street per City Standard Plan 123.

d. A 4-foot minimum pedestrian right-of-way dedication behind any driveway approach per City Standard 118C, on both Eucalyptus Avenue and "A" Street.

e. A 2-foot public access easement to the City for the portions of sidewalk which are outside of the public right-of-way, along the north side of Eucalyptus Avenue.

f. An 11-foot multi-use trail easement to the City adjoining and north of the 2-foot public access easement listed above for trail purposes, along the north side of Eucalyptus Avenue.

g. Corner cutback right-of-way dedications per City Standard 208.

LD75. Prior to approval of the parcel map, the Developer shall guarantee the construction of the following improvements by entering into a public improvement agreement and posting security. The improvements shall be completed prior to occupancy of the first building or as otherwise determined by the City Engineer.

a. Redlands Boulevard, future Divided Arterial, City Standard 103A (110-foot RW / 66-foot CC) shall not be constructed to its ultimate half-width improvements with this project. However, it is acknowledged that some level of interim improvements will be required to facilitate the orderly development of this project. This project shall install the required interim improvements as directed by the City's Land Development and Transportation Engineering Divisions during design plan check. Improvements might consist of, but not be limited to, pavement, base, street widening to include an auxiliary lane from the SH-60 E/B off-ramp south to Eucalyptus Avenue, redwood header, curb and/or AC berm, drainage structures, any necessary offsite improvement transition/joins to existing, streetlights, pedestrian ramps, removal/relocation and/or undergrounding of any power poles with overhead utility lines less than 115,000 volts, and dry and wet utilities.

b. Eucalyptus Avenue (formerly Fir Avenue), Arterial, City Standard 104A (100-foot RW / 76-foot CC) shall be constructed to half-width plus an additional 18 feet south of the centerline, with an additional 5 foot gravel shoulder south of the 18 feet, along the entire project's south frontage and continuing offsite easterly to Redlands Boulevard. A 10-foot right-of-way dedication on the north side of the street, along the project's south property line, shall be shown on the parcel map. Required offsite dedications shall be per separate instrument. Improvements shall consist of, but not be limited to, pavement, base, redwood header, gravel, curb, gutter, sidewalk, a multi-use trail as approved by the City's Parks and Community Services Department, landscaping, driveway approaches, drainage structures, any necessary offsite improvement transition/joins to existing, streetlights, pedestrian ramps, removal/relocation and/or undergrounding of any power poles with overhead utility lines less than 115,000 volts, and dry and wet utilities.

c. "A" Street, Industrial Collector, City Standard 106 (78-foot RW / 56-foot CC) shall be constructed to half-width plus an additional 18 feet minimum east of the centerline, along the project's east property line, however, per the planning level documents, the applicant has opted to construct full-width improvements. A 39-foot right-of-way dedication on the west side of the street, along the project's east property line, shall be shown on the parcel map. Required offsite dedications shall be per separate instrument. Improvements shall consist of, but not be limited to, pavement, base, curb, gutter, sidewalk, driveway approaches, drainage structures, any necessary offsite improvement transition/joins to existing, streetlights, pedestrian ramps, dry and wet utilities.

d. The developer shall ensure adequate turn-around on Eucalyptus Avenue at the west end of the project, east of Quincy Channel, as approved by the City's Land Development, Transportation Engineering and Fire Prevention Divisions/Department.

e. Driveway approaches shall be constructed per City Standard No. 118C. The parcel map shall show an additional 4-foot right-of-way dedication behind driveway approaches. No decorative pavers shall be placed within the public right-of-way.

f. The developer shall install all necessary on-site and off-site drainage improvements to properly collect and convey drainage entering, within and leaving the project. This may include, but not be limited to on-site and perimeter drainage improvements to properly convey drainage within and along the project site, and downstream off-site improvements of master plan storm drain lines. The developer shall construct the following storm drain lines: Line D-3 in Eucalyptus Avenue of the Moreno Master Drainage Plan.

LD76. The Applicant shall prepare and submit for approval a final, project-specific water quality management plan (F-WQMP). The F-WQMP shall be consistent with the approved P-WQMP and in full conformance with the document; "Riverside County Water Quality Management Plan for Urban Runoff" dated July 24, 2006, errata corrected 1-22-09. The F-WQMP shall be submitted and approved prior to application for and issuance of grading permits or building 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.

LD77. The Applicant shall select and implement treatment control BMPs that are medium to highly effective for treating Pollutants of Concern (POC) for the project. POC include project pollutants associated with a 303(d) listing or a TMDL for receiving waters.

a. Project POC include Nutrients, Oxygen Demanding Substances, and Pathogens (Bacteria and Viruses).

b. Exhibit C of the document, "Riverside County Water Quality Management Plan for Urban Runoff" dated July 24, 2006 shall be consulted for determining the effectiveness of proposed treatment BMPs

LD78. The Applicant has proposed to incorporate the use of an infiltration basin system and pervious contrete. Final design details of the infiltration system and pervious concrete system must be provided in the first submittal of the F-WQMP. The size of the treatment control BMPs are to be determined

using the procedures set forth in Exhibit C of the Riverside County Guidance Document. 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. All areas of infiltration shall be evaluated using the Double Ring Infiltrometer Test Method (ASTM D3385). The testing shall be taken at elevations where infiltration will take place.

LD79. The Applicant shall substantiate the applicable Hydrologic Condition of Concern (HCOC) (WQMP Section IV) in the F-WQMP. The HCOC designates that the project will comply with Condition A; therefore, the condition must be addressed in the F-WQMP.

LD80. The Applicant shall, prior to building or grading permit closeout or the issuance of a certificate of occupancy, demonstrate:

a. That all structural BMPs have been constructed and installed in conformance with the approved plans and specifications.

b. That all structural BMPs described in the F-WQMP have been implemented in accordance with approved plans and specifications.

c. That the applicant is prepared to implement all non-structural BMPs included in the FWQMP, conditions of approval, and building/grading permit conditions.

d. That an adequate number of copies of the approved F-WQMP are available for the future owners/occupants of the project.

LD81. (CO) The developer has selected Option LD32a.ii to meet the financial responsibility for NPDES funding and has agreed to establish an endowment. Currently, the proposed Parcel Map 36207 includes a single numbered parcel – Parcel 1. The NPDES funding obligation for the project will need to be recalculated if additional parcels are proposed and/or created other than what is currently shown on the proposed Parcel Map 36207. Any additional funds required as a result of additional parcels will be due prior to the release of the Certificate of Occupancy.

PUBLIC WORKS DEPARTMENT – TRANSPORTATION ENGINEERING DIVISION

Note: All Special conditions are in bold lettering. All other conditions are standard to all or most development projects.

Based on the information contained in our standard review process we recommend the following conditions of approval be placed on this project:

GENERAL CONDITIONS

TE1. Future Eucalyptus Avenue is classified as an Arterial (100'RW/76'CC) per City Standard Plan No. 104A. Any modifications or improvements undertaken by this project shall be consistent with the City's standards for this facility. Sidewalk shall be curb separated. The project shall construct pavement improvements from the eastern property boundary to Redlands Boulevard consistent with Land Development conditions.

TE2. Future Collector Street is classified as an Industrial Collector (78'RW/56'CC) per City Standard Plan No. 106. Any modifications or improvements undertaken by this project shall be consistent with the City's standards for this facility.

PRIOR TO GRADING PERMIT

TE3. (GP) Prior to issuance of a grading permit, the project applicant shall submit conceptual striping plans for street improvements along Eucalyptus Avenue as well as Redlands Boulevard.

PRIOR TO IMPROVEMENT PLAN APPROVAL OR CONSTRUCTION PERMIT

TE4. The driveways less than or equal to 40 feet in width shall conform to Section 9.11.080, and Table 9.11.080-14 of the City's Development Code - Design Guidelines, and City Standard Plan No. 118C. Driveways wider than 40' shall be designed as intersections with pedestrian access ramps per City standards.

TE5. 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 all streets with a cross section of 66'/44' and wider.

TE6. Prior to issuance of a construction permit, construction traffic control plans prepared by a qualified, Registered Civil or Traffic engineer shall be required.

TE7. Sight distance at driveways and on streets shall conform to City Standard Plan No. 125 A, B, and C at the time of preparation of final grading, landscape, and street improvements.

TE8. Prior to final approval of the street improvement plans, interim and ultimate alignment studies shall be approved by the City Traffic Engineer.

TE9. Prior to the final approval of the street improvement plans, the project applicant shall prepare traffic signal design plans for the following intersections:

- **Redlands Boulevard/SR-60 Westbound Ramp**
- **Redlands Boulevard/Future Eucalyptus Avenue**

TE10. Prior to the final approval of the street improvement plans, the project applicant shall design a southbound auxiliary lane (additional southbound lane) from the SR-60 Eastbound Ramp to Future Eucalyptus Avenue. The minimum width of the auxiliary lane shall be 16'.

TE11. Prior to the final approval of the street improvement plans, the project applicant shall design the intersection of Redlands Boulevard and Eucalyptus Avenue to provide the following geometrics:

Northbound: One left turn lane, one through lane
Southbound: One through lane, one right turn lane
Eastbound: One left turn lane, one right turn lane
Westbound: N/A

NOTE: All curb return radii shall be 50 feet.

TE12. Prior to final approval of the street improvement plans, the project applicant shall design the intersection of Redlands Boulevard and SR-60 Westbound Ramp to provide the following geometrics:

Northbound: One left turn lane, one through lane, one right turn lane
Southbound: One left turn lane, one shared through/right turn lane
Eastbound: One shared left turn/through/right turn lane
Westbound: One shared left turn/through/right turn lane

TE13. Prior to issuance of a construction permit, the project applicant shall pay to the City all applicable "Fair Share" impact fees per the findings of the Environmental Impact Report.

PRIOR TO CERTIFICATE OF OCCUPANCY OR BUILDING FINAL

TE14. (CO) Prior to issuance of a certificate of occupancy, all approved signing and striping shall be installed per current City Standards and the approved plans.

TE15. (CO) Each gated entrance from a public street will be provided with the following, or as approved by the City Engineer:

A. A storage lane with length sufficient to support the queuing predicted by the traffic study (minimum of 75 feet).
B. Signing and striping at the gate, including no parking signs.
C. A separate pedestrian entry, if pedestrian access is necessary.
D. Presence loop detectors (or another device) within 1 or 2 feet of the gates that ensures that the gates remain open while any vehicle is in the queue.

All of these features must be kept in working order.

TE16. (CO) Prior to issuance of a certificate of occupancy, the project applicant shall construct the intersection/roadway improvements identified in TE9, TE10, TE11, and TE12 per the approved plans.

PRIOR TO ACCEPTANCE OF STREETS INTO THE CITY-MAINTAINED ROAD SYSTEM

TE17. Prior to the acceptance of streets into the City-maintained road system, all approved traffic control and signing and striping shall be installed per current City Standards and the approved plans.

PUBLIC WORKS DEPARTMENT – MORENO VALLEY UTILITY

Note: All Special Conditions, Modified Conditions, or Clarification of Conditions are in bold lettering. All other conditions are standard to all or most development projects.

Acknowledgement of Conditions

The following items are Moreno Valley Utility's Conditions of Approval for project P13-111, PA09-0022 and TPM 36207; this project shall be completed at no cost to any Government Agency. All questions regarding Moreno Valley Utility's Conditions including but not limited to, intent, requests for change/modification, variance and/or request for extension of time shall be sought from Moreno Valley Utility, the Electric Utility Division of the Public Works Department at 951.413.3500. The applicant is fully responsible for communicating with Moreno Valley Utility staff regarding their conditions.

PRIOR TO ENERGIZING MVU ELECTRIC UTILITY SYSTEM AND CERTIFICATE OF OCCUPANCY

MVU-1 (R) For single family subdivisions, a three foot easement along each side yard property line shall be shown on the final map and offered for dedication to the City of Moreno Valley for public utility purposes, unless otherwise approved by the City Engineer. If the project is a multi-family development, townhome, condominium, apartment, commercial or industrial project, and it requires the installation of electric distribution facilities within common areas, a non-

exclusive easement shall be provided to Moreno Valley Utility to include all such common areas. All easements shall include the rights of ingress and egress for the purpose of operation, maintenance, facility repair, and meter reading.

MVU-2 (BP) **City of Moreno Valley Municipal Utility Service – Electrical Distribution**: Prior to constructing the MVU Electric Utility System, 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 concurrent with trenching operations and other subdivision 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, or the City's designee, all utility infrastructure (including but not limited to conduit, equipment, vaults, ducts, wires, 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 to be necessary for the distribution and /or delivery of any and all "utility services" to each lot and unit within the Tentative Map. 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.

MVU-3 This project may be subject to a Reimbursement Agreement. The project may be responsible for a proportionate share of costs associated with electrical distribution infrastructure previously installed that directly benefits the project. Payment shall be required prior to issuance of building permits.

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT

Special Districts Division

Note: All Special Conditions, Modified Conditions, or Clarification of Conditions are in bold lettering. All other conditions are standard to all or most development projects.

Acknowledgement of Conditions

The following items are Special Districts' Conditions of Approval for project **P13-111**; this project shall be completed at no cost to any Government Agency. All questions regarding Special Districts' Conditions including but not limited to, intent, requests for change/modification, variance and/or request for extension of time shall be sought from the Special Districts Division of the Financial & Management Services Department 951.413.3480 or by emailing specialdistricts@moval.org.

General Conditions

SD1. The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services Districts Zones A (Parks & Community Services) and 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.

SD2. Any damage to existing landscape areas maintained by the Moreno Valley Community Services District due to project construction shall be repaired/replaced by the developer, or developer's successors in interest, at no cost to the Moreno Valley Community Services District.

SD3. Street light Authorization forms, for all street lights that are conditioned to be installed as part of this project, must be submitted to the Special Districts Division for approval, prior to street light installation. The Street light Authorization form can be obtained from the utility company providing electric service to the project, either Moreno Valley Utility or Southern California Edison.

SD4. To assist in satisfying the NPDES funding requirement, please provide a list of all Assessor's Parcel Numbers created from the recordation of Parcel Map 36207 or through any other process that would create additional parcels to the Special Districts Division for the purpose of confirming the NPDES endowment requirement.

Prior to Building Permit Issuance

SD5. (BP) This project has been identified to be included in the formation of a Map Act Area of Benefit Special District for the construction of **major thoroughfares**

and/or freeway 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 the district, the property owner(s) will not protest the formation, but the property owners(s) will retain the right to object if any eventual assessment is not equitable, that is, if the financial burden of the assessment is not reasonably proportionate to the benefit which the affected property obtains from the improvements which are to be installed. The Developer must notify Special Districts of intent to request building permits 90 days prior to their issuance. (Street & Highway Code, GP Objective 2.14.2, MC 9.14.100)

SD6. (BP) This project has been identified to be included in the formation of a Community Facilities District (Mello-Roos) 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 object to the rate and method of maximum special tax. In compliance with Proposition 218, the developer 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 Special Districts of intent to request building permits 90 days prior to their issuance. (California Government Code)

SD7. (BP) Prior to the issuance of the first building permit for this project, the developer shall pay Advanced Energy fees for all applicable Zone B (Residential Street Lighting) and/or Zone C (Arterial Street Lighting and Intersection Lighting) street lights required for this development. Payment shall be made to the City of Moreno Valley, as collected by the Land Development Division, based upon the Advanced Energy fee rate in place at the time of payment, as set forth in the current Listing of City Fees, Charges and Rates, as adopted by City Council.

The developer shall provide a receipt to the Special Districts Division showing that the Advanced Energy fees have been paid in full for the number of street lights to be accepted into the CSD Zone B and/or Zone C programs. Any change in the project which may increase the number of street lights to be installed will require payment of additional Advanced Energy fees at the then current fee.

SD8. (BP) Prior to release of building permit, the developer, or the developer's successors or assignees, shall record with the County Recorder's Office a **Covenant of Assessments** for each assessable parcel therein, whereby the developer covenants the existence of the Moreno Valley Community Services District, its established benefit zones, and that said parcel(s) is (are) liable for payment of annual benefit zone charges and the appropriate National Pollutant Discharge Elimination System (NPDES) maximum regulatory rate schedule when due. A copy of the recorded Covenant of Assessments shall be submitted to the Special Districts Division. For a copy of the Covenant of Assessments form, please contact Special Districts, phone 951.413.3480.

PARKS AND COMMUNITY SERVICES DEPARTMENT

Acknowledgement of Conditions

The following items are Parks and Community Services Department Conditions of Approval for project PA08-0097. This project shall be completed at no cost to any Government Agency. All questions regarding Parks and Community Services Department Conditions including but not limited to, intent, requests for change/modification, variance and/or request for extension of time shall be sought from the Parks and Community Services Department 951.413.3280. The applicant is fully responsible for communicating with the Parks and Community Services Department project manager regarding the conditions.

PCS1. A multi-use trail shall be designated for PA08-0097/98. The trail shall be 11' wide, located along the north side of Eucalyptus Avenue (Fir Ave.). The trail requires a crossing over Quincy Street on the north side of Eucalyptus Avenue. The trail shall be designed similar to the Highland Fairview project east of Redlands Blvd. The trail shall be dedicated as an easement to the CSD.
Additionally, a multi-use trail shall be located along the west side of Quincy Channel.

If the applicant's property includes this area, the applicant shall install the trail. The trail shall match the trail on Quincy Street, south of Cottonwood Avenue. This trail is approximately 14' wide, plus another 2' concrete step out from adjoining street (or parking lot). The applicant shall coordinate this trail with RCFC. The trail shall be dedicated as an easement to the CSD.

On November 19, 2008, the Trail Board recommended that the trail be located to the north side of Eucalyptus Avenue, being consistent with the Highland Fairview project.

Standard Trail Conditions

PCS2. Parks and Community Services Department

- **a.** Trail construction shall adhere to: The City's Standard Plans, 'The Greenbook Standard Specifications for Public Works Construction', 'California Code of Regulations Title 24' (where applicable), and the Park and Community Services Specification Guide.
- **b.** The General Contractor shall be a State of California Class 'A' General Engineering Contractor, per the Business and Professions Code Section 7056, or a combination of State of California Class 'C' licenses for which the work is being performed. Licenses must be current and in good standing, for the duration of the project.

- **c.** All utility easements shall not interfere with the trail or its fencing. A map of all easements and the corresponding easement rights shall be presented to Parks and Community Services prior to scheduling the Tentative Map for approval.
- **d.** (R) A restriction shall be placed on lots that are adjacent to the trail, preventing openings or gates accessing the trail. This shall be done through Covenants, Conditions, and Restrictions (CC&R's). A copy of the CC&R's with this/her restriction noted shall be submitted and approved by the Director of Parks and Community Services or his/her designee prior to the recordation of the Final Map.
- **e.** Trails shall not be shared with any above ground utilities, blocking total width access.
- **f.** The following plans require Parks and Community Services written approval: Tentative tract/parcel maps; rough grading plans (including all Delta changes); Final Map; precise grading plans; street improvement plans; traffic signal plans; fence and wall plans; landscape plans for areas adjacent to trails; trail improvement plans.
- **g.** (GP) A detailed rough grading plan with profile for the trail shall be submitted and approved by the Director of Parks and Community Services or his/her designee prior to the issuance of grading permits.
- **h.** Grading certification and compaction tests are required, prior to any improvements being installed.
- **i.** A minimum two-foot graded bench is required where trails adjoin landscaped or open space areas.
- **j.** (R) Prior to the approval of the Final Map, a detailed map of the trail and areas adjacent to the trail shall be submitted to the Director of Parks and Community Services or his/her designee prior for review and written approval.
- **k.** (R) All necessary documents to convey to the City and/or the Community Services District any required dedications for parks or open space, as specified on the tentative map or in these Conditions of Approval shall be submitted by the developer to Parks and Community Services, prior to the recordation of the final map.
- **l.** (R) Prior to recordation of the Final Map, the developer shall post security (bonds) to guarantee construction of the trail to the City's standards. Copies of the bonds shall be provided to Parks and Community Services, prior to the approval of the Final Map.
- **m.** (BP) Prior to the issuance of the first Building Permit, final improvement plans (mylars and AutoCAD & PDF file on a CD-ROM) shall be reviewed and approved by the Community Development Department – Planning Division; the Public Works Department – Land Development and Transportation Division; Fire Prevention; and Parks and Community Services Department. Landscaped areas adjacent to the park shall be designed to prevent water on the park.

n. Eight sets of complete trail improvement plans shall be submitted to Parks and Community Services for routing. Adjacent landscaping and walls shall be shown on the plans. Final construction plans and details require wet stamped and signed Mylars, eight sets of bond copies and one Mylar copy from the City signed mylars, the AutoCAD file on CD, and a PDF file on CD. As-builts for the trails have the same requirements as final plan submittals.

o. All street crossings shall be signed with approved 'STOP' signs, trail signs, and posts. All improved equestrian trail crossings at signalized intersections that are constructed at their ultimate locations shall have high mounted push buttons. These shall be coordinated through the Transportation Division.

p. CSD Zone 'A' plan check fees shall be paid prior to the second plan check.

q. CSD Zone 'A' inspection fees shall be paid prior to signing of Mylars.

r. (BP) The trail shall be surveyed and staked by the developer. The trail shall be inspected and approved by the Director of Parks and Community Services or his/her designee prior to the issuance of any building permits for production units.

s. Any damage to trails or fencing during construction shall be repaired by the developer and inspected by the Director of Parks and Community Services or his/her designee; prior to the last phase of building permit issuance.

t. A minimum 38' radius shall be incorporated on all trails where a change of direction occurs (minor or major). Additionally, widening of the trail is necessary in most situations. This is only necessary where trails share Fire Prevention access.

u. Drive approaches shall adhere to City Std. Plan #118C.

v. Concrete access areas to trails with decomposed granite surfaces shall be rough finished concrete (typically raked finish). The access shall extend to the main trail flat surface.

w. (BP) In order to prevent the delay of building permit issuance, any deviation from trail fencing materials or trail surface materials shall be submitted to Director of Parks and Community Services or his/her designee and approved in writing 60-days prior to the commencement of trail construction.

x. Any unauthorized deviation from the approved plan, specifications, City Standard Plans, or Conditions of Approval may result in the delay of building permit issuance and/or building Finals/ Certificate of Occupancy of the project conditioned for improvements.

y. Where required, decorative solid-grouted block wall (no precision block, stucco, veneer finishes, PVC, or wood fencing) with a minimum height of 72" on the trailside shall be installed along lots that adjoin the trail. Block walls shall be located solely on private property. If landscaping is to be utilized between the block wall and the trail, a PVC fence shall be installed along the trail separating the landscaping from the trail (where required). All block walls that have public view shall have an anti-graffiti coating per Parks and Community Services specifications. Combination block/tubular steel fences shall only be utilized where approved by Parks and Community Services. Tubular steel shall comply with Parks and Community Services standards. Coating for tubular steel shall be anti-graffiti coating for metal per Parks and Community Services specifications. If alternate products are requested, the

requested material(s) shall be presented to the Director of Parks and Community Services or his/her designee for review and approval. Under no circumstances can alternate products be utilized without prior written authorization from the Director of Parks and Community Services or his/her designee.

z. Any damage to existing landscape or hardscape areas due to project construction shall be repaired/replaced by the developer, or developer's successors in interest, at no cost to the City or Community Services District.

aa. All inspections shall be requested two (2) working days in advance from the Parks and Community Services Department at the time of rough and precise grading; fence and gate installation; curb and drainage; flatwork; D.G. installation; graffiti coating; and final inspection.

bb. (BP)Trail construction in single family developments shall commence prior to 30% of total building permit issuance. Trail completion and acceptance (single family developments) for maintenance shall be completed prior to 70% of total building permit issuance.

cc. (CO)Trail construction in multi-family or commercial developments shall commence with the rough grading. Trail completion and acceptance for maintenance shall be completed prior to the issuance of 50% of the total certificates-of-occupancy (for multi-family and/or commercial developments).

POLICE DEPARTMENT

Note: All Special conditions are in bold lettering. All other conditions are standard to all or most development projects

Standard Conditions

PD1. 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 shall remain through the duration of construction. 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 as determined by the Public Works Department. If security fencing is required, it shall remain in place until the project is completed or the above conditions no longer exist. (MC 9.08.080)

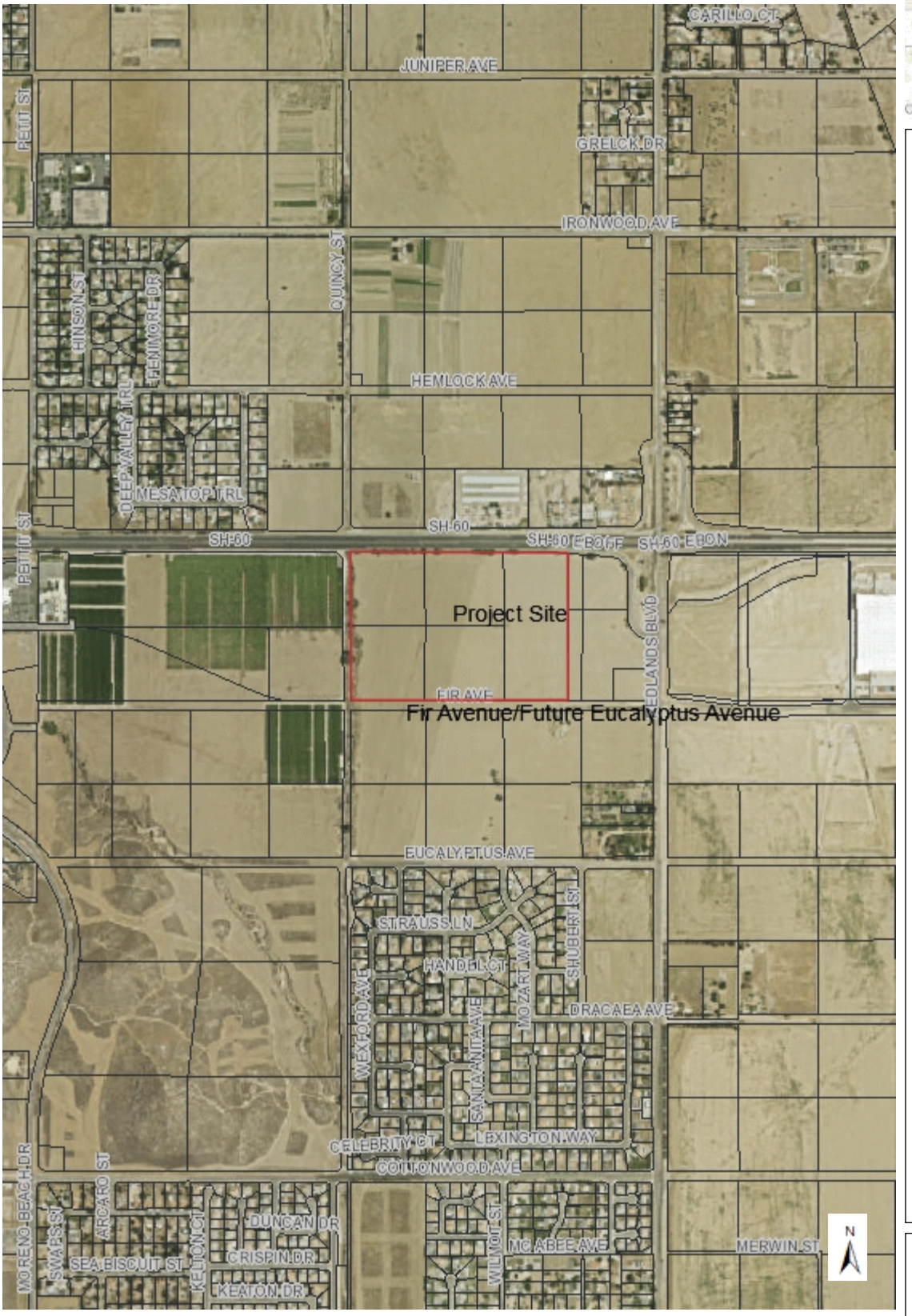
PD2. (GP) Prior to the issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the following:

a. The name (if applicable) and address of the development.

b. The developer's name, address, and a 24-hour emergency telephone number. (MC 9.08.080)

PD3. (CO) Prior to the issuance of a Certificate of Occupancy, an Emergency Contact Information Form for the project shall be completed at the permit counter of the Community & Economic Development Department - Building Division for routing to the Police Department. (MC 9.08.080)

P13-111 - Aerial Photograph



Legend

- Road Labels
- Parcels
- City Boundary
- Sphere of Influence

Notes

ATTACHMENT 3

2,614.0 0 1,307.00 2,614.0 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere

Print Date: 1/9/2014

DISCLAIMER: The information shown on this map was compiled from the City of Moreno Valley GIS and Riverside County 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.

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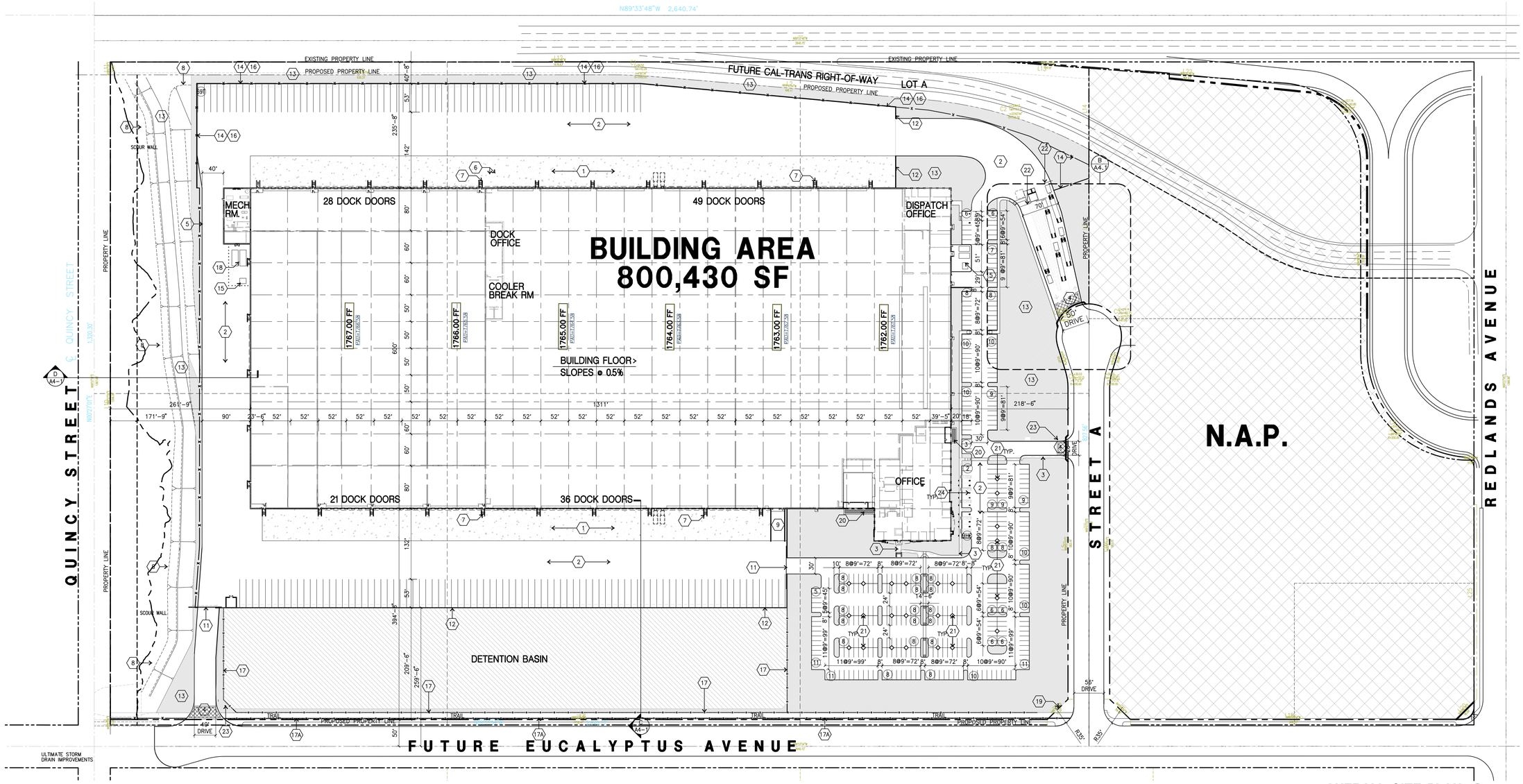


OVERALL SITE PLAN A
scale: 1"=80'-0"

PROJECT TABULATIONS

TABULATION	Building	Channel	Grand Total
Site Area			
Gross site area (in sq.ft.)			**2,269,258**
Gross site area (in acres)			**52.095**
Net site area (in sq.ft.)	1,976,929	161,172	**2,138,101**
Net site area (in acres)	45.384	3.700	**49.084**
Warehouse Building Area			
Office - 1st floor	25,000		
Office - 2nd floor	25,000		
Warehouse area	506,380		
Total Warehouse Area	**531,380**		
Perishable Area	263,800		
Mechanical Room	5,250		
Total Building Area	**800,430**		
Coverage (Gross)			
Coverage (Net)	**40%**		
Parking Provided			
Standard	365		
Handicap	9		
Total Auto Parking Provided	**374**		
Trailers	**154**		

KEYNOTES - SITE PLAN

1. HEAVY BROOM FINISH CONC. PAVEMENT, SEE "C" & "S" DWGS..
2. ASPHALT CONCRETE (AC) PAVING, SEE "C" DWGS.
3. CONCRETE WALKWAY, SEE "L" DRAWINGS.
4. DRIVEWAY APRONS TO BE CONSTRUCTED PER CITY STANDARD 118C. NO DECORATIVE PAVING WITHIN RIGHT-OF-WAY. SEE "L" DWGS.
5. 5'-6"X5'-6"X4" MIN. THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH. SLOPE TO BE 1/4" : 12" MAX. PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY W/ 1:20 MAX. AS REQ. BY CITY INSPECTOR.
6. 7' SIDE X 15' LONG TRASH COMPACTOR W/ 8' WIDE X 22' LONG REFUSE CONTAINER.
7. EXTERIOR CONC. STAIR.
8. 8' H. COATED CHAIN-LINK FENCE OR OTHER AS APPROVED BY THE COMMUNITY DEVELOPMENT DIRECTOR.
9. CONCRETE RAMP.
10. 8' H. METAL SWING GATE.
11. 8' H. METAL SLIDING GATE. WITH MORENO VALLEY FIRE APPROVED KNOX BOX LOCK.
12. 14' H. CONCRETE SCREENWALL, PAINTED.
13. LANDSCAPE. SEE "L" DWGS. LANDSCAPE AREAS INDICATED BY SHADED PATTERN.
14. 8' H. WROUGHT IRON FENCE.
15. APPROXIMATE LOCATION OF TRANSFORMERS & BACK UP GENERATORS.
16. RETAINING WALL, SEE "C" DWGS.
17. 4' H. THREE RAIL FENCE.
17A. 4' H. THREE RAIL FENCE AS PER COMMUNITY DEVELOPMENT DIRECTOR.
18. APPROXIMATE LOCATION OF GENERATORS.
19. MONUMENT SIGN
20. EMPLOYEE BREAK AREA. SEE LANDSCAPE PLANS.
21. 6'X6' DIAMOND PLANTER. SEE LANDSCAPE DRAWINGS.
22. MOTOR OPERATED SWING ARM GATE
23. HANDICAPPED ENTRY SIGN
24. HANDICAPPED PARKING STALL SIGN

GENERAL NOTES - FLOOR PLAN

A. THE SOILS REPORT PREPARED BY ASSOCIATED SOILS ENGINEERING SHOULD BE A PART OF THESE CONTRACT DOCUMENTS.

B. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE.

C. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.

D. SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALES.

E. THE ENTIRE PROJECT SHALL BE PERMANENTLY MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM.

F. SEE "C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS.

G. PROVIDE POSITIVE DRAINAGE AWAY FROM BLDG. SEE "C" DRAWINGS.

H. CONTRACTOR TO REFER TO "C" DRAWINGS FOR ALL HORIZONTAL CONTROL DIMENSIONS. SITE PLANS ARE FOR GUIDANCE AND STARTING LAYOUT POINTS.

I. SEE "C" DRAWINGS FOR FINISH GRADE ELEVATIONS.

J. CONCRETE SIDEWALKS TO BE A MINIMUM OF 4" THICK W/ TOOLED JOINTS AT 6' O.C. EXPANSION/CONSTRUCTION JOINTS SHALL BE A MAXIMUM 12' EA. WAY W/ 1:20 MAX. SLOPE. EXPANSION JOINTS TO HAVE COMPRESSIVE EXPANSION FILLER MATERIAL OF 1/4". SEE "L" DRAWINGS FOR FINISH.

K. PAINT CURBS AND PROVIDE SIGNS TO INFORM OF FIRE LANES AS REQUIRED BY FIRE DEPARTMENT.

L. CONSTRUCTION DOCUMENTS PERTAINING TO THE LANDSCAPE AND IRRIGATION OF THE ENTIRE PROJECT SITE SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND APPROVED BY PUBLIC FACILITIES DEVELOPMENT PRIOR TO ISSUANCE OF BUILDING PERMITS.

M. PRIOR TO FINAL CITY INSPECTION, THE LANDSCAPE ARCHITECT SHALL SUBMIT A CERTIFICATE OF COMPLETION TO PUBLIC FACILITIES DEVELOPMENT.

N. ALL LANDSCAPE AND IRRIGATION DESIGNS SHALL MEET CURRENT CITY STANDARDS AS LISTED IN GUIDELINES OR AS OBTAINED FROM PUBLIC FACILITIES DEVELOPMENT.

O. LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB

P. APPROVED CONCEPTUAL LANDSCAPE PLAN PRIOR TO GRADING PERMIT

PROJECT INFORMATION

Owner / Applicant
ALDI INC.
6000 NORTH NOAH DR.
SAXONBURG, PA 16056
TEL: (724) 352-9393
CONTACT: BRIAN MCGEE

Architect
HPA, INC.
18831 BARDEEN AVE. SUITE #100
IRVINE, CA 92612
TEL: (949) 863-1770
CONTACT: ALAN SANDOVAL

Applicant's Representative
HPA, INC.
18831 BARDEEN AVE. SUITE #100
IRVINE, CA 92612
TEL: (949) 863-1770
CONTACT: ALAN SANDOVAL

Civil Engineer
HUITT ZOLLARS
1101 S. MILLIKEN - STE.G
ONTARIO, CA 91761
TEL: (909) 390-8400
CONTACT: MAURICE MURAD

Legal Description
ALL OF LOTS 3,4,5,6 BLK. 35 AND A PORTION OF LOTS 2 AND 7 BLK. 35 LYING WITHIN MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY IN THE COUNTY OF RIVERSIDE, STATE OF CALIF. AS PER MAP RECORDED IN BOOK 11, PG. 10 OF MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

Zoning
ZONING: EXISTING - BP
PROPOSED - LI

Assessors Parcel Number
APN 488-330-003
APN 488-330-004
APN 488-330-005
APN 488-330-006
APN 488-330-026

SITE LEGEND

- LANDSCAPED AREA
- WQMP AREA
- 28' WIDE FIRE APPARATUS ACCESS ROAD. ROAD TO BE IDENTIFIED WITH PAINTED RED CURBS AND MARKED "FIRE LANE-NO PARKING" PER CITY OF MORENO VALLEY FIRE DEPT.
- AC. PAVING - SEE "C" DRWGS. FOR THICKNESS
- CONCRETE PAVING SEE "C" DRWGS. FOR THICKNESS
- STANDARD PARKING STALL (9' X 18')
- HANDICAP PARKING STALL (9' X 18')
- OFFICE AREA
- NOT APART

PROPERTY LINE
ADA PATH OF TRAVEL
(#) PARKING STALL COUNT

ATTACHMENT 4

UTILITY INFORMATION

TELEPHONE
VERIZON
1980 ORANGE TREE LANE, STE 100
REDLANDS, CA 92374
PHONE: (909) 748-6639
CONTACT: THEA CARLSON

ELECTRIC
MORENO VALLEY UTILITIES
14177 FREDERICK ST.
MORENO VALLEY, CA 92552
PHONE: (951) 413-3480
CONTACT: DARCY RAMIREZ

WATER
EASTERN MUNICIPAL WATER DISTRICT
2270 TRUMBLE ROAD
PERRIS, CA 92571
PHONE: (951) 928 - 3777
CONTACT: NEW BUSINESS

SEWER
EASTERN MUNICIPAL WATER DISTRICT
2270 TRUMBLE ROAD
PERRIS, CA 92571
PHONE: (951) 928-3777
CONTACT: NEW BUSINESS

GAS
SOUTHERN CALIFORNIA GAS CO.
25200 TRUMBLE ROAD SC 8058
ROMOLAND, CA 92380
PHONE: (951) 335-3902
CONTACT: DAVE MULLIGAN

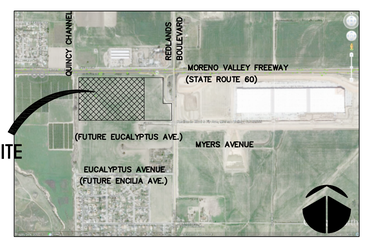
CABLE - TV
TIME WARNER CABLE
1500 AUTO CENTER DR.
ONTARIO, CA 91761
PHONE: (909) 975-3380
(909) 390-4777
CONTACT: MARK DAUENHAUER

CIVIL LINETYPES

LEGEND / ABBREVIATIONS

- DW — *PROPOSED DOMESTIC SERVICE*
- FW — *PROPOSED FIRE SERVICE*
- W — *PROPOSED WATER LINE*
- S — *PROPOSED SEWER LINE*
- *RIGHT OF WAY/SITE BOUNDARY*
- *EXITING RIGHT OF WAY/SITE BOUNDARY*
- R — *PROPOSED RIDGE LINE*
- SD — *PROPOSED STORM DRAIN*

AERIAL MAP



CASE NO. P13-111
OCTOBER 24, 2013
AMENDED PLOT PLAN
CASE NO.: PA08-0097/0098
MARCH 24, 2009

HPA
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LICENSED ARCHITECT LONG NAM CT C-29451 3-31-15 RENEWAL DATE STATE OF CALIFORNIA

Contractor:
GRAYCOR Construction Company Inc
Graycor Construction Co.
2 Mid America Plz Ste 400
Oak Terrace, IL 60181

Owner:
ALDI
ALDI Inc.
1200 N. Kirk Rd.
Batavia, IL 60510

Project:
ALDI Distribution Center
Regional Headquarters

Consultants:

Civil:	Huitt Zollars
Structural:	TBD
Mechanical:	TBD
Plumbing:	TBD
Electrical:	TBD
Landscape:	Environs
Fire Protection:	TBD
Soils Engineer:	TBD

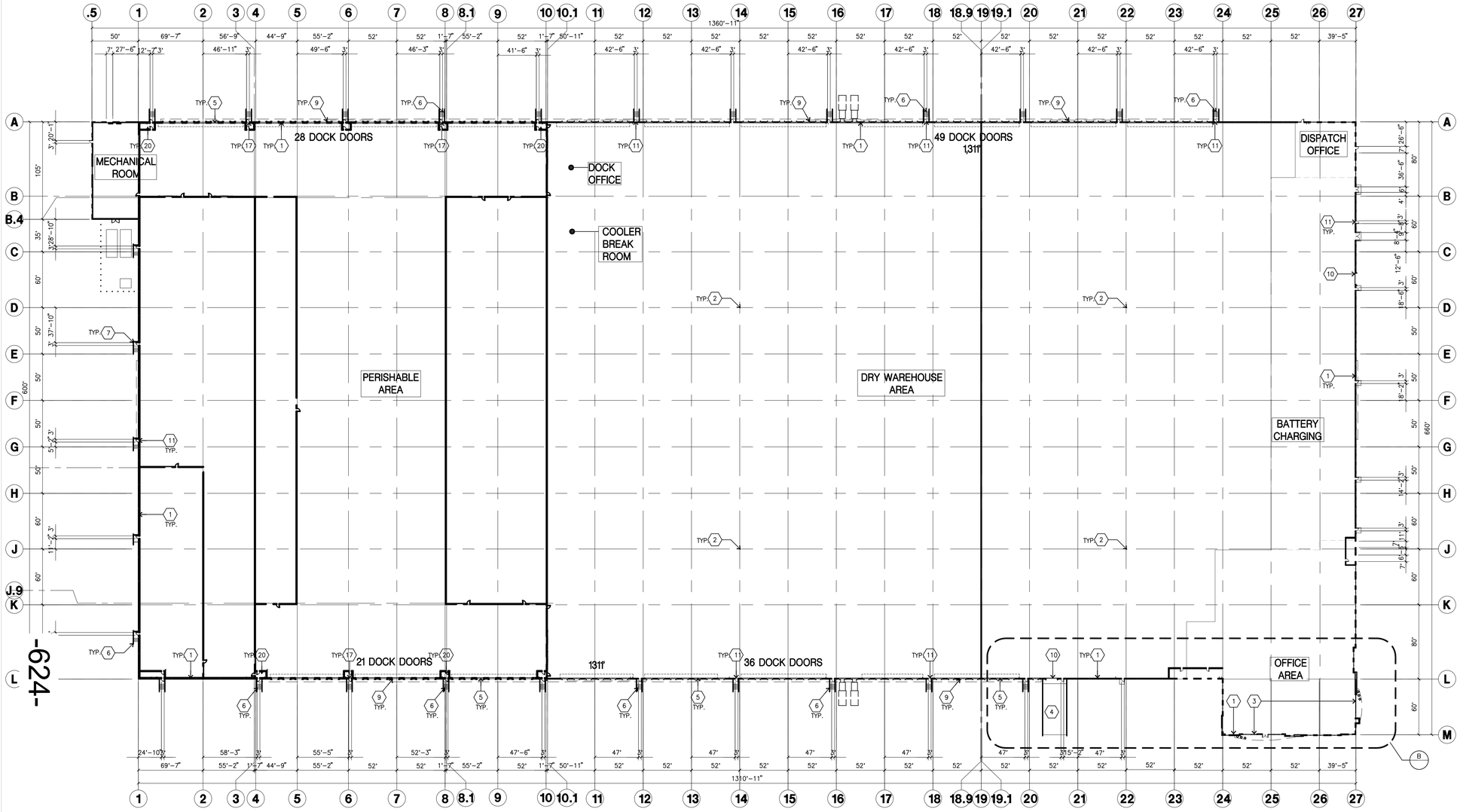
Title: site plan

Project Number:	13220
Drawn by:	Sandoval
Date:	October 23, 2013
Revision:	

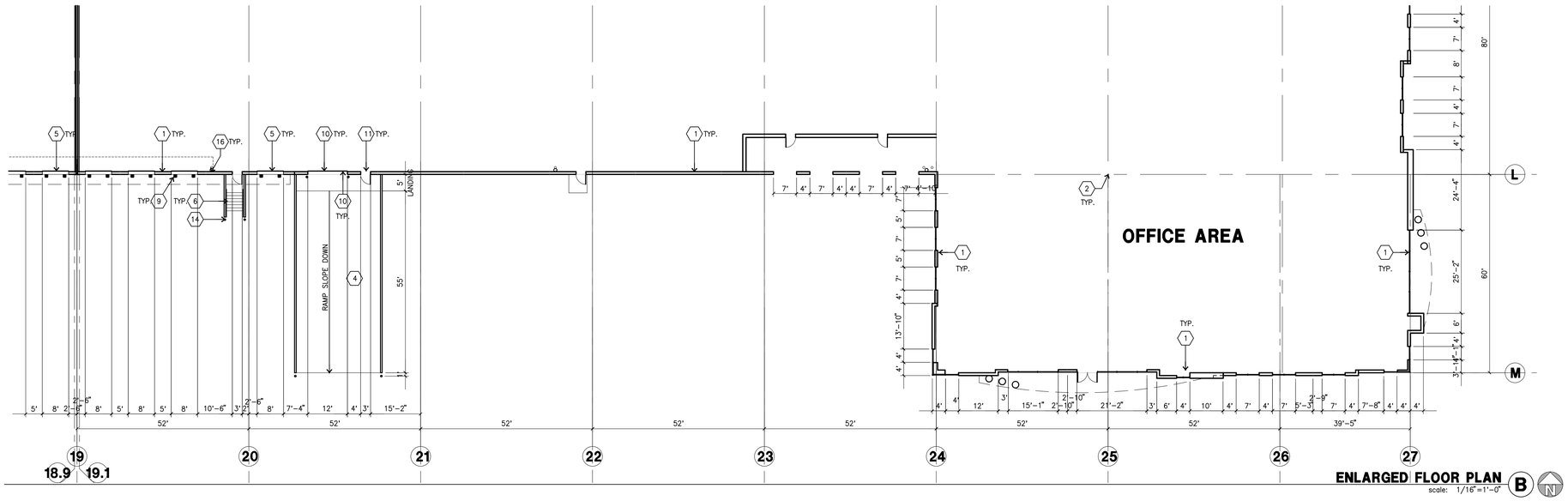
Sheet: A1.1

THESE DRAWINGS ARE NOT INTENDED FOR BIDDING, SHOP DRAWINGS, OR CONSTRUCTION PURPOSES. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL BIDS MADE FROM THESE DRAWINGS

-623-



OVERALL FLOOR PLAN A
scale: 1"=50'-0"



ENLARGED FLOOR PLAN B
scale: 1/16"=1'-0"

KETNOTES - FLOOR PLAN

1. CONCRETE TILT-UP PANEL. SEE "S" DWGS. FOR THICKNESS AND STEEL REQUIREMENTS.
2. STRUCTURAL STEEL COLUMN. SEE "S" DRAWINGS FOR SIZE.
3. TYPICAL STOREFRONT SYSTEM WITH GLAZING. SEE OFFICE BLOW-UP AND ELEVATIONS FOR SIZE, COLOR AND LOCATIONS.
4. CONCRETE RAMP W/ 42" HIGH CONC TILT-UP GUARD WALL OR BUILDING WALL ON BOTH SIDE OF RAMP, SEE "S" DWG FOR DETAIL.
5. 8'-0" X 10' TRUCK DOOR, SECTIONAL O'H., STANDARD GRADE. DESIGNED TO RESIST WIND 90 MPH., EXPOSURE "C".
6. EXTERIOR CONCRETE STAIR
7. 5'-6"X5'-6"X4" THICK CONCRETE EXTERIOR LANDING PAD TYPICAL AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREA. FINISH TO BE MEDIUM BLOOM FINISH. SLOPE TO BE 1/4" : 12" MAX. PROVIDE WALK TO HARD SURFACE PER CITY REQUIREMENTS.
8. LOUVERED OPENING FOR VENTILATION.
9. DOCK DOOR BUMPER
10. 12' X 14' DRIVE THRU, SECTIONAL OH., STANDARD GRADE. DESIGNED TO RESIST WIND 90 MPH., EXPOSURE "C".
11. 3'X7' HOLLOW METAL EXTERIOR MAN DOOR. DESIGNED TO RESIST WIN 90 MPH., EXPOSURE "C".
12. METAL CANOPY
13. SOFFIT LINE ABOVE
14. ELECTRICAL ROOM
15. EXTERIOR DOWNSPOUT WITH OVERFLOW SCUPPER,
16. INTERIOR DOWNSPOUT
17. FREEZER MAN DOOR.
18. CONCRETE KNOCK-OUT PANEL
19. APPROXIMATE LOCATION OF ROOF TOP UNIT.
20. FIRE STAND PIPE CLOSET WITH PERISHABLE SPACE.

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Electrical:	TBD
Landscape:	Environs
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Soils Engineer:	TBD

Title: floor plan

Project Number:	13220
Drawn by:	Sandoval
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Sheet: A2.1

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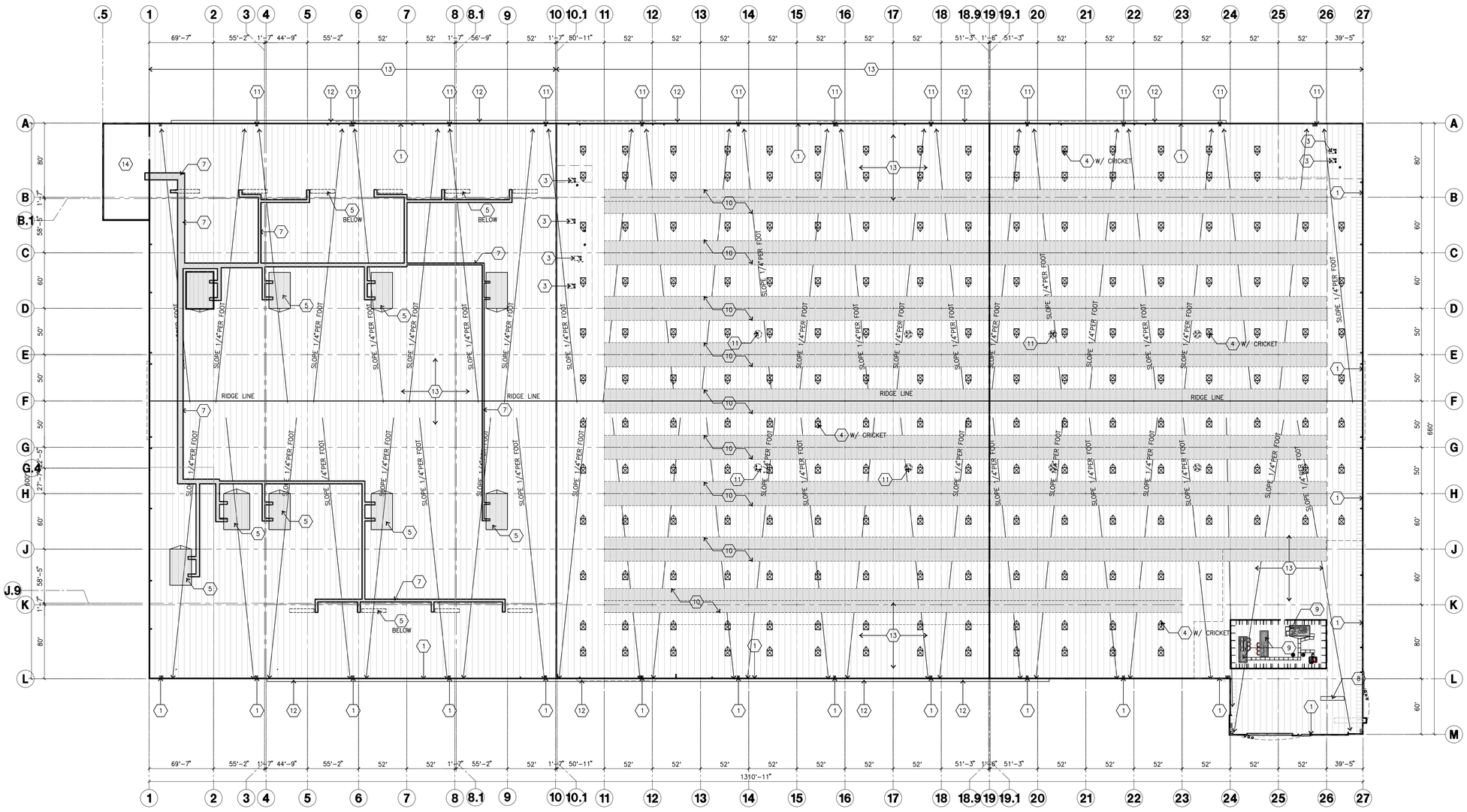

OVERALL ROOF PLAN (A)

scale: 1" =50'-0"

ROOF LEGEND

- 6' X 6' CURB MOUNTED SKYLIGHT
- BUILDING PARAPET LINE
- EXTERIOR METAL DOWNSPOUT W/ OVERFLOW SCUPPER
- INTERIOR ROOF DRAIN W/ OVERFLOW SCUPPER

SKYLIGHT/SMOKE HATCH CALCULATIONS

ROOF AREA ABOVE WAREHOUSE AREA:	459,207
CLEAR HEIGHT	36'
REQUIRED NON VENTED SKYLIGHTS	1.3% 5,970 S.F.
NUMBER OF REQUIRED SKYLIGHT/SMOKE HATCH	166
NUMBER OF PROVIDED SKYLIGHT/SMOKE HATCH	189
DRAFT CURTAINS NOT REQUIRED PER CFC SECT. 910.3.5	

KEYNOTES - ROOF PLAN

1. CONCRETE PARAPET.
2. INTERIOR DOWNSPOUT WITH OVERFLOW SCUPPERS.
3. APPROXIMATE LOCATION OF MECHANICAL PACKAGE UNITS
4. 6' X 6' SKYLIGHT / SMOKE HATCH.
5. APPROXIMATE LOCATION OF ROOF TOP PENTHOUSE
6. ROOF ACCESS HATCH.
7. APPROXIMATE LOCATION OF AMMONIA REFRIGERATION PIPING.
8. ROOF ADDRESS PAINTED BLACK 4' HIGH W/ 1' WIDE STROKE PER LETTER.
9. APPROXIMATE LOCATION OF ROOF TOP MECHANICAL VAV UNITS W/ ROOF SCREEN.
10. APPROXIMATE LOCATIONS ALLOCATED FOR SOLAR PANELS. SIZE AND PLACEMENT BY OTHERS.
11. APPROXIMATE LOCATION OF MECHANICAL VENTILATION
12. DOCK CANOPY.
13. PROVIDE SINGLE PLY TPO ROOFING OVER INSULATION OVER METAL DECK.
14. EVAP CONDENSING UNITS. SET DOWN IN MECHANICAL AREA AND SCREENED BY TILT PANEL WALLS. OPEN TO ABOVE.

GENERAL NOTES - ROOF PLAN

A. ALL DIMENSIONS ARE TO FACE OF CONCRETE WALL, GRIDLINE, OR FACE OF STUD. (U.N.O.)

B. VERIFY THAT ALL ROOF AREAS HAVE POSITIVE DRAINAGE (1/4" FT.) PRIOR TO ROOF INSULATION INSTALLATION.

C. REFER TO "S" DRAWINGS FOR ROOF HEIGHT ELEVATIONS IN REGARDS TO ROOF DRAINAGE.

D. CONTRACTOR TO VERIFY AND COORDINATE WITH ALL SUBCONTRACTORS, ALL LOCATIONS AND SIZES OF ROOF OPENINGS.

E. FOR TYP. ROOF PENETRATIONS, CONTRACTOR TO VERIFY ALL LOCATIONS WITH MECHANICAL AND PLUMBING DRAWINGS.

F. CONTRACTOR TO VERIFY AL ROOF DRAIN DEPRESSIONS W/ "S" DRAWINGS.

G. CONTRACTOR TO COORDINATE EXACT SKYLIGHT LOCATION W/ FIRE SPRINKLER AND ROOF FRAMING SUB-CONTRACTORS. LOCATIONS ON DRAWINGS ARE APPROXIMATE.

H. ALL SKYLIGHTS TO BE DESIGNED FOR 105 M.P.H., EXPOSURE "C" W/ STRONGER FRAMES, SUPPORTS AND DOMES. MANUFACTURER TO CONFIRM IN WRITING.

I. ROOF DRAINS AND OVERFLOW DRAINS TO BE A MIN. 8" DIA, SEE "P" DRAWINGS FOR EXACT SIZE.

J. NOT USED

K. PROVIDE SHAPED INSULATION CRICKETS AS REQUIRED FOR PROPER ROOF DRAINAGE OF 1/4" PER FOOT (MIN.).

L. BUILT-UP ROOFING TO BE DESIGNED FOR I 105 AND TO BE A U.L. CLASS A ROOF. FLASHING: 6AF TYPE 5MB MOPPED AP SHEET, U.L. TYPE 63 BUR.

M. ALL ROOFING FASTENERS SHALL MEET ALL CODE AND REGULATION REQUIREMENTS. PROPER REQUIREMENTS ARE IN PROJECTS JURISDICTION AND ALSO, FACTORY MUTUAL (FM) WIND UPLIFT PRESSURE REQUIREMENTS.

N. ALL SKYLIGHTS TO BE PLACED A MIN. OF 18" FROM INSIDE FACE OF PARAPET.

O. FIRE PROTECTION SYSTEM CONTRACTOR TO PROVIDE FIRE HOSE STATIONS ON ROOF PER FIRE DEPARTMENT & BUILDING DEPARTMENT'S REQUIREMENT.

P. ROOF DRAINS, OVERFLOW DRAINS AND RAINWATER PIPING WITHIN THE INTERIOR OF THE BUILDING SHALL BE TESTED IN ACCORDANCE WITH THE PROVISIONS OF THE PLUMBING CODE FOR TESTING DRAIN, WASTE AND VENT SYSTEMS.

Q. ROOF DRAINS, OVERFLOW PIPING WITHIN THE BUILDINGS SHALL UTILIZE APPROVED DRAINAGE FITTINGS.

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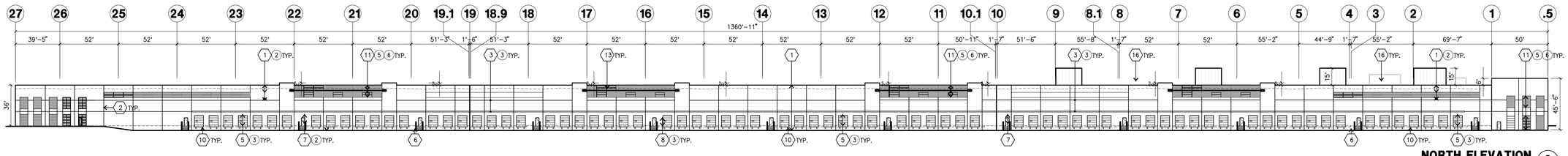
Mechanical:	TBD
Plumbing:	TBD
Electrical:	TBD
Landscape:	Environs
Fire Protection:	TBD
Soils Engineer:	TBD

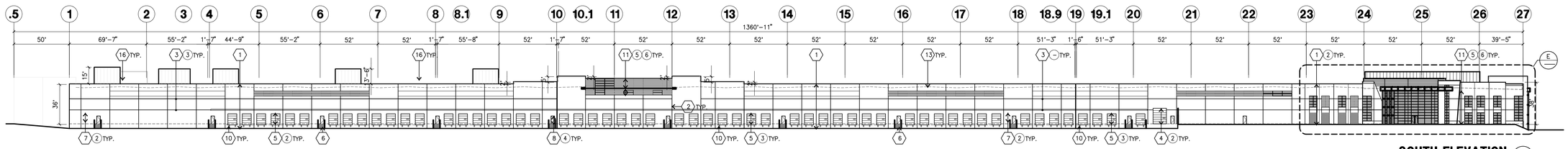
Title: overall roof plan

Project Number:	13220
Drawn by:	Sandoval
Date:	October 23, 2013
Revision:	

Sheet: A2.2



NORTH ELEVATION (A)
scale: 1"=40'-0"



SOUTH ELEVATION (B)
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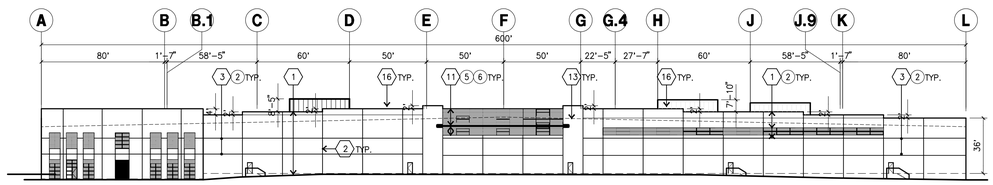

WEST ELEVATION (D)
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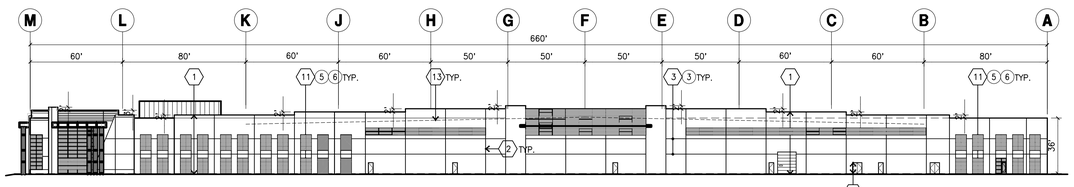
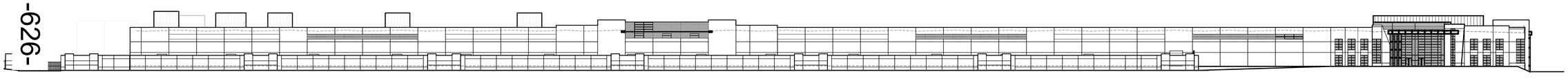
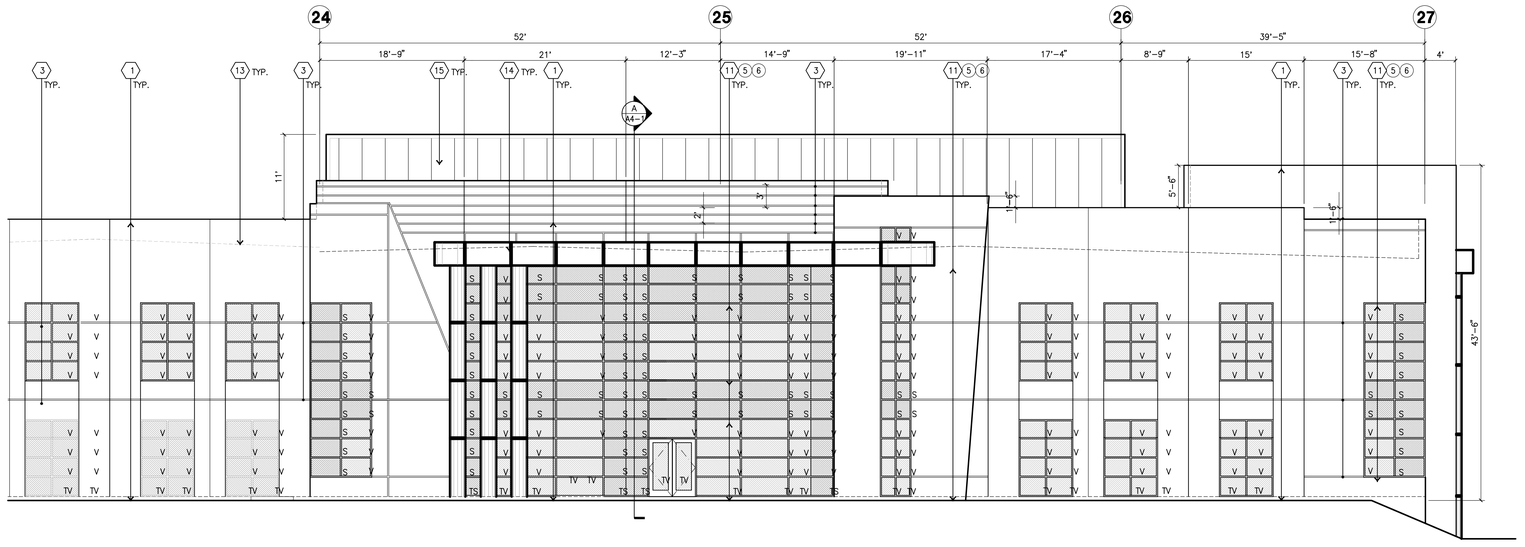


EAST ELEVATION (C)
scale: 1"=40'-0"



SOUTH ELEVATION W/ SCREEN WALL (B)
scale: 1"=40'-0"



ENLARGE SOUTH ELEVATION (E)
scale: 1/8"=1'-0"

KEYNOTES - ELEVATIONS

1. CONCRETE TILT-UP PANEL(PAINTED). FINISH GRADE VARIES. SEE "C" DRAWINGS. WATERPROOF ALL WALLS WHERE GRADE IS HIGHER AND EXPOSED TO THE WEATHER ONE SIDE. WATERPROOFING TO BE PROTECTED WITH PROTECTION BOARD AND A MIN. OF 6" OF GRAVEL. PROVIDE TRENCH DRAIN AT BOTTOM AND DAYLIGHT TO CURB OR TAKE TO STORM DRAIN. NOT REQUIRED AT DOCK HIGH CONDITION OR AT RAMP WALLS.
2. PANEL JOINT.
3. PANEL REVEAL. ALL REVEALS TO HAVE A MAX. OF 3/8" CHAMFER. REVEAL COLOR TO MATCH ADJACENT BUILDING FIELD COLOR. U.N.O.
4. OVERHEAD DOOR @ DRIVE THRU. SEE DOOR SCHEDULE. PROVIDE COMPLETE WEATHER-STRIPPING PROTECTION ALL AROUND. DESIGN TO RESIST 90 MPH WIND EXPOSURE "C".
5. OVERHEAD DOOR @ DOCK HIGH. SEE DOOR SCHEDULE. PROVIDE COMPLETE WEATHER-STRIPPING PROTECTION ALL AROUND. DESIGN TO RESIST 110 MPH WIND EXPOSURE "C".
6. CONCRETE STAIR, LANDING AND GUARDRAIL W/ METAL PIPE HANDRAIL. PROVIDE NON SKID NOSING TO MEET ADA REQUIREMENTS. PROVIDE CONTRASTING COLORED 3" WIDE WARNING STRIPE INTEGRAL TO CONCRETE AT TOP LANDING AND BOTTOM TREAD PER ADA REQUIREMENTS.
7. METAL LOUVER, DESIGN TO RESIST 90 MPH WIND EXPOSURE "C". PAINT TO MATCH BUILDING COLOR
8. HOLLOW METAL DOORS. SEE DOOR SCHEDULE. PROVIDE COMPLETE WEATHER STRIPING ALL AROUND DOOR. PROVIDE FOR RAIN DIVERTER ABOVE DOOR. DESIGN TO RESIST 90 MPH WIND EXPOSURE "C".
9. EXTERIOR DOWNSPOUT AND OVERFLOW SCUPPER
10. DOCK BUMPER
11. ALUMINUM STOREFRONT FRAMING WITH TEMPERED GLAZING AT ALL DOORS, SIDELITES ADJACENT TO DOORS AND GLAZING WITH BOTTOMS LESS THAN 18" ABOVE FINISH FLOOR ELEVATION. DESIGN TO RESIST 90 MPH WIND EXPOSURE "C".
12. EXTERIOR LIGHTING FIXTURE
13. ROOF LINE
14. METAL CANOPY
15. METAL EQUIPMENT SCREEN
16. REFRIGERATION PENTHOUSE

GENERAL NOTES - ELEVATIONS

A. ALL PAINT COLOR CHANGES TO OCCUR AT INSIDE CORNERS UNLESS NOTED OTHERWISE.
B. ALL PAINT FINISHES ARE TO BE FLAT UNLESS NOTED OTHERWISE.
C. T.O.P. EL.= TOP OF PARAPET ELEVATION.
D. F.F. = FINISH FLOOR ELEVATION.
E. STOREFRONT CONSTRUCTION: GLASS, METAL ATTACHMENTS AND LINTELS SHALL BE DESIGNED TO RESIST 90 MPH, EXPOSURE "C" WINDS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION.
F. CONTRACTOR SHALL FULLY PAINT ONE CONCRETE PANEL W/ SELECTED COLORS. ARCHITECT AND OWNER SHALL APPROVE PRIOR TO PAINTING REMAINDER OF BUILDING.
G. BACK SIDE OF PARAPETS TO HAVE SMOOTH FINISH AND BE PAINTED WITH ELASTOMERIC PAINT.
H. FOR SPANDREL GLAZING, ALLOW SPACE BEHIND SPANDREL TO BREATH.
J. USE ADHESIVE BACK WOOD STRIPS FOR ALL REVEAL FORMS.
K. THE FIRST COAT OF PAINT TO BE ROLLED-ON AND THE SECOND COAT TO BE SPRAYED-ON

COLOR SCHED. - ELEVATIONS

1. CONCRETE TILT-UP PANEL PAINT BRAND: SHERWIN-WILLIAMS SW7529 SAND BEACH
2. CONCRETE TILT-UP PANEL PAINT BRAND: SHERWIN-WILLIAMS SW7533 KHAKI SHADE
3. CONCRETE TILT-UP PANEL PAINT BRAND: SHERWIN-WILLIAMS SW2827 COLONIAL RIVAL TAN
4. CONCRETE TILT-UP PANEL PAINT BRAND: SHERWIN-WILLIAMS SW7550 RESORT TAN
5. METAL CANOPY PAINT BRAND: BENJAMIN MOORE 2139 RIVER ROCK
6. GLAZING COLOR: PPG SOLAR BRONZE
7. MULLIONS PAINT BRAND: BENJAMIN MOORE 2139 RIVER ROCK

GLAZING LEGEND

S SPANDREL GLASS
V VISION GLASS
TV TEMPERED VISION GLASS

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Electrical:	TBD
Landscape:	Environs
Fire Protection:	TBD
Soils Engineer:	TBD

Title: elevation

Project Number: 13220
Drawn by: Sandoval
Date: October 23, 2013
Revision:

Sheet: A3.1

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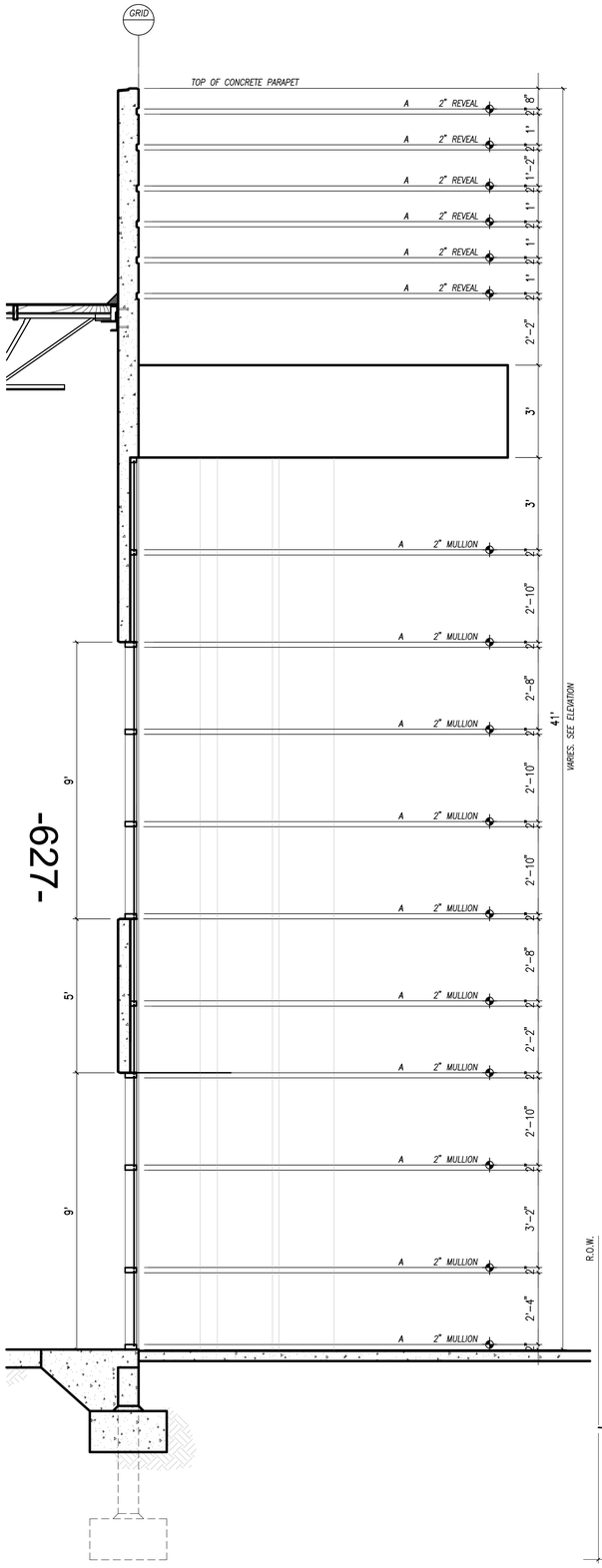
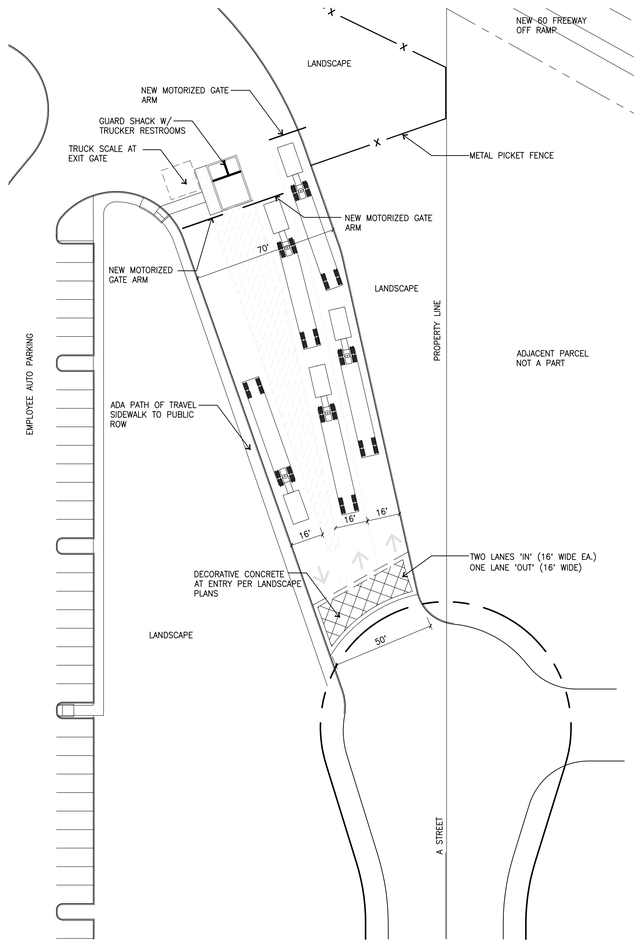
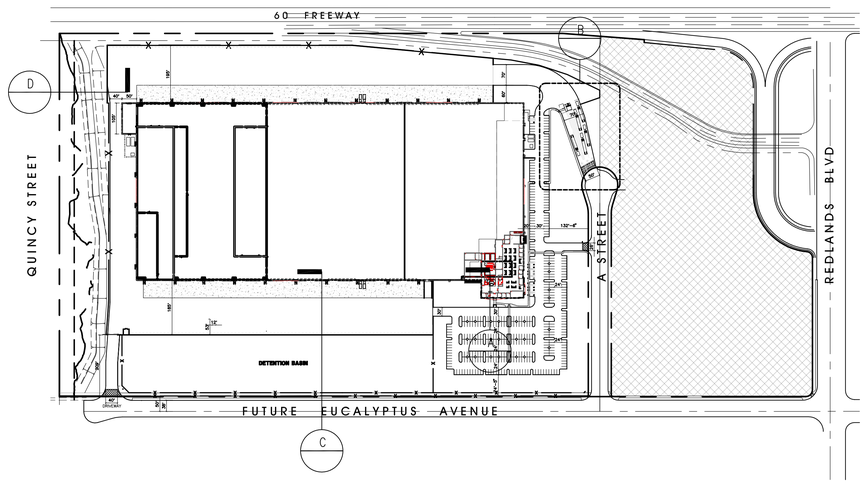


BUILDING SECTION @ OFFICE AREA (A)
scale: 1/2" = 1'-0"



NORTHEAST TRAILER SITE ENTRY (B)
scale: 1" = 30'-0"



CROSS-SECTION (D)
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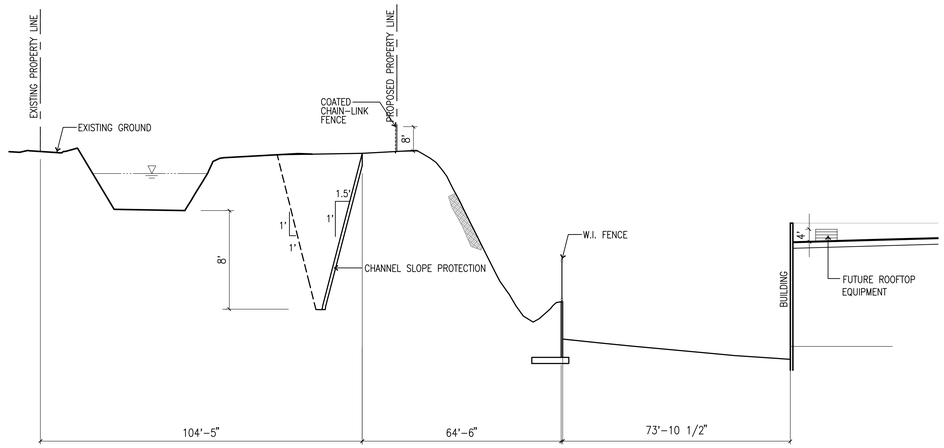
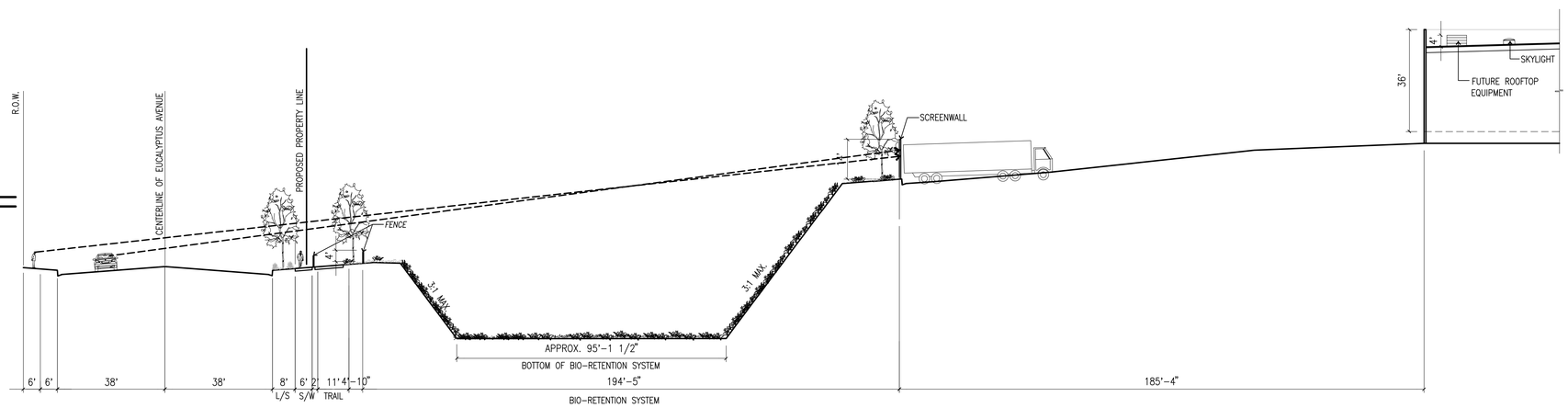


LINE OF SIGHT (C)
scale: 1" = 20'-0"



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Electrical:	TBD
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Fire Protection:	TBD
Soils Engineer:	TBD

Title: sections

Project Number:	13220
Drawn by:	Sandoval
Date:	October 23, 2013
Revision:	

Sheet: A4.1

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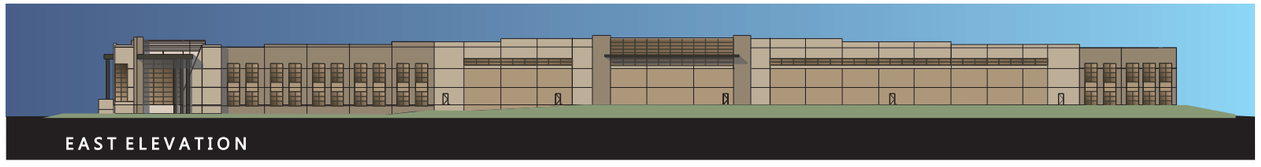
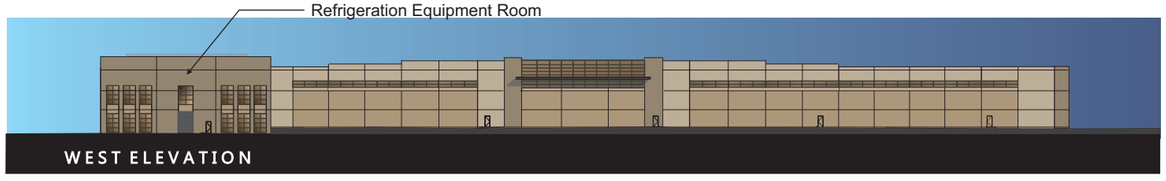
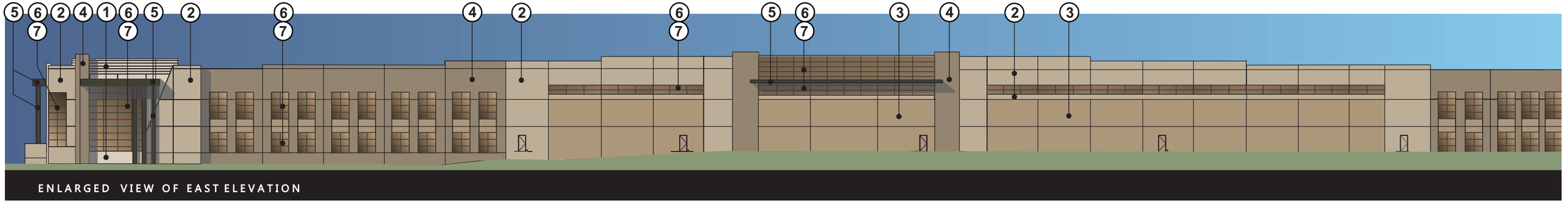
NORTH ELEVATION



EAST ELEVATION



WEST ELEVATION



ENLARGED VIEW OF EAST ELEVATION

-628-

① Sherwin-Williams SW7529 Sand Beach

② Sherwin-Williams SW7533 khaki Shade

③ Sherwin-Williams SW2827 Colonial Rivial Tan

④ Sherwin-Williams SW7550 Resort Tan

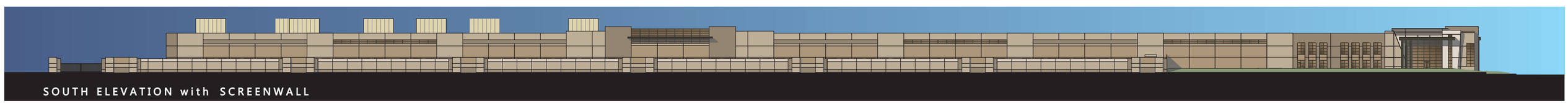
⑤ Benjamin Moore 2139 River Rock @ METAL CANOPY

⑥ PPG Solar Bronze GLAZING

⑦ Benjamin Moore 2139 River Rock @ MULLIONS

NOTE: All colors/finish to be reviewed and confirmed by ALDI

SOUTH ELEVATION



SOUTH ELEVATION with SCREENWALL

HPA architecture

WEST RIDGE COMMERCE CENTER

MORENO VALLEY, CA

ALDI

Job No 13220.00 | COLORED ELEVATIONS & MATERIAL BOARD - scheme D (darker glazing tone) | 08.01.2013

NORTH ELEVATION

EAST ELEVATION

WEST ELEVATION

ENLARGED VIEW OF EAST ELEVATION

ENLARGED VIEW OF SOUTH ELEVATION with SCREENWALL

SOUTH ELEVATION

SOUTH ELEVATION with SCREENWALL

HPA architecture

WEST RIDGE COMMERCE CENTER

MORENO VALLEY, CA

ALDI

Job No 13220.00

COLORED ELEVATIONS with CONCEPTUAL LANDSCAPE - scheme D

08.05.2013

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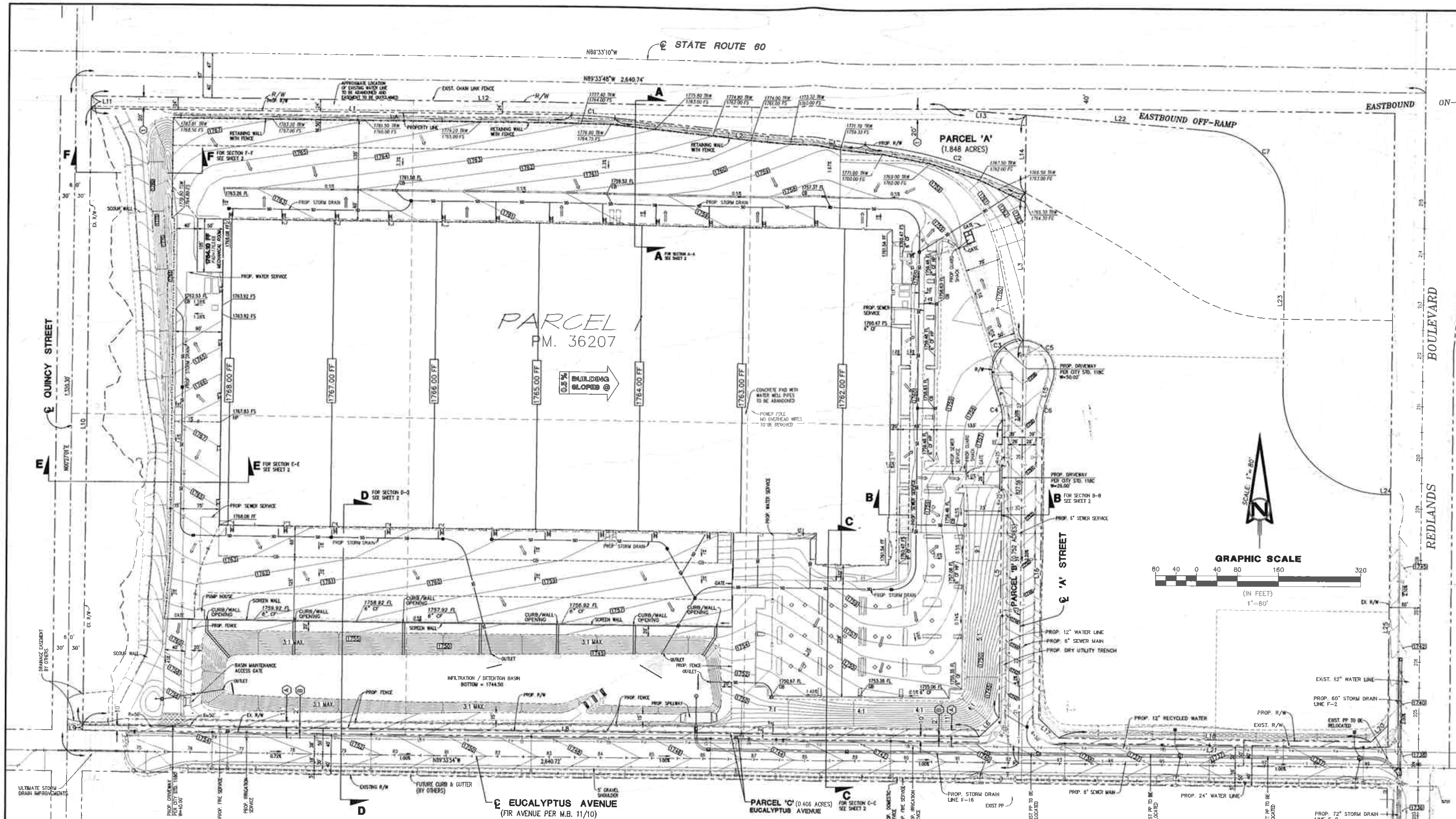


UTILITY PROVIDERS

SEWER / WATER
EASTERN MUNICIPAL WATER DISTRICT
2270 TRUMBLE ROAD
PERRIS, CA 92571
(951) 928-3777

GAS
SOUTHERN CALIFORNIA GAS COMPANY
25200 TRUMBLE RD, SC 8058
ROMOLAND,CA 92380
(909) 335-7955

TELEPHONE
VERIZON
1980 ORANGE TREE LANE, STE 100
REDLANDS, CA 92374

ELECTRIC
MORENO VALLEY UTILITIES
14177 FREDERICK ST.
MORENO VALLEY, CA 92552
(951) 413-3480

CABLE – TV
TIME WARNER
1500 AUTO CENTER DR.
ONTARIO, CA 91761
(909) 975-3380

LEGEND

—SD—	PROPOSED STORM DRAIN
—S—	PROPOSED SEWER
—DW—	PROPOSED DOMESTIC WATER SERVICE
—W—	PROPOSED WATER MAIN
---GB---	PROPOSED GRADE BREAK LINE
-·-·-	PROPOSED R/W
—RW—	PROPOSED RECYCLED WATER
▫	PROPOSED GRATING INLET
▭	PROPOSED CURB OPENING INLET
FF	PROPOSED FINISH FLOOR ELEVATION
TP	TOP OF PAVEMENT
TG	TOP OF GRATE
FL	FLOWLINE
CF	CURB FACE
FS	FINISHED SURFACE
CB	CATCH BASIN
PL	PROPERTY LINE
R/W	RIGHT-OF-WAY
CL	CENTERLINE
PROP.	PROPOSED
EXIST.	EXISTING
DRWY	DRIVEWAY
STL	STREET LIGHT
PP	POWER POLE
⟸	DIRECTION OF FLOW
	EX. STREET LIGHT
	PROPOSED STREET LIGHT PER CITY STD. NO. 501

LEGAL DISCRIPTION:

BEING A SUBDIVISION OF PARCEL A OF LOT LINE ADJUSTMENT NO. 983 /AND CERTIFICATE OF COMPLIANCE AS SHOWN ON THE DOCUMENT RECORDED MARCH 26, 2007 AS INSTRUMENT NUMBER 2007-0180759 OF OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY AND LOTS 3, 4, 5 & 6, BLOCK 35 OF MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS PER MAP RECORDED IN BOOK 11, PAGE 10, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

FLOOD ZONE:
FLOOD ZONE X,
PANEL NO. 06065C0760G EFFECTIVE DATE 8/28/2008

AREA
GROSS AREA = 51.668 ACRES
NET AREA = 49.089 ACRES
NUMBER OF PARCELS: 1
LETTERED PARCELS: 3 (A-C)

TOPO
SOURCE: DMI (DIGITAL MAPPING INC.)
DATE: 12-22-2006

PREPARED FOR OWNER/DEVELOPER
ALDI INC.
6000 NORTH NOAH DRIVE
SAXONBURG, PA 16056
CONTACT: BRIAN MCGEE

PREPARED IN THE OFFICE OF
HUITT-ZOLLARS, INC.
3990 CONCOURS, SUITE 450
ONTARIO, CALIFORNIA 91764
PHONE: (909) 941-7799

EASEMENT NOTES

(1) *EASEMENT FOR PIPELINES AND INCIDENTAL PURPOSES IN FAVOR OF EASTERN MUNICIPAL WATER DISTRICT RECORDED SEPTEMBER 19, 1962 AS INSTRUMENT NO. 87666 IN BOOK 3223, PAGE 159, O.R.*

(A) *EASEMENT FOR MULTI-USE TRAIL PURPOSES IN FAVOR OF THE MORENO VALLEY COMMUNITY SERVICES DISTRICT DEDICATED HEREON.*

(B) *EASEMENT FOR PEDESTRIAN ACCESS AND SIDEWALK PURPOSES IN FAVOR OF THE CITY OF MORENO VALLEY DEDICATED HEREON.*

EARTHWORK VOLUMES

	CUT (CY)	FILL (CY)
RAW*	277,041	110,578

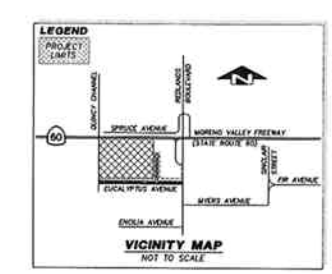
* ALL EARTHWORK VOLUMES SHOWN HERE ARE RAW AND SHRINKAGE AND SUBSIDENCE ANALYSIS ARE NOT APPLIED. ACTUAL NET IMPORT WILL BE SHOWN ON THE ROUGH GRADING PLAN

COURSE DATA

LINE	BEARING	DISTANCE
L1	N89°33'48"W	938.29'
L2	N84°43'14"W	496.11'
L3	N00°27'03"E	289.25'
L4	N16°45'28"W	50.00'
L5	N00°27'03"E	583.19'
L6	N46°39'41"E	53.37'
L8	N89°33'54"W	1752.47'
L9	N00°27'01"E	10.00'
L10	N00°27'01"E	1206.30'
L11	N00°27'01"E	24.00'
L12	N89°33'48"W	1676.63'
L13	N85°11'25"W	154.18'
L14	N00°27'03"E	151.68'
L15	N17°39'34"E	50.00'
L16	N00°27'03"E	583.15'
L17	N45°46'35"W	54.46'
L18	N89°33'54"W	609.35'
L20	N45°26'35"E	46.66'
L22	N85°11'25"W	368.93'
L23	N00°25'44"E	353.59'
L24	N89°33'25"W	11.90'
L25	N00°27'05"E	495.23'

CURVE DATA

CURVE	DELTA	R	L	T
C1	0.00	1000.00'	84.52'	42.29'
C2	23°42'44"	796.00'	329.43'	167.11'
C3	107°12'31"	61.00'	114.14'	82.75'
C4	17°12'31"	100.00'	30.03'	15.13'
C5	107°12'31"	61.00'	114.14'	82.75'
C6	17°12'31"	100.00'	30.03'	15.13'
C7	85°37'09"	152.00'	227.14'	140.80'
C8	89°59'09"	200.00'	314.11'	199.95'



ATTACHMENT 5

CITY CASE NO. PA08-0097

REV	DESCRIPTION	DATE

REGISTERED PROFESSIONAL ENGINEER MAURICE H. MURAD NO. 33366 EXPIRATION 6-30-2014 CIVIL STATE OF CALIFORNIA

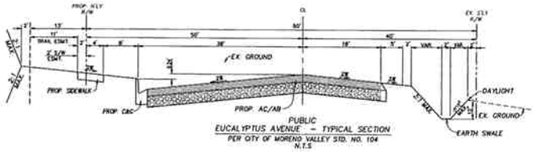
PRELIMINARY GRADING & UTILITY PLAN
FOR
ALDI DISTRIBUTION WAREHOUSE
REDLANDS BOULEVARD & EUCALYPTUS AVENUE
CITY OF MORENO VALLEY

HUITT-ZOLLARS
Huitt-Zollars, Inc. Ontario

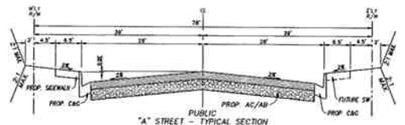
APPROVED BY: MAURICE H. MURAD — R.C.E. 33366 — EXPIRES 6-30-14 — DATE

DESIGNED BY M.H.M. | DRAWN BY H-Z STAFF | CHECKED BY M.H.M. | FIELD BOOK | JOB NO.

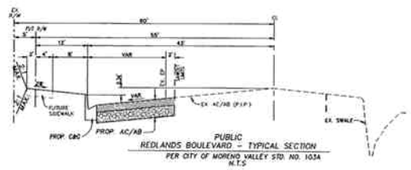
SHEET 1 OF 2 SHEETS



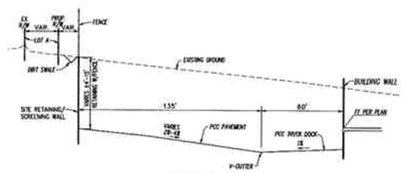
PUBLIC
EUCALYPTUS AVENUE – TYPICAL SECTION
PER CITY OF MORENO VALLEY STD. NO. 104
N.T.S



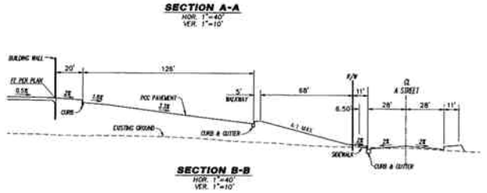
PUBLIC
"A" STREET – TYPICAL SECTION
PER CITY OF MORENO VALLEY STD. NO. 106
N.T.S



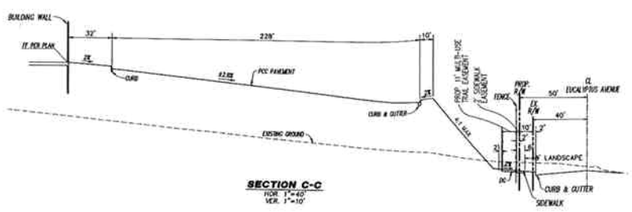
PUBLIC
REDLANDS BOULEVARD – TYPICAL SECTION
PER CITY OF MORENO VALLEY STD. NO. 103A
N.T.S



SECTION A-A
HOR. 1"=40'
VER. 1"=10'



SECTION B-B
HOR. 1"=40'
VER. 1"=10'



SECTION C-C
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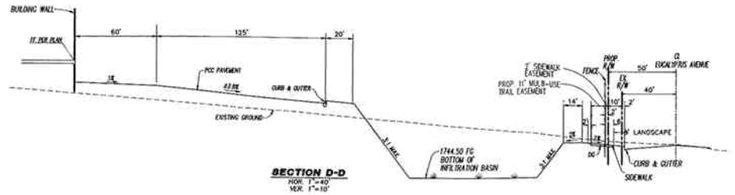
VER. 1"=10'



SECTION D-D
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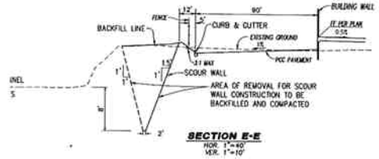
VER. 1"=10'



SECTION E-E
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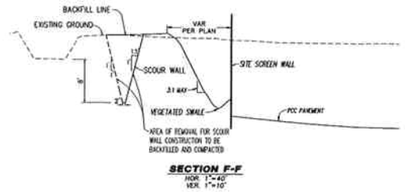

SECTION F-F
HOR. 1"=40'
VER. 1"=10'

CITY CASE NO. PA08-0097

REV	DESCRIPTION	DATE

PRELIMINARY GRADING & UTILITY PLAN
FOR
ALDI DISTRIBUTION WAREHOUSE
REDLANDS BOULEVARD & EUCALYPTUS AVENUE
CITY OF MORENO VALLEY

HUITT-ZOLLARS
Huitt-Zollars, Inc. Ontario
3502 SONOLO ST. • SUITE 320 • ONTARIO, CALIFORNIA 91764
PHONE (909) 941-1726 • FAX (909) 941-1727

APPROVED BY: MAURICE H. MURAD R.C.E. 33366 EXPIRES 6-30-14 DATE

DESIGNED BY: M.H.M.
DRAWN BY: H-Z STAFF
CHECKED BY: M.H.M.
FIELD BOOK:
JOB NO.

SHEET 2 OF 2 SHEETS

H:\proj\11035804\dwg\construction\ grading\Grad1.dwg, Layout: G2, Oct 23 2013 2:31pm

-632-

Johnson & Sedlack
ATTORNEYS at LAW

Raymond W. Johnson, Esq. AICP
Carl T. Sedlack, Esq. Retired
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Kimberly Foy, Esq.

26785 Camino Seco, Temecula, CA 92590

E-mail: EsqAICP@WildBlue.net
Abby.JSLaw@gmail.com
Kim.JSLaw@gmail.com
Telephone: 951-506-9925
Facsimile: 951-506-9725

November 20, 2013

Jeff Bradshaw
Associate Planner
Moreno Valley
Community & Economic Development Department
Planning Division
14177 Frederick St.
Moreno Valley, CA 92552
jeffreyb@moval.org

VIA US MAIL AND EMAIL

RE: **Amended Plot Plan for the Project Orion Distribution Center (ALDI Foods) and Addendum to West Ridge Commerce Center EIR**

Dear Mr. Bradshaw,

I have reviewed the Addendum to the West Ridge Commerce Center EIR, and submit the following comments on behalf of Sierra Club and Residents for a Livable Moreno Valley.

The Project Orion Distribution Center increases the proportion of the warehouse to be used for office uses from 14,000 square feet to 50,000 square feet within the 52 acre site; and would install of refrigeration across 263,800 sq. ft., which would substantially increase GHG emissions from stationary sources.

For example, GHGs from Natural Gas and Electricity Energy would increase, Natural Gas from 148.53 CO2e/yr to 797.14 CO2e/yr, and Electricity Energy from 741.71 CO2e/yr to 3,644.71 CO2e/yr.

New or newly feasible mitigation measures are available which could reduce the impacts from these additional stationary emissions. For example, the incorporation of additional solar paneling for the Project would reduce these additional stationary source emissions. Alternatively, require that the project purchase only green/ renewable power from the electric company.

Sierra Club and Residents also note that a settlement agreement was entered into with respect to the West Ridge Commerce Center project on June 20, 2012 which would be applicable to this Aldi Project Orion as well. I do not see that the Aldo Project Orion design incorporates the requirements of that settlement agreement, attached hereto as Attachment 1.

Thank you for your consideration of these brief comments.

Sincerely,

Raymond W. Johnson
JOHNSON & SEDLACK

Thomas Thornsley – 29177 Steven Avenue, – Moreno Valley, CA 92555 – tomthornsley@hotmail.com

November 22, 2013

Jeff Bradshaw
Associate Planner
Moreno Valley Planning Division
14177 Frederick St.
Moreno Valley, CA 92552
jeffreyb@moval.org

Sent Via Email

RE: Project Orion Addendum to the West Ridge Commerce Center Project

Dear Mr. Bradshaw,

I would like to thank you for keeping me informed of this project. The Project Orion site plan makes significant changes to the original West Ridge Commerce Center project. Although they may not be considered significant environmental changes they significantly alter what the public and the Planning Commission initial commented on and approved. Utilizing the Memorandum of Understanding to forgo what would most likely have required reconsideration by the Planning Commission fails to keep with the City's new commitment to cooperation and transparency especially as it related to development.

The Project Orion plan presents significant changes to the site layout, access, retention basins, building focal points, parking locations and configurations, office space, and intensity of use. The revised warehouse is 12% smaller while the office area is 357% larger indicating a greater need for employees and subsequent parking. Consolidation of all parking and building focal points to the southwest corner of the building diminishes the enhanced building elevation on the southwest corner. The proposed installation of several roof mounted refrigeration units on the building now necessities 15 foot tall mechanical screen walls or penthouses that will be larger than most homes and will be fully visible from almost all locations along public rights-of-way. The site also has reconfigured the access points which now created a much greater retention basin between the on-site improvements and the street frontage. The extent of these modifications should be made available to the public and the Planning Commission for reconsideration and possible modification to address the significant design changes.

In reviewing the Project Orion Addendum there are several items of concern because of the City's past practices, the deferment of improvements, writing off of mitigation with the Statement of Overriding Consideration, and what appears to the limited desire to address modest impacts to the community in a timely fashion. The items below are of concern and should be addressed.

1. The City's Trails Plan shows that the pedestrian tail should be install along the north side of Fir adjacent to Project Orion. The City should be insistent that this community amenity be installed at the time of project development and not deferred as was done with the Sketchers' project. Deferment means the City will have to take it upon itself to install this trail at a later date and at a higher cost for construction.

2. Most of the traffic impacts addressed in the Mitigation Measure will not be addressed or made by opening day of the project but instead deferred because of the option to pay TUMF, DIF, and fair share fees to satisfy impacts. However, there is no recognized timeline for most of the required MM because of development uncertainties and full funding abilities. Therefore, consideration must be taken to offset the immediate impacts that will be associated with both construction activity and occupancy of the warehouse because all traffic will take access from Redlands Boulevard and SR-60. In the case of SR-60 improvements should be made that will ease traffic congestion exiting the eastbound lanes and signalization of the westbound intersection. The eastbound off ramp should have both left and right turn lanes and the westbound on/off ramp should be signalized with full turning movement lanes to keep traffic moving on Redlands Boulevard.
3. The analysis of the Project Orion Addendum seems to incorrectly address the environmental impacts related to air and Green House Gas emissions based on the following that should be redressed in their report.
    a. Parking numbers and the stated number of employees indicates that there would be a greater number of vehicle trips than stated. The traffic report needs to correctly address this issue.
    b. The Green House Gas emissions mentioned in the report do not appear to address the high energy demands of Project Orion related to the addition of large refrigeration cold storage area which comprises 263,800 square feet.
    c. The overall numbers in the emissions summaries do not seem to validate the differences between the original conceptual use of the West Ridge project and the known parameters of Aldi with a greater number of employees than projected for with speculative development. Additionally, the Aldi operation will include a significant number of refrigeration trucks that will no doubt idle for an indefinite time while waiting to connect to a loading dock.
4. With the new configuration of the enlarged retention basin, consideration should be given to the necessity for fencing in this area. As proposed, the 8-foot tall wrought iron fence will appear as a cage around a significant landscape area thus taking away from the aesthetic character of the project.
5. The City typically has required that roof mounted equipment be screen and the addition of refrigeration units should screen also. Adding screen walls or a penthouse structure only adds to the aesthetic lose to the community. These units should be ground mounts to avoid the visual blight they bring to the building.
6. As a concerned resident of Moreno Valley and one that sees the City's fanfare over nationally recognized tenants, I cannot help but wonder why we do not request or insist that greater design emphasis be placed on creating significant entry statement at every building entry point. I would have thought that the company itself would have demanded this considering this is their headquarters as they make their way into the Southern California market. Please press for something more to signify value this project should have to the city.

In conclusion, the changes proposed are no doubt significant and should have been fully vetted in public and given their due consideration before the community and the Planning Commission. It is my sincere hope that full consideration of my comment will be taken to heart because this community deserves more.

Sincerely,

Thomas Thornsley

Memorandum

To: Jeff Bradshaw
City of Moreno Valley

Date: November 25, 2013

From: Ross S. Geller

Re: Response to November 20, 2013 Letter from Johnson & Sedlack

The commentor correctly notes that the Project Orion Distribution Center (Project Orion) Addendum to the Certified Westridge Commerce Center EIR (EIR Addendum) incorporates a refrigeration component for cold storage; but then incorrectly infers that greenhouse gas (GHG) emissions impacts would somehow be increased under Project Orion when compared to GHG emissions impacts considered and addressed in the Certified Westridge Commerce Center EIR (Certified EIR, Certified EIR project). Continuing, the commentor incorrectly suggests that new and additional GHG emissions mitigation measures are required for Project Orion. As discussed below, Project Orion would actually yield a net reduction in GHG emissions when compared to the Certified EIR project, and would require no new or additional GHG emissions mitigation.

Aggregate GHG Emissions Reduced Under Project Orion

As noted by the commentor, the inclusion of refrigerated storage at the Project Orion facility would increase the demand for electrical usage and natural gas (stationary GHG emissions sources) when compared to the project that was assessed in the 2011 Certified EIR. What is pointedly *not* noted by the commentor is that Project Orion would also result in a substantial reduction in mobile source GHG emissions when compared to

emissions considered and evaluated in the Certified EIR. In fact, while electrical usage and natural gas would account for an increase of 3551.61 metric tons CO2 equivalent (MTCO2e) under Project Orion, mobile source emissions would be reduced by 11,070.09 MTCO2e, yielding a net reduction in GHG emissions of 7,518.48 MTCO2e when considering these two emissions source categories. When considering all GHG emissions sources, GHG emissions in aggregate would be reduced by 7834.83 MTCO2e under Project Orion when compared to GHG emissions generated by the Certified EIR project. This dramatic reduction in GHG emissions under Project Orion would further diminish the previously identified "less–than-significant" GHG impacts substantiated in the Certified EIR. The overall comparative reductions in GHG emissions were presented at Table 5 of the Air Quality Study (Appendix C of the EIR Addendum). For ease of reference, this Table is presented again as an attachment to this memorandum.

The significant reduction in mobile source emissions reflected in the EIR Addendum is primarily due to the anticipated schedule and operation of the Project Orion. That is, at the time that the Certified EIR was prepared, the traffic analysis (and air and noise impact analyses) relied on standardized distribution warehouse trip generation rates and conservative vehicle mix assumptions reflected in *National Association for Industrial and Office Parks (NAIOP) - City of Moreno Valley Hybrid Rates*, September 14, 2007; and *City of Fontana Truck Trip Generation Study for LU030*, respectively. This methodology was employed because no specific tenant had been identified for the Certified EIR project at the time the Certified EIR was prepared. In essence, by employing these standardized trip generation rates and vehicle mix assumptions, rather than tenant-specific information, the Certified EIR analyses assured that potential impacts reflecting the widest array of possible warehouse tenants were evaluated. When a specific user for the Certified EIR project was identified (Project Orion), the operational aspects of the facility were refined accordingly to reflect tenant-specific vehicle trip generation rates and vehicle composition. Detailed traffic analysis for Project Orion is presented in the Traffic Impact Analysis (Appendix B of the EIR Addendum). Comparative vehicle composition characteristics of Project Orion and the Certified EIR project, and resulting GHG emissions impacts are summarized below.

Project Orion would be served by 1,000 total vehicles (400 passenger and 600 trucks). In comparison, the Certified EIR analysis modeled 1,585 vehicles (729 passenger and 856 trucks). The difference is an approximate 37 percent reduction in total vehicles, resulting from Project Orion, as compared to vehicles analyzed in the Certified EIR modeling. As shown in the aforementioned Table, this reduction is consistent with the modeled mobile source reductions in MTCO2e of 39% (16,787.99 MTCO2e vs. 27,858.08 MTCO2e, Project Orion and Certified EIR project, respectively.)

Also contributing to comparative reductions in mobile source GHG emissions is the recently developed California Emissions Estimator Model (CalEEMod 2013) prescribed for use by the South Coast Air Quality Management District, and employed in the EIR Addendum GHG analysis. In contrast, the Certified EIR relied on the Urban Emissions (URBEMIS) 2007 modeling protocols. URBEMIS 2007 was the SCAQMD emissions modeling protocol in effect when the Certified EIR was prepared (2009 and 2010). The newly enacted CalEEMod 2013 protocols serve to reconcile some of the URBEMIS 2007 limitations by acknowledging contemporary enhanced vehicle emission controls; and more accurately representing natural turnover of older truck fleet vehicles as dictated by existing state regulations and federal Clean Air mandates. In total, these refinements under CalEEMod 2013 (and absent under URBEMIS 2007) recognize downward-trending vehicular source emissions resulting from improved emissions control technologies, and imposition of increasingly stringent air pollution control regulatory and policy actions.

When compared to the Certified EIR analyses, GHG emissions inventories reflected in the EIR Addendum also changed because the Certified EIR URBEMIS 2007 modeling protocols do not directly calculate electrical demand GHG emissions. Rather, GHG emissions estimates from electrical usage as evaluated in the Certified EIR were necessarily calculated outside of the URBEMIS 2007 Model by employing likely maximum electrical demand assumptions, and then added back to the base GHG emissions results. In contrast, CalEEMod 2013 protocols directly and more accurately calculate use-specific electrical demand GHG emissions.

No New or Additional GHG Emissions Mitigation Required Under Project Orion

The commentor suggests that new or newly feasible mitigation measures are available to reduce GHG impacts. The commentor does not, however, provide any specific mitigation suggestions, or any indication of the efficacy or applicability of these undefined measures.

Notwithstanding the commentor's statements, GHG emissions impacts were previously substantiated to be less-than-significant in the Certified EIR (Section 4.3 Air Quality, Findings and Recommendations, pg. 4.3-93 and summarized in Table 1.10-1, Summary of Environmental Impacts and Mitigation Measures, pg. 1-59). These already less-than-significant impacts would be further reduced under Project Orion as substantiated in the EIR Addendum. Project Orion GHG emissions impacts would also therefore be less-than-significant. CEQA states that no mitigation (new or otherwise) is necessary for effects not found to be significant (CEQA Guidelines §15126.4, subd. (a) (3)). Accordingly, no new or additional GHG emissions impacts mitigation is required for Project Orion, and none is proposed.

Based on the above, the analysis and findings as presented in EIR Addendum are correct and accurate and no changes are recommended.

TABLE 5
GHG EMISSIONS SUMMARY (metric tons CO2e / year)
2010 Westridge Commerce Center EIR
vs. Aldi Distribution Center Warehouse

2010 Westridge Commerce Center EIR				
Emission Source	**CO2**	**CH4**	**N20**	**CO2e**
Annual construction related emissions amortized over 30 years	174.16	0.0104	0.522	338.32
Natural Gas	141.10	0.02	0.022	148.53
Landscaping	0.51	--	--	0.51
Mobile Sources	27,724.82	0.35	0.41	27,858.08
Electricity Energy	732.09	0.008	0.03	741.71
Solid Waste Generation	--	22.60	--	474.67
Water Usage	39.63	0.002	0.0005	39.81
Refrigerant Leakage	--	--	--	401.75
Subtotal Transportation Sources				**27,858.08**
Subtotal Non-Transportation Sources				**2,145.31**
Total CO2e				**30,003.39**
Aldi Distribution Center Warehouse				
Emission Source	**CO2**	**CH4**	**N20**	**CO2e**
Annual construction related emissions amortized over 30 years	174.16	0.0104	0.522	338.32
Natural Gas	792.32	0.02	0.02	797.14
Landscaping	--	--	--	--
Mobile Sources	16,783.54	0.21	--	16,787.99
Electricity Energy	3,360.50	0.17	0.03	3,644.71
Solid Waste Generation	152.73	9.03	--	229.47
Water Usage	23.41	0.15	3.81e-3	27.83
Refrigerant Leakage	--	--	--	343.10
Subtotal Transportation Sources				**16,787.99**
Subtotal Non-Transportation Sources				**5,380.57**
Total CO2e				**22,168.56**
Variance Total CO2e				***-7,834.83***

Garrett DeFrenza Stiepel Ryder LLP

Henry R. Stiepel
Direct Dial No.
(714) 384-4303
Email Address
hstiepel@gdsrlaw.com

November 22, 2013

VIA EMAIL (jeffreyb@moval.org) AND FEDERAL EXPRESS

Mr. Jeff Bradshaw
Associate Planner
Moreno Valley Community & Economic
Development Department
Planning Division
14177 Frederick Street
Moreno Valley CA 92552

Re: Aldi Regional Distribution Center

Dear Mr. Bradshaw:

This firm is real estate counsel to Aldi, Inc. This letter will confirm that Aldi, through its affiliate, AI California LLC ("AI"), is under contract with Ridge Rancho Belago, LLC ("Ridge") to purchase the site for the Aldi Regional Distribution Center. We received a copy of the November 20, 2013 letter to you from Raymond Johnson of Johnson & Sedlack. Please note that under the express terms of the purchase and sale agreement between AI and Ridge, to the extent obligations arise under the June 20, 2012 settlement agreement mentioned in Mr. Johnson's letter after the property is purchased, AI will be responsible.

Please let me know if you have any questions or concerns.

Very truly yours,

Henry R. Stiepel

cc: Mr. Brian McGee via email
Doug Evertz, Esq. via email

3200 BRISTOL STREET, SUITE 850, COSTA MESA, CALIFORNIA 92626-1808
Tel: (714) 384-4300 Fax: (714) 384-4320

(JB)

LEIBOLD MCCLENDON & MANN
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LAGUNA HILLS, CALIFORNIA 92653
(949) 457-6300
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JOHN G. McCLENDON
john@CEQA.com

December 5, 2013

HAND DELIVERED
City of Moreno Valley Planning Commission
% Community Development Director
Moreno Valley City Hall
14177 Frederick St.
Moreno Valley, CA 92553

Re: *Appeal to City of Moreno Valley Planning Commission [Muni Code § 9.02.240]*
[Aldi Foods regional headquarters & distribution center; EIR Addendum for same]

Honorable Chairman and Members of the Planning Commission:

In accordance with Section 9.02.240 of the City of Moreno's Valley *Municipal Code*, I am appealing the Administrative Decision, made on or about November 22, 2013, to approve an Amended Plot Plan and EIR Addendum for the above-referenced project (the "Project"). I am filing this appeal on behalf of our clients who are citizens of the City of Moreno Valley and who oppose the administrative approval of this Project in violation of the California Environmental Quality Act (Pub. Resources Code §§ 21000 *et seq.*: "CEQA") and the State Guidelines for Implementation of CEQA (14 Cal. Code Regs. §§ 15000 *et seq.*) as well as other California laws.

In accordance with Subdivision B of Section 9.02.240, the specific reasons for this appeal are that by preparing an EIR Addendum for the Project the City recognizes that it is a discretionary project subject to CEQA; however, due to the unique nature of this Project and its environmental impacts, it cannot be approved with merely an addendum under Section 15164 of the CEQA Guidelines. Given the reasons set forth herein, and the City's unusually short period of time to submit this appeal (15 days), my clients reserve the right to proffer further evidence and testimony at your hearing on their appeal.

Subdivision B of Section 9.02.240 directs that this appeal letter "shall be accompanied by the required fee." In reviewing your City's current fee schedule, it appears that the fee for this appeal is $750. However, under Section 10 of the fee schedule, the City Council may waive this fee on a case-by-case basis for any private or public agency.

Requiring such a fee in *this* situation – citizens rather than project applicants appealing an administrative decision – violates State law. Notably, CEQA only authorizes agencies to charge and collect "a reasonable fee from any person proposing a project subject to [CEQA] . . . ." (Public Resources Code section 21089(a).) Moreover, in 1993, the Legislature added subdivision (c) to Section 21151 of CEQA, expressly granting the public a statutory right to appeal CEQA decisions to an elected decisionmaking body:

> "If a nonelected decisionmaking body of a local lead agency certifies an environmental impact report, approves a negative declaration or mitigated negative declaration, or determines that a project is not subject to this division, that certification, approval, or determination may be appealed to the agency's elected decisionmaking body, if any."

Thus, the City has no legal authority to set up a toll booth and dun members of the public who seek to exercise their statutory right to appeal to their elected officials. Such a "pay to play" scheme deprives all but the wealthy of what the California Supreme Court calls "the 'privileged position' that members of the public hold in the CEQA process." (*Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Association* (1986) 42 Cal.3d 929, 935-936.)

Therefore, we are tendering the enclosed check in the amount of $750.00 under protest, fully expecting that the City will follow State law and/or its own "case-by-case" discretion, and return it to us uncashed.

Please provide written notice of the date and time set for the hearing on the appeal addressed to our office. Pursuant to CEQA section 21092.2, please consider this letter to be our written request for notice to also be provided to the undersigned by e-mail at: john@CEQA.com.

Thank you in advance for you courtesy and cooperation on this matter.

Very truly yours,

LEIBOLD McCLENDON & MANN, P.C.

By: John G. McClendon

Enclosure: check for $750.00

Westridge Commerce Center
Final Environmental Impact Report

Prepared for:
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92552
City Case # P08-133

Prepared by:

applied planning inc

April 2011

ATTACHMENT 9

FINAL ENVIRONMENTAL IMPACT REPORT

for the

Westridge Commerce Center Project

State Clearinghouse Number:
2009101008

Prepared for:

The City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92553
City Case No. P08-133

Prepared by:

Applied Planning, Inc.
5817 Pine Avenue, Suite A
Chino Hills, CA 91709

April 2011

Table of Contents

List of Tables

1.0 Introduction

1.0 INTRODUCTION

1.1 OVERVIEW

This document, combined with the Draft Environmental Impact Report (EIR), constitutes the Final EIR for the Westridge Commerce Center Project (Project). The Draft EIR describes existing environmental conditions relevant to the proposal, evaluates the Project's potential environmental effects, and identifies mitigation measures to reduce or avoid the potentially significant impacts. The Draft EIR was circulated for public review and comment from October 21, 2010 through December 6, 2010.

1.2 CONTENT AND FORMAT

Subsequent to this introductory section, Section 2.0 of this document contains corrections and errata to the Draft EIR. Section 3.0 contains copies of each comment letter received on the Draft EIR, along with annotated responses to each comment contained within the letters. The Project Mitigation Monitoring Plan, which includes additional measures developed as a part of this Final EIR, is presented in Section 4.0.

1.3 DRAFT EIR COMMENTORS

A total of twenty-four (24) comment letters were received from various agencies and organizations. Additionally, four comment cards were received at a December 2, 2010 public meeting that was held to discuss the Project. The following Table 1.3-1 identifies the Draft EIR commentors. For reference purposes, comments are numbered and may be referred to by an acronym within the Responses to Comments (Final EIR Section 3.0). These acronyms, along with the dates of correspondence received, are also included in Table 1.3-1. Comments denoted with an asterisk * were received subsequent to the stated close of comments date (December 6, 2010), and are therefore not provided responses within Section 3 of this Final EIR. The Lead Agency has, however, attached these late comments and their corresponding responses to the Project staff report.

Table 1.3-1
Draft EIR Commentors

Commentor	Acronym	Correspondence Date
State Agencies		
Office of Planning & Research - State Clearinghouse	SCH	12/7/10
California Department of Fish and Game	CDFG	12/3/10
California Department of Transportation	DOT	12/6/10
County and Regional Agencies		
Eastern Municipal Water District	EMWD	12/6/10
Riverside County Flood Control and Water Conservation District	RCFC	11/29/10
South Coast Air Quality Management District	AQMD	12/10/10*
Local Organizations and Individuals		
Marcia Amino	MA	12/5/10
Lynne Ashley	LA	12/5/10
Gerald M. Budlong	GB	12/2/10
Center for Community Action and Environmental Justice	CCA	12/6/10
Paul Claxton	PC	12/5/10
Stephen Crews	SCR	12/6/10
Friends of the Northern San Jacinto Valley	FNSJ	12/6/10
Susan Gilchrist	SG	12/6/10
Highland Fairview	HF	12/6/10
Tom Hyatt	TH	12/10/10*
Johnson & Sedlack	JS	12/6/10
Shelly Mesa	SM	12/6/10
Ned and Dawn Newkirk	NDN	12/6/10
Deanna Reeder, Letter 1	DR1	12/6/10
Deanna Reeder, Letter 2	DR2	12/6/10
Residents for a Liveable Moreno Valley	RLMV	12/3/10
Sierra Club	SC	12/6/10
Thomas Thornsley	TT	12/6/10
Comment Cards Received at the City of Moreno Valley Public Meeting, December 2, 2010		
Amora Johnson	AJ-C	12/2/10
Richard Johnson	RJ-C	12/2/10
Deanna Reeder	DR-C	12/2/10
Sierra Club	SC-C	12/2/10

* Comments received after the stated close of comments date (12/06/10).

1.4 POINT OF CONTACT

The Lead Agency for this Project is the City of Moreno Valley. Any questions or comments regarding the preparation of this document, its assumptions, or its conclusions, should be referred to:

Jeff Bradshaw, Associate Planner
City of Moreno Valley
Development Department
14177 Frederick Street
Moreno Valley, CA 92553

1.5 PROJECT SUMMARY

The following information is summarized from the Project Description in the Draft EIR. For additional detail in regard to Project characteristics and Project-related improvements, along with analyses of the Project's potential environmental impacts, please refer to Draft EIR Sections 3.0 and 4.0, respectively.

1.5.1 Project Location

The Project site is located southwesterly of the State Route 60/Redlands Boulevard interchange, within the easterly portion of the City of Moreno Valley. The approximately 55-acre site is bounded to the north by State Route 60 (SR-60), to the west by the Quincy Channel, to the south by Fir Avenue (future Eucalyptus Avenue), and by a vacant parcel to the east. The Project's easterly boundary parallels Redlands Boulevard, which is located approximately 700 feet to the east.

1.5.2 Project Overview

The subject of this EIR is the proposed development of the Westridge Commerce Center, which has been initiated by the Project proponent, Ridge Property Trust. Together with supporting improvements, the Project will provide for approximately 937,260 square feet of new light industrial warehouse/distribution uses.

In addition, the Project includes the development of supporting infrastructure, including roadway improvements, all necessary utilities including storm water management detention/retention basins, and paved, on-site parking areas.

1.5.3 Project Objectives

Primary objectives of the Project, as identified by the Project Applicant, are as follows:

- Transition the existing site into a productive use;
- Develop a project that is sensitive to the surrounding land uses;
- Provide jobs-producing, light industrial uses to the City of Moreno Valley and local community;
- Capitalize on the site's regional freeway access; and
- Increase economic benefits to the City of Moreno Valley through increased tax generation and job creation.

1.5.4 Discretionary Actions

Necessary discretionary actions, permits, and consultations allowing for implementation and operation of the Project will include, but are not limited to, the following.

1.5.4.1 Lead Agency Discretionary Actions and Permits

- **Certification of the EIR (City Case # P08-133).** The proposed development is a Project under CEQA, and may result in significant environmental impacts. Lead Agency certification of the Project EIR is required;

- **A zone change from Business Park to Light Industrial (City Case # PA08-0098).** The proposed zone change will allow for construction and operation of the Project's distribution warehouse uses as configured;

- **Amendment to Municipal Code Section 9.05.020 B (City Case # PA10-0017) [Light Industrial Districts],** to provide objective standards for the development of Light Industrial uses adjacent to residentially-zoned property to ensure the protection of the health, safety and welfare of future residents;

- **Parcel Map Approval (City Case # PA09-0022)** to consolidate and reconfigure existing parcels defining the Project site, and to provide necessary easements and dedications;

- **Development Plan Review (City Case # PA08-0097)** pursuant to City of Moreno Valley Municipal Code Section 9.02.030 [Development Review Process], et al.;

- **Construction, grading, and encroachment permits** allowing implementation of the Project facilities within City of Moreno Valley jurisdictional areas; and

- **Vacation and/or dedication of public rights-of-way and easements** as elements of the proposed parcel map, or independent of the map. Rights-of-way and easements will provide public access, and ensure appropriate alignment of and access to infrastructure and utilities.

1.5.4.2 Responsible and Trustee Agency Discretionary Actions, Permits, and Consultation

- **Permitting and Consultation through the California Department of Fish and Game (CDFG)**, to include:

  - **Lake and Streambed Alteration Agreement (LSA)** addressing potential CDFG jurisdictional area impacts resulting from the Project; and
  - **Consultation** regarding the possible relocation of resident burrowing owls (if burrowing owls are determined to be present on the subject site during required pre-construction surveys).

- **CWA Section 404 and Army Corps of Engineers (ACOE) permitting** will be required for Project activities affecting off-site ACOE jurisdictional areas. CWA Section 404 permitting may also be required should the Project riparian habitat mitigation plan involve or require use of off-site federal jurisdictional areas;

- **Permitting required by/through CWA Section 401 and Santa Ana Regional Water Quality Control Board (SARWQCB)** pursuant to requirements of the National Pollutant Discharge Elimination System (NPDES) Permit;

- **Permitting required by/through the South Coast Air Quality Management District (SCAQMD)** for certain equipment to be temporarily employed within the Project during construction, and/or permanently installed and used over the life of the Project; and

- **Permitting by/through the California Department of Transportation (Caltrans**) for improvements within or that may affect Caltrans rights-of-way.

1.5.4.3 City Development Applications

In support of requested discretionary approvals and permits noted above, development applications submitted by the Project Applicant include:

- **Plot Plan** for a 937,260 square foot warehouse distribution facility;

- **Zone Change** from Business Park to Light Industrial;

- **Tentative Parcel Map** No. 36207 to combine the Project's five parcels into a single parcel; and

- **Application to Amend the City Municipal Code.** The Project Applicant is requesting a Municipal Code text Amendment to Section 9.05.020 B. The requested Amendment would provide objective standards for the development of Light Industrial uses adjacent to residentially-zoned property in order to ensure the protection of the health, safety and welfare of future residents.

2.0 Revisions and Errata Corrections

2.0 REVISIONS AND ERRATA CORRECTIONS

2.1 INTRODUCTION

Based on the comments received on the Draft EIR (which are provided in full in Section 3.0 of this Final EIR), this Section presents revisions to the text and graphic illustrations of the Draft EIR. For text corrections, additional text is identified by **bold underlined text**, while deletions are indicated by ~~strikeout font~~. All text revisions affecting mitigation measures have been incorporated into the Mitigation Monitoring Plan presented in Section 4.0 of this Final EIR. It should be noted that the revisions and corrections provided here expand and clarify analyses previously provided, and do not constitute substantive new information. Conclusions of the Draft EIR are not affected by these revisions.

2.2 TEXT REVISIONS

2.2.1 Text Revisions to Draft EIR Section 3.0, Project Description

Consistent with the comments provided by Thomas Thornsley, the text at DEIR Section 3.5.12, Page 3-17 (excerpt following) is amended to also include notation of screening discussed previously at DEIR Page 3-9:

> **3.5.12 Screening**
>
> Screening within the Project site will be provided for under Zoning Code Section 9.08.150, "Screening Requirements," and Section 9.10.160, "Outdoor Storage, Trash Areas, and Service Areas." As required under

these portions of the Code, the Project final site plan and building designs shall incorporate screening of mechanical equipment and trash areas. Southerly facing loading docks and adjacent truckyard areas will be screened from off-site views by an approximately 14-foot high screenwall spanning approximately 1,200 feet, across the length of southerly-facing truckyard areas. **Project loading areas will be screened from view on the north and the northernmost portion of the east side by 8-foot high masonry screenwalls** . . .

2.2.2 Text Revisions to Draft EIR Section 4.3, Air Quality

A typographical error appearing in the first paragraph of Draft EIR Page 4.3-68 is corrected as follows, providing consistency with the described trip length/vehicle speed reported in Air Quality Analysis.

> Therefore, for purposes of the operational LST analysis the average trip length in URBEMIS was altered to ~~0.5~~ **0.3** miles which conservatively characterizes on-site vehicle travel. Additionally, the vehicle speed in URBEMIS was altered to ~~five~~ **ten** miles per hour as a conservative measure to account for on-site vehicular travel.

Additionally, in response to correspondence from the South Coast Air Quality Management District and others, the Draft EIR's Air Quality Mitigation Measures are revised as follows.

> *4.3.1* ***Consistent with URBEMIS modeling inputs and to effect*** ~~***The following measures shall be incorporated as***~~ *implementation of* ***SCAQMD*** *Rule 403****, the following measures shall be incorporated****:*

- *All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.*
- *The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.*
- *The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less to reduce PM10 and PM2.5 fugitive dust haul road emissions.*
- ***Site disturbance during mass grading and fine grading activities shall not exceed 13.66 acres per day.***
- ***Ground cover shall be replaced, and/or non-toxic soil stabilizers shall be applied (according to manufacturers' specifications) to any inactive construction areas (previously graded areas inactive for ten days or more);***
- ***In support of Project plan specifications and contract document language; and as means of controlling on-site construction vehicle speeds, for the duration of Project construction activities, speed limit signs (15 mph maximum) shall be posted at entry points to the Project site, and along any unpaved roads providing access to or within the Project site and/or any unpaved designated on-site travel routes.***

~~*4.3.4 Construction contractors shall use only lowpolluting paints and coatings as defined in SCAQMD Rule 1113.*~~

4.3.5~~4~~ Contractor(s) shall ensure that all off-road heavy-duty construction equipment utilized during construction activity shall be CARB Tier 2 Certified or better.

4.3.~~6~~**5** In order to reduce localized Project impacts to sensitive receptors in the Project vicinity during construction, construction equipment staging areas shall be located at least 300 feet away from sensitive receptors.

4.3.~~7~~**6** During Project construction, existing electrical power sources (e.g., power poles) shall be ~~provided for~~ ***utilized to*** power electric construction tools including saws, drills and compressors, to minimize the need for diesel or gasoline powered electric generators.

4.3.~~8~~**7** The Applicant shall use ~~Zero Volatile Organic Compounds paints (no more than 150 grams/liter of VOC) and/or High Pressure Low Volume (HPLV) applications~~ ***"Zero-Volatile Organic Compounds" paints, coatings, and solvents with a VOC content lower than required under Rule 1113 (not to exceed 150 grams/liter; 1.25 pounds/gallon). High Pressure Low Volume (HPLV) applications of paints, coatings, and solvents shall be*** consistent with South Coast Air Quality Management District Rule 1113. Alternatively, the Applicant shall use materials that do not require painting or are pre-painted.

4.3.~~9~~**8** Grading plans, construction specifications and bid documents shall ***also*** include ~~notation that off-road construction equipment shall utilize biodiesel fuel (a minimum of B20), except for equipment where the use of biodiesel fuel would void the equipment warranty.~~ ***the following notations:***

- ***Off-road construction equipment shall utilize alternative fuels e.g., biodiesel fuel (a minimum of B20), natural gas (CNG), liquefied natural gas (LNG), propane, except for equipment where use of such fuels would void the equipment warranty;***

- ***Gravel pads shall be provided at all access points to prevent tracking of mud onto public roads;***
- ***Install and maintain trackout control devices at all access points where paved and unpaved access or travel routes intersect;***
- ***The contractor or builder shall designate a person or person(s) to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite;***
- ***The contractor or builder shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The contact person shall take corrective action within 24 hours;***
- ***High pressure injectors shall be provided on diesel construction equipment where feasible;***
- ***Engine size of construction equipment shall be limited to the minimum practical size;***
- ***Substitute gasoline-powered for diesel powered construction equipment where feasible;***
- ***Use electric construction equipment where feasible;***
- ***Install catalytic converters on gasoline-powered equipment where feasible;***
- ***Ride-sharing program for the construction crew shall be encouraged and shall be supported by contractor(s) via incentives or other inducement;***
- ***Documentation shall be provided to the City of Moreno Valley indicating that construction workers have been encouraged to carpool or otherwise reduce VMT to the greatest extent practical, including providing information on available park and ride programs;***
- ***Lunch services shall be provided onsite during construction to minimize the need for offsite vehicle trips;***

• All forklifts used during construction and in subsequent operation of the Project shall be electric or natural gas powered.

4.3.9 Throughout Project construction, a construction relations officer/community liaison, appointed by the Applicant, shall be retained on-site. In coordination and cooperation with the City, the construction relations officer/community liaison shall respond to any concerns related to PM_{10} (fugitive dust) generation or other construction-related air quality issues.

4.3.13 GHG emissions reductions measures shall also include the following:

- *The Project shall provide* ***secure, weather-protected*** *on-site bicycle storage/parking~~. Bicycle storage parking/quantity and location shall be~~ consistent with City of Moreno Valley requirements;*
- *The Project shall provide pedestrian and bicycle connections to surrounding areas, consistent with provisions of the City of Moreno Valley General Plan. Location and configurations of proposed pedestrian and bicycle connections are subject to review and approval by the City. Prior to Final Site Plan approval, pedestrian and bicycle connections shall be indicated on the Project Site Plan;*
- ***The Project shall provide onsite showers (one for males and one for females). Lockers for employees shall be provided.***
- *Any traffic signals installed as part of the Project will utilize light emitting diodes (LEDs);*
- *The Project will establish a Transportation Management Association (TMA). The TMA will coordinate with other TMAs within the City to encourage and coordinate carpooling among building occupants. The TMA will advertise its services to building occupants, and offer transit and/or other incentives to reduce GHG emissions. Additionally, a shuttle will be provided during any one hour period where more than 20 employees or construction workers utilize public transit. A plan will be submitted by the TMA to the City within two months of Project completion that outlines the measures implemented by the TMA, as well as contact information;*

- *The Project shall provide preferential parking for carpools and vanpool. Locations and configurations of proposed preferential parking for carpools and vanpools are subject to review and approval by the City. Prior to Final Site Plan approval, preferential parking for carpools and vanpools shall be delineated on the Project Site Plan;*
- *The Project shall provide at least two electric vehicle charging stations. Locations and configurations of proposed charging stations are subject to review and approval by the City. Prior to issuance of the first building permit, stub outs for charging stations shall be indicated on the Project building plans.*
- ***Lease/purchase documents shall identify that tenants are encouraged to provide incentives to realize the following:***
  - ***Implementation of compressed workweek schedules;***
  - ***SmartWay partnership;***
  - ***Achievement of at least 20% per year (as a percentage of previous percentage, not total trips) increase in percentage of consolidated trips carried by SmartWay carriers until it reaches a minimum of 90% of all long haul trips carried by SmartWay 1.0 or greater carriers.***
  - ***Achievement of at least 15% per year (as a percentage of previous percentage, not total trips) increase in percentage of long haul trips carried by SmartWay carriers until it reaches a minimum of 85% of all consolidator trips carried by SmartWay 1.0 or greater carriers.***
  - ***Use of fleet vehicles conforming to 2010 air quality standards or better.***
  - ***Installation of catalytic converters on gasoline-powered equipment.***
  - ***Inclusion of electric powered and/or compressed natural gas fueled trucks and/or vehicles in fleets;***
  - ***Establishment and use of carpool/vanpool programs, complemented by parking fees for single-occupancy vehicles;***
  - ***Provision of preferential parking for EV and CNG vehicles;***
  - ***Use of electrical equipment (instead of gasoline-powered equipment) for landscape maintenance;***

- ***Use of electric (instead of diesel or gasoline-powered) yard trucks; and***
- ***Use of SmartWay 1.25 rated trucks.***

2.2.3 Text Revisions to Draft EIR Section 4.5, Water Supply

In response to correspondence from the Eastern Municipal Water District, Mitigation Measure 4.5.3 is revised as follows:

> *4.5.3 The Applicant shall meet with EMWD staff* ***at the earliest feasible date*** *to develop a Plan of Service (POS) for the Project. The POS shall detail water, wastewater and recycled water* ***facilities*** *requirements to serve the Project****, to be constructed by the Applicant****.*

2.2.4 Text Revisions to Draft EIR Section 4.7, Cultural Resources

In order to ensure that, where appropriate, cultural resources are preserved in place, the following amendments to Mitigation Measures 4.7.1, 4.7.2, and 4.7.3 have been incorporated.

> *4.7.1 A professional cultural resources monitor (Project Paleontological Monitor) shall conduct full-time monitoring throughout site excavation and grading activities. The monitor shall be equipped to salvage and****/or*** *record the location of historic and/or archaeological resources as they may be unearthed to avoid construction delays****, consistent with the requirements of California Public Resources Code Section 21083.2****. The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens or finds and to allow the preparation of recovered resources to a point of identification. One monitor for both archaeological and paleontological resources is sufficient if the monitor is qualified in both disciplines to the satisfaction of the City of Moreno Valley.*

4.7.2 *Should historic or prehistoric resources of potential significance be identified, a qualified archaeologist shall be contacted to assess the find(s) and make recommendations in regard to further monitoring.* ***Resources shall be left in an undisturbed state where feasible. Where preservation in place is infeasible, a*** ~~*A*~~*ll recovered resources shall then be curated in an established, accredited museum repository with permanent retrievable archaeological/historic resource storage. A report of findings shall also be prepared by a qualified archaeologist, and shall include an itemized inventory of any specimens recovered. The report and confirmation of curation of any recovered resources from an accredited museum repository shall signify completion of the program to mitigate impacts to archaeological/historic resources. If disturbed resources are required to be collected and preserved, the applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2.*

4.7.3 *Prior to the issuance of a grading permit, a City-approved Project Paleontologist shall be retained to initiate and supervise paleontological mitigation-monitoring in all areas of the Project site, subject to the following certain constraints:*

- *Once excavations reach ten (10) feet in depth, monitoring of excavation in areas identified as likely to contain paleontologic resources by a qualified paleontologic monitor or his/her representative must take place;*
- *A paleontological mitigation-monitoring plan shall be developed before grading begins;*
- *Paleontological monitors shall be equipped to salvage* ***and/or record the location of*** *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; and*
- *Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.*

2.2.5 Text Revisions to Draft EIR Section 4.8, Biological Resources

In response to correspondence from the California Department of Fish and Game, Mitigation Measure 4.8.5 is revised as follows:

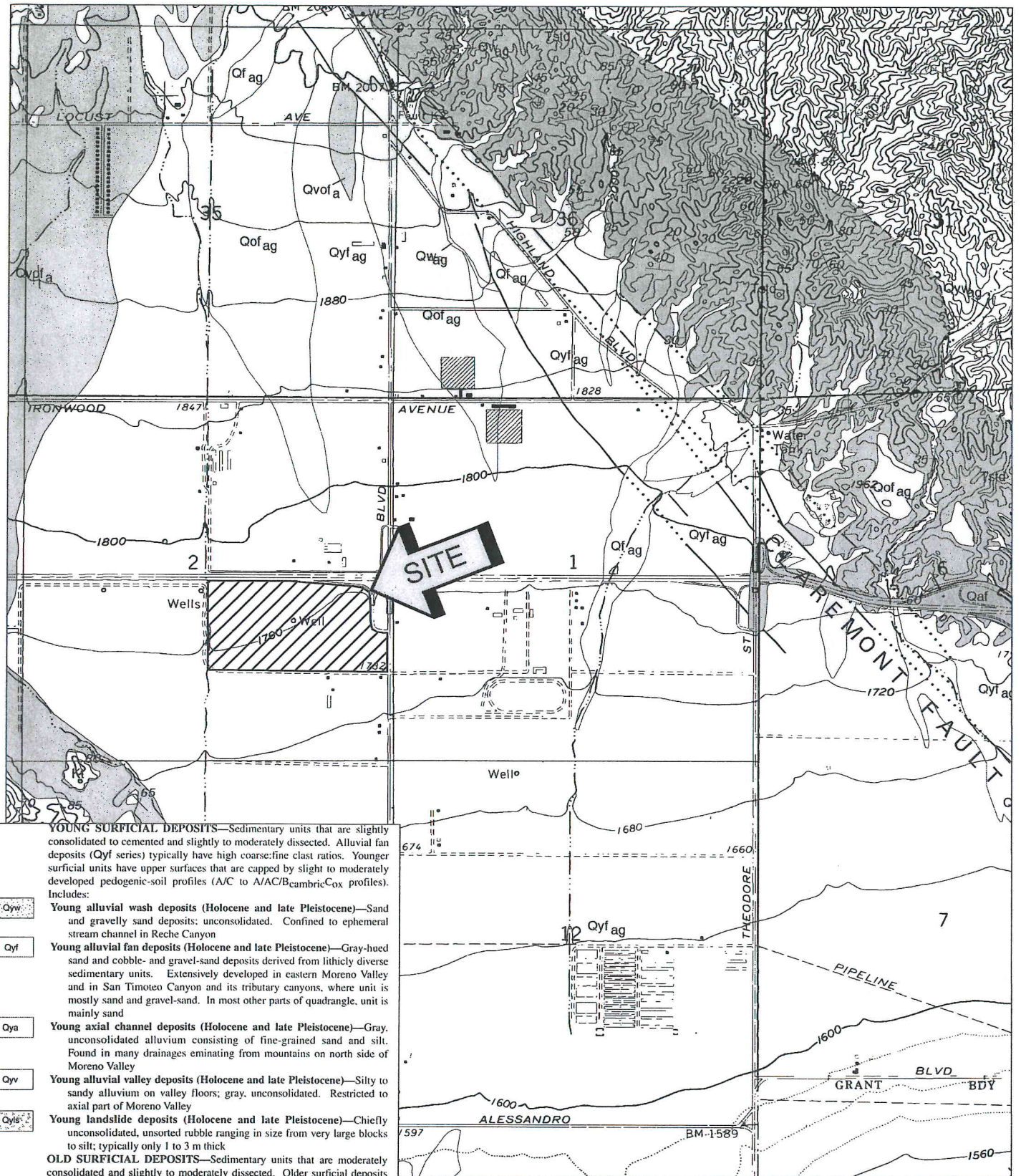
4.8.5 Prior to issuance of a grading permit, the Applicant shall develop and implement a Habitat Mitigation and Monitoring Plan (HMMP) to restore impacted riparian (mulefat) habitat. Prior to implementation, the HMMP shall be reviewed and approved by the CDFG. If in its final design, the CDFG-approved HMMP involves use or restoration of USACE or RWQCB jurisdictional areas, USACE and/or RWQCB approval shall also be obtained. The HMMP shall, at a minimum, meet the following requirements:

- *A habitat replacement and/or enhancement ratio of at least 1:1 for temporary impact;*
- *A success criterion of at least 80 percent cover of native riparian vegetation for replaced habitat;*
- *Additional requirements, including a 3-year establishment period for the replacement habitat, regular trash removal,* ***native plant re-vegetation for areas temporarily disturbed by construction,*** *and regular maintenance and monitoring activities to ensure the success of the mitigation plan****; and***

- ***Prior to the issuance of a grading permit, as part of the Project HMMP, appropriate maintenance and monitoring protocols will be developed in concert with CDFG based on final Project designs, and the ultimate scope, location, and type of mitigation reflected in the HMMP as approved by CDFG.***

2.3 REVISIONS TO GRAPHIC ILLUSTRATIONS

In response to comments received from Gerald M. Budlong, a City of Moreno Valley Environmental and Historical Preservation Board member, several geologic maps, which were used as points of reference in the preparation of the Project Geotechnical Investigation, are incorporated on the following pages as "Plates 1 through 4."



YOUNG SURFICIAL DEPOSITS—Sedimentary units that are slightly consolidated to cemented and slightly to moderately dissected. Alluvial fan deposits (Qyf series) typically have high coarse:fine clast ratios. Younger surficial units have upper surfaces that are capped by slight to moderately developed pedogenic-soil profiles (A/C to A/AC/$B_{cambric}C_{ox}$ profiles). Includes:

Qyw — **Young alluvial wash deposits (Holocene and late Pleistocene)**—Sand and gravelly sand deposits; unconsolidated. Confined to ephemeral stream channel in Reche Canyon

Qyf — **Young alluvial fan deposits (Holocene and late Pleistocene)**—Gray-hued sand and cobble- and gravel-sand deposits derived from lithicly diverse sedimentary units. Extensively developed in eastern Moreno Valley and in San Timoteo Canyon and its tributary canyons, where unit is mostly sand and gravel-sand. In most other parts of quadrangle, unit is mainly sand

Qya — **Young axial channel deposits (Holocene and late Pleistocene)**—Gray, unconsolidated alluvium consisting of fine-grained sand and silt. Found in many drainages eminating from mountains on north side of Moreno Valley

Qyv — **Young alluvial valley deposits (Holocene and late Pleistocene)**—Silty to sandy alluvium on valley floors; gray, unconsolidated. Restricted to axial part of Moreno Valley

Qyls — **Young landslide deposits (Holocene and late Pleistocene)**—Chiefly unconsolidated, unsorted rubble ranging in size from very large blocks to silt; typically only 1 to 3 m thick

OLD SURFICIAL DEPOSITS—Sedimentary units that are moderately consolidated and slightly to moderately dissected. Older surficial deposits have upper surfaces that are capped by moderately to well-developed pedogenic soils (A/AB/B/C_{ox} profiles and Bt horizons as much as 1 to 2 m thick and maximum hues in the range of 10YR 5/4 and 6/4 through 7.5YR 6/4 to 4/4 and mature Bt horizons reaching 5YR 5/6). Includes:

Qof — **Old alluvial fan deposits (late to middle Pleistocene)**—Indurated, sandy and gravelly alluvial fan deposits, found on south side of San Timoteo Badlands and in Reche Canyon. Slightly to moderately dissected: reddish-brown. Some deposits include thin, discontinuous surface layer

SOURCE: "GEOLOGIC MAP OF THE SUNNYMEAD 7.5' QUADRANGLE, RIVERSIDE COUNTY, CALIFORNIA" MORTON AND MATTI, 2001

GEOLOGIC MAP

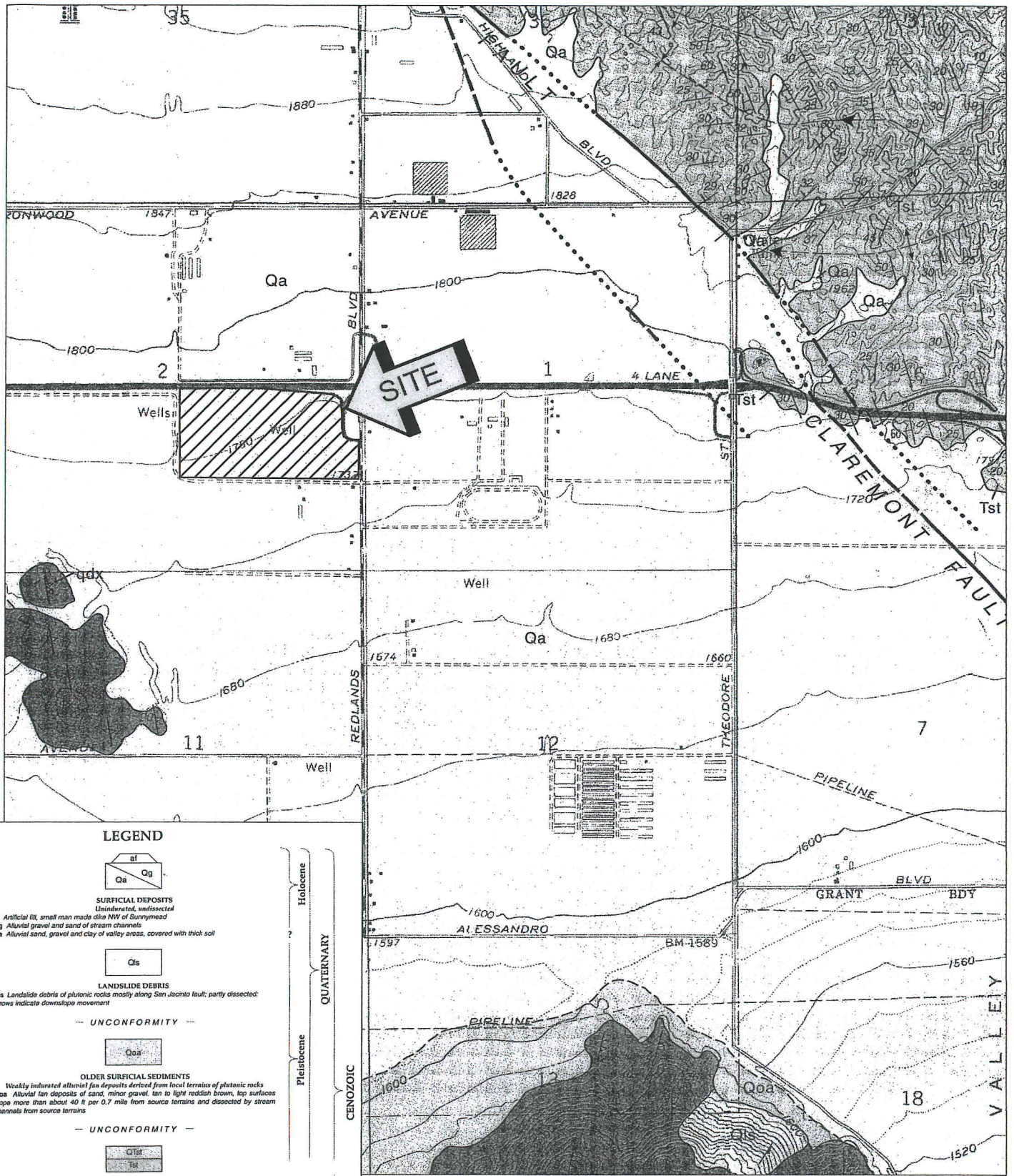
PROPOSED WEST RIDGE BUSINESS CENTER

MORENO VALLEY, CALIFORNIA

SCALE: 1" = 2000'	
DRAWN: DRK CHKD: JAS	
SCG PROJECT 06G285-2	
PLATE 1	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL



LEGEND

af / Qa / Qg

SURFICIAL DEPOSITS
Unindurated, undissected

af *Artificial fill, small man made dike NW of Sunnymead*
Qg *Alluvial gravel and sand of stream channels*
Qa *Alluvial sand, gravel and clay of valley areas, covered with thick soil*

Qls

LANDSLIDE DEBRIS

Qls *Landslide debris of plutonic rocks mostly along San Jacinto fault; partly dissected; arrows indicate downslope movement*

— UNCONFORMITY —

Qoa

OLDER SURFICIAL SEDIMENTS

Weakly indurated alluvial fan deposits derived from local terrains of plutonic rocks

Qoa *Alluvial fan deposits of sand, minor gravel, tan to light reddish brown, top surfaces slope more than about 40 ft per 0.7 mile from source terrains and dissected by stream channels from source terrains*

— UNCONFORMITY —

QTst / Tst

SAN TIMOTEO FORMATION

(San Timoteo beds of Frick, 1921) stream-laid alluvial sediments of detritus derived from plutonic and metamorphic rocks of San Bernadino Mountains area, weakly indurated, upper part yielded vertebrate fauna diagnostic of Blancan Stage, Plio-Pleistocene (Frick, 1921, Savage, et. al. 1954), or Irvingtonian 1 Stage, earliest Pleistocene (Repenning, 1987); main part inferred to be of Pliocene age (Morton and Matti, 2001)

QTst *Upper part, sandstone, light gray to tan, fine to coarse grained, arkosic, bedded and minor conglomerate of pebbles and cobbles of mostly granitic detritus, some of gneissic rocks and quartzite; includes thin layers of soft greenish to light reddish silty claystone, unconformably (?) overlain by Qoa in this quadrangle*

Tst *Main part (middle part of Morton and Matti, 2001); lithologically similar to upper part; within 1 km of San Jacinto fault includes more conglomerate; base not exposed in this quadrangle*

Holocene	QUATERNARY	CENOZOIC
Pleistocene		
Pliocene	TERTIARY	

SOURCE: "GEOLOGIC MAP OF THE SUNNYMEAD/SOUTH ½ OF REDLANDS QUADRANGLES, SAN BERNARDINO AND RIVERSIDE COUNTY, CALIFORNIA" DIBBLEE, 2003

GEOLOGIC MAP

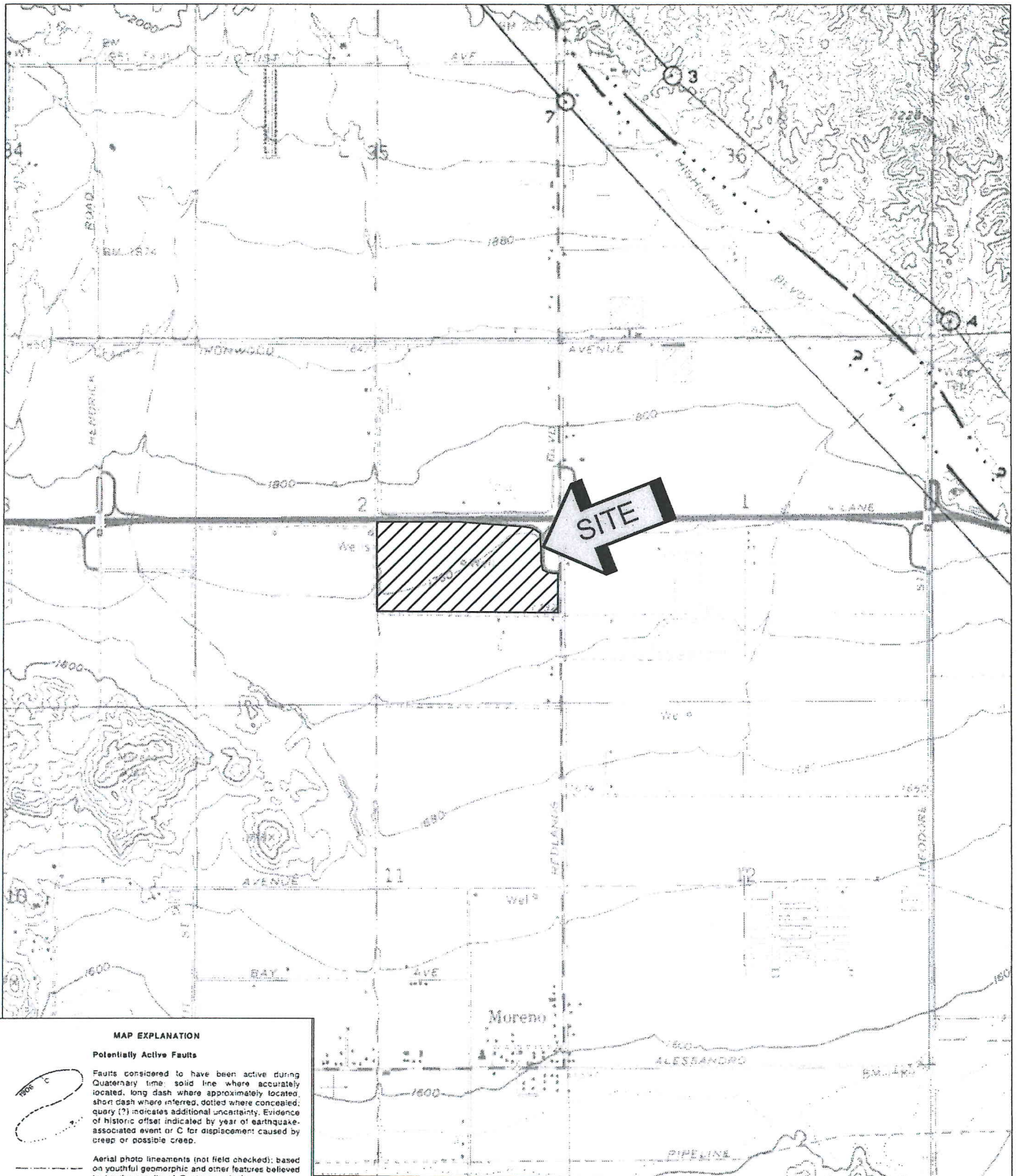
PROPOSED WEST RIDGE BUSINESS CENTER

MORENO VALLEY, CALIFORNIA

SCALE: 1" = 2000'	
DRAWN: DRK CHKD: JAS	
SCG PROJECT 06G285-2	
PLATE 2	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL



SOURCE: "ALQUIST-PRIOLO EARTHQUAKE FAULT ZONES MAP, SUNNYMEAD QUADRANGLE"

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONE MAP

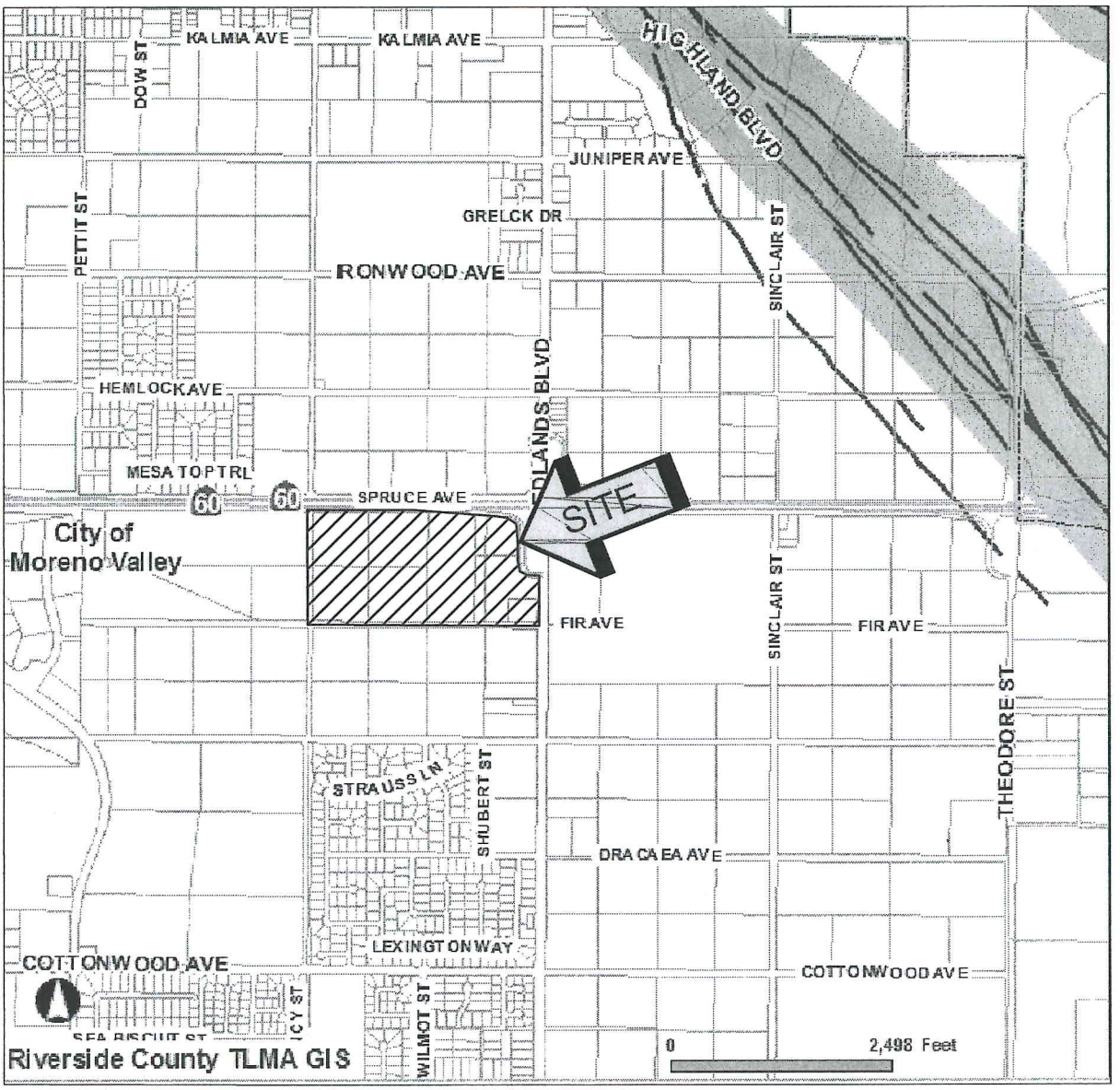
PROPOSED WEST RIDGE BUSINESS CENTER

MORENO VALLEY, CALIFORNIA

SCALE: 1" = 2000'	
DRAWN: DRK CHKD: JAS	
SCG PROJECT 06G285-2	
PLATE 3	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL



FAULT ZONES
12/15/2010

- INTERSTATES
- HIGHWAYS
- PARCELS
- ALQUIST-PRIOLO
- RIVERSIDE COUNTY
- COUNTY FAULT ZONE
- SAN JACINTO FAULT ZONE
- CITY

SOURCE: "RIVERSIDE COUNTY LAND INFORMATION SYSTEM - FAULT ZONES"

RIVERSIDE COUNTY FAULT ZONES MAP

PROPOSED WEST RIDGE BUSINESS CENTER

MORENO VALLEY, CALIFORNIA

SCALE: 1" = 2000'	
DRAWN: DRK CHKD: JAS	
SCG PROJECT 06G285-2	
PLATE 4	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL

3.0 Comments and Responses

3.0 COMMENTS AND RESPONSES

3.1 INTRODUCTION

The City of Moreno Valley's Responses to Comments on its Draft EIR for the Westridge Commerce Center are presented herein as required by California Code of Regulations, title 14 (hereinafter, "State *CEQA Guidelines*") Sections 15089, 15132, and 15088. Specifically, *CEQA Guidelines* Section 15088, subd. (a) requires that: "[t]he lead agency . . . evaluate comments on environmental issues received from persons who reviewed the draft EIR and . . . prepare a written response. The lead agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments." The 45-day comment period on the Draft EIR commenced on October 21, 2010 and concluded December 6, 2010.

Additionally, and as required by Section 15088, the City of Moreno Valley will provide written responses to all comments on the Draft EIR received from public agencies during the 45-day public review period at least 10 days prior to the proposed certification of the Program EIR.

In summary, the City's written responses describe the disposition of significant environmental issues raised and any revisions to the Draft EIR made as a result of the comments. Additionally, the City's written responses provide a good faith, reasoned analysis of all environmental issues raised and cite to specific factual and legal support for the Draft EIR's conclusions.

3.1.1 Comments Received

The following section presents a list of the comment letters received during the Draft EIR public review period. Comment letters have been organized by State agencies, County and regional agencies, and comments received from local organizations and individuals. Each letter has been assigned an identifying designation (generally an acronym or name abbreviation), and topical items within each letter have been numbered. Table 3-1 lists all commentor letters received by the City in regard to the Draft EIR, and the designation assigned to each. Comments with an asterisk * were received subsequent to the stated close of comments date (December 6, 2010), and are therefore not included with the provided responses herein. The Lead Agency has, however, included these late comments and their corresponding responses in the Project staff report.

Table 3-1
Draft EIR Commentors

Commentor	Acronym Assigned	Correspondence Date
State Agencies		
Office of Planning & Research - State Clearinghouse	SCH	12/7/10
California Department of Fish and Game	CDFG	12/3/10
California Department of Transportation	DOT	12/6/10
County and Regional Agencies		
Eastern Municipal Water District	EMWD	12/6/10
Riverside County Flood Control and Water Conservation District	RCFC	11/29/10
South Coast Air Quality Management District	AQMD	12/10/10*
Local Organizations and Individuals		
Marcia Amino	MA	12/5/10
Lynne Ashley	LA	12/5/10
Gerald M. Budlong	GB	12/2/10
Center for Community Action and Environmental Justice	CCA	12/6/10
Paul Claxton	PC	12/5/10
Stephen Crews	SCR	12/6/10
Friends of the Northern San Jacinto Valley	FNSJ	12/6/10

Table 3-1
Draft EIR Commentors

Commentor	Acronym Assigned	Correspondence Date
Susan Gilchrist	SG	12/6/10
Highland Fairview	HF	12/6/10
Tom Hyatt	TH	12/10/10*
Johnson & Sedlack, on behalf of Residents for a Liveable Moreno Valley, and Moreno Valley Group of Sierra Club.	JS	12/6/10
Shelly Mesa	SM	12/6/10
Ned and Dawn Newkirk	NDN	12/6/10
Deanna Reeder, Letter 1	DR1	12/6/10
Deanna Reeder, Letter 2	DR2	12/6/10
Residents for a Liveable Moreno Valley	RLMV	12/3/10
Sierra Club	SC	12/6/10
Thomas Thornsley	TT	12/6/10
Comment Cards Received at the City of Moreno Valley Public Meeting, December 2, 2010		
Amora Johnson	AJ-C	12/2/10
Richard Johnson	RJ-C	12/2/10
Deanna Reeder	DR-C	12/2/10
Sierra Club	SC-C	12/2/10

* Comments received after the stated close of comments date (12/06/10).

The comment letters and the corresponding numbered responses are presented on the following pages.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Cathleen Cox
Acting Director

December 7, 2010

RECEIVED
DEC 13 2010
CITY OF MORENO VALLEY

Jeff Bradshaw
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92553

Subject: PA08-0097 (Plot Plan), PA08-0098 (Zone Change), PA09-0022 (TPM 36207, & PA10-0017 (Code Amendment)
SCH#: 2009101008

Dear Jeff Bradshaw:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on December 6, 2010, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

SCH-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Document Details Report
State Clearinghouse Data Base

SCH# 2009101008
Project Title PA08-0097 (Plot Plan), PA08-0098 (Zone Change), PA09-0022 (TPM 36207, & PA10-0017 (Code Amendment)
Lead Agency Moreno Valley, City of

Type EIR Draft EIR

Description The West Ridge Commerce Center project proposes a 937,260 square foot industrial warehouse building on approximately 55 acres located on the south side of State Route 60, on the north side of Eucalyptus Avenue and ~650 feet west of Redlands Boulevard. The proposed warehouse use requires a change of zone from the Business Park land use district to the Light Industrial land use district. The project also requires approval of Tentative Parcel Map No. 36207 to combine the project parcels into a single parcel and a Municipal Code Amendment to establish a minimum buffering distance between warehouse distribution activities in the LI zone and adjacent residential zones. THe Quincy Channel, which is a segment of the City's Master Plan of Drainage, runs along the west site boundary and the project will be responsible for some channel improvements.

Lead Agency Contact

Name Jeff Bradshaw
Agency City of Moreno Valley
Phone (951) 413-3224 **Fax**
email
Address 14177 Frederick Street
City Moreno Valley **State** CA **Zip** 92553

Project Location

County Riverside
City Moreno Valley
Region
Lat / Long 33° 56' 7.7" N / 117° 09' 34.5" W
Cross Streets Fir/Eucalyptus Avenue, Redlands Boulevard
Parcel No. 488-330-003 to 006 & 026
Township 3S **Range** 3W **Section** 2 **Base** SBB&M

Proximity to:

Highways SR 60
Airports No
Railways No
Waterways No
Schools No
Land Use GPD: Business Park
Z: Business Park

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Landuse; Noise; Public Services; Soil Erosion/Compaction/Grading; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Game, Region 6; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 8; Air Resources Board, Major Industrial Projects; Regional Water Quality Control Board, Region 8; Native American Heritage Commission

Date Received 10/21/2010 **Start of Review** 10/21/2010 **End of Review** 12/06/2010

Note: Blanks in data fields result from insufficient information provided by lead agency.

STATE OF CALIFORNIA
GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
STATE CLEARINGHOUSE
SCH No. 2009101008

Response SCH-1

State Clearinghouse receipt of the Westridge Commerce Center Draft EIR is acknowledged, as is distribution of the Draft EIR to the listed State Agencies. The State-assigned Clearinghouse reference number (SCH No. 2009101008) and dates of the public review period for the Draft EIR (October 21, 2010 through December 6, 2010) are also acknowledged.

California Natural Resources Agency
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
Inland Deserts Region
3602 Inland Empire Blvd., Suite C-200
Ontario, CA 91764
(909) 484-0167

ARNOLD SCHWARZENEGGER, Governor
JOHN McCAMMAN, Director

December 3, 2010

RECEIVED
DEC - 7 2010
CITY OF MORENO VALLEY

Jeff Bradshaw
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92552

Re: Draft Environmental Impact Report for Westridge Commerce Center
SCH No. 2009101008

Dear Mr. Bradshaw:

The Department of Fish and Game (Department) appreciates this opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Westridge Commerce Center. The Department is responding as a Trustee Agency for fish and wildlife resources [Fish and Game Code sections 711.7 and 1802 and the California Environmental Quality Act Guidelines (CEQA) section 15386] and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines section 15381), such as a Lake and Streambed Alteration Agreement (Section 1600 *et seq.*) or a California Endangered Species Incidental Take Permit (Fish and Game Code Sections 2080 and 2080.1). CDFG-1

For this project the Department will be acting as a Trustee and Responsible Agency. As per Section 15096 of the California Environmental Quality Act statute, as a Responsible Agency the Department is obligated to focus its comments on any shortcomings in the CEQA document, the appropriateness of the CEQA document utilized, and additional alternatives or mitigation measures which the CEQA document should include.

The site is located in the City of Moreno Valley, County of Riverside and is bounded on the north by SR-60 and Spruce Avenue, on the south by Eucalyptus Avenue, on the east by vacant land and Redlands Boulevard, and on the west by the Quincy Channel and agricultural land. Surrounding development consists of vacant and agricultural land. CDFG-2

The proposed project consists of a 937,260 square foot industrial warehouse building on 55 acres. The Quincy Channel runs along the western boundary and will require improvements.

MSHCP

The project is located within the boundary of the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) and is subject to the provisions and policies of that plan. The MSHCP is a Natural Communities Conservation Plan that provides coverage for 146 species and up to 510,000 acres. Participants in the MSHCP are issued take authorization for covered species and do not require Federal or State Endangered Species Act Permits. The City of Moreno Valley is an MSHCP participant. CDFG-3

The project is not within Cell Criteria Areas and does not require additional surveys and narrow endemic surveys, however, burrowing owl surveys are required. Initial surveys showed that burrowing owl was not present.

CDFG-3 cont'd.

Recommendations

Per section 15096 of the CEQA statute, as a Responsible Agency the Department is obligated to focus its comments on any inadequacies of the CEQA document and additional alternatives or mitigation measures which should be included in the CEQA document. As a Responsible Agency the Department will be obligated to consult the final CEQA document to prepare a Lake and Streambed Alteration Agreement or a California Endangered Species Incidental Take Permit. If the final CEQA document fails to identify and adequately mitigate all of the impacts of the proposed project and any alternatives, the project proponents will be required to reinitiate the CEQA process at their expense, or fund another CEQA process under the direction of the Department to identify and adequately mitigate all impacts associated with any Department discretionary actions.

The Department recommends that the Lead Agency clarify the issues raised below and provide a response to these comments in the Final Environmental Impact Report (FEIR) or subsequent CEQA document.

1. Submittal of a 1600 Lake or Streambed Alteration Agreement Notification form for impacts to State jurisdictional waters;
2. Include native plant revegetation for areas temporarily disturbed by construction in the maintenance and monitoring plan;
3. Submit a copy of the maintenance and monitoring plan for the review and approval of the Department.

CDFG-4

Biological Resources

A biological assessment was conducted in October, 2008. Biological Resources Assessments for the project site include the following: Burrowing Owl surveys in July, 2009, an off-site biological assessment in May, 2010 and a wetland jurisdictional delineation in February, 2010.

Biological habitat communities on the site include mulefat riparian, ruderal and agricultural. The site is highly disturbed and was formerly utilized for agricultural purposes. No focused biological surveys were required. Two southern black walnut trees were found on site.

CDFG-5

Impacts and Mitigation

Section 14(a) of Appendix G of the CEQA Guidelines provides an outline for significant biological impacts. Section (a) asks whether the project will have a substantial adverse effect "...either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species...".

CDFG-6

Section (b) asks, in part, whether the project will have a substantial adverse effect on any riparian habitat or other sensitive natural community identified by the California Department of Fish and Game.

Impacts to terrestrial biological resources are minimal. Mitigation for these impacts is provided for by participation in the MSHCP. The project is also located within the fee area for the Stephens Kangaroo Rat Habitat Conservation Plan. No burrowing owl were found on the site.

CDFG-6 cont'd

Streambed Alteration Agreements and CEQA

The site is located adjacent to the Quincy Channel. Potential receiving waters from Quincy Channel are the Heacock Channel, Perris Valley Storm Drain and the San Jacinto River. The project site is not within the 100-year floodplain. The Channel is 1,295 linear feet with 2.4 acres of riparian habitat. Sheet flow from the site drains to the east to the jurisdictional channel along the west side of Redlands Boulevard. Both channels collect runoff from SR-60 and north of SR-60. The applicant is proposing to construct a scour wall adjacent to this channel. Along with the scour wall will be a maintenance road and a 50-150 foot buffer between the development and the Channel. The stream is an eroded earthen channel that collects runoff from three five foot wide culverts under SR-60.

CDFG-7

Impacts to Quincy Channel will be from a channel crossing, not the scour wall. Impacts will also occur to an off-site channel. Permanent impacts are .003 acres to the Quincy Channel and 0.08 acres to the channel to the east (off-site). The applicant is proposing to mitigate impacts to jurisdictional State waters and riparian habitat by replacing riparian habitat at a 1:1 ratio, success criteria, and a three year maintenance and monitoring plan.

CDFG-8

If the CEQA documents do not fully identify potential impacts to lakes, streams, and associated resources and provide adequate avoidance, mitigation, monitoring, funding sources, a habitat management plan and reporting commitments, additional CEQA documentation will be required prior to execution (signing) of the Agreement. In order to avoid delays or repetition of the CEQA process, potential impacts to a stream or lake, as well as avoidance and mitigation measures need to be discussed within this CEQA document.

CDFG-9

The Department opposes the elimination of drainages, lakes and their associated habitats. The Department recommends avoiding the stream and riparian habitat to the greatest extent possible. Any unavoidable impacts need to be compensated with the creation and/or restoration of in-kind habitat either on-site or off-site at a minimum 3:1 replacement-to-impact ratio, depending on the impacts and proposed mitigation. Additional mitigation requirements through the Department's Streambed Alteration Agreement process may be required depending on the quality of habitat impacted, proposed mitigation, project design, and other factors.

We recommend submitting a notification early on, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Streambed Alteration Agreement notification package, please call (562) 430-7924.

CDFG-10

The following information will be required for the processing of a Streambed Alteration Agreement and the Department recommends incorporating this information to avoid subsequent CEQA documentation and project delays:

1) Delineation of lakes, streams, and associated habitat that will be temporarily and/or permanently impacted by the proposed project (include an estimate of impact to each habitat type);
2) Discussion of avoidance measures to reduce project impacts; and,
3) Discussion of potential mitigation measures required to reduce the project impacts to a level of insignificance.

CDFG-11

Section 15370 of the CEQA guidelines includes a definition of mitigation. It states that mitigation includes:

1) Avoiding the impact altogether by not taking a certain action or parts of an action,
2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation,
3) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment,
4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action,
5) Compensating for the impact by replacing or providing substitute resources or environments.

CDFG-12

In the absence of specific mitigation measures in the CEQA documents, the Department believes that it cannot fulfill its obligations as a Trustee and Responsible Agency for fish and wildlife resources. Permit negotiations conducted after and outside of the CEQA process deprive the public of its rights to know what project impacts are and how they are being mitigated in violation of CEQA Section 15002. Also, because mitigation to offset the impacts was not identified in the CEQA document, the Department does not believe that the Lead Agency can make the determination that impacts to jurisdictional drainages and/or riparian habitat are "less than significant" without knowing what the specific impacts and mitigation measures are that will reduce those impacts.

Thank you for this opportunity to comment. Please contact Robin Maloney-Rames at (909) 980-3818, if you have any questions regarding this letter.

Sincerely,

Jeff Brandt
Senior Environmental Scientist

cc: Michael Flores

STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

Letter Dated December 3, 2010

Response CDFG-1

The commentor notes CDFG's status as a responding Trustee Agency for California's fish and wildlife resources, and as a Responsible Agency for CDFG discretionary actions and permits. For the Project under consideration, the commentor notes that CDFG provides comments as both a Trustee and Responsible Agency. The commentor notes further that, pursuant to *CEQA Guidelines* Section 15096, comments provided by Responsible Agencies should focus on shortcomings on an EIR, and on additional alternatives or mitigation to be included in the EIR.

Trustee and Responsible Agency status of CDFG is recognized. The *CEQA Guidelines* Section 15096 directions for comments on EIRs to be provided by Responsible Agencies are acknowledged. It is noted further the *CEQA Guidelines* Section 15096 requires that Responsible Agencies limit their comments to ". . . those project activities which are in the agency's area of expertise or which are required to be carried out or approved by the agency or which will be subject to the exercise of powers by the agency."

Response CDFG-2

The Project location and scope as summarized by the commentor is materially correct. Please refer also to the detailed Project Description presented in Draft EIR Section 3.0.

Response CDFG-3

The commentor notes location of the Project within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP).Attributes of the MSHCP and species "take" authorization for MSCHP participants are noted by the commentor. The commentor identifies the City of Moreno Valley as a participant in the MSHCP. The

commentor states further that the Project does not lie within [MSHCP] Cell Criteria Areas, and does not require surveys other than for burrowing owls. The commentor notes that initial [Draft EIR] surveys conducted for the Project indicate that owls are not present on the subject site.

Provisions of the MSHCP are noted, as is the City's status as an MSHCP participant. Species survey requirements for the Project, as stated by the commentor, are consistent with surveys conducted in conjunction with preparation of the Draft EIR. Results of the Project Burrowing Owl Survey (Survey) are summarized in Draft EIR Section 4.8, "Biological Resources," and the Survey is provided at Draft EIR Appendix G.As noted by the commentor, the initial Survey results indicate that burrowing owls are not present on the Project site. The Survey notes that "[n]o burrowing owls or their sign were detected during the surveys and there was no evidence that any burrowing owls occur onsite. In addition, this species has not been recorded from the project area in the past." [Survey, Page 6.] Further, the Draft EIR notes that "[t]he Project area does provide suitable burrowing owl foraging habitat; however, no burrowing owls or their sign were detected during the Project burrowing owl survey." (Draft EIR, Page 4.8-8.)

Response CDFG-4

The commentor reiterates *CEQA Guidelines* Section 15096 provisions and requirements. The commentor notes that CDFG will consult the EIR for the purposes of preparing a Lake and Streambed Alteration Agreement and/or issuance of an Incidental Take Permit. The commentor lists three (3) issues to be clarified in the Final EIR:

1. Submittal of a 1600 Lake or Streambed Alteration Agreement Notification form for impacts to State jurisdictional waters;
2. Include native plant re-vegetation for areas temporarily disturbed by construction in the maintenance and monitoring plan;
3. Submit a copy of the maintenance and monitoring plan for the review and approval of the Department.

The following responses are provided to the issues/requirements cited by the commentor.

1. Submittal of a 1600 Lake or Streambed Alteration Agreement Notification form for impacts to State jurisdictional waters. Draft EIR Mitigation Measure 4.8.4 requires that a lake and streambed alteration agreement (Section 1600 permit) or waiver be obtained prior to the issuance of any grading permit and that written verification of the permit or waiver be provided to the Lead Agency (Community Development Department-Planning Division and the Public Works Department-Land Development Division).In support of the Permit, the Draft EIR identifies estimated impacts at CDFG jurisdictional areas and habitat, and identifies responding mitigation. This information will be included in subsequent Section 1600 Permit documentation for the Project. Relevant EIR text is excerpted below:

> [T]he channel is jurisdictional under the U.S. Army Corps of Engineers, the California Department of Fish and Game, the California Regional Water Quality Control Board and the MSHCP Riverine/Riparian Habitat (as defined under Section 6.1.2 of the MSHCP) programs. Under a maximum potential impact scenario, construction of off-site improvements could result in permanent disturbance and alteration of approximately 0.08 acres (710 lineal feet of 5-foot wide channel, or a total of 3,550 square feet) of un-vegetated riparian habitat. Consultation and permits from these agencies will be required prior to any disturbance of this channel (Draft EIR, Page 4.8-10).

As summarized in Draft EIR Section 4.8 and presented in detail in the Project Jurisdictional Delineation, construction of the Project's proposed scour wall in the westerly portion of the Project site, adjacent to the Quincy Channel, will result in the temporary disturbance of an estimated 0.003 acres (22 lineal feet) of vegetated mulefat

riparian habitat/CDFG jurisdictional areas. This is a potentially significant impact, as acknowledged on Draft EIR Page 4.8-23.

The following mitigation measures addressing potential impacts to jurisdictional/ habitat areas were incorporated in the Draft EIR, and will be reflected in subsequent Section 1600 Permit documentation.

4.8.1 Prior to the issuance of a grading permit, a "no touch" area shall be staked along the westerly limit of Project development as defined by the alignment of the scour wall proposed along the Quincy Channel. Importantly, the westerly limits of development shall be established so as to preclude potential permanent impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Prior to the issuance of a grading permit, a City-approved Project biologist shall be retained to initiate and supervise monitoring of construction activities to ensure protection and preservation of adjacent Channel areas.

4.8.2 Prior to issuance of a grading permit, the proposed scour wall to be located between the developed Project site and the Quincy Channel shall be shown on the grading plans. Alignment of the scour wall shall be field-determined and physically delineated by the Project biologist in consultation with the City. Importantly, the scour wall alignment shall be established so as to preclude potential impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Ongoing monitoring of construction activities shall be maintained throughout implementation of the scour wall to ensure protection and preservation of adjacent Channel areas.

4.8.3 Prior to issuance of a building permit, landscape and irrigation plans shall be approved which demonstrate that no invasive, non-native plants will be

planted or seeded within 150 feet of the avoided riparian habitat along the Quincy Channel.

4.8.4 *Prior to the issuance of <u>any</u> grading permits and prior to any physical disturbance of any jurisdictional areas, 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 the Community Development Department - Planning Division and the Public Works Department - Land Development Division.*

4.8.5 *Prior to issuance of a grading permit, the Applicant shall develop and implement a Habitat Mitigation and Monitoring Plan (HMMP) to restore impacted riparian (mulefat) habitat. Prior to implementation, the HMMP shall be reviewed and approved by the CDFG. If in its final design, the CDFG-approved HMMP involves use or restoration of USACE or RWQCB jurisdictional areas, USACE and/or RWQCB approval shall also be obtained. The HMMP shall, at a minimum, meet the following requirements:*

- *A habitat replacement and/or enhancement ratio of at least 1:1 for temporary impact;*
- *A success criterion of at least 80 percent cover of native riparian vegetation for replaced habitat; and*
- *Additional requirements, including a 3-year establishment period for the replacement habitat, regular trash removal, and regular maintenance and monitoring activities to ensure the success of the mitigation plan*

(Draft EIR Pages 4.8-23 through 4.8-24).

The commentor incorrectly states subsequently (please refer to Comment CDFG-8) that "[i]mpacts to the Quincy Channel will be from a channel crossing, not the scour wall." Potential impacts from a future crossing of the Quincy Channel at Fir (future Eucalyptus) Avenue are described in the Project Jurisdictional Delineation; however, this crossing is not part of the Project and is not required to support the Project. As noted in Footnote 2 on Draft EIR Page 4.8-19, repeated here for ease of reference:

> The EIR Jurisdictional Delineation also acknowledges jurisdictional impacts and associated mitigation and permitting requirements associated with the future bridge crossing of Fir (Eucalyptus) Avenue at the Quincy Channel, located southwesterly adjacent to the Project site. This bridge crossing, to be implemented by the City or others at a future date as a part of areawide circulation system improvements, will permanently impact an estimated 0.47 acres of CDFG jurisdictional areas, with temporary impacts to an additional 0.06 acres of CDFG jurisdictional area. Affected CDFG jurisdictional areas encompass ACOE and RWQCB jurisdictional areas. These are not Project-related impacts, but are however considered in this EIR and CEQA within the context of cumulative impacts. Please refer also to EIR Section 5.1.1.8, Cumulative Biological Resources impacts (Draft EIR Page 4.8-19).

2. Include native plant re-vegetation for areas temporarily disturbed by construction in the maintenance and monitoring plan. The last bullet point at Mitigation Measure 4.8.5 is amended as follows to include native plant re-vegetation for areas temporarily disturbed by construction.

- *Additional requirements, including a 3-year establishment period for the replacement habitat, regular trash removal**, native plant re-vegetation for areas temporarily disturbed by construction,** and regular maintenance and monitoring activities to ensure the success of the mitigation plan.*

3. Submit a copy of the maintenance and monitoring plan for the review and approval of the Department. As noted above at Mitigation Measure 4.8.5 (as amended):

> *[The Project] HMMP shall, at a minimum, meet the following requirements:*
> - *A habitat replacement and/or enhancement ratio of at least 1:1 for temporary impact;*
> - *A success criterion of at least 80 percent cover of native riparian vegetation for replaced habitat; and*
> - *Additional requirements, including a 3-year establishment period for the replacement habitat, regular trash removal**, native plant re-vegetation for areas temporarily disturbed by construction,** and regular maintenance and monitoring activities to ensure the success of the mitigation plan.*

While the Draft EIR presents a reasoned best estimate of impacts and proposed responsive mitigation based on Project design concepts, details such as monitoring and maintenance of mitigation for impacts to jurisdictional areas and affected habitat are more effectively developed based on final Project designs including detailed grading plans, utility plans design and final building designs. As matter of clarification, the following bullet point is added to Mitigation Measure 4.8.5:

- ***Prior to the issuance of a grading permit, as part of the Project HMMP, appropriate maintenance and monitoring protocols will be developed in concert with CDFG based on final Project designs, and the ultimate scope, location, and type of mitigation reflected in the HMMP as approved by CDFG.***

With these revisions, Mitigation Measure 4.8.5 in total will be worded as presented below. These revisions will be reflected in Final EIR Section 2.0, "Revisions and Errata," as well as in the Mitigation Monitoring Plan presented in Final EIR Section 4.0.

4.8.5 Prior to issuance of a grading permit, the Applicant shall develop and implement a Habitat Mitigation and Monitoring Plan (HMMP) to restore impacted riparian (mulefat) habitat. Prior to implementation, the HMMP shall be reviewed and approved by the CDFG. If in its final design, the CDFG-approved HMMP involves use or restoration of USACE or RWQCB jurisdictional areas, USACE and/or RWQCB approval shall also be obtained. The HMMP shall, at a minimum, meet the following requirements:

- *A habitat replacement and/or enhancement ratio of at least 1:1 for temporary impact;*
- *A success criterion of at least 80 percent cover of native riparian vegetation for replaced habitat;*
- *Additional requirements, including a 3-year establishment period for the replacement habitat, regular trash removal, native plant re-vegetation for areas temporarily disturbed by construction, and regular maintenance and monitoring activities to ensure the success of the mitigation plan.*
- *Prior to the issuance of a grading permit, as part of the Project HMMP, appropriate maintenance and monitoring protocols will be developed in concert with CDFG based on final Project designs, and the ultimate scope, location, and type of mitigation reflected in the HMMP as approved by CDFG.*

Response CDFG-5

The commentor notes biological resources surveys conducted for the Project, and comments further that no focused surveys were required. Surveys and survey results noted by the commentor are materially correct. No further response is required.

Response CDFG-6

The commentor cites *CEQA Guidelines* Appendix G suggested threshold considerations addressing habitat modifications and potential impacts to candidate, sensitive or special status species, riparian habitat, or other sensitive natural communities. The commentor notes that [Project] impacts to terrestrial biological resources are minimal, and that mitigation for these impacts is provided for through participation in the encompassing MSHCP. The Project also lies within the fee area for the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan. Potential impacts to SKR are addressed though fee payments consistent with provisions of the SKR Habitat Conservation Plan. The above statements provided by the commentor are materially correct. No further response is required.

Response CDFG-7

The commentor summarizes physical characteristics of the Quincy Channel (Channel), located westerly of the Project site. The commentor notes that the Project Applicant proposes to construct a scour wall adjacent to the Channel. A maintenance road will be constructed on the easterly (developed side) of the wall and an approximate 50-150 foot buffer area will be provided between the wall and the developed warehouse areas.

The commentor's summary descriptions of the Channel and Applicant-initiated improvements are materially correct. No further response is required.

Response CDFG-8

The commentor incorrectly states that "[i]mpacts to the Quincy Channel will be from a channel crossing, not the scour wall." As noted in the preceding Response CDFG-4, potential impacts from a future crossing of the Quincy Channel at Fir (Future Eucalyptus) are described in the Project Jurisdictional Delineation; however, this crossing is not part of the Project and is not required to support the Project.

As noted by the commentor, the Draft EIR acknowledges that the Project will result in or cause approximately 0.003 acres of *temporary* [emphasis added] impact to CDFG jurisdictional area along the Quincy Channel due to construction of the scour wall. Impacts arising from eventual future crossing of the Channel are not Project-specific and no mitigation is proposed by the Project. Potential cumulative impacts of the crossing are discussed at Draft EIR Section 5.1.1.8:

> . . .[I]t is noted that the ultimate design of Fir (future Eucalyptus) Avenue includes the construction of a crossing to span Quincy Channel. This future channel crossing is not considered a component of the proposed [P]roject and is contingent on vicinity development, which may occur in the next several years. The future construction of a channel crossing could result in permanent and temporary impacts on [the] Quincy Channel. These potential impacts are identified within Section 5.2.2 of the Jurisdictional Delineation Report in Draft EIR Appendix G. Because the future extension of Fir (future Eucalyptus) Avenue to the west across Quincy Channel is not a part of the proposed Project, the future crossing activities will require separate regulatory permits and approvals as well as specific mitigation for impacts, similar to the mitigation included in this EIR. It is further noted, however, that the ultimate extension of Eucalyptus Avenue, including the construction of a Quincy Channel crossing, is included in the City's General Plan Circulation Element, and as such, has been considered as a part of the City's General Plan EIR. Cumulative Project impacts are not affected by the extension of Fir (future Eucalyptus) Avenue or the construction of a Quincy Channel crossing (Draft EIR Pages 5-22 through 5-23).

Response CDFG-9

The commentor states that"[i]f the CEQA documents do not fully identify potential impacts to lakes, streams, and associated resources and provide adequate avoidance,

mitigation, monitoring, funding sources, a habitat management plan and reporting commitments, additional CEQA documentation will be required prior to execution (signing) of the Agreement."

The commentor's statement/concern is recognized; however, such concerns are not germane to the Project or to the Draft EIR. Potential Project-related impacts to lakes, streams, and associated resources are fully disclosed and discussed in the Draft EIR and supporting technical studies presented in Draft EIR Appendix G. A summary of impacts and proposed mitigation is provided in preceding responses CDFG-1 through CDFG-8. Please refer also to the detailed discussions presented in Draft EIR Section 4.8, "Biological Resources," and supporting technical studies provided in Draft EIR Appendix G, "Biological Resource Assessments." Moreover, all areas of potential jurisdictional impacts are avoided to the extent possible and mitigated where complete avoidance is infeasible. The discussion provided as part of Draft EIR Mitigation Measures 4.8.1 through 4.8.3, as excerpted below, requires and promotes avoidance. The complete text of these mitigation measures is provided in the preceding Response CDFG-4.

> *. . . Importantly, the westerly limits of development shall be established so as to preclude potential permanent impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel . . . a City-approved Project biologist shall be retained to initiate and supervise monitoring of construction activities to ensure protection and preservation of adjacent Channel areas.*
>
> *. . .Alignment of the scour wall shall be field-determined and physically delineated by the Project biologist in consultation with the City. Importantly, the scour wall alignment shall be established so as to preclude potential impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Ongoing monitoring of construction activities shall be maintained*

throughout implementation of the scour wall to ensure protection and preservation of adjacent Channel areas.

*. . . [N]o invasive, non-native plants will be planted or seeded within 150 feet of the avoided riparian habitat along the Quincy Channel (*Draft EIR Page23).

Response CDFG-10

The commentor states that "[t]he Department opposes the elimination of drainages, lakes and their associated habitats. The Department recommends avoiding the stream and riparian habitat to the greatest extent possible. Any unavoidable impacts need to be compensated with the creation and/or restoration of in-kind habitat either on-site or off-site at a minimum 3:l replacement-to-impact ratio, depending on the impacts and proposed mitigation. Additional mitigation requirements through the Department's Streambed Alteration Agreement process may be required depending on the quality of habitat impacted, proposed mitigation, project design, and other factors."

The Project does not propose elimination of drainages, lakes and their associated habitats. Mitigation is proposed for the Project's temporary impact to 0.003 acres of riparian (mulefat) habitat.[1]The ultimate scope and location of mitigation will be determined in consultation with CDFG through the Streambed Alteration Agreement Notification/Permit process (or waiver), to be completed prior to the issuance of any grading permits and prior to any physical disturbance of any jurisdictional areas. Notification/Permit processes will be initiated by the Applicant at the earliest practicable date. Given the nominal scope of habitat impact (0.003 acres), its relative distance from proposed areas of development, and intervening buffering areas provided, no substantive alteration of the Project is proposed nor anticipated to be

[1] Total impacts to jurisdictional areas are estimated at 0.083 acres: 0.003 acres temporary impact to jurisdictional mulefat habitat; 0.08 acres permanent impact to non-habitat jurisdictional areas.

required in order to successfully mitigate the Project's temporary impacts to riparian habitat. Contact information provided by the commentor is noted.

Response CDFG-11

The commentor notes the following informational requirements for a Streambed Alteration Agreement, and recommends its incorporation in CEQA documents:

> 1) Delineation of lakes, streams, and associated habitat that will be temporarily and/or permanently impacted by the proposed project (include an estimate of impact to each habitat type);
> 2) Discussion of avoidance measures to reduce project impacts; and,
> 3)Discussion of potential mitigation measures required to reduce the project impacts to a level of insignificance.

The above information is provided in the Draft EIR and supporting jurisdictional delineation information presented at Draft EIR Appendix G. Excerpted germane Draft EIR discussions are presented below, and the commentor is referred to full detailed discussions presented in the body of the Draft EIR, specifically, within Section 1.0, Summary; Section 4.8, Biological Resources; and Section 5.0, Other CEQA Considerations. Supporting technical studies are provided at Draft EIR Appendix G, Biological Resource Assessments.

1. **Delineation of lakes, streams, and associated habitat that will be temporarily and/or permanently impacted by the proposed project (include an estimate of impact to each habitat type).**The Draft EIR states that "[p]roject construction activities will result in the following potentially significant impacts: Potential direct temporary impacts to 0.003 acres, (22 lineal feet) of mulefat vegetated riparian habitat; and Potential direct permanent impact to 0.08 acres of un-vegetated riparian habitat" (Draft EIR Page 1-77, et al.).

2. **Discussion of avoidance measures to reduce project impacts.** The Draft EIR states that "[a]maintenance road will be provided along the easterly edge of the scour wall, and Westerly of the scour wall, a buffer area averaging in width from approximately 50 feet to 150 feet will be established, providing separation between the developed site and the adjacent Quincy Channel. This physical separation between the developed site and the Channel habitat areas minimizes or precludes direct impacts to the Channel and its associated vegetation communities and special status plant species." (Draft EIR Page 4.8-18, *et al.*) Please refer also to the preceding Response CDFG-9.

3. **Discussion of potential mitigation measures required to reduce the project impacts to a level of insignificance.** Please refer to Draft EIR Mitigation Measures 4.8.1 through 4.8.5 (as amended through these responses), presented in the preceding Response CDFG-4.

Response CDFG-12

The commentor cites *CEQA Guidelines* Section 15370, which describes/defines mitigation, and states that CDFG cannot fulfill its obligations absent defined impacts and proposed mitigation. CDFG point of contact information is provided.

Project impacts are fully and appropriately defined and disclosed as summarized in the preceding responses and presented in detail in the Draft EIR (0.08 acres permanent impact to non-habitat jurisdictional areas; 0.003 acres temporary impact to jurisdictional mulefat habitat). Mitigation is proposed for impacts determined to be potentially significant. Mitigation includes restoration/replacement habitat at a minimum 1:1 ratio. The Lead Agency considers the defined area of impact and proposed mitigation to be consistent with CDFG requirements, and supports the Department's obligations and responsibilities as a Trustee and Responsible Agency. Project impacts, as mitigated, are considered to be less-than-significant. Mitigation as revised herein is included in

response to CDFG comments. CDFG staff were contacted (phone conversation 12.16.10) to clarify information provided in the DEIR and discuss CDFG concerns. Subsequent to that conversation, a draft of these responses was emailed to CDFG staff. As indicated in the following email response from CDFG, CDFG staff concurs with the substance of these responses and proposed revisions to the Draft EIR text.

From: Robin Maloney-Rames <RMaloney@dfg.ca.gov>
Date: December 29, 2010 9:13:07 AM PST
To: <cray@appliedplanning.com>
Subject: **Re: Westridge Draft EIR-CDFG Comments and Responses (Draft)**

Hello Charly:

I took a look at the letter and response to comments. It seems to be in order. If you could include this with the Response to Comments I would appreciate it.

thanks
Robin

Environmental Scientist
Dept. of Fish and Game
Eastern Sierra Inland Deserts Region 6
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
(909) 980-3818

Thank you for contacting the California Department of Fish and Game. Pursuant to Governor's Executive Order S-12-10, we are closed on the second, third and fourth Friday of each month.

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 8
PLANNING
464 WEST 4th STREET, 6th Floor MS 725
SAN BERNARDINO, CA 92401-1400
PHONE (909) 383-4557
FAX (909) 383-6890
TTY (909) 383-6300

Flex your power!
Be energy efficient!

December 6, 2010

Jeff Bradshaw
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92552

Westridge Development Draft Environmental Impact Report (October 2010). SCH: 009101008.
Riv-60-PM19.0/20.4

Dear Mr. Bradshaw,

We have completed our review for the above noted project which is located south of State Route 60 (SR-60) east of Quincy Channel, and north of Fir Avenue in the City of Moreno Valley. The project proposal comprises of the construction of 937,260 square feet of new light industrcial warehouse/distribution area.

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when proposed development may impact our facilities. As the responsible agency under the California Environmental Quality Act (CEQA), it is also our responsibility to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the County of Riverside due to the Project's potential impact to State facilities it is also subject to the policies and regulations that govern the SHS. DOT-1

We have the following comments:

Traffic Operations DOT-2

1. Please include a Stacking Distance analysis for the Moreno Beach Road .

2. Traffic Impact Study (page 124, Table 6-11); under Redlands Blvd at SR-60 Westbound Ramp, please include: WBL, WBR, EBL & EBR. Additionally, under SR-60 at eastbound Ramps, please include: SBR. DOT-3

3. Due to the potential high volumes of truck traffic, please ensure that the ramp intersection will accommodate STAA truck turning movements. DOT-4

4. Please include the ramp merge/diverge analysis for SR-60 at Moreno Beach Dr. and at Redlands Blvd. DOT-5

Hydrology

1. Although the proposed improvements should have no significant effect on Caltrans facilities, the documentation submitted did not give specific details how the runoff from the freeway SR-60 will be captured and contained. We would expect the developer's engineer to address this issue during the design and permit approval process.

DOT-6

Permit Requirements:

1. Any proposed alterations to existing improvements within State right-of-way may only be performed upon issuance of a valid encroachment permit and must conform to current Caltrans design standards and construction practices.
2. Review and approval of street, grading and drainage construction plans will be necessary prior to permit issuance. Information regarding permit application and submittal requirements may be obtained by contacting:

Office of Encroachment Permits
Department of Transportation
464 West 4th Street, 6th Floor, MS-619
San Bernardino, CA 92401-1400
(909) 383-4526

DOT-7

We appreciate the opportunity to offer comments concerning this project. If you have any questions regarding this letter, please contact Joe Shaer at (909) 383-6908 or myself at (909) 383-4557 for assistance.

Sincerely,

DANIEL KOPULSKY
Office Chief
Community Planning/IGR-CEQA

"Caltrans improves mobility across California"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION, DISTRICT 8

Letter Dated December 6, 2010

Response DOT-1

Caltrans jurisdiction and statutory responsibilities in regard to the proposed Project's potential effects on SR-60 are acknowledged. Agency review of the Draft EIR is appreciated.

Response DOT-2

The commentor requests a stacking distance analysis for Moreno Beach Road. Within the context of the Caltrans Guide for the Preparation Traffic Impact Studies (State Of California Department Of Transportation), December 2002, the traffic impact analysis consultant, guided by local input and expertise of the Lead Agency, established the parameters and extent of the Project Traffic Impact Analysis (TIA). The Project is anticipated to contribute nominal[2] traffic to Moreno Beach Road for opening year conditions; and would contribute less than 50 peak hour trips to Moreno Beach Road under long-range conditions.

Pursuant to applicable CMP TIA guidelines (see Caltrans TIS Guidelines, Page 2), it is typically unnecessary for projects generating less than 50 peak hour trips to assess potential impacts in regard to stacking or progression through an interchange area. The Lead Agency has not indicated special circumstances or other considerations that would indicate a requirement for a stacking distance analysis for Moreno Beach Road, nor is such the conclusion of the TIA consultant.

[2] Nominal traffic contributions are defined less than 50 vehicles per day (Project TIA Page 44, et al.)

Response DOT-3

The commentor requests specific analysis of the westbound left-turn, westbound right-turn, eastbound left-turn, and eastbound right-turn movements at the Redlands Boulevard/SR-60 Westbound Ramps. Analysis of the southbound right-turn movement at Redlands Boulevard/SR-60 Eastbound Ramps is also requested.

The westbound left-turn, westbound right-turn, eastbound left-turn, and eastbound right-turn movements at the Redlands Boulevard/SR-60 Westbound Ramps were not individually reported since they are shared lanes, and the queues associated with these movements are reflected in the 95th percentile queue presented for the westbound and eastbound through movements, respectively. Similarly, the southbound right-turn movement at Redlands Boulevard/SR-60 Eastbound Ramps was not reported individually since it is a shared movement with the southbound through lane. Please refer also to TIA Table 4-1 (Intersection Analysis for Existing Conditions).

Response DOT-4

As noted in the discussion of regional access (Draft EIR Section 4.2.2.2 on Page4.2-8), the Project has been designed to accommodate future interchange improvements planned by Caltrans at Redlands Boulevard and the SR-60, which would upgrade the existing rural configuration to a standard diamond interchange. (Please refer to Figure 3.5-1, Site Plan Concept). The Project would, upon approval, be responsible for payment of Traffic Uniform Mitigation Fee (TUMF) contributions; however, interchange improvements would be constructed by Caltrans, and are not a part of the proposed Project. When designed, reviewed and constructed, it is presumed that the ramps will be required to be consistent with Caltrans design standards, and will accommodate STAA truck turning movements.

Response DOT-5

According to the Transportation Research Board's *Highway Capacity Manual*, the influence area for a merge junction is 1,500 feet downstream, and the influence area for a

diverge junction is 1,500 feet upstream. The distance between the ramps at Redlands Boulevard and Moreno Beach Boulevard is approximately 6,600 feet. There are no other merge/diverge junctions (i.e., interchanges) within the 1,500-foot influence areas of the ramps at Moreno Beach Boulevard and Redlands Boulevard, and as such, merge and diverge analyses were determined unwarranted as part of the Project TIA.

Response DOT-6

As noted by the commentor, specific concerns in regard to the design of collectors for runoff from the SR-60 onto the site will be addressed as part of the design and permit approval process. In general, as discussed in Draft EIR Section 4.6, "Hydrology and Water Quality," storm water will be collected onsite through a series of catch basins and clarifiers, and directed to a municipal drainage system, connections for which would be constructed adjacent to the site within the rights-of-way of Fir (future Eucalyptus) Avenue and Redlands Boulevard.

Response DOT-7

The required review of street, grading and drainage construction plans by Caltrans personnel prior to the issuance of encroachment permits is acknowledged. The address and contact information provided is appreciated.

EASTERN MUNICIPAL WATER DISTRICT
SINCE 1950

December 6, 2010

Jeff Bradshaw, Associate Planner
City of Moreno Valley
Development Department
14177 Frederick Street
Moreno Valley, CA 92553

SUBJECT: West Ridge Commerce Center Project
Draft Environmental Impact Report
SCH No. 2009101008

Dear Mr. Bradshaw:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the above referenced project. The project is generally described as a plot plan for development of a 937,260 square foot warehouse distribution on building on a 55 acre site, Related applications include a Zone Change from Business Park to Light Industrial, a tentative parcel map to combine five parcels into a single parcel and a lettered lot that would be dedicated to the Riverside County Flood Control District for storm channel improvements, and a Municipal Code Amendment to establish a buffering distance between warehouse distribution land uses in the light industrial zone and adjacent residential zones. EMWD-1

Eastern Municipal Water District (EMWD) offers the following comments with respect to this DEIR document:

1- Please revise Mitigation Measure 4.5.3, on page 4.5-29, as follows (revisions indicated in ***bold italics***): EMWD-2

4.5.3 ***In this East Moreno Valley area, existing water, sewer and recycled water facilities are not adequate to accommodate the Project. Therefore, from a facilities perspective, the Project would be conditioned to construct off-site and on-site water, sewer and recycled facilities needed to serve the***

Mailing Address: Post Office Box 8300 Perris, CA 92572-8300 Telephone: (951) 928-3777 Fax: (951) 928-6177
Location: 2270 Trumble Road Perris, CA 92570 Internet : www.emwd.org

Project. Accordingly, a Plan of Services (POS) must be completed and submitted by the Applicant, for EMWD's approval. As soon as possible, the Applicant shall meet with EMWD staff to develop a Plan Of Service (POS) for the Project. The POS shall detail water, wastewater and recycled water ***facilities*** requirements to serve the project, ***to be constructed by the Applicant. Additionally, there could be temporary service impacts while constructing or extending facilities required for this Project, which should be evaluated in the Final EIR.*** EMWD-2 cont'd.

2- Please note the Water Supply Assessment (WSA) expiration date is June 4, 2011. EMWD-3

Again, EMWD appreciates the opportunity to comment on this project. Please forward future environmental documents for this project and the response to the above comments prior to EIR certification to the attention of Karen Hackett at the mailing address shown on page one. If you have questions concerning these comments, please feel free to contact Karen Hackett at 951 928-3777, Ext. 4462, or myself at Ext. 4455. EMWD-4

Sincerely,

Joseph B. Lewis
Director of Engineering Services

JBL:ME:RR:KAH

cc: E. Lovsted

Encl.

EASTERN MUNICIPAL WATER DISTRICT
SINCE 1950

Developers/Engineers

Will your project require service from Eastern Municipal Water District for water, sewer or recycled water?

EMWD requires beginning dialogue with the applicant at an early point in site design and development of a project, in order to assess the infrastructure needs. Accordingly, we offer to meet with developers/engineers for one initial due-diligence meeting, without requiring a deposit. This meeting is to review your project and determine potential service from EMWD. The objective is to provide a forum to resolve any questions about our development process and help to determine if there are any potential issues that may exist in the area concerning EMWD facilities (water, sewer or recycled water). Afterward, should you decide to pursue your project(s) with EMWD, we will require you to deposit funds and open a Work Order. This Work Order is used to cover staff time and research required to generate a Plan of Service. No improvement plans will be accepted until this pre-project phase is completed and an EMWD Plan of Service has been approved.

In an ongoing effort to develop a dependable and reliable water supply for its customers, EMWD's goal is to maximize the use of recycled water, for landscape demands. All projects that include landscaped areas are carefully considered for recycled water use. This process needs to begin early to avoid unnecessary delays.

EMWD-5

In order to set up a Due Diligence meeting we need:

1- A completed Due Diligence questionnaire.
2- Your proposed agenda for the due-diligence meeting
3- Location Map
4- Proposed development plan layout if available (hard copy and JPEG format)

I encourage developers/engineers to become familiar with EMWD New Development processes, while designing your project. They have been developed over many years and serve a great importance as they can prevent complications and save time. More information can be found at http://www.emwd.org/new_biz/new-biz-dev.html

If at any point in time there are questions or concerns, please do not hesitate to contact me

Sincerely,

Linda H. Petersen
Development Coordinator ex. 4310
Petersel@emwd.org

EASTERN MUNICIPAL WATER DISTRICT

Letter Dated December 6, 2010

Response EMWD-1

The commentor has accurately summarized the general aspects of the proposed Project and required discretionary actions.

Response EMWD-2

As discussed in the EIR, the Project's impacts to water supplies is less-than-significant. Notwithstanding, mitigation is provided to ensure timely construction of service lines/facilities necessary to serve the Project. In this regard, the Lead Agency acknowledges the District's desire to clarify the referenced Mitigation Measure 4.5.3, which is discussed in Draft EIR Section 4.5, "Water Supply." Accordingly, the language of this mitigation measure has been amended as follows.

> *4.5.3 The Applicant shall meet with EMWD staff* ***at the earliest feasible date*** *to develop a Plan of Service (POS) for the Project. The POS shall detail water, wastewater and recycled water* ***facilities*** *requirements to serve the Project,* ***to be constructed by the Applicant****.*

Related to the Project POS, preliminary information provided by EMWD indicates that provision of adequate fire flows for the area west of Redlands Boulevard and south of SR-60 will require construction of a 24-inch water line within the Fir (future Eucalyptus Avenue) extending westerly from Redlands Boulevard to connect to an existing 24-inch line at the approximate alignment of Petit Street. The extent of the actual construction of the line is not known at this time and is ultimately dependent on the timing of improvements constructed as a part of adjacent proposals. Regardless of these other projects, Certificate of Occupancy for the Project is conditioned on the provision of

adequate fire flows whether achieved by this new line, or by other means acceptable to EMWD and the City Fire Department.

To ensure monitoring and enforcement, this revision to Mitigation Measure 4.5.3 is reflected in the Project Mitigation Monitoring Plan (Final EIR Section 4.0), and in Final EIR Section 2.0, Revisions and Errata. Additional explanatory language provided by the commentor is not considered appropriate for inclusion in this mitigation measure.

The Applicant's responsibility for the construction of all required infrastructure to serve the Project, including but not limited to the extension of off-site and on-site water, wastewater, and recycled water facilities, is acknowledged. As noted in the discussion of Water/Sewer Services on Draft EIR Page 3-21, "[a]lignment of service lines, and connection to existing services will be as required by EMWD."

The possibility of temporary service impacts during the construction or extension of facilities is acknowledged. Coordination with the District in regard to planned or proposed construction actions will occur as part of the preparation of the required POS (identified in Mitigation Measure 4.5.3, above). Additionally, notification of potential utility service disruptions would be provided to existing residents and/or business owners in the area by the developer, acting to minimize their effects. The results and conclusions of the Draft EIR are not affected.

Response EMWD-3

As noted in Draft EIR Mitigation Measure 4.5.4 (excerpted below), the upcoming expiration date of the Project's Water Supply Assessment is acknowledged.

> *4.5.4 Until the Project begins construction, the Project Water Supply Assessment shall be reviewed for its continued accuracy and adequacy every three (3) years, commencing on the WSA approval date of June 4, 2008.The Project Applicant shall maintain communication with EMWD*

on the status of the Project, and the lead agency shall request the referenced three-year periodic review and update of the WSA. If neither the Project applicant nor the lead agency contacts EMWD within three (3) years of approval of this WSA, it shall be assumed that the Project no longer requires the estimated water demand as calculated in the WSA.

Response EMWD-4

As requested, and pursuant to Public Resources Code §21092.5, the District will receive a written response to these comments at least ten days prior to the certification of this EIR.

Response EMWD-5

EMWD provides a standardized Notice to Developers and Engineers outlining EMWD requirements and processes necessary to ensure adequate and timely provision of services.

The Notice to Developers and Engineers (Notice) attached to the above-referenced comment letter is acknowledged, and has been incorporated in this Final EIR for ease of reference. The Applicant consulted with EMWD early in the planning process (due diligence meeting conducted with EMWD staff on January 27, 2009) in order to determine the likely scope and type of improvements required. At the earliest feasible date, the Applicant will coordinate with EMWD in developing the POS for the Project consistent with provisions of the Notice.

WARREN D. WILLIAMS
General Manager-Chief Engineer

1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
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134314

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

November 29, 2010

Mr. Jeff Bradshaw
City of Moreno Valley
Community Development Department
14177 Frederick Street
Moreno Valley, CA 92553

~~Dear Mr. Bradshaw~~:

Re: Notice of Availability
West Ridge Commerce Center Project
Draft Environmental Impact Report

This letter is written in response to the Notice of Availability West Ridge Commerce Center Project Draft Environmental Impact Report. The purpose of the proposed project is to develop a 937,260 sq. ft. warehouse distribution building on a 55 acre site located near Eucalyptus Avenue and Redlands Boulevard. The project also requests a zone change of five parcels from Business Park to Light Industrial, combining the five parcels into one and a lettered lot that would be dedicated to the Riverside County Flood Control District for storm channel improvements, and a Municipal Code Amendment. RCFC-1

The Riverside County Flood Control and Water Conservation District (District) has reviewed the DEIR and has the following comments:

This project involves District Master Drainage Plan facilities, namely Moreno Line G-7 and D-3. The District will accept ownership of such facilities on written request of the City. Facilities must be constructed to District standards and District plan check and inspection will be required for District acceptance. Plan check and administrative fees will be required. RCFC-2

This project is located within the limits of the District's Moreno Area Drainage Plan for which drainage fees have been adopted; applicable fees should be paid by cashier's check or money order only to the Flood Control District or City prior to issuance of grading permits. Fees to be paid should be at the rate in effect at the time of issuance of the actual permit.

The District is signatory to the Western Riverside County Municipal Species Habitat Conservation Plan (MSHCP). If it is anticipated that the City will request that the District own, operate and maintain the above referenced facilities, the applicant will need to demonstrate that all construction related activities within the District right-of-way or easement are consistent with the MSHCP. To accomplish this, the CEQA document should include a MSHCP consistency report with all of its supporting documents and provide adequate mitigation in accordance with all applicable MSHCP requirements. The MSHCP consistency report should address, at a minimum, Sections 3.2, 3.2.1, 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3 and Appendix C of the MSHCP. RCFC-3

134314

Mr. Jeff Bradshaw -2- November 29, 2010
City of Moreno Valley
Re: Notice of Availability
West Ridge Commerce Center Project
Draft Environmental Impact Report

General Information

This project may require a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Clearance for grading, recordation or other final approval should not be given until the City has determined that the project has been granted a permit or is shown to be exempt.

If this project involves a Federal Emergency Management Agency (FEMA) mapped floodplain, then the City should require the applicant to provide all studies, calculations, plans and other information required to meet FEMA requirements, and should further require that the applicant obtain a Conditional Letter of Map Revision (CLOMR) prior to grading, recordation or other final approval of the project, and a Letter of Map Revision (LOMR) prior to occupancy. RCFC-4

If a natural watercourse or mapped floodplain is impacted by this project, the City should require the applicant to obtain a Section 1602 Agreement from the California Department of Fish and Game and a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers or written correspondence from these agencies indicating the project is exempt from these requirements. A Clean Water Act Section 401 Water Quality Certification may be required from the local California Regional Water Quality Control Board prior to issuance of the Corps 404 permit.

Very truly yours,

Edwin Quinonez

EDWIN QUINONEZ
Senior Civil Engineer

c: Riverside County Planning Department
Attn: Kathleen Browne

AJK:EQ:blj

RIVERSIDECOUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

Letter Dated November 29, 2010

Response RCFC-1

The commentor has accurately summarized the general aspects of the proposed Project and its required discretionary actions.

Response RCFC-2

The District's requirements in regard to transfer of ownership, standards for construction, inspection and fees are acknowledged.

Response RCFC-3

The assessment of the Project's potential to conflict with any applicable habitat conservation plan or natural community conservation plan (Draft EIR Page 4.1-31), indicates that the Project site is within the jurisdiction of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).The Project's compliance with all referenced sections of the MSHCP is documented within the *Report on Habitat Assessments and Biological Surveys for the Westridge Project Site* (Pages 42-43, Draft EIR Appendix G).

Response RCFC-4

RCFC provides general information addressing: National Pollutant Discharge Elimination System (NPDES) permit requirements; Federal Emergency Management Agency (FEMA) requirements for projects or actions within or affecting FEMA-mapped floodplains; and Army Corps of Engineers (ACOE)/California Department of Fish and Game (CDFG) requirements for projects or actions within or affecting natural watercourses or mapped floodplains.

The Lead Agency appreciates the general information on permitting requirements provided by the District. As noted in the Draft EIR's discussion of stormwater

permitting (Section 4.6.3.3, Pages 4.6-10 through 4.6-13), the Project is required to obtain clearance from the State Water Resources Control Board pursuant to the NPDES Statewide Industrial Storm Water Permit for General Construction activities. The Project does not lie within, nor would it otherwise affect any mapped floodplain areas. As such, the Project is not subject to FEMA floodplain requirements. As required through Project Mitigation Measure 4.8.4, the Applicant is required to obtain a streambed alteration agreement or permit, or a written waiver of the requirement for such an agreement or permit prior to physical disturbance of any jurisdictional areas.

December 5, 2010

Jeff Bradshaw, Associate Planner
Moreno Valley Planning Division
City of Moreno Valley
14177 Frederick Street
Moreno Valley 92552

Re: PROPOSED WAREHOUSE PROJECT, WESTRIDGE COMMERCE CENTER
CITY CASE #P08-133

Dear Mr. Bradshaw:

I am a Moreno Valley resident, and have looked at the Westridge Commerce Center Draft Environmental Report and feel compelled to comment on this proposed project. I believe the proposed project; a 937,260 square foot warehouse distribution building on a 55-acre site located on the north side of Eucalyptus Avenue, approximately 650 feet west of Redlands Boulevard will negatively impact the overall quality of life in Moreno Valley**. I ask that this project be denied and not be built to the scope/size requested or in the area Ridge Property Trust is asking for it to be built on.** MA-1

The preamble to our City's General Plan states, "The City of Moreno Valley embraces the interests of its residents and strives to meet their needs by creating a sense of community. The commitment to this vision encourages attractive amenities and a full range of public services while promoting **a safe and healthy environment. It is the goal of the City to improve the quality of life …"** and after reviewing the EIR it is apparent that this project will negatively affect: Air Quality, Traffic Congestion, Destroy Aesthetics, Impact Water, Incur Large amounts of Solid Waste, Bring More Light and Noise that overall will result in a deterioration of the quality of life enjoyed by residents of our city overall and in particular residents living on the East Side of our City and also hurt the children in our city by these negative impacts. MA-2

A survey taken for the City's General Plan also found out that **47% of our residents wanted to retain the rural character of northeast Moreno Valley** (10% disagreed). This project destroys that rural character, and it would be in the best interests of the residents of our City to honor that desire by denying this project. MA-3

I do not agree with the philosophy that for economic development to occur and for there to be jobs that I must lower my standard of living to achieve this. The 900 jobs that the EIR for this project suggests will occur, are in no way guaranteed to meet that number nor are they guaranteed to even go to a portion of Moreno Valley residents and this is a tactic that is playing upon the need for jobs in our City by promises that may not be kept, because there is no written contract that will guarantee this job number or that they go to local residents. MA-4

The EIR states repeatedly that the effects of this project are minimal and not significant in magnitude, however, if this were true this developer would not have to ask for a Zone Change from Business Park to Light Industrial because the proposed warehouse/distribution center at 937,260 sq. ft. exceeds Business Park footage in our City's General Plan of 50,000 sq. ft. This request in no way benefits the health, safety or welfare of current residents much less future residents as stated in the EIR. MA-5

This EIR also uses the approval of the 2.6 million square feet for the Highland Fairview Project as a tool for their requests to be granted. Due to the approval and development of Highland Fairview's mega warehouse and approval of the ProLogis project, any additional project(s) that incur additional MA-6

Jeff Bradshaw, Associate Planner
Moreno Valley Planning Division

Re: PROPOSED WAREHOUSE PROJECT
WESTRIDGE COMMERCE CENTER
CITY CASE #P08-133
2

truck traffic, and diesel particulate matters into the air, as well as changing the scenic view by building another mega warehouse that will be open 24 hours per day, the accompanying lighting, noise, air pollution, traffic congestion, MUST be factored into the overall effect and impact of the Highland Fairview and ProLogis Projects to determine the real effects that will occur to the residents in the area of this development and the City as a whole.

MA-6 cont'd.

With the State of California, Riverside County, and Moreno Valley all suffering from large budget deficits it is unknown when the necessary funds to upgrade the freeway, overpasses, roads will be able to be completed, and with numerous diesel trucks that will come from this project, the damage to local roads, streets, and increased congestion, as well as increased dirty air and diesel particulate will hurt our city's overall quality of life and could result in increased traffic accidents and costs to our police and fire as a result.

MA-7

Again, our City's General Plan states, "The image of the community is perceived from freeways, streets and the point of view of the pedestrian. The viewer forms an impression about the beauty and safety of the community as he or she views the surrounding buildings …" If mega warehouses and distribution centers continue to be built along the eastern portion of our city and exceptions to the business park/light industrial maximum square footage of 50,000 sq. ft. continues to be ignored our city will suffer from negative impressions because we are allowing ourselves to become a warehouse ghetto, and that will also hurt property values of the residents surrounding this project as well as the others of the same ilk, and ultimately will cause depressed property values to continue if not decrease even more than they already have. By denying this project you will be protecting our home values and our city's image rather than letting the 60 freeway become a vision of mega warehouse distribution centers that were never intended to be built en masse in this part of our city.

In section 5.3.2.2 Industrial Development of the Moreno Valley General Plan it says, "Industrial and business park development is concentrated in the southern part of the City, generally located south of Iris Avenue and north of San Michele Road to the Perris city limits." Approving this project, as the others that have been approved, goes against what was to be an orderly and organized location for industrial and business park developments, not the east end of our city that was to have the rural characteristics valued and protected.

MA-8

Although this project says it will get water from MWD and that there is no problem, I would point out that EMWD is still in a Stage 2 Water Shortage and goes on to say in their newsletter, that all EMWD customers are required to eliminate water waste, so how does approving mass warehouses help to not add more stress to our lack of water? And in their 10/21/10 newsletter, MWD says, "Southern California's water reserves are still low
Southern California continues to face significant water supply challenges in 2010 and beyond. … During the past three years, Metropolitan has tapped its reserves to maintain deliveries to its 26 member agencies and 19 million Southern Californians. Our reserves are down by about 50 percent. With water uncertainties facing the state, the challenge ahead is to continue to lower demand and stretch our reserve supplies as much as possible … Approving mega warehouse projects does not help in our struggle to maintain adequate water supplies whether it be from EMWD resources or MWD resources. This is another reason this project should be denied.

MA-9

Regarding the increase diesel truck traffic that will occur if this project is approved, in a presentation, Truck Management Strategies in Los Angeles, by Susan Bok, AICP a Senior Transportation Planner,

MA-10

Jeff Bradshaw, Associate Planner
Moreno Valley Planning Division

Re: PROPOSED WAREHOUSE PROJECT
WESTRIDGE COMMERCE CENTER
CITY CASE #P08-133
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Los Angeles it was noted that "Trucks often pass through or near residential areas en route to … distribution centers… safety, air pollution, vibration and noise impacts on residents, Truck impacts on roadway surfaces: 1 truck = 10,000 cars" which is a negative health and safety impact that will be incurred on the resident of Moreno Valley if this project is approved.

MA-10 cont'd.

In an article from: Contemporary Economic Policy | January 1, 2007 | Bluffstone, Randall A.; Ouderkirk, Brad | Copyright:

"II. THE ENVIRONMENTAL ISSUES

Diesel exhaust is made up of gas and particulates. Gases include hydrocarbons, carbon dioxide, carbon monoxide, nitrogen oxides, and sulfur oxides, but particulates are of special concern because they are associated with a variety of cancers and cardiopulmonary problems that have been shown to increase the risk of mortality. Relative to gasoline engines, heavy-duty diesel trucks, such as those used in the logistics industry, typically emit at least 24 times more fine particulate matter per mile traveled (Kirchstetter et al., 1999). Health effects associated with these particles fall disproportionately on vulnerable populations, such as the young, elderly, and those who already have compromised respiratory systems.

Recently, the toxic and especially carcinogenic effects of diesel particulate matter (DPM), much of which comes from trucks, have been highlighted. The State of California and the U.S. Environmental Protection Agency (USEPA) have identified more than 40 toxic pollutants in diesel emissions, and in 1998 the California Air Resources Board (CARB) named it a toxic air contaminant (CARB, 2000; Lippmann et al., 2003; Ostro and Chestnut, 1998; SCAQMD, 2003).

MA-11

Particulates are classified according to their diameters. Those less than 2.5 [micro]m ([PM.sub.2.5]) pose the greatest threat to human health because smaller size allows deeper penetration into lung tissues as well as longer float times (as much as several days under dry conditions) and therefore wider deposition. DPM is particularly light, with a mean particle diameter of 0.2 [micro]m, but as much as 20% of DPM can be less than 0.05 [micro]m, which floats longer and penetrates deeper than larger particles. DPM also has a large surface area, making it an ideal carrier for a variety of toxic compounds. DPM typically makes up 10-30% of total [PM.sub.2.5] concentrations. The federal limit for [PM.sub.2.5] is 15 [micro]g/[m.sup.3] average annual concentration and 65 [micro]g/[m.sup.3] maximum concentration during any 24-h period. California has a stricter annual average concentration standard of 12 [micro]g/[m.sup.3]. DPM-specific standards do not exist.

The eastern Inland Empire and particularly the I-215, I-10, and I-15 freeway corridors have very high particulate concentrations. In 2003, Riverside and San Bernardino counties ranked first and second, respectively, in the nation for total particulate pollution (CARB/American Lung Association, 2004). For example, at the Rubidoux monitoring station in Riverside, during the period 2000-2002 the average annual [PM.sub.2.5] concentration was 28.9 [micro]g/[m.sup.3], which is about 1.75 times the federal limit and

Jeff Bradshaw, Associate Planner
Moreno Valley Planning Division

Re: PROPOSED WAREHOUSE PROJECT
WESTRIDGE COMMERCE CENTER
CITY CASE #P08-133
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> more than twice the state …Warehouses, trucks, and [PM.sub.2.5]: human health and logistics industry growth in the eastern Inland Empire.(Report)"

This article spells out the health dangers from increased diesel truck traffic to our elderly, children, and our overall population, and this is a very real and dangerous and I might add, unnecessary and unacceptable health risk(s) and as such, this project should be denied as this should not be the price we have to pay for "900 jobs".

MA-11 cont'd.

Sincerely,

Marcia Amino
10363 Crest Brook Drive
Moreno Valley 92557
951-247-8225

MARCIA AMINO

Letter Dated December 5, 2010

Response MA-1

The commentor, a Moreno Valley resident, expresses concern regarding the impact of the Project on the overall quality of life within the City and requests the Project be denied as proposed. These opinions are acknowledged.

Response MA-2

The commentor provides an excerpt of the City's General Plan regarding City goals and offers that the Project is not in keeping with the stated goals of the General Plan. Notwithstanding the commentor's opinions, Project consistency with the applicable provisions of the General Plan are substantiated within each EIR topical section (Land Use-Pages 4.1-17 through 4.1-20; Traffic/Circulation-Pages 4.2-23, 4.2-24; Air Quality-Page 4.3-18; Noise-Pages 4.4-10, 4.4-11; Water Supply-Pages 4.5-24, 4.5-25; Hydrology and Water Quality-Pages 4.6-13, 4.6-14; Cultural Resources-Page 4.7-10; Biological Resources-Pages 4.8-11, 4.8-12; and Aesthetics-Page 4.9-5 through 4.9-7. The commentor's statements and opinions regarding the Project will be forwarded to the decision-makers for their consideration.

Response MA-3

The commentor references a survey of opinion (regarding the City's General Plan) of Moreno Valley residents, wherein 47 percent of residents want to retain the rural character of the area. Notwithstanding poll results offered by the commentor, development of the site with industrial/business park uses is anticipated under the site's current General Plan land Use designation (Business Park/Light Industrial). Please refer also to the discussion of Project consistency with existing land use plans and policies (DEIR Pages 4.1-17 through 4.1-30). Moreover, design and visual attributes of the Project are consistent with General Plan (Community Development Element) Objectives

and Policies generally addressing design and aesthetic considerations (please refer to DEIR Pages 4.9-5 through 4.9-7). The commentor's statements and opinions regarding the Project will be forwarded to the decision-makers for their consideration.

Response MA-4

The commentor's assertion that there is no written guarantee that the entire number of jobs referenced in the Draft EIR (approximately 900 jobs)[3] will be filled by Moreno Valley residents is accurate. However, the types of warehousing employment offered by the Project are not considered growth-inducing, as these types of jobs typically draw from the local employment pool and do not induce long commutes.

Response MA-5

Contrary to the commentor's assertion that "the EIR states repeatedly that the effects of this project are minimal and not significant in magnitude," the Draft EIR contains 50 mitigation measures, specifically developed to reduce the identified potentially significant impacts. Additionally, the environmental topics of traffic, air quality, and noise were found to have significant and unavoidable impacts, even after the implementation of all feasible mitigation. Please refer to Table 1.10-1 of the Draft EIR for a summary all of Project-related impacts.

The commentor also states an opinion regarding the Project's requested zone change. The General Plan's limitation of square footage (50,000) is per building. It is important to note that the total square footage and uses proposed by the Project are allowed under the site's current General Plan land use designation. The zone change is required to

[3] Based on one (1) job per 1,030 square feet of development, Riverside County General Plan Appendix E, Buildout Assumptions and Methodology, Page 6, Light Industrial employment multiplier (*See* DEIR, Page 5-44).

allow the proposed uses to be contained within a building larger than 50,000 square feet.

Response MA-6

The commentor expresses concern regarding the cumulative effects of the Project when combined with other vicinity projects. As identified at Draft EIR Table 5.1-1, and illustrated in Figure 5.1-1, a number of current or anticipated "related projects" were identified within the cumulative scope of the Westridge Commerce Center Project. In total, 11 related projects were included within the Draft EIR cumulative analysis, including both projects referenced by the commentor ("Highland Fairview and ProLogis").

In addition to the identified related projects, the cumulative impacts analysis assumed development of the area in a manner consistent with the City of Moreno Valley General Plan, and reflecting the anticipated growth of the region. The analysis of cumulative impacts considered potentially significant impacts that could be considered cumulatively considerable when viewed in the context of known related projects and generalized ambient growth of the City and region. The commentor is referred to Section 5.0, "Other CEQA Topics" of the Draft EIR.

Response MA-7

While the State-wide budget deficit is out of the scope of the EIR, it should be noted that the Project will pay nearly $6 million in fees for local school, library, fire, and police facilities and local street improvements. Additionally, the Project will invest nearly $1 million in regional transportation improvements. Implementation will also produce nearly $1 million for regional water, sewer and flood control improvements. The Project's impacts on traffic, air quality, and public services are addressed in the EIR.

Response MA-8

The commentor expresses an opinion regarding the Project's role in what she perceives as the degradation of property values and the City's image as a whole. The commentor also asserts that the Project, along with other similar vicinity projects, is a direct contrast of the vision of the General Plan. The project's impacts on aesthetics and consistency with the City's General Plan are addressed in the EIR. The commentor's statements and opinions regarding the Project will be forwarded to the decision-makers for their consideration.

Response MA-9

As required under SB 610/221, a Water Supply Assessment (WSA) has been prepared by the serving water purveyor, Eastern Municipal Water District (EMWD). The Project WSA demonstrates water supply sufficiency from existing and planned resources, and under conditions that are even more restrictive than the single-year and multiple-dry year scenario standards of SB 610. Within the WSA, EMWD has stipulated Conditions of Approval ensuring implementation and operation of the Project in a manner that provides for efficient use of available water supplies. The commentor is referred to Section 4.5, "Water Supply" and Appendix E of the Draft EIR.

Response MA-10

The commentor references a Los Angeles County presentation regarding diesel truck management strategies. Specifically, the commentor excerpts a portion of the presentation regarding diesel truck trips through residential neighborhoods.

It should be noted that Project traffic will not pass through residential neighborhoods. The Project's proximity to State Route 60 minimizes the amount of truck trips occurring on residential streets. Trucks will exit Redlands Boulevard (passing properties designated for commercial and warehouse distribution uses), then turn right on Fir Avenue (future Eucalyptus) to access the site. Properties located south of Fir Avenue (future Eucalyptus) are designated for residential uses; however, trucks will not require

the use of internal neighborhood streets. Ultimate configuration of Redlands Boulevard under its current General Plan designation is a four-lane, divided arterial roadway. Fir Avenue (future Eucalyptus) is designated as an arterial roadway with a 104-foot right-of-way from west of Moreno Beach Drive to east of Redlands Boulevard. Please refer also to DEIR Section 4.3, Air Quality; and DEIR Section 4.4, Noise.

The basis for the statement "1 truck = 10,000 cars" noted in the presentation is unclear. As presented in Section 4.2, "Traffic and Circulation" of the Draft EIR, "passenger car equivalent" (PCE) factors were utilized in the analysis. Specifically, Page 4.2-19 of the Draft EIR states:

> "As seen in Table 4.2-5, "passenger car equivalent" (PCE) factors, ranging from 1.5 to 3.0, have been applied to ensure that truck volumes are accurately accounted for in terms of their proportional contributions to traffic impacts. More specifically, the Project Trip Generation Forecast equates two-axle trucks to 1.5 passenger cars. Three-axle trucks are considered the equivalent of two (2) passenger cars; and trucks with four (4) or more axles are counted as the equivalent of three passenger cars. Employing these PCE factors, the Project is anticipated to generate 2,930 Passenger Car Equivalent (PCE) trips per day, with 191 PCE trips occurring during the AM peak hour, and 225 PCE trips occurring during the PM peak hour."

The PCE factors employed within the Draft EIR were derived from San Bernardino Associated Governments (SANBAG). SANBAG is the metropolitan planning organization for the County, with policy makers consisting of mayors, councilmembers, and county supervisors, and the funding agency for the county's transit systems.

Response MA-11

The commentor excerpts an article regarding the health dangers of diesel truck traffic. Similarly, Section 4.3, "Air Quality" of the Draft EIR presents background information, including the dangers of criteria pollutants. Additionally, a Health Risk Assessment of Diesel Particulate Emissions was prepared to address Diesel Particulate Matter (DPM) generated by diesel trucks and the operation of heavy duty equipment. The Health Risk Assessment was 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* (SCAQMD 2003). Results of the Health Risk Assessment (HRA) are summarized at Draft EIR Pages 4.3-80 through 4.3-86, and the HRA is presented in its entirety at Appendix C to the Draft EIR.

Mitigation was developed to address DPM generation (Mitigation Measure 4.3.10). The Draft EIR concluded that, with mitigation, no sensitive receptors or off-site workers will be exposed to DPM-source cancer risks exceeding the SCAQMD's significance criteria. Additionally, the commentor expresses an opinion that the dangers are "unnecessary and unacceptable" and requests that the Project be denied. These opinions will be forwarded to the decision-makers for their consideration.

From: Lynne Ashley [lynneashley70@yahoo.com]
Sent: Sunday, December 05, 2010 8:52 AM

Dear Jeffrey,

I live on the North side of the freeway, Ironwood and Moreno Beach, I am very concerned about the health risks for myself and my family with the possibility of more warehouses coming to the East end of Moreno Valley, please see my concerns below.

How will the toxic diesel truck emissions affect the people who will live on the south side of Fir when both this warehouse and Pro Logis as well as Skechers are at full operation? LA-1

What measures could be implemented during the construction and operation of this warehouse which could lessen the impact on noise, air quality and global warming, but which you are not going to put into place? LA-2

What will you do to protect the warehouse workers from the effects of toxic diesel pollution? LA-3

I understand that you do not have a tenant for the building and do not plan to build until you do. Are there any large amounts toxic materials which you would allow to be warehoused at this location? This includes materials which become toxic when burning. If such tenants do occupy this warehouse what are you planning to do in order to protect the residents/workers from the smoke plumes and spills? LA-4

Why are you not making sure this almost 1,000,000 sq foot building is built to Leadership in Energy and Environmental Design (LEED) standards? The very minimum should be Silver. Please explain why your company will not build and advertise that this will be at least a LEED Silver project and reject any attempt by the tenant to prevent such building standards? LA-5

How will this project be growth inducing for similar projects? LA-6

How many toxic diesel trucks do you calculate to use Redlands Blvd to come/go north out of town that are either coming or going from your warehouse? How many large diesel trucks do you calculate will use Redlands Blvd to come/go north out of town when Skechers, Westridge Commerce Center and Pro Logis are in full operation? LA-7

Since there is only one lane that allows drivers to continue west out of town-- the other forces you off at Central Ave-- how will this project impact the merger to this single lane? How many diesel trucks will come form your project, Skechers and Pro Logis combined during a typical 24 hour day? How will these trucks impact that single lane heading west? What Level of Service (LOS) presently exists and what will the LOS be as a result of these three warehouses? LA-8

Sincerely,

Lynne Ashley
12285 Deep Valley Trail
Moreno Valley, CA 92555

LYNNE ASHLEY

Email Dated December 5, 2010

Response LA-1

The commentor expresses concerns about the effect of diesel truck emissions on the future sensitive receptors located on the south side of Fir Avenue. A Health Risk Assessment of Diesel Particulate Emissions was prepared to address Diesel Particulate Matter (DPM) generated by diesel trucks and the operation of heavy duty equipment. The Health Risk Assessment was 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 (SCAQMD 2003). The Health Risk Assessment is summarized within the Draft EIR (see Page 4.3-80) and presented in its entirety as Appendix C to the Draft EIR.

Regionally, the SCAQMD has conducted a cumulative analysis of the toxic air contaminants (including DPM emissions) and their resulting health risks for all of Southern California. This study, Multiple Air Toxics Exposure Study in the South Coast Air Basin, or MATES III, indicates the average excess cancer risk level from exposure to TACs is approximately 1,200 in one million basin-wide. These estimates were based on monitoring data collected at ten fixed sites within the South Coast Air Basin.

None of the fixed monitoring sites are within the immediate Project area. However, MATES III has extrapolated cancer risk levels throughout the Basin by using grid-specific modeling. In this regard, MATES III grid modeling predicted a cancer risk of 524 in one million for the Project area. DPM is included in this cancer risk along with all other TAC sources, and accounts for the predominance (83.6 percent) of the total risk shown in MATES III. The Project will not contribute cumulatively to TACs other than DPM, however, the Project DPM emissions levels are not significant. That is, as discussed in Section 4.3 of the Draft EIR, the SCREEN3 screening analysis prepared for

the Project indicates that the maximally impacted modeled receptor would be exposed to a mitigated inhalation cancer risk of no more than 8.6 in 1 million, which is less than the SCAQMD exposure threshold of 10 in 1 million.

Though the Project DPM emissions would add to existing levels of DPM within the basin, the Project's contribution and associated MICR as mitigated is not individually significant and is not cumulatively considerable. [3]

Response LA-2

The commentor asks if there are additional mitigation measures not currently contained within the Draft EIR which would lessen noise, air quality, and global warming impacts of the Project. It should be noted that no significant Project-related impacts regarding global warming have been identified. All feasible mitigation measures have been employed within the Draft EIR to reduce any potentially significant impacts. However, as summarized at DEIR Pages 1-18 and 1-19, the Project will result in certain significant and unavoidable air quality and noise impacts.

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3 [T]he 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 (South Coast Air Quality Management District White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, Appendix D, Page D-3).

Response LA-3

As discussed in the Draft EIR (Page 4.3-80), South Coast Air Quality Management District (SCAQMD) guidance does not require assessment of the potential health risk to on-site workers. Similarly, the following excerpts from the California Office of Health Hazard Assessment (OEHHA) document *Air Toxics Hot Spots Program Risk Assessment Guidelines-The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 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.

> If a facility must also comply with RCRA/CERCLA HRA requirements, health effects to on-site workers may also need to be addressed. The DTSC's Remedial Project Manager should be consulted on this issue. In some cases it may be appropriate to evaluate risks to on-site receptors. The district should be consulted about special cases for which evaluation of on-site receptors is appropriate, such as facilities frequented by the public or where people may reside (e.g., military facilities).
>
> On-site workers are protected by the California Division of Occupational Safety and Health (CAL/OSHA) and do not have to be evaluated under the Hot Spots program, unless the worker also lives on the facility site, or property. Occasionally, facilities like prisons, military bases, and universities have worker housing within the facility. In these situations the evaluation of on-site cancer risks, and/or acute and chronic non-cancer hazard indices is appropriate under the Hot Spots program.

Since none of these provisions apply to the Project, risk to on-site workers was not evaluated in the Draft EIR.

Response LA-4

The commentor is concerned about the future tenants of the proposed Project, and whether or not hazards materials would be housed at the site. As stated within the Hazards and Hazardous Materials section of the Project Initial Study, presented as Appendix A to the Draft EIR:

> "During construction activities, the Project will require limited transport of potentially hazardous materials (e.g., paints, solvents, fertilizer, etc.) to and from the Project site. Additionally, operation of the Project could involve the temporary storage and handling of potentially hazardous materials such as pesticides, fertilizers, or paint products that are pre-packaged for distribution and use. This type of storage, transfer, use and disposal of potentially hazardous materials is extensively regulated at the local, State and federal levels. It is not anticipated that the development of the Project would result in conditions that are not currently addressed by existing regulations…"

No potentially hazardous materials, beyond those described above, are anticipated to be handled at the site. Any such materials used/housed on-site will be subject to applicable local, State and federal laws.

Response LA-5

Contrary to the commentor's assertion that the Project will not be built to Leadership in Energy and Environmental Design (LEED) standards, the following discussion can be found on Page 3-16 of the Draft EIR:

> "The Westridge Commerce Center Project reflects design and operational criteria established under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, a program developed by the United States Green Building Council. This program includes a rating

> system that can be applied to new construction as well as tenant improvement projects with performance goals in multiple environmental categories.
>
> LEED certification is contingent, among other requirements, on demonstrated and documented conservation and efficient use of available resources. It is recognized that not all LEED performance standards are applicable or appropriate for the Project, and that different standards may be utilized by the Project's end user(s). However, the Project, as a whole, will be developed as a LEED-certified facility.
>
> In support of LEED-certification, resources conservation, reduction in energy consumption and associated reductions in air pollutant emissions and greenhouse gases (GHGs), the Project will achieve a minimum of 20 percent in energy efficiencies beyond incumbent Title 24 Energy Efficiency standards, as well as compliance with other applicable state and federal energy standards."

The ultimate level of LEED certification cannot be determined at this time, since the tenant(s) for the Project, and therefore specific environmental strategies to be employed at the facility, are unknown. It is also important to note that no significant impacts have been identified in regard to the energy conservation attributes of the Project; nor would any of the identified significant impacts of the Project be reduced based on a certain level of LEED certification.

Response LA-6

The commentor expresses concern regarding the growth-inducing effects of the proposed Project. The California Environmental Quality Act (CEQA) requires a discussion of the ways in which a project could be growth-inducing. (Pub. Resources Code, § 21100, subd. (b)(5); CEQA Guidelines, §§ 15126, subd. (d), 15126.2, subd (d).) To

this end, Section 5.3, "Growth-Inducing Impacts of the Proposed Action" of the Draft EIR, contains such a discussion.

As presented on Pages 5-67 through 5-68 of the Draft EIR, it is unlikely that the Project would directly result in any significant population growth, and would not result in population growth for the City beyond that reflected in adopted growth forecasts.

Development of the Project as envisioned will entail upgrade of infrastructure in the immediate Project vicinity, including abutting roadways, the local water distribution and sewer collection systems, and storm drainage conveyance facilities. It is acknowledged within the Draft EIR that infrastructure improvements necessitated by the implementation of the Project may facilitate and encourage development of nearby properties. The City will review all proposed development to ensure compatibility with evolving City and regional land use plans acting to reduce or avoid potentially adverse effects of growth.

Response LA-7

Estimated opening-year average daily Project-generated truck traffic ingressing/ egressing the Project site via Redlands Boulevard includes:

- 97 two-axle trucks;
- 220 three-axle trucks; and
- 539 four-axle trucks.

Please refer also to detailed trip generation and trip distribution analyses and supporting discussions are presented in the Project TIA (EIR Appendix B, TIA Pages 51-76).

Cumulative opening year average daily traffic along Redlands Boulevard north of Fir (future Eucalyptus) Avenue is estimated at 30, 400 trips (see TIA Page 115, Exhibit 6-10).

This is inclusive of all trips/all vehicle categories generated by existing, proposed or anticipated development, and includes trips generated by the Westridge Project, Skechers, and Pro Logis cited by the commentor.

Notwithstanding the above-cited average daily truck/traffic volumes, the more germane issue with regard to potential truck traffic impacts is peak hour passenger car equivalent (PCE) intersection traffic volumes. As noted subsequently in this response, all Project-specific traffic impacts, inclusive of truck traffic impacts, are reduced to levels that are less-than-significant. If the commentor's concerns are not really truck traffic volumes, but rather truck-generated diesel emissions, the Project Health Risk Assessment (HRA) summarized at EIR Section 4.4, "Air Quality," and discussed in detail in the Project HRA Study (included at EIR Appendix C) substantiates that with application of mitigation, Project-related diesel emissions will not result in significant adverse health risks.

The commentor is also referred to Section 4.2, "Traffic and Circulation," of the Draft EIR, which includes the following excerpted discussion:

> As seen in Table 4.2-5, "passenger car equivalent" (PCE) factors, ranging from 1.5 to 3.0, have been applied to ensure that truck volumes are accurately accounted for in terms of their proportional contributions to traffic impacts. More specifically, the Project Trip Generation Forecast equates two-axle trucks to 1.5 passenger cars. Three-axle trucks are considered the equivalent of two (2) passenger cars; and trucks with four (4) or more axles are counted as the equivalent of three passenger cars. Employing these PCE factors, the Project is anticipated to generate 2,930 Passenger Car Equivalent (PCE) trips per day, with 191 PCE trips occurring during the AM peak hour, and 225 PCE trips occurring during the PM peak hour. (Draft EIR Page 4.2-18.)

Additionally, with regard to cumulative traffic impacts, Page 4.2-67 of the Draft EIR states:

> As indicated at Table 4.2-13, with completion of the improvements recommended under Mitigation Measure 4.2.7, 4.2.18 and 4.2.19, acceptable V/C and LOS conditions would be realized at all Study Area roadway segments under Opening Year Cumulative Conditions with the Project. Improvements necessary to mitigate potentially significant Opening Year Cumulative Condition roadway segment impacts would be accomplished in part by the Project, with the balance of required improvements realized under combined TUMF, DIF, and fair share fee traffic improvement programs. However, timely completion of the required improvements in total cannot be assured based on Project participation in mandated traffic impact fee programs (TUMF, DIF, and fair share). Further, roadway segment improvements at or affecting the SR-60 at Redlands Boulevard interchange improvements are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency. ***The Project's incremental contributions to Opening Year Cumulative Traffic Impacts at, or affecting, the following roadway segments are therefore considered cumulatively significant and unavoidable:***
>
> - Redlands Boulevard north of the SR-60 Westbound Ramps to Eucalyptus (future Encilia) Avenue;
>
> - Quincy Street south of Fir (future Eucalyptus) Avenue (future street); and

- Fir (future Eucalyptus) Avenue west of Quincy Street to the westerly Project boundary (future street) and Fir (future Eucalyptus) Avenue east of Redlands Boulevard.

Should the Project be approved, the Lead Agency is required to adopt a Statement of Overriding Considerations acknowledging the Project's individually and/or cumulatively significant environmental impacts.

It is further noted that with specific regard to Redlands Boulevard, this road is a designated truck route in the County and a direct route to San Timoteo Canyon Road through Redlands (also designated as a truck route). It is appropriate for Redlands Boulevard to convey Project-related and area truck traffic. To maintain the continuity between affected agencies, the truck route designation for Redlands Boulevard cannot be practically removed. Moreover, there is no feasible means to restrict Redlands Boulevard to local truck trips only, given its direct connection, with no alternative routes, to the previously mention roadways. Further, there is no suggested or demonstrated environmental benefit that would result from restricting use of Redlands Boulevard. The commentor's remarks are forwarded to the decision-makers for their consideration.

Response LA-8

In response to the commentor's concerns regarding the levels of service on westbound State Route 60, the Project's Traffic Impact Analysis (TIA, included as Draft EIR Appendix B) examined performance on the SR-60 as part of Appendix 7.8. The City of Moreno Valley requested that a basic freeway segment analysis be conducted between Box Springs Road/Fair Isle Drive and the I-215 Freeway along the SR-60 Freeway, and included in the TIA. As indicated in the Introduction to this Study (Page 7.8-3), "[i]t should be noted that this analysis was not requested due to potential impacts from the project itself, as these impacts would be nominal, but rather to analyze the current and future projected operations within the segment based on freeway lane geometrics."

The study concludes that "[a]s vehicular traffic increases on the freeway mainline under each of the future analysis scenarios, the densities on each basic freeway segment are anticipated to increase and peak hour level of service operations are anticipated to progressively worsen." It is in part on this basis that the Draft EIR acknowledges significant cumulative traffic impacts affecting freeway segments in the Project area. As noted in the summary of mitigation on Draft EIR Page 1-51, "[u]nder Opening Year Cumulative Conditions and General Plan Buildout Conditions, cumulative LOS impacts of traffic generated by the project in combination with traffic generated by ambient growth and other development projects will result in potentially significant cumulative traffic impacts affecting SR-60 freeway segments within the Study Area." Because freeway mainline improvements such as widening are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency, no mitigation was identified that could be feasibly implemented. As such, the Draft EIR found that the Project would have a significant and unavoidable impact in regard to exceedance of LOS thresholds on certain study area freeway segments.

RECEIVED
DEC - 2 2010
CITY OF MORENO VALLEY

CITY OF MORENO VALLEY
ENVIRONMENTAL AND HISTORICAL PRESERVATION BOARD
COMMENTS OF BOARD MEMBER GERALD M. BUDLONG
24821 Metric Drive
Moreno Valley, CA 92557
December 2, 2010

SUBJECT: WESTRIDGE COMMERCE CENTER DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR}
STATE CLEARINGHOUSE NUMBER 2009101008

COMMENT GLOBAL TO ALL APPLICABLE DEIR FIGURES: Why are the applicable figures throughout the DEIR not drawn to scale? How can the reader duplicate the science when for instance the maps and plans are not drawn to scale? GB-1

1.0 SUMMARY page 1-8 Geology and Soils. The DEIR addresses the Checklist Category "Geology and Soils" in a Geotechnical Investigation prepared for the Project site and is designated Appendices H. Geotechnical Investigation in the EIR. Therefore comments on the CEQA Geology and Soils Category will be addressed below in the Appendices H.

APPENDICES H. GEOTECHNICAL INVESTIGATION, Project No. 06G258-1 Proposed West Ridge Business Center, January 10, 2007, Southern California Geotechnical, Inc.

2.0 SCOPE OF SERVICES, page 3.

"The scope of services performed for this project was in accordance with our Proposal No. 06P420, dated November 20, 2006. The scope of services included a visual site reconnaissance, subsurface exploration, field and laboratory testing, and geotechnical engineering analysis to provide criteria for preparing the design of the building foundation, building floor slabs, and parking lot pavements along with site preparation recommendations and construction considerations for the proposed development. The evaluation of the environmental aspect of this site was beyond the scope of services for this geotechnical investigation." GB-2

COMMENT: The subject geotechnical investigation appears to consist of a foundation analysis for future foundations for buildings and parking lot pavements. The scope does not evaluate the environmental aspect of this site. Please define what environmental aspects of the site are missing from this report? Is one of the missing environmental aspects a detailed seismic study of this site which defines buried fault(s} and their potential of rupturing the ground surface above them?

3.3 Previous Studies, page 5.

"As part of our investigation of the site, we were provided with one geotechnical report prepared by LGC Inland, Inc. pertaining to the north east portion of the site. The report is summarized below:"

COMMENT: I cannot find a copy of the LGC Inland, geotechnical report in the DEIR , Appendices or anywhere else in the DEIR? Should not the DEIR Appendices contain a complete copy of this study rather than just a one-paragraph summary?

GB-3

6.1 Seismic Design Parameters, page 9

"Faulting and Seismicity
Research of available maps indicates that the subject site is not located with an Alquist-Priolo Earthquake fault zone. Therefore, the possibility of significant fault rupture on the site is not located with an Alquist-Priolo Earthquake Fault Zone. Therefore, the possibility of significant fault rupture of the site is considered to be low."

COMMENT: I cannot find a list of references with subject Appendix H. What are your references used to research the faulting and seismicity conclusions in this study?

GB-4

UBCSEIS
Version 1.03
COMPUTATION OF 1997 UNIFORM BUILDING CODE SEISMIC DESIGN PARAMETERS, JOB NUMBER: 06G258-1, JOB NAME: West Ridge Business Center, DATE: 12-30-2006, FAULT-DATA-FILE NAME: CDMGUBRC. DAT lists the nearest type A fault as the San Andreas fault 19.8 km away and the nearest type B fault as the San Jacinto-San Jacinto Valley fault 1.0 km away. This table lists faults up to 1000 km away from the site.

COMMENT: Why is the Casa Loma fault missing from this table? Within the city jurisdiction of San Jacinto, the Casa Loma fault is very prominent with a displacement approximately of 20 vertical feet and designated as an Alquist-Priolo Earthquake Fault Zone and proceeds northwest to the vicinity of the San Jacinto Wildlife Area where the State Earthquake Zone terminates.

GB-5

The following study provides geologic evidence of the continuance of the Casa Loma fault located northwest of the State Earthquake Zone. R M Environmental, Inc. prepared a Preliminary Geotechnical Investigation on January 19, 2004, under Project No03-406 for a proposed 347 lot single-family-residential development, 120 +- acres, Assessors Parcel Numbers (APNs) 477-120-(001, 006, 007, 008, 014, 015), near the intersection of Pettit Street and Highway 50 in the City of Moreno Valley. This site abuts the West

Ridge Business Center site on the east side of the single-family residential development site.

GB-5, cont'd

Page 1 of this Geotechnical Investigation presents a scope of work presented in the form of six (6) bullets. The second bullet states"Geologic Mapping of the site by our geologist".

COMMENT: Why does the scope of the West Ridge Business Center geotechnical investigation omit the geologic mapping of the site by a geologist?

GB-6

Page 4 of the R M geotechnical study states "the Casa Loma Fault zone inferred to be located on or within 500 feet of the northeast corner of the site. The site is not located with an Alquist Priolo Earthquake Studies Zone for fault rupture hazard."

"Based on review of the Riverside County Seismic Safety Element (Environ, 1976), the Casa Loma has been inferred as trending in a northwest to southeast direction near the northeast corner of the site. The inferred trace of the Casa Loma fault has been based on the projection of the Reche Canyon Fault to the northwest with the Hemet-San Jacinto faults, the Casa Loma fault may be considered as active."

"The projected fault location and the recommended hazard zone for the Casa Loma fault in the site are shown on Plate 1. Prior to development of the site in this zone, a geologic fault investigation should be conducted to the evaluate if faulting has occurred on the site, and the activity of faulting, if present."

Page 6, 5.2 Ground Rupture states: "A potential for ground rupture exist in the northeast portion of the site. The Casa Loma fault has been mapped as projecting from a northwest to southwest direction near the northeast corner of the site. Prior to development of the northeast portion of the site, a geologic fault investigation should be conducted to the evaluate if faulting has occurred on the site, and the activity of faulting, if present."

GB-7

"The projected fault location and recommended hazard zone for the Casa Loma fault in the site are shown on Plate 1."

The inferred trace of the Casa Loma fault as delineated by the geologist of RM Geotechnical enters the vicinity of the northwest corner of the West Ridge Center property and extends southeast across the property, leaving the property midway at the southern boundary of the site. The recommended hazard zone delineated by the RM Geotechnical geologist covers approximately two-thirds of the proposed footprint of the proposed 937,260 square foot building of West Ridge Center.

For more than 20 years I have been an appointed member of the City Ecological Protection Advisory Committee (name changed to Environmental and Historical Preservation Board) except for the 2.5 years where I served as a member of the City Planning Commission. During my tenure I have always expressed the need for detailed

geologic fault investigations to be conducted to delineate the trace of the Casa Loma fault and to evaluate if faulting has occurred on the site and the activity of faulting.
Also since the availability of the U.S. Geological Survey (USGS) Earthquake Hazards Program, I have monitored the recorded earthquake events in Moreno Valley. This USGS program records all earthquakes occurring in the United States for the past 7-days, having a magnitude of 1. I have shared to the Environmental and Historical Preservation Board, Planning Commission and the School Board of the regular USGS records of mini earthquakes along the trace of the Casa Loma fault within the city.

The most recent seismic event occurring along the Casa Loma fault recorded by the USGS was Event No. CI 14870228. This event occurred at 1:49:08 P.M., on October 28, 2010. The USGS recorded the magnitude at 1.1, at a depth of 9 miles, with the epicenter located southwest of Ironwood and Nason.

GB-7, cont'd

COMMENT: Why doesn't the City of Moreno Valley require a geologic fault investigation and evaluate if faulting has occurred on the site and the activity of the faulting and present the evidence in the DEIR?

COMMENT: Why didn't Applied Planning Inc., review the City's copy of the R M Environmental Geotechnical Report and utilize the geological, faulting, and mapping data in the West Ridge Commerce Center DEIR?

GB-8

COMMENT: In the past I was an Associate Instructor at San Jacinto Community College, where I conducted Physical Geography 101 classes at night and summer sessions. My final exams always had this question. "Why do you never ever build a building for human occupancy across an active fault?" Would you please answer this question, because the proposed building footprint will over lay the Casa Loma fault defined by R M Environmental Inc., a potentially active fault?

GB-9

An appendix containing pages of the R M Environmental Inc. geotechnical report including the eastern part of plate 1 is included with these comments on the DEIR.

4.9 AESTHETICS

4.9.2 SETTING, page 4.9-3 Last paragraph concerns "Major Scenic Resources" addresses the badlands to the east and the Mount Russell and foothill areas to the east.

GB-10

COMMENT: Why is the San Jacinto Valley containing the agricultural lands, riversidean sage habitat, and the wetlands of the State San Jacinto Wildlife Area, including Mystic Lake not included as a major scenic resource?

COMMENT: Figure 4.9-1 Major Scenic Resources delineates the San Jacinto Valley with the visual scenic resource symbol, why the inconsistency mentioned in proceeding comment. Also the San Jacinto Wildlife Area is mislabeled as Preserve rather than Area. GB-11

COMMENT: page 4.9-19 Level of Significance: Significant and Unavoidable. The California Department of Transportation's (CALTRANS) list of Officially Designated Scenic Highways is a legislative mandate upon this state agency. The state legislature also mandates cities and counties to address scenic roads and highways in their general plans. CALTRANS recognizes the importance of local scenic roads and highways. For instance, CALTRANS objected to the installation of a billboard adjacent to the right of way of U. S. Route 395(Highway 395) in the unincorporated town of Big Pine in Inyo County. Highway 395 at this location is outside of the CALTRANS Officially Designated Scenic Highway System, however the highway is a county scenic highway. CALTRANS at Inyo County Superior Court stated that the Scenic Highway Element of the Inyo County General Plan designated U.S. Route 395 as a county scenic highway as evidence for removing the billboard. The court in its decision ordered the defendant to remove the billboard in favor of CALTRANS. GB-12

What are your sources or evidence concerning the scenic values of CALTRANS Officially Designated Scenic Highways having scenic values rated higher than local scenic highways? For instance county scenic Highway 395 at Big Pine is located in the Owens Valley with the White Mountains to the east and the Sierra Nevada, including the Palisade Glacier to the west. The nickname of Owens Valley is the "Deepest Valley" the valley at 4000 feet and the surrounding mountains at 14,000 feet.

COMMENT: page 4.9-19 Why isn't the blocking of the view scape from SR-60 of the visual scenic resources consisting of the San Jacinto Valley a significant impact? Have you ever viewed the reflections of the wetlands of the San Jacinto Wildlife Area? GB-13

APPENDIX

R M Environmental, Inc., Preliminary Investigation dated January 19, 2004

COVER PAGE; Page 1- INTRODUCTION, including project scope;
Page 4 -4.0 Geology and 4.1 Regional Geologic Setting;
Page 6- 5.0 Seismicity, 5.2 Ground Rupture;
Figure 1- Location Map;
Plate 1 Site Plan with geological mapping containing projected Casa Loma fault and its recommended hazard zone. Contains only the mapped area east of the logical extension of Quincy Street, contained in three pages:
- Page 1: SR- 60 south;
- Page 2: Logical extension of Eucalyptus Avenue;
- Page 3: Title Block

GB-14

R M Environmental, Inc.
Geology - Environmental - Geotechnical Engineering

January 19, 2004
Project No. 03-406

Mr. Jeff Palmer
5511 Calumet Ave.,
La Jolla, CA., 92037

SUBJECT: PRELIMINARY GEOTECHNICAL INVESTIGATION
Proposed 347 Lot Single-Family Residential Development
120± Acres, Assessors Parcel Numbers (APNs) 477-120-(001, 006, 007, 008, 014, 015)
Near the Intersection of Pettit Street and Highway 60
City of Moreno Valley, California

Dear Mr. Palmer:

In accordance with your request, we have completed a Preliminary Geotechnical Investigation for the proposed development of the site. This report presents our findings regarding the site geotechnical conditions and recommendations for the anticipated earthwork and geotechnical design of the project.

For this investigation, we were provided with a 100-scale Site Plan/topographic map of the site titled "Eucalyptus Site, Moreno Valley, CA." This map was utilized as the base map for our Geotechnical Investigation of the site and is presented as **Plate 1**.

Provided the recommendations presented in this report are implemented during site development, the proposed project is feasible from a geotechnical standpoint.

This opportunity to be of service is sincerely appreciated. If you have any questions, please call us at (909) 446-0041.

Sincerely,

Robert C. Manning, CEG #1768/RCE #58565
President

Travis Meier
Staff Geologist

Post Office Box 575 • Calimesa, California 92320 • Telephone (909) 446-0041 • Fax (909) 446-0124

1.0 INTRODUCTION

This report presents the findings of our Preliminary Geotechnical Investigation for the proposed development of 347 single-family residential lots located southeast of the intersection of Pettit Street and Highway 60, City of Moreno Valley, California.

The site is identified as Assessor Parcel Numbers (APNs) 477-120-(001, 006, 007, 008, 014, 015). The site consists of approximately 120± acres of land located on the south side of Highway 60, southeast of the intersection of Pettit Street and Highway 60, Moreno Valley, California. The geographic setting of the site is shown on **Figure 1** - Site Location Map.

This report presents our findings regarding the site geotechnical conditions and general recommendations for the anticipated earthwork and geotechnical design of the project.

R M Environmental's scope of work for this investigation included the following:

- Review of selected background information, aerial photographs, and site reconnaissance;
- Geologic Mapping of the site by our geologist;
- Subsurface exploration by means of nine exploratory borings;
- Laboratory testing of selected soil samples obtained to evaluate geotechnical properties;
- Analysis of site conditions and test results; and
- Preparation of this report presenting our findings, conclusions, and recommendations.

1.1 Proposed Development

The proposed development of the site includes 347 single-family residential lots with associated streets and infrastructure.

It is our understanding, the proposed structures will be one to two story, wood framed, single family homes. Foundation designs are anticipated to consist of continuous and isolated shallow footing foundation systems, or utilization of post-tension type foundations. Maximum foundation loads using a continuous and isolated shallow footing foundation design are not anticipated to exceed 4 kips and 2 kips per foot for isolated and continuous footings, respectively.

4.0 GEOLOGY

4.1 Regional Geologic Setting

The site is located in the east portion of the Moreno Valley, which is part of the Perris Block area of the Peninsular Ranges Geomorphic Province of southern California. The regional geology of the site includes the San Timoteo Badlands to the northeast, Mt. Moleno to the south and southwest, and the San Jacinto Valley to the east.

Lateral displacement and uplift of the region have occurred on a series of major, northwest-trending faults which are thought to be related to the regional tectonic framework. These faults include the San Jacinto Fault zone located approximately 1 mile to the northeast, the San Andreas Fault zone located approximately 11 miles to the northeast, and the Casa Loma Fault zone inferred to be located on or within 500 feet of the northeast corner of the site. The site is not located within an Alquist Priolo Earthquake Studies Zone for fault rupture hazard.

Based on review of the Riverside County Seismic Safety Element (Enviro, 1976), the Casa Loma has been inferred as trending in a northwest to southeast direction near the northeast corner of the site. The inferred trace of the Casa Loma fault has been based on the projection of the Reche Canyon Fault to the northwest with the Hemet-San Jacinto fault zone located to the southeast. Based on prior investigation of the Reche Canyon and Hemet-San Jacinto faults, the Casa Loma fault may be considered as active.

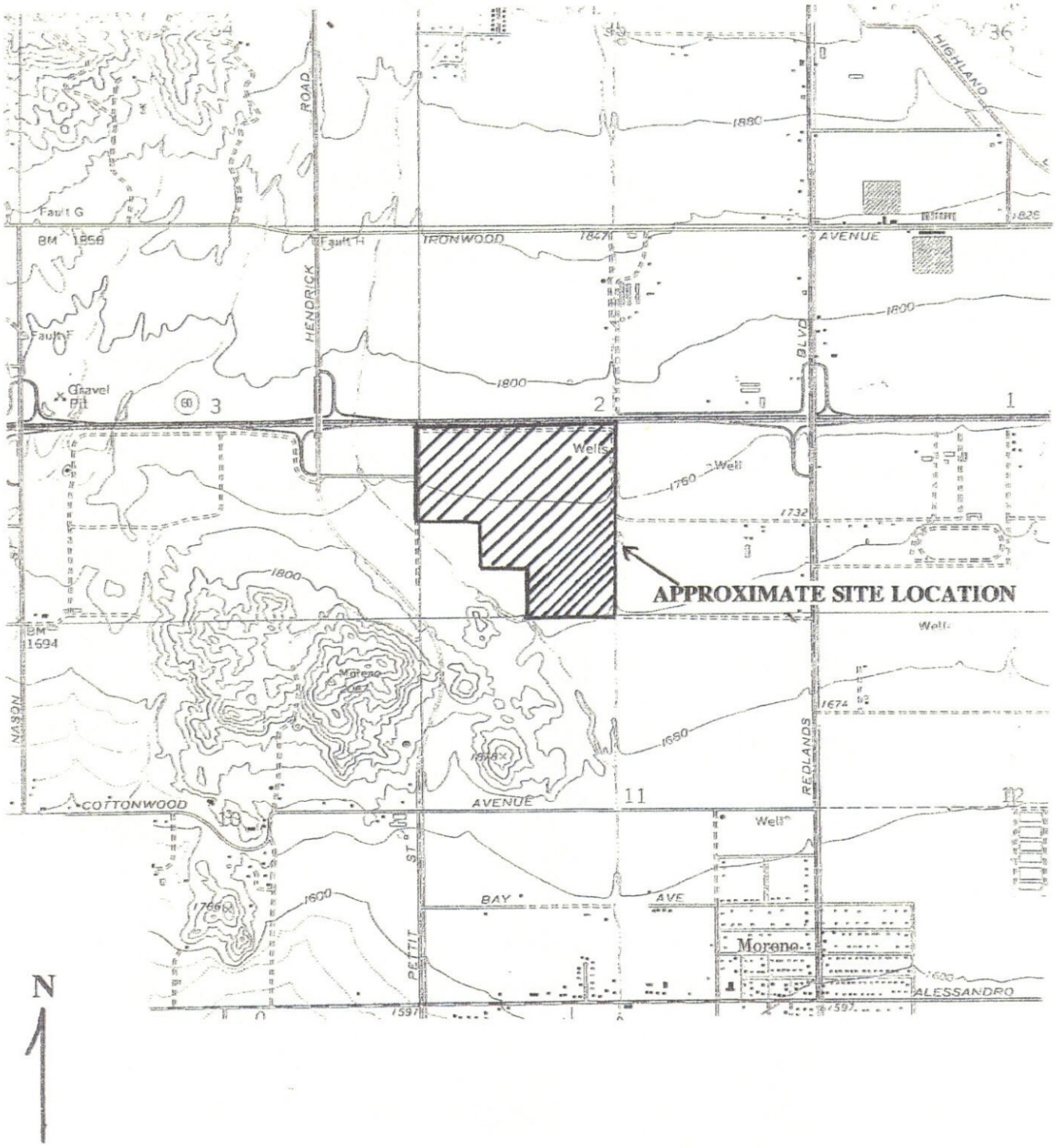
The projected fault location and the recommended hazard zone for the Casa Loma fault in the site are shown on **Plate 1**. Prior to development of the site in this zone, a geologic fault investigation should be conducted to the evaluate if faulting has occurred on the site, and the activity of faulting, if present.

4.2 Local Geology

Locally, the site is underlain by at least 50 feet of recent alluvial deposits consisting of slightly moist to very moist, loose to medium dense, soft to very stiff, slightly clayey silts, sandy silts, clayey silts, silts, and fine to medium sands.

The in-situ dry density of the encountered soils varied from approximately 93 pounds per cubic foot (pcf) to 120 pcf. The measured in-situ moisture contents varied from approximately 1.7 to 18.3 percent.

The exploratory boring logs are presented in **Appendix B**. The exploratory boring locations are shown on **Plate 1**. The laboratory test results of the in-situ soils are presented in **Appendix C**.



Scale: 1" = 2,000'

References: U.S.G.S., 1967, PR 1980, Sunnymead, California Quadrangle, 7.5 Minute Series

LOCATION MAP - 120± Acres, Near the Intersectin of Pettit Street and Highway 60, City of Moreno Valley, California

Project No. 03-406-geo	*DATE: January 2004*	*FIGURE 1*

5.0 SEISMICITY

5.1 Regional Seismicity

The site is located in a region of generally high seismicity which includes essentially all of southern California. During the design life-span of the project, the site is expected to experience ground motions from earthquakes on regional and/or local causative faults.

The site is located within Seismic Zone 4, which can be related to an "effective" peak acceleration of 0.40g, or a peak acceleration of 0.60g.

5.2 Ground Rupture

A potential for ground rupture exist in the northeast portion of the site. The Casa Loma fault has been mapped as projecting from a northwest to southwest direction near the northeast corner of the site. Prior to development of the northeast portion of the site, a geologic fault investigation should be conducted to the evaluate if faulting has occurred on the site, and the activity of faulting, if present.

The projected fault location and recommended hazard zone for the Casa Loma fault in the site are shown on **Plate 1**.

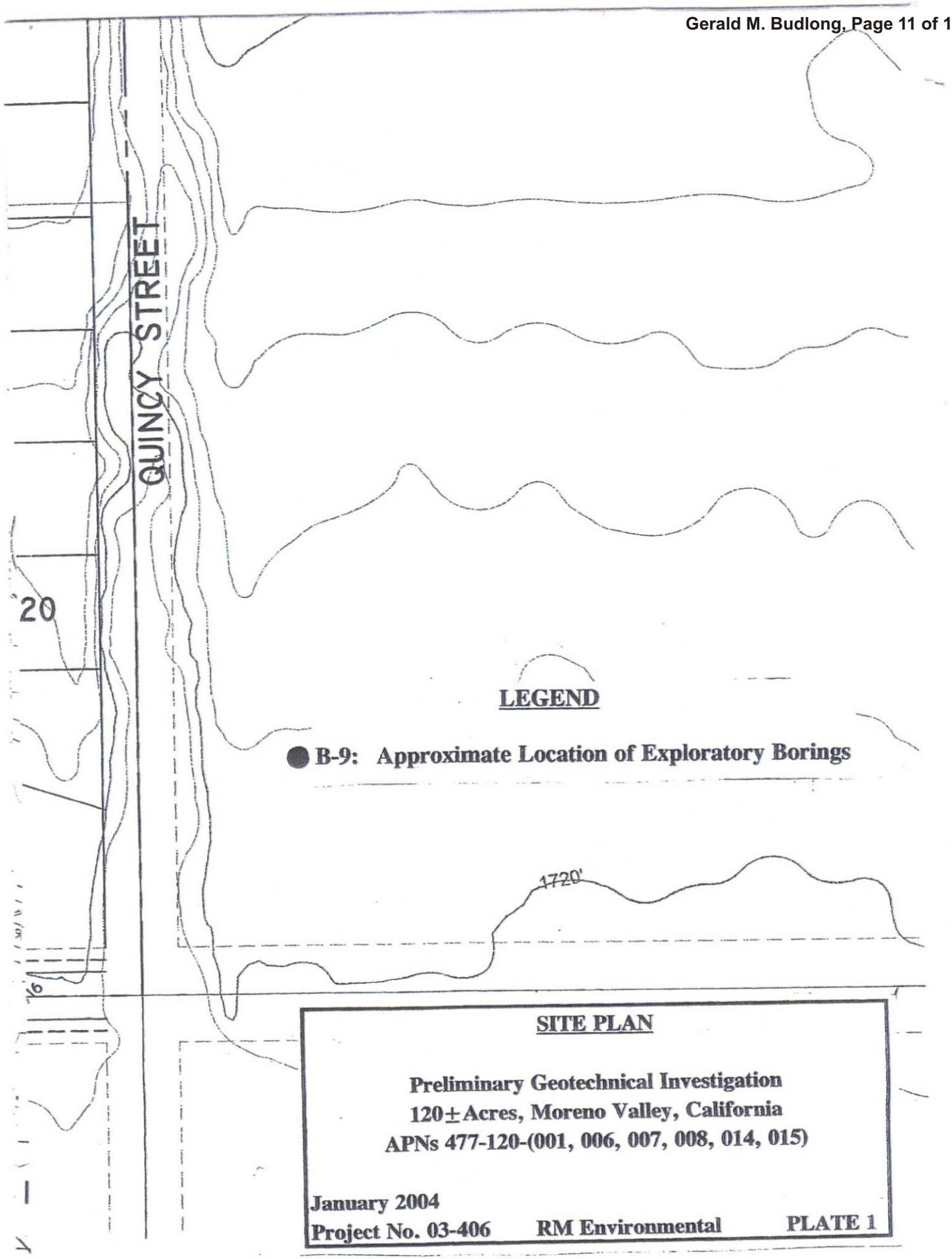
5.3 Liquefaction

Soil liquefaction is the loss of soil strength due to increased pore water pressures caused by a significant ground shaking. Liquefaction typically consists of the re-arrangement of the soil particles into a denser condition resulting, in this case, in localized areas of settlement, sand boils, and flow failures. Areas underlain by loose to medium dense soils where groundwater is within 40 to 50 feet of the surface are particularly susceptible when subject to ground accelerations such as those due to earthquake motion. Groundwater at the site is greater than 50 feet is depth; therefore, the potential of liquefaction affecting site development may be considered as low.

5.4 Geologic Lineament Analysis

For this investigation, a geologic lineament analysis was performed. This analysis included review of the referenced aerial photographs pertinent to the site. Based on the aerial photograph review, no significant topographic or vegetation alignments indicating potential faulting on or projecting into the site were observed.

The site and surrounding areas have been farmed for over 50 years. Aerial photographs were not available prior to the observed farming activities. Therefore, the use of aerial photographs to evaluate geologic lineaments in the vicinity of the site was limited.



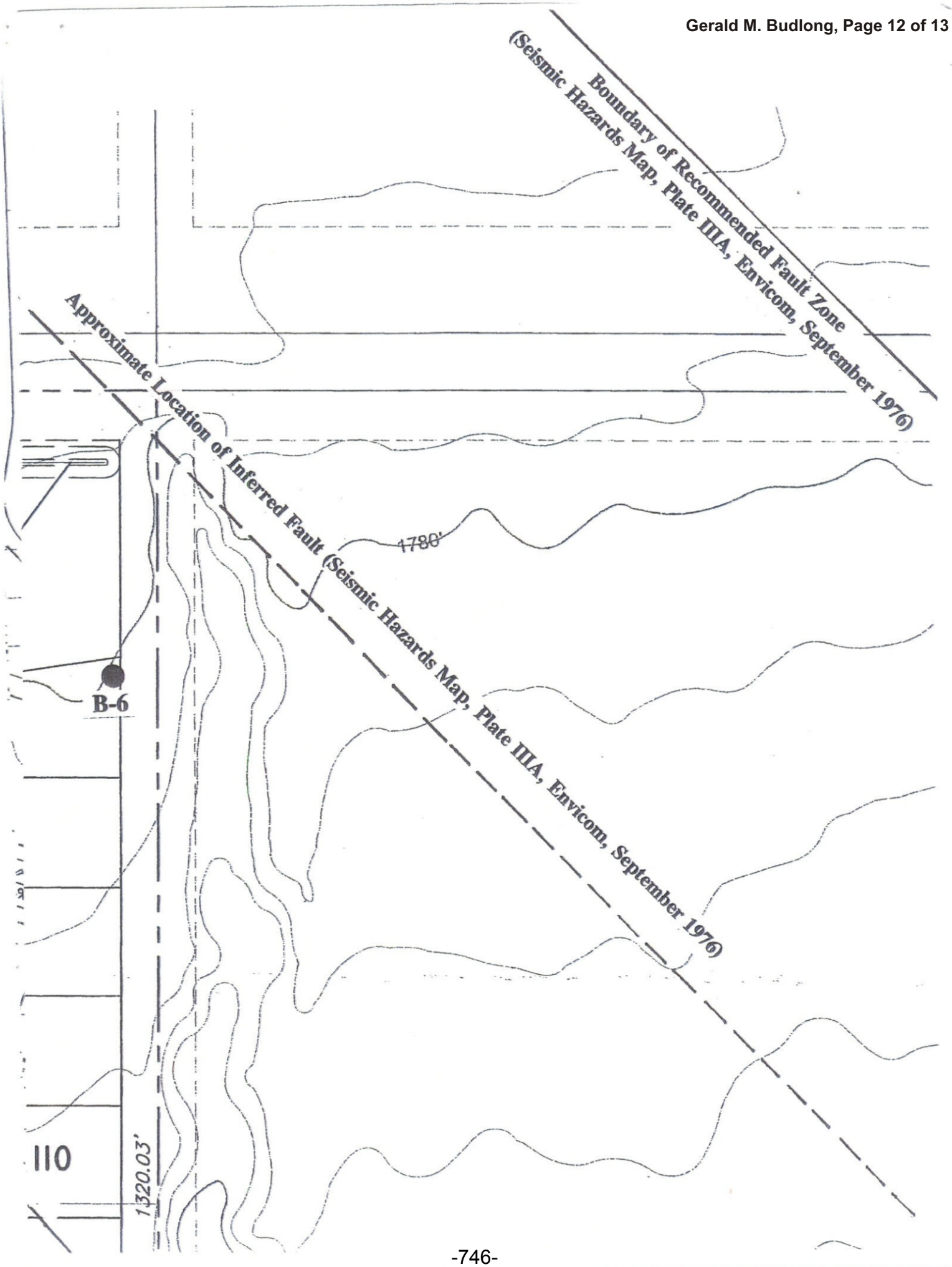
LEGEND

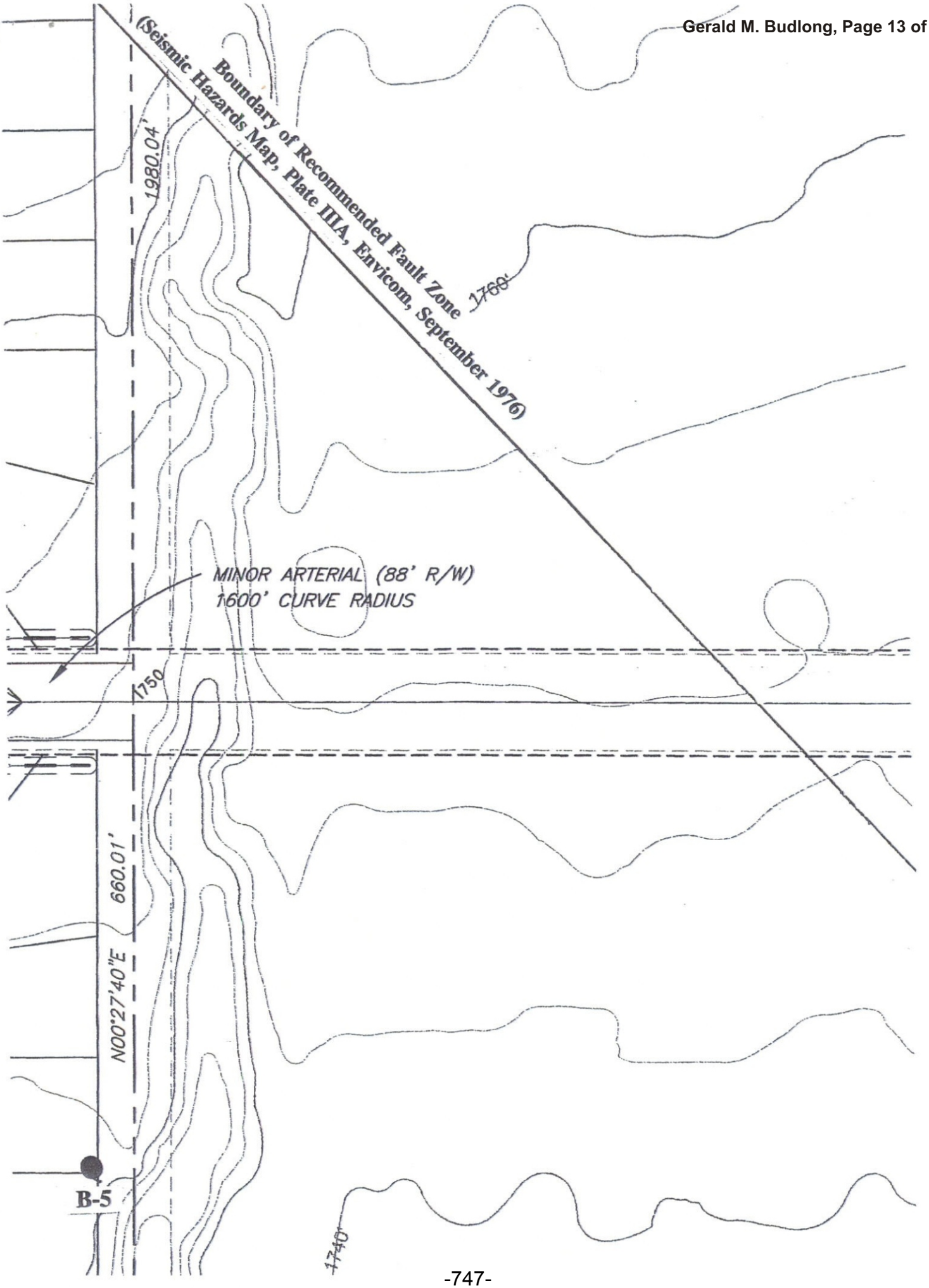
● **B-9: Approximate Location of Exploratory Borings**

SITE PLAN

Preliminary Geotechnical Investigation
120± Acres, Moreno Valley, California
APNs 477-120-(001, 006, 007, 008, 014, 015)

January 2004
Project No. 03-406 **RM Environmental** **PLATE 1**


Boundary of Recommended Fault Zone
(Seismic Hazards Map, Plate IIIA, Envicom, September 1976)
Approximate Location of Inferred Fault (Seismic Hazards Map, Plate IIIA, Envicom, September 1976)
1780'
B-6
110
1320.03'


(Seismic Hazards Map, Plate IIIA, Envicom, September 1976)
Boundary of Recommended Fault Zone
1980.04'
1760'
MINOR ARTERIAL (88' R/W)
1600' CURVE RADIUS
1750
660.01'
N00°27'40"E
B-5
1740'

GERALD M. BUDLONG
CITY OF MORENO VALLEY ENVIRONMENTAL AND HISTORICAL PRESERVATION BOARD MEMBER

Letter dated December 2, 2010

Response GB-1

The process of reproducing maps and plans at the size required for inclusion in the Draft EIR generally involves a substantial reduction from larger source documents. Where feasible, distances are indicated within the Draft EIR's illustrations; however, for accurately scaled plans, the reader is referred either to the document's Technical Appendices, or to full-sized copies of plans and maps available at the City of Moreno Valley Planning Department.

Response GB-2

The commentor correctly describes the Project Geotechnical Investigation (prepared by Southern California Geotechnical in January 2007, and included in its entirety as Draft EIR Appendix H), and its scope of services, which included a visual site reconnaissance, subsurface exploration, field and laboratory testing, and geotechnical engineering analysis to provide recommendations in regard to building design criteria, site preparation, and construction. The Project Geotechnical Investigation was not intended to provide an environmental evaluation of the Project site; rather, the Phase I Environmental Site Assessment (Project ESA), included in Draft EIR Appendix I, addresses other environmental conditions affecting the Project site.

Both the Project ESA and the Geotechnical Investigation reference a fault study for a portion of the Project site that was prepared prior to the proposed Project application. The *Preliminary Geotechnical Investigation and Fault Study for the Proposed 31-1/2-Acre Residential Development, South of SR-60 and West of Redlands Boulevard, Assessor's Parcel Numbers 477-120-004 and 477-120-005, Moreno Valley, California (Project No. I05876-10)* was prepared by LGC Inland, Inc. (LGC) on September 12, 2005. The LGC Fault Study

states that "[n]o evidence of fracturing, offsets, or any discernable characteristics related to faulting was observed." A detailed fault study was not prepared, because it was determined unnecessary based upon Southern California Geotechnical's review of the LGC Fault Study along with other mapping of the Project site (detailed in the following Response GB-4), and their on-site reconnaissance, which found no evidence of surficial features indicating faulting (i.e., fault scarps, fault line scarps, sag ponds, fractures, or vegetated areas).

Response GB-3

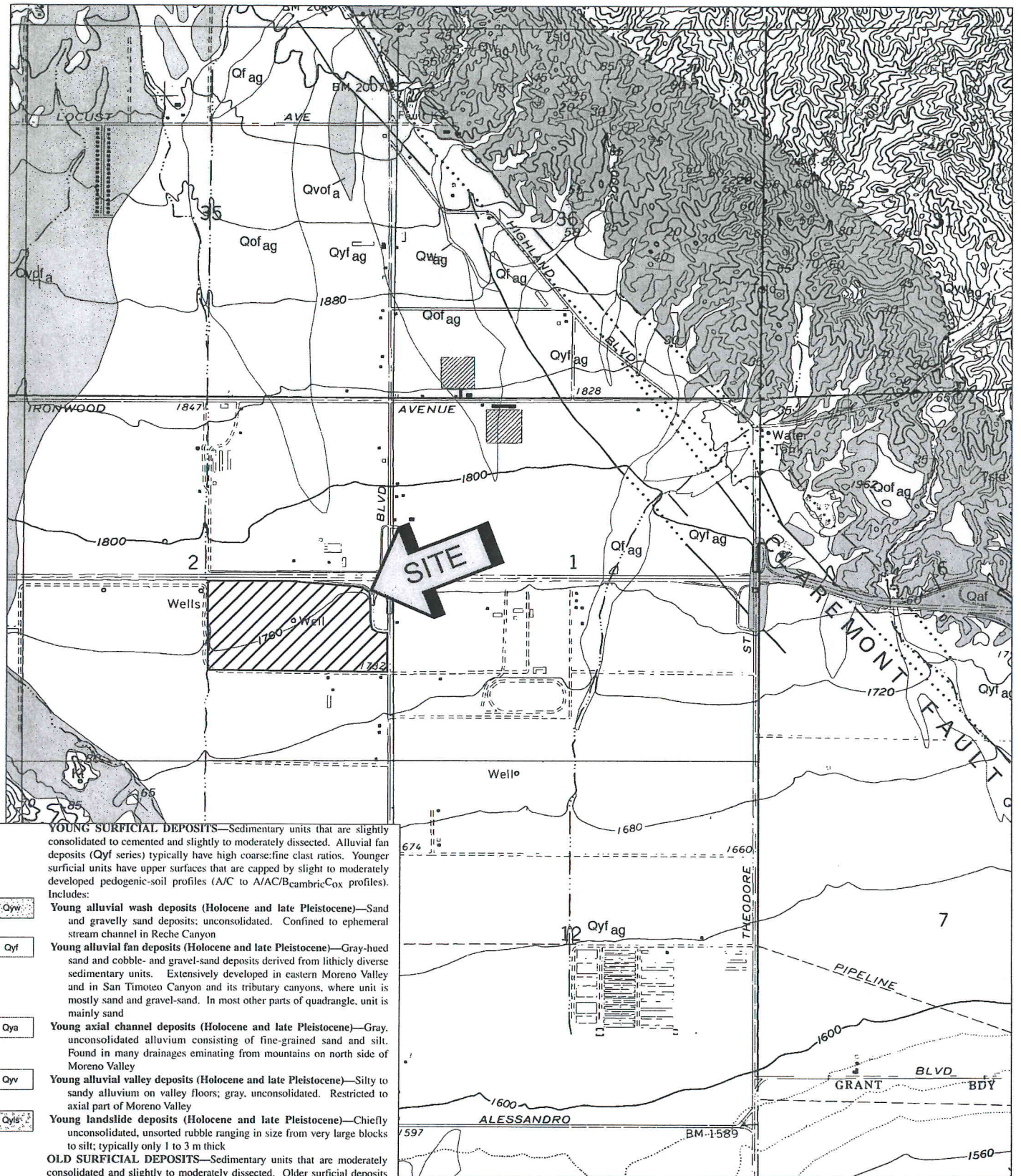
The LGC report is available through the Lead Agency (a copy is available at the Planning Department), and was considered incorporated by reference into the Project Geotechnical Investigation. As discussed in the preceding Response GB-2, because no evidence of faulting or other geologic hazard was identified in this report, it was not determined necessary for inclusion.

Response GB-4

In addition to the LGC report referenced in the preceding Responses GB-2 and GB-3, several geologic maps were used as points of reference in the preparation of the Project Geotechnical Investigation. These include the following:

- Geologic Map of the Sunnymead 7.5' Quadrangle, Riverside County, California, by Douglas M. Morton and Jonathan C. Matti, 2001;
- Geologic Map of the Sunnymead/South ½ of Redlands Quadrangles, San Bernardino and Riverside County, California, by Thomas W. Dibblee, Jr., 2003;
- Alquist-Priolo Earthquake Fault Zones Map of the Sunnymead Quadrangle; and
- Riverside County Land Information System – Fault Zone Map.

Copies of these maps are included on the following pages for ease of reference, and have also been incorporated in Final EIR Section 2.0, Revisions and Errata.



YOUNG SURFICIAL DEPOSITS—Sedimentary units that are slightly consolidated to cemented and slightly to moderately dissected. Alluvial fan deposits (Qyf series) typically have high coarse:fine clast ratios. Younger surficial units have upper surfaces that are capped by slight to moderately developed pedogenic-soil profiles (A/C to A/AC/$B_{cambric}C_{ox}$ profiles). Includes:

Qyw — **Young alluvial wash deposits (Holocene and late Pleistocene)**—Sand and gravelly sand deposits; unconsolidated. Confined to ephemeral stream channel in Reche Canyon

Qyf — **Young alluvial fan deposits (Holocene and late Pleistocene)**—Gray-hued sand and cobble- and gravel-sand deposits derived from lithicly diverse sedimentary units. Extensively developed in eastern Moreno Valley and in San Timoteo Canyon and its tributary canyons, where unit is mostly sand and gravel-sand. In most other parts of quadrangle, unit is mainly sand

Qya — **Young axial channel deposits (Holocene and late Pleistocene)**—Gray, unconsolidated alluvium consisting of fine-grained sand and silt. Found in many drainages eminating from mountains on north side of Moreno Valley

Qyv — **Young alluvial valley deposits (Holocene and late Pleistocene)**—Silty to sandy alluvium on valley floors; gray, unconsolidated. Restricted to axial part of Moreno Valley

Qyls — **Young landslide deposits (Holocene and late Pleistocene)**—Chiefly unconsolidated, unsorted rubble ranging in size from very large blocks to silt; typically only 1 to 3 m thick

OLD SURFICIAL DEPOSITS—Sedimentary units that are moderately consolidated and slightly to moderately dissected. Older surficial deposits have upper surfaces that are capped by moderately to well-developed pedogenic soils (A/AB/B/C_{ox} profiles and Bt horizons as much as 1 to 2 m thick and maximum hues in the range of 10YR 5/4 and 6/4 through 7.5YR 6/4 to 4/4 and mature Bt horizons reaching 5YR 5/6). Includes:

Qof — **Old alluvial fan deposits (late to middle Pleistocene)**—Indurated, sandy and gravelly alluvial fan deposits, found on south side of San Timoteo Badlands and in Reche Canyon. Slightly to moderately dissected: reddish-brown. Some deposits include thin, discontinuous surface layer

SOURCE: "GEOLOGIC MAP OF THE SUNNYMEAD 7.5' QUADRANGLE, RIVERSIDE COUNTY, CALIFORNIA" MORTON AND MATTI, 2001

GEOLOGIC MAP

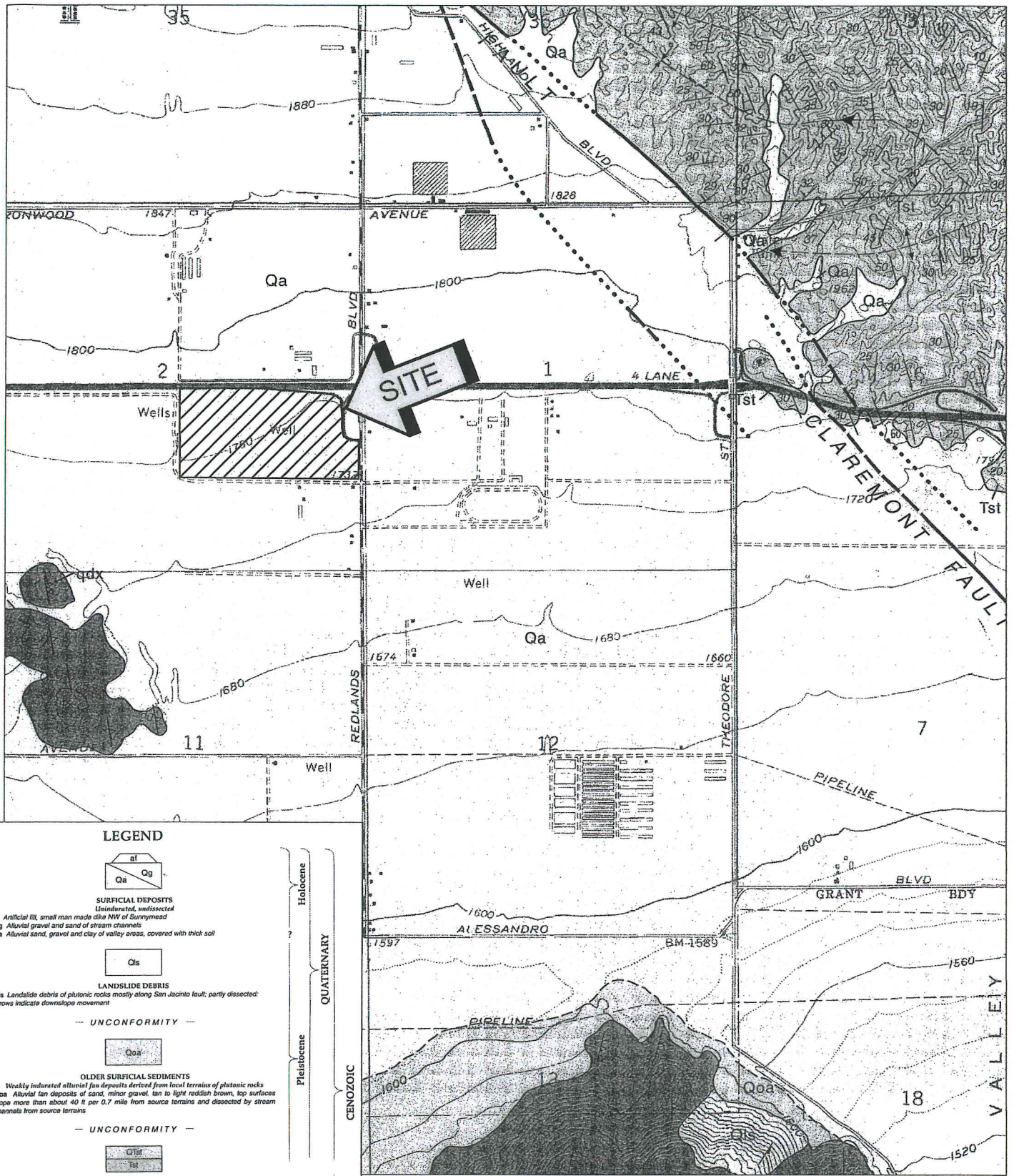
PROPOSED WEST RIDGE BUSINESS CENTER

MORENO VALLEY, CALIFORNIA

SCALE: 1" = 2000'	
DRAWN: DRK CHKD: JAS	
SCG PROJECT 06G285-2	
PLATE 1	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL



LEGEND

af / Qa / Qg

SURFICIAL DEPOSITS
Unindurated, undissected

af *Artificial fill, small man made dike NW of Sunnymead*
Qg *Alluvial gravel and sand of stream channels*
Qa *Alluvial sand, gravel and clay of valley areas, covered with thick soil*

Qls

LANDSLIDE DEBRIS

Qls *Landslide debris of plutonic rocks mostly along San Jacinto fault; partly dissected; arrows indicate downslope movement*

— UNCONFORMITY —

Qoa

OLDER SURFICIAL SEDIMENTS

Weakly indurated alluvial fan deposits derived from local terrains of plutonic rocks

Qoa *Alluvial fan deposits of sand, minor gravel, tan to light reddish brown, top surfaces slope more than about 40 ft per 0.7 mile from source terrains and dissected by stream channels from source terrains*

— UNCONFORMITY —

QTst / Tst

SAN TIMOTEO FORMATION

(San Timoteo beds of Frick, 1921) stream-laid alluvial sediments of detritus derived from plutonic and metamorphic rocks of San Bernadino Mountains area, weakly indurated, upper part yielded vertebrate fauna diagnostic of Blancan Stage, Plio-Pleistocene (Frick, 1921, Savage, et. al. 1954), or Irvingtonian 1 Stage, earliest Pleistocene (Repenning, 1987); main part inferred to be of Pliocene age (Morton and Matti, 2001)

QTst *Upper part, sandstone, light gray to tan, fine to coarse grained, arkosic, bedded and minor conglomerate of pebbles and cobbles of mostly granitic detritus, some of gneissic rocks and quartzite; includes thin layers of soft greenish to light reddish silty claystone, unconformably (?) overlain by Qoa in this quadrangle*

Tst *Main part (middle part of Morton and Matti, 2001); lithologically similar to upper part; within 1 km of San Jacinto fault includes more conglomerate; base not exposed in this quadrangle*

?	Holocene	QUATERNARY
	Pleistocene	
	Pliocene	TERTIARY
		CENOZOIC

SOURCE: "GEOLOGIC MAP OF THE SUNNYMEAD/SOUTH ½ OF REDLANDS QUADRANGLES, SAN BERNARDINO AND RIVERSIDE COUNTY, CALIFORNIA" DIBBLEE, 2003

GEOLOGIC MAP

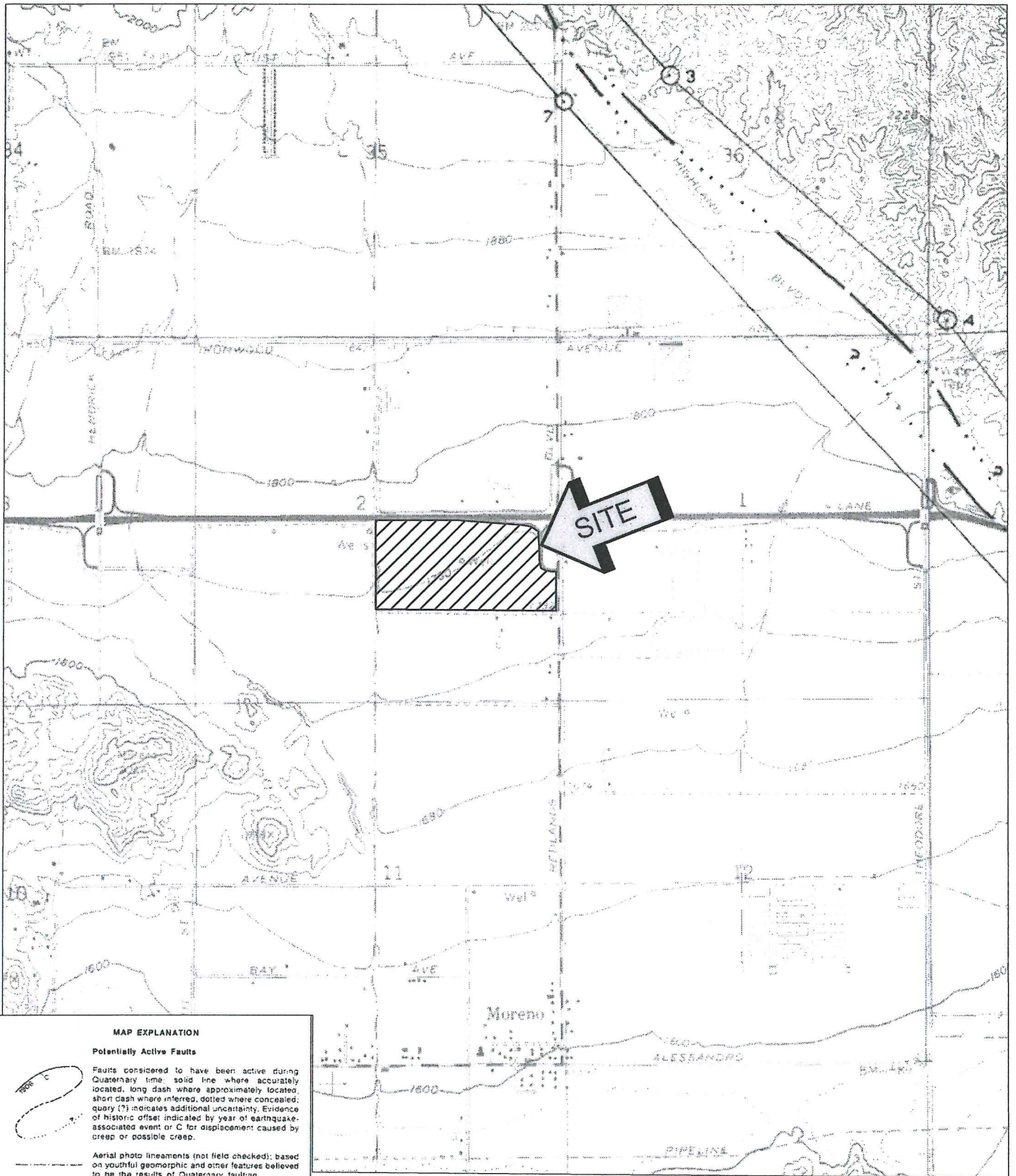
PROPOSED WEST RIDGE BUSINESS CENTER

MORENO VALLEY, CALIFORNIA

SCALE: 1" = 2000'	
DRAWN: DRK CHKD: JAS	
SCG PROJECT 06G285-2	
PLATE 2	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL



SOURCE: "ALQUIST-PRIOLO EARTHQUAKE FAULT ZONES MAP, SUNNYMEAD QUADRANGLE"

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONE MAP

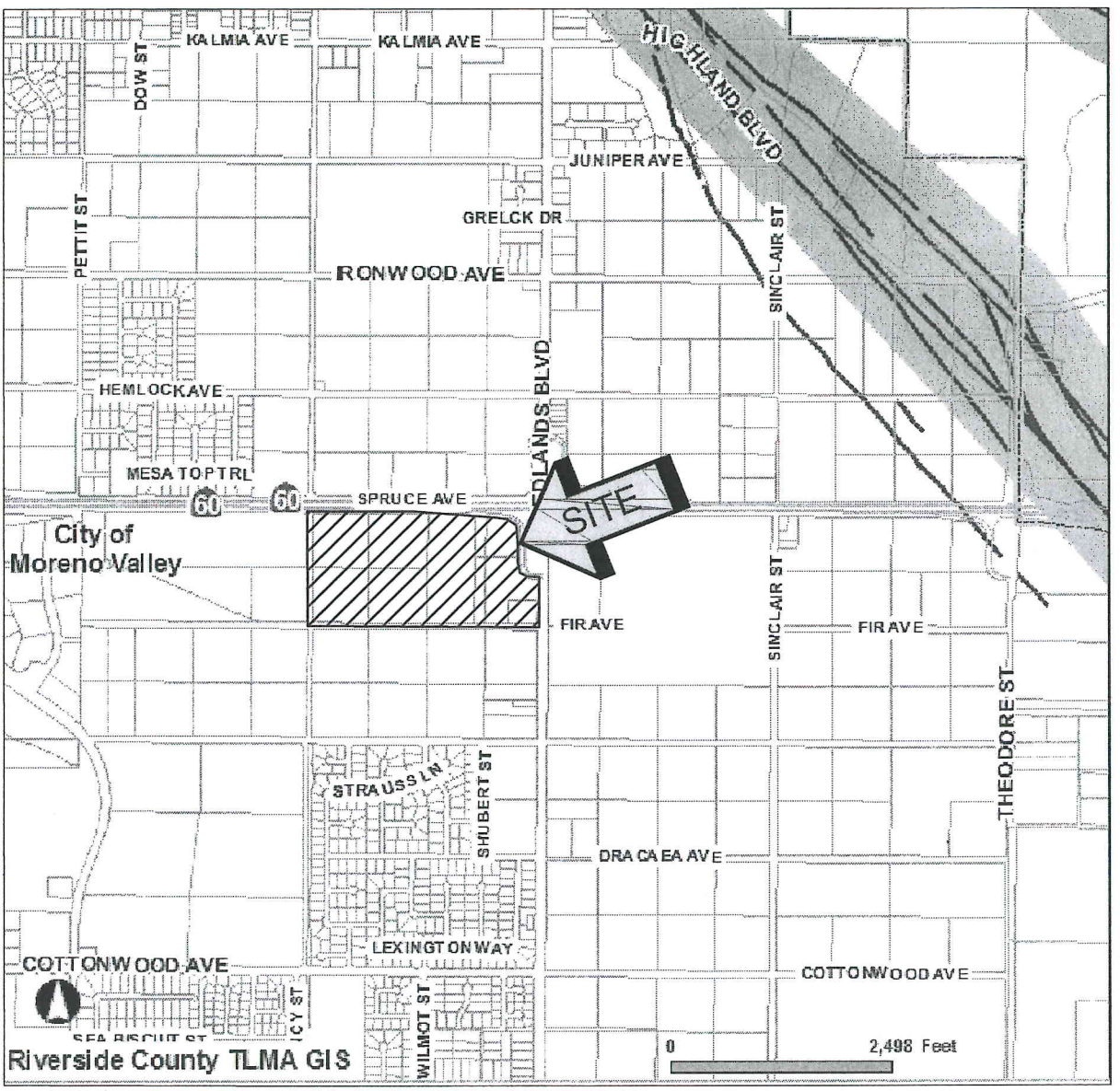
PROPOSED WEST RIDGE BUSINESS CENTER

MORENO VALLEY, CALIFORNIA

SCALE: 1" = 2000'	
DRAWN: DRK CHKD: JAS	
SCG PROJECT 06G285-2	
PLATE 3	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL



FAULT ZONES
12/15/2010

- INTERSTATES
- HIGHWAYS
- PARCELS
- ALQUIST-PRIOLO
- RIVERSIDE COUNTY
- COUNTY FAULT ZONE
- SAN JACINTO FAULT ZONE
- CITY

SOURCE: "RIVERSIDE COUNTY LAND INFORMATION SYSTEM - FAULT ZONES"

RIVERSIDE COUNTY FAULT ZONES MAP

PROPOSED WEST RIDGE BUSINESS CENTER

MORENO VALLEY, CALIFORNIA

SCALE: 1" = 2000'	
DRAWN: DRK CHKD: JAS	
SCG PROJECT 06G285-2	
PLATE 4	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL

Response GB-5

As noted on Page 9 of the Project Geotechnical Investigation (Draft EIR Appendix H), "The 1997 UBC/2001 CBC Design Parameters have been generat[ed] using UBCSEIS, a computer program published by Thomas F. Blake (January 1998)." It is assumed that the fault parameters were not available for the Casa Loma fault at the time the UBCSEIS program was published.

It may be noted that the building code has changed since the Project Geotechnical Investigation was issued. New development must now be designed in accordance with the requirements of the incumbent edition of the California Building Code (CBC). The CBC provides procedures for earthquake resistant structural design that includes considerations for on-site soil conditions, occupancy, and the configuration of the structure including the structural system and height. The seismic design parameters are based on the soil profile and the proximity of known faults with respect to the subject site. The 2007 CBC Seismic Design Parameters are now generated using *Earthquake Ground Motion Parameters*, a software application developed by the United States Geological Survey (USGS). This software application, available at the USGS website, calculates seismic design parameters in accordance with the 2007 CBC, utilizing a database of deterministic site accelerations at 0.01 degree intervals. Since the UBCSEIS is no longer used to calculate the seismic design parameters for the proposed development, it is not considered relevant that the Casa Loma fault is not listed in the UBCSEIS database.

Please refer to the following Response GB-7 in regard to the referenced Preliminary Geotechnical Investigation for the property westerly adjacent to the Project site, prepared by RM Engineering.

Response GB-6

Please refer to the geologic maps referenced as part of the preceding Response GB-4.

Response GB-7

The commentor's inclusion of the referenced excerpts from the Preliminary Investigation prepared by RM Engineering (RME) is acknowledged. The site addressed by this report is located westerly adjacent to the Project site. Although RME recommended that a fault investigation be conducted prior to development within the portion of the site within the zone designated by the Riverside County Seismic Safety Element (Envicom, 1976), RME provided no data or evidence that an active fault was located on the site or adjacent sites. In fact, RME performed a geologic lineament analysis and concluded (on Page 6 of the referenced report) that, "[b]ased on the aerial photograph review, no significant topographic or vegetation alignments indicating potential faulting on or projecting into the site were observed." The recommendation by RME to perform a fault study was solely based on the Envicom report.

As referenced in the Project Geotechnical Investigation, Southern California Geotechnical reviewed the LGC report referenced in the preceding Response GB-2. LGC performed a fault study in the southeast portion of the Project site. The fault trench was approximately 400 feet in length and trended S48W (perpendicular to the projection of the nearest faults). The trench was excavated to a maximum depth of approximately 14 feet. LGC stated that "[n]o evidence of fracturing, offsets, or any discernable characteristics related to faulting was observed." It should also be noted that no evidence of surficial features indicating faulting (i.e., fault scarps, fault line scarps, sag ponds, fractures, or vegetated areas) were observed on the subject site at the time of the original geotechnical investigation. In addition, the two geological maps presented as part of the preceding Response GB-4 (Plates 1 and 2) indicate that the closest fault to the subject site is the Claremont Fault Section of the San Jacinto Fault Zone, located 3,700 feet northeast of the site. The mapped active portion of the Casa Loma fault is located approximately 4.5 miles southeast of the Project site.

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone (Plate 3), nor is it located within a Riverside County designated fault zone (Plate 4). Based on

information from the previous LGC report and published geologic maps, it is not considered likely that the Casa Loma fault, located more than four miles southeast of the Project site, would cause on-site surface rupture.

Response GB-8

Applied Planning utilized the Project-specific Geotechnical Investigation provided in the Draft EIR, and its assessment of on-site conditions.

Response GB-9

As detailed in the preceding Response GB-7, despite the commentor's assertions to the contrary, as documented in the Project-specific Geotechnical Investigation, there is no indication that the Project building footprint will overlay any active fault, nor is there evidence of potential fault rupture.

Response GB-10

The Draft EIR's description of major scenic resources is focused primarily on those views that would be potentially affected by the Project. It may be noted that, on Draft EIR Page 4.9-3, the reader is referred to Draft EIR Figure 4.9-1, which is based on an exhibit from the Moreno Valley General Plan. This figure does indicate views of the San Jacinto Wildlife Preserve among the City's major scenic resources. As can also be seen from this figure, the San Jacinto Wildlife Area is located approximately 3.5 miles to the southeast of the Project site. Although not identified in the illustration, the California Department of Fish and Game (http://www.dfg.ca.gov/lands/wa/region6/sanjacinto/maps.html) identifies Mystic Lake as being located adjacent to the eastern boundary of the San Jacinto Wildlife Area.

Response GB-11

As noted on Draft EIR Page 4.9-3, Figure 4.9-1 is the Draft EIR is a reproduction of Moreno Valley General Plan Figure 5.11-1, and as such, reflects the labeling used in the General Plan.

Response GB-12

The Draft EIR acknowledges, on Page 4.9-10, that the Project site lies within an established view corridor adjacent to the SR-60, and that SR-60 has been locally designated in the Moreno Valley General Plan as a scenic route. Primarily on this basis, the Project was found to have a substantial adverse effect on a scenic vista, which is considered a significant and unavoidable impact. The CEQA thresholds differentiate effects on a "scenic vista" from potential impacts to "scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway." Although SR-60 has not been designated as a "State scenic highway," its local importance has been acknowledged in the Draft EIR.

Response GB-13

The Draft EIR acknowledges that the Project would have a substantial adverse effect on scenic vistas, which is considered a significant and unavoidable impact.

Response GB-14

The commentor's inclusion of the referenced excerpts from the Preliminary Investigation prepared by RM Engineering is acknowledged.

From: Rachel Lopez [rachel.lopez@ccaej.org]
Sent: Monday, December 06, 2010 2:19 PM
To: Jeffrey Bradshaw
Subject: Project Description 105-131
Environmental Impact Analysis 132-135

Land Use and Planning 136-169

Air Quality 261-372

Noise 373-401

This is in response to the Project # 105-131.

Mitigations for the cumulative exposure from projects that have already been approved and those that are in the process of being will have a significant effect on traffic and diesel exposure to residents within the impacted area and fall short of lowering the impacts to residents in close proximity of these projects. How can you mitigate this to include the other projects impacts. CCA-1

The Environmental Impact Analysis does not indicate or give a true picture of projected truck trips taking into account the other projects and the new Sketchers project. What types of mitigation are being initiated for these projects when they reach full capacity and are taken into account. The noise impacts to the surrounding community and its residents must also be mitigated especially with the additional projects that are in the planning process. What will those mitigations look like on a cumulative level. CCA-2

There must be in the mitigation of this project stipulations from the projected/future tenants that only 2010-compliant truck fleet cleanest trucks be allowed into the facility and create incentives or a schedule to phase in a clean truck fleet. The project should also consider other alternatives which might be to consider alternatives such as a portion of the fleet might be retrofitted or repowered and be phased in over a period of time which could reduce the air quality health risks and may be more economically feasible. CCA-3

Cumulatively Significant and Unavoidable for PM10, PM2.5, VOC and NOx exceedances; and long term VOC and *NO exceedances* this phrase is repeated several times in the Draft EIR we must not continue to approve projects in our communities that continue to impact our residents with health risks that can be avoidable with mitigation that should be implemented even before projects are proposed for review. The fact that we see unavoidable and significant in the EIRs is great concern that these projects will continue to be approved with overriding considerations or approved regardless of the impacts to <u>existing</u> or <u>future</u> residents. CCA-4

There are designated proposed residential projects being proposed along side these industrial facilities with no significant buffer areas dedicated. The SCAQMD and the Air Resources board indicate a buffer zone of not less than 1,000 ft. between a sensitive receptor and a diesel source. These issues must be addressed and mitigated with what ever means are available to the lowest levels possible with **sufficient buffer zones of not less than 1,000** to lessen those impacts. The DEIR have buffers of 250 or 300 how can the developer include/mitigate buffer zones of 1,000 ft. CCA-5

Rachel Lopez

Community Organizer

Center for Community Action and Environemtal Justice

Centro de Accin Comunitaria y Justicia Ambiental

Office - 951-360-8451 / Fax - 951-360-5950

rachel.l@ccaej.org

CENTER FOR COMMUNITY ACTION AND ENVIRONMENTAL JUSTICE
RACHEL LOPEZ

Email Dated December 6, 2010

Response CCA-1

The commentor expresses concern regarding the cumulative effects of the Project's contributions to impacts from traffic and diesel emissions when combined with other vicinity projects. As identified at Draft EIR Table 5.1-1, and illustrated in Figure 5.1-1, a number of current or anticipated "related projects" were identified within the cumulative scope of the Westridge Commerce Center Project. In total, 11 discrete related projects were included within the Draft EIR cumulative analysis, including both projects referenced by the commentor ("Highland Fairview and ProLogis"). Additionally, the cumulative analysis reflects generalized disaggregated regional growth not otherwise attributable to specific development proposals.

In addition to the identified related projects, the cumulative impacts analysis assumed development of the area in a manner consistent with the City of Moreno Valley General Plan, and reflecting the anticipated growth of the region. The analysis of cumulative impacts considered potentially significant impacts that could be considered cumulatively considerable when viewed in the context of known related projects and generalized ambient growth of the City and region. The commentor is referred to Section 5.0, "Other CEQA Topics" of the Draft EIR.

Response CCA-2

As noted in the preceding Response CCA-1, the Draft EIR did consider the effects of cumulative projects including potential cumulative truck trips, including the Highland Fairview ("Skechers") project.

With specific regard to truck traffic, estimated opening-year average daily Project-generated truck trips ingressing/egressing the Project site via Redlands Boulevard include:

- 97 two-axle trucks;
- 220 three-axle trucks; and
- 539 four-axle trucks.

Please refer also to detailed trip generation and trip distribution analyses and supporting discussions are presented in the Project TIA (EIR Appendix B, TIA Pages 51-76).

Cumulative opening year average daily traffic along Redlands Boulevard north of Fir (future Eucalyptus) Avenue is estimated at 30, 400 trips (see TIA Page 115, Exhibit 6-10), This is inclusive of all trips/all vehicle categories generated by existing, proposed or anticipated development, and includes trips generated by the Westridge Project, Skechers, and Pro Logis cited by the commentor. Vehicular noise impacts from all Project and cumulative traffic are also addressed in the DEIR, and are determined to be less-than-significant. Please refer to DEIR at Pages 4.4-21 through 4.4-23; and 5-14 through 5-17.

Notwithstanding the above-cited average daily truck/traffic volumes, the more germane issue with regard to potential truck traffic impacts is peak hour intersection passenger car equivalent (PCE) traffic volumes. As noted subsequently in this response, all Project-specific traffic impacts, inclusive of truck traffic impacts, are reduced to levels that are less-than-significant. If the commentor's concerns are not really truck traffic volumes, but rather truck-generated diesel emissions, the Project Health Risk Assessment (HRA) summarized at EIR Section 4.4, "Air Quality," and discussed in detail in the Project HRA Study (included at EIR Appendix C) substantiates that with application of

mitigation, Project-related diesel emissions will not result in significant adverse health risks.

The commentor is also referred to Section 4.2, "Traffic and Circulation," of the Draft EIR, which includes the following excerpted discussion:

> As seen in Table 4.2-5, "passenger car equivalent" (PCE) factors, ranging from 1.5 to 3.0, have been applied to ensure that truck volumes are accurately accounted for in terms of their proportional contributions to traffic impacts. More specifically, the Project Trip Generation Forecast equates two-axle trucks to 1.5 passenger cars. Three-axle trucks are considered the equivalent of two (2) passenger cars; and trucks with four (4) or more axles are counted as the equivalent of three passenger cars. Employing these PCE factors, the Project is anticipated to generate 2,930 Passenger Car Equivalent (PCE) trips per day, with 191 PCE trips occurring during the AM peak hour, and 225 PCE trips occurring during the PM peak hour. (Draft EIR Page 4.2-18.)

Additionally, with regard to cumulative traffic impacts, Page 4.2-67 of the Draft EIR states:

> As indicated at Table 4.2-13, with completion of the improvements recommended under Mitigation Measure 4.2.7, 4.2.18 and 4.2.19, acceptable V/C and LOS conditions would be realized at all Study Area roadway segments under Opening Year Cumulative Conditions with the Project. Improvements necessary to mitigate potentially significant Opening Year Cumulative Condition roadway segment impacts would be accomplished in part by the Project, with the balance of required improvements realized under combined TUMF, DIF, and fair share fee traffic improvement programs. However, timely completion of the

required improvements in total cannot be assured based on Project participation in mandated traffic impact fee programs (TUMF, DIF, and fair share). Further, roadway segment improvements at or affecting the SR-60 at Redlands Boulevard interchange improvements are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency. ***The Project's incremental contributions to Opening Year Cumulative Traffic Impacts at, or affecting, the following roadway segments are therefore considered cumulatively significant and unavoidable:***

- Redlands Boulevard north of the SR-60 Westbound Ramps to Eucalyptus (future Encilia) Avenue;

- Quincy Street south of Fir (future Eucalyptus) Avenue (future street); and

- Fir (future Eucalyptus) Avenue west of Quincy Street to the westerly Project boundary (future street) and Fir (future Eucalyptus) Avenue east of Redlands Boulevard.

Should the Project be approved, the Lead Agency is required to adopt a Statement of Overriding Considerations acknowledging the Project's individually and/or cumulatively significant environmental impacts.

Mitigation that addresses identified cumulative impacts was provided in the Draft EIR, and has been incorporated in the Project's Mitigation Monitoring Program, included in Final EIR Section 4.0. It is further noted that other development projects are required to address their own specific impacts, and projects subject to CEQA EIR mandates are also required to address cumulative impacts. In this regard, cumulative impacts are likely

overstated as these estimated impacts do not necessarily reflect or assume mitigation applied by other projects within the affected cumulative impact area.

Response CCA-3

The commentor expresses concern about emissions from diesel trucks associated with the Project. Mitigation Measure 4.3.13 has been revised to incorporate the following requirement.

> ***Lease/purchase documents shall identify that tenants are encouraged to provide incentives to realize the following:***
>
> ***• Use of fleet vehicles conforming to 2010 air quality standards or better.***

These revisions are reflected in Final EIR Section 2.0, "Revisions and Errata," as well as in the Mitigation Monitoring Plan presented in Final EIR Section 4.0.

Response CCA-4

The commentor correctly reflects the Draft EIR's finding that the Project would have a cumulatively significant air quality impact in regard to the referenced criteria pollutant exceedances (temporary construction-related PM_{10}, $PM_{2.5}$, VOC and NOx exceedances; and long-term operational VOC and NOx exceedances). The commentor's opinions regarding the possible approval of the Project with overriding considerations will be forwarded to decision-makers for their consideration.

Response CCA-5

As acknowledged in the Draft EIR (Pages 4.1-7 through 4.1-9), currently undeveloped properties to the south of Fir (future Eucalyptus) Avenue, and to the west of the Quincy Channel are designated for residential uses. Despite the commentor's assertion to the

contrary, the City has no currently active proposals for residential development on any parcels adjacent to the Westridge Commerce Center Project site.

The 1,000 foot buffer zone referenced by the commentor has been offered by the California Air Resources Board as a planning guideline, to be implemented in cases where site-specific analysis has not been conducted.[4] In the case of the Westridge Commerce Center Project, a Health Risk Assessment of Diesel Particulate Emissions was prepared to address Diesel Particulate Matter (DPM) generated by diesel trucks and the operation of heavy duty equipment. The Health Risk Assessment was 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 (SCAQMD 2003). The Health Risk Assessment is summarized within the Draft EIR (see Page 4.3-80) and presented in its entirety as Appendix C to the Draft EIR.

As discussed in Section 4.3 of the Draft EIR, the SCREEN3 screening analysis prepared for the Project indicates that the maximally impacted modeled receptor would be exposed to a mitigated inhalation cancer risk of no more than 8.6 in 1 million, which is less than the SCAQMD exposure threshold of 10 in 1 million. The Project HRA considers and evaluates maximum potential exposure to maximum DPM concentrations consistent with established SCAQMD methodologies. The methodology considers not only DPM source emissions (the highest concentrations of which would occur on the Project site) but also considers other exposure/risk determinants including but not limited to: relative distance to and location of receptors, wind patterns, and topography.

---

[4] Please refer to the CARB *Air Quality and Land Use Handbook: A Community Health Perspective,* April 2005, Page ES-2, at the following website: http://www.arb.ca.gov/ch/handbook.pdf.

With specific regard to DPM emissions air quality impacts generated by Project traffic along area roads, the Project HRA considers potential worst case cancer risk exposures by evaluating pollutant concentrations at the Project site, which include pollutant emissions generated by all vehicles within the site in combination with emissions generated by on-site stationary sources. It is further noted that the cancer risk exposure scenario is in and of itself a conservative assessment of potential cancer risks arising from DPM exposure. That is, pursuant to the adopted SCAQMD/EPA methodologies, calculated DPM-source cancer risks are predicated on extended 70-year/30-year exposure scenarios. Both the 70-year and 30-year cancer risk assessments considered in the Draft EIR represent estimates of theoretic DPM-source cancer risks, and are based on the assumption that a person is exposed to the emission source 24 hours a day for 365 days a year for the entire length of the assumed exposure period. Individuals are typically not stationary at any given outdoor location, spending a portion of each 24-hour cycle indoors. In addition, individuals and families remaining at a given location for 70 or even 30 years would be considered the exception rather than the norm.

The California OEHHA has indicated that based on EPA studies, the EPA recommends a central tendency estimate of 9 years for residency at a given location, and a high-end estimate of 30 years for residency time. Thus, the methodologies used to determine cancer risk (e.g., the assumption of a 24-hour exposure for a 30- or 70- year period) represent a maximum theoretic cancer risk, and is not intended to account for or represent DPM exposures based on residency and occupancy tendencies. As discussed in the Draft EIR, with application of mitigation, applicable cancer risk thresholds are not exceeded. Draft EIR Table 4.3-17 (Page 4.3-86) summarizes maximum mitigated potential cancer risk exposures.

In comparison, DPM emission concentrations generated by Project vehicles traveling along area roads would be substantively reduced in that they reflect only a portion of transient vehicle traffic/emissions, and these emissions are dispersed through vehicle movements and localized winds.

From: Paul Claxton [paul1960@verizon.net]
Sent: Sunday, December 05, 2010 10:02 AM

To: Jeffrey Bradshaw

Subject: Moreno Valley Warehouses/Ridge Project

I am concerned about the efforts to rush into construction the millions of square feet worth of warehouses in the east end of Moreno Valley. These projects can do nothing positive to the natural environment of the area. My biggest concern is turning Moreno Valley into another Ontario with hundreds of diesel trucks lumbering down our roads spewing pollution, creating noise, and traffic. That additional traffic will add to commute times creating additional pollution. The 60 freeway east of this project is not contusive to big rig traffic. I've been a resident here for just nine years and I intentionally bought on the more rural east side to avoid the traffic of the 215 freeway. This project drives a stake into the heart of the city. I'm planning on leaving to seek a better managed city. PC-1

Paul Claxton
Moreno Valley CA

PAUL CLAXTON

Email Dated December 5, 2010

Response PC-1

The commentor's general concerns regarding the Project's location and the cumulative impacts of the Project when combined with other vicinity projects are noted. As identified at Draft EIR Table 5.1-1, and illustrated in Figure 5.1-1, eleven existing and planned development projects were identified within the cumulative scope of the Westridge Commerce Center Project. A thorough discussion of the cumulative impacts is presented at Draft EIR Section 5.1.

Similarly, the commentor's generalized concerns regarding the increased traffic, air quality and noise impacts are discussed in the EIR. Specifically, traffic impacts are addressed in Draft EIR Section 4.2, air quality impacts at Draft EIR Section 4.3 and noise impacts at Draft EIR Section 4.4.

The commentor's statements and opinions regarding the Project are forwarded to the decision-makers for their consideration.

COMMENTS AND QUESTIONS REGARDING THE DEIR AND LAND USEAGE IN GENERAL FOR WESTRIDGE COMMERCIAL CENTER, A.K.A. "THE RIDGE PROJECT"

Stephen Crews, Moreno Valley, CA

1. It is evident from current zoning, that lands designated commercial south of SR60, from Moreno Beach Dr. to Redlands Blvd., including land devoted for the Westridge Center, do not extend southerly for a great distance, and thus any commercial development there is not intended as a part of an extensive commercial region. In fact, for this reason, it appears this land serves as a buffer for the residentially zoned areas to the south. Thus, it is incumbent on planners and developers to ensure that properties developed in these commercially zoned areas are in keeping with aesthetics, appearance, landscape, geographic culture, and the sentiments of future residents of the predominant land use in the area, residential. This warehouse structure, with its massive edifice and size could not possibly conform to nor compliment Rancho Belago, "the land of ranches and lakes". SCR-1

   Has any consideration been given to the degradation of future residential developments in the area by the construction of an eyesore across the street?

2. One can only presume that there is a cumulative effect of air pollution from SR60, diesel trucks on the site of Westridge, and those travelling on nearby surface streets, as well as these types of contributors to air pollution from future similar developments along the freeway, and that this would have a deleterious effect on the health of citizens residing in residential neighborhoods. SCR-2

   Has this been taken into consideration, and wouldn't it be advisable to restrict commercial land use to less concentrated populations of heavy polluters, such as diesel trucks?

3. **The proposed project sits on the mouth of the entrance into the badlands heading east on SR 60, a highway that is essentially a rural route at this point, and one that is treacherous for traffic. At what point does the added introduction of truck traffic become dangerous? The route on SR60 west is extremely congested and practically at a standstill, caused by the incompletion of recent freeway construction, growth, and lack of capacity. At what point does the introduction of further truck traffic become untenable?** SCR-3

4. **The local surface roads and overpasses servicing the area of the project are dilapidated and are residential in nature. Will roads be brought up to standards, and who will pay for the inevitable degradation of heavy wear trucks cause on roads, with the potential of harm to automobile motorists?** SCR-4

STEPHEN CREWS

Letter Dated December 6, 2010

Response SCR-1

The commentor expresses an opinion regarding the land use designations (and the conformation of the proposed Project with the intent of those designations) of the properties located south of the SR-60. These statements and opinions will be forwarded to the decision-makers for their consideration.

The commentor also expresses concern regarding the consideration of nearby residential uses. It is assumed that, in this instance, the commentor is referring to aesthetic consideration. Indeed, the Draft EIR contains a detailed analysis of the Project's aesthetic attributes and impacts within Section 4.9. Specifically, the analysis examined whether the Project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

As supported by the analysis, the Project would obstruct views of off-site scenic resources, and would therefore have a substantial adverse effect on a scenic vista. This is a significant and unavoidable impact. All other potential aesthetic impacts of the

Project were determined to be less-than-significant. The commentor is also referred to Figures 4.9-2 through 4.9-8 of the Draft EIR, which illustrate line of sight and view simulations of the Project.

Response SCR-2

The commentor expresses concern regarding the cumulative effects (air pollution) of the Project when combined with other vicinity projects. As identified at Draft EIR Table 5.1-1, and illustrated in Figure 5.1-1, a number of current or anticipated "related projects" were identified within the cumulative scope of the Westridge Commerce Center Project. In total, eleven (11) distinct related projects were included within the Draft EIR cumulative analysis.

In addition to the identified related projects, the cumulative impacts analysis assumed development of the area in a manner consistent with the City of Moreno Valley General Plan, and reflecting the anticipated growth of the region. The analysis of cumulative impacts considered potentially significant impacts that could be considered cumulatively considerable when viewed in the context of known related projects and generalized ambient growth of the City and region. The commentor is referred to Section 5.0, "Other CEQA Topics" of the Draft EIR.

Cumulatively significant air quality impacts are summarized at DEIR Page 1-18, 1-19 and are discussed at DEIR pages 5-12 through 5-14.

Should the Project be approved, the Lead Agency is required to adopt Findings of Fact and a Statement of Overriding Considerations acknowledging the Project's significant environmental impacts, and substantiating that the Project benefits outweigh the unavoidable adverse environmental effects, such that the adverse environmental effects may be considered acceptable.

Response SCR-3

The commentor characterizes location of the Project "on the mouth of the entrance into the badlands heading east on SR-60." Location of the Project and proximity of the badlands are noted in the Draft EIR:

> 3.2 PROJECT LOCATION AND BOUNDARIES
>
> The Project site is located in the eastern portion of the City of Moreno Valley, in western Riverside County. Please refer to Figure 3.2-1, "Regional Location." The Project will be developed within a 54.66-acre site, which is located near the SR-60/Redlands Boulevard interchange. The site is bounded by SR-60 to the north, Fir Avenue (future Eucalyptus Avenue) to the south, the Quincy Channel to the west, and vacant land designated for commercial use between the Project's east boundary and Redlands Boulevard, approximately 700 feet to the east. Please refer also to the Project site aerial, Figure 3.2-2, "Project Vicinity" (Draft EIR Page 3-1).
>
> General Plan Final EIR Figure 5.11-1, "Major Scenic Resources," reproduced in this Draft EIR as Figure 4.9-1, indicates the Project site is located along the SR-60 scenic corridor. The Badlands area, located approximately one mile to the north, and the Mount Russell foothills and associated rock outcroppings, located approximately two miles southerly of the site (Draft EIR Page 4.9-3).

The commentor offers that SR-60 "is essentially a rural route at this point, and one that is treacherous for traffic."

Existing and programmed SR-60 configurations proximate to the Project are accurately and appropriately described in the EIR:

Regional Access

State Route 60 (SR-60), adjacent to the Project site's northerly boundary, provides regional access to the subject property and vicinity. Connection to SR-60 is provided via Redlands Boulevard, located less than one-quarter mile east of the Project site. The Project has been designed to accommodate future interchange improvements planned by Caltrans at Redlands Boulevard and the SR-60, which would upgrade the existing rural configuration to a standard diamond interchange. These interchange improvements would be constructed by Caltrans, and are not a part of the proposed Project. As demonstrated in the analysis presented in this Section, with implementation of the improvements identified subsequently (and in the Project TIA, EIR Appendix B),the existing rural interchange at Redlands Boulevard and the SR-60 will accommodate existing and anticipated future traffic, including Project-related traffic, at Opening Year and beyond. The upgrade of this interchange is included as part of the regional Western Riverside County TUMF improvement program.

The commentor provides no supporting evidence indicating any substantive potential safety concerns along the segment of SR-60 proximate to the project site. Moreover, Caltrans, the Responsible Agency for actions and projects affecting SR-60, has not suggested or indicated any significant safety issues for this segment of highway (Draft EIR, Page 4.2-8).

In response to the commentor's concerns regarding traffic on westbound State Route 60, the Project's Traffic Impact Analysis (TIA, included as Draft EIR Appendix B) examined performance on the SR-60 as part of Appendix 7.8. The City of Moreno Valley requested that a basic freeway segment analysis be conducted between Box Springs Road/Fair Isle Drive and the I-215 Freeway along the SR-60 Freeway, and included in the TIA. As indicated in the Introduction to this Study (Page 7.8-3), "[i]t should be noted that this analysis was not requested due to potential impacts from the project itself, as these

impacts would be nominal, but rather to analyze the current and future projected operations within the segment based on freeway lane geometrics."

The study concludes that "[a]s vehicular traffic increases on the freeway mainline under each of the future analysis scenarios, the densities on each basic freeway segment are anticipated to increase and peak hour level of service operations are anticipated to progressively worsen." It is in part on this basis that the Draft EIR acknowledges significant cumulative traffic impacts affecting freeway segments in the Project area. As noted in the summary of mitigation on Draft EIR Page 1-51, "[u]nder Opening Year Cumulative Conditions and General Plan Buildout Conditions, cumulative LOS impacts of traffic generated by the project in combination with traffic generated by ambient growth and other development projects will result in potentially significant cumulative traffic impacts affecting SR-60 freeway segments within the Study Area." Because freeway mainline improvements such as widening are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency, no mitigation was identified that could be feasibly implemented. As such, the Draft EIR found that the Project would have a significant and unavoidable impact in regard to exceedance of LOS thresholds on certain study area freeway segments.

The commentor also provides opinions regarding traffic and safety along SR-60. These statements and opinions will be forwarded to the decision-makers for their consideration.

Response SCR-4

The commentor expresses concern regarding the nature and condition of vicinity roadways. Section 3.0, "Project Description" of the Draft EIR includes a complete list of roadway improvements to be implemented by the Project. Roadway improvements to be implemented by the Project prior to issuance of the first Certificate of Occupancy are summarized below:

- Fir Avenue (future Eucalyptus Avenue) will be constructed to its ultimate half-section width (one-half of 104-foot right-of-way section improvements pursuant to City Standard No. 104B) as an arterial roadway from the westerly Project boundary, extending to Redlands Boulevard to the east. Signalization and turn lane improvements will be provided at the intersection of Fir Avenue (future Eucalyptus Avenue) at Redlands Boulevard consistent with City standards and requirements. At the westerly terminus of Fir Avenue (future Eucalyptus Avenue), full cul-de-sac improvements will be provided to allow for vehicle turnaround.

- An auxiliary lane along the westerly side of Redlands Boulevard will be constructed between Fir Avenue (future Eucalyptus Avenue) and the SR-60 eastbound off-ramps.

- The proposed public street (Street "A") at the Project's easterly boundary will be constructed to its ultimate half-section width (one-half of 78-foot right-of-way section improvements pursuant to City Standard No. 106) as an industrial collector roadway from the proposed northern terminus of the road to Fir Avenue (future Eucalyptus Avenue) in conjunction with development. Full improvements will be provided at the cul-de-sac "bulb" to allow for vehicle turnaround.

All roadway improvements proposed by the Project will conform with City engineering standards thereby reducing future maintenance responsibilities for these improvements. The Project will contribute fees and tax revenues to the City that may be directed to the repair and maintenance of area roads.

More specifically, the Project will pay nearly $6 million in fees for local school, library, fire, and police facilities and local street improvements. Additionally, the Project will invest nearly $1 million in regional transportation improvements. Implementation will also produce nearly $1 million for regional water, sewer and flood control improvements.

FRIENDS OF THE NORTHERN SAN JACINTO VALLEY
P.O. Box 9097
Moreno Valley, CA 92552-9097
www.northfriends.org

6 December 2010

Via e-mail: Jeffreyb@moval.org

Mr. Jeff Bradshaw, Associate Planner
City of Moreno Valley
14177 Frederick Street/P.O. Box 88005
Moreno Valley, California 92552-0805

Dear Mr. Bradshaw:

Re: Westridge Commerce Center Draft Environmental Impact Report (DEIR)—State Clearing House Number 2009101008

The Friends of the Northern San Jacinto Valley are a local conservation group dedicated to preserving and protecting the Northern San Jacinto Valley, the San Jacinto Wildlife Area, and Mystic Lake. We are a 501(c)(3) organization. Since 1991, we have sponsored monthly nature walks at the wildlife area, reviewed and commented on numerous environmental documents, attended community events to share information about the wildlife area, and we have a long history of supporting public land acquisition at the San Jacinto Wildlife Area.

We have reviewed the Draft Environmental Impact Report (DEIR) for the proposed Westridge Commerce Center and are very discouraged by the poor quality of the environmental document. To a great extent, the Draft EIR presupposes that the Moreno Valley Planning Commission and City Council will adopt a statement of overriding consideration for a number of the identified project impacts. This erroneous presumption allows the preparer of the California Environmental Quality Act (CEQA) document, Applied Planning, Inc., to avoid necessary consideration of feasible mitigation measures and to avert meaningful consideration of project alternatives to reduce or avoid significant environmental impacts. The Draft EIR incorrectly asserts that the following significant project impacts are unavoidable and the City's only prerogative is to make CEQA findings of overriding consideration. FNSJ-1

Aesthetics - Loss of Scenic Vista: Perhaps the most spectacular scenic vista from within the City of Moreno Valley is the view of Mystic Lake with the San Jacinto Mountains in the background which motorists can see while traveling east on Highway 60. This project proposes to block this scenic vista with the side of a warehouse building and summarily omits from consideration potential mitigation measures and a project alternative (Alternative Site) FNSJ-2

capable of avoiding or minimizing this aesthetic impact. The project proponents have the ability to buy land anywhere for this warehouse which will not be built until the have a tenant and this makes feasible several mitigation opportunities to avoid or lessen the loss of a scenic vista this project will incur. The pad level of the warehouse buildings is proposed to be 25 feet below the grade of Highway 60. *A project design mitigation measure limiting the building height to 25 feet would preserve the present scenic vista from the highway.* In our view, other building design mitigation measures are feasible and can be incorporated into the project to avoid or minimize the loss of this scenic resource.

FNSJ-2 (cont'd)

Agriculture - Loss of Farmland of Local Importance: The Project will convert Farmland of Local Importance to nonagricultural uses and these losses will be cumulatively significant. The Draft EIR fails to consider mitigation for the loss of agricultural land this project will incur and merely dismisses mitigation measures included in the City's General Plan intended to stem the loss of agricultural land. Preservation can be a feasible means of reducing or eliminating the impact of agricultural land loss. The City's General Plan indicates agricultural lands subject to conversion can be mitigated through the purchase or transfer of development rights or the purchase of conservation easements. We believe the Loss of Agricultural lands of Local Importance must be thoroughly discussed and mitigated in the EIR.

FNSJ-3

Air Quality: The project will generate long-term operational project emissions during operation that will exceed the South Coast Air Quality District's regional thresholds for a number of pollutants detrimental to community health. A recent Press-Enterprise newspaper article (September 11, 2008) indicates most of the cancer risk from Southern California air pollution is from diesel exhaust. The article also notes the Inland area still has the region's worst fine-particle pollution, which is linked to early deaths, heart attacks and, in children, stunted lung development. Diesel soot is the most toxic major ingredient of fine particle pollution. The Inland region is also recognized as having the worst ozone pollution, which causes nausea, fatigue and headaches, and aggravates asthma and other respiratory conditions. The project Draft EIR makes no attempt to mitigate or avoid these long-term operational emissions and instead asks the City Council to make findings of overriding consideration for this air quality impact. The Draft EIR fails to even consider feasible mitigation measures to reduce community exposure to these harmful long-term project pollutants. A feasible mitigation measure worthy of consideration would be for the developer and future warehouse tenant to commit to operating the facility with trucks equipped only with the latest air pollution abatement technology including diesel soot filters. Since Highland Fairview Corporate Center/Skechers project has been able to have 80% of all off-road heavy-duty construction equipment utilized during construction activity *certified as* CARB Tier III or better, your project and analysis must do at least as well.

FNSJ-4

Climate Change and Greenhouse Gases: AB 32 requires that California's greenhouse gas emissions be reduced to 1990 levels by the year 2020. The Draft EIR indicates greenhouse gas emissions from the operation of the Westridge Commerce Center project will result in a significant and unavoidable impact to climate change because emissions will hinder or delay California's ability to meet the reduction targets contained in AB 32. The Draft EIR limits its consideration of emission reduction to on-site measures and will request the City Council make

FNSJ-5

findings of overriding consideration for the project failure to achieve the reduction targets in AB 32. This approach is incorrect in that the CEQA analysis also needs to consider offsite mitigation remedies such as emission trading regimes and/or carbon sequestration to offset the emissions this project will generate. Given the urgency of climate change solutions, the project proponent's reliance on a finding of overriding consideration is misplaced. FNSJ-5 (cont'd)

THE EIR MUST ADEQUATELY ANALYZE AND MITIGATE AIR QUALITY IMPACTS

The EIR fails to adequately analyze and mitigate the significant impacts to air quality resulting from the project. Californians experience the worst air quality in the nation, with annual health and economic impacts estimated in at 8,800 deaths (3,000–15,000 probable range) and $71 billion ($36–$136 billion) per year (Cayan 2006). Ozone and particulate matter (PM) are the pollutants of greatest concern (maximum levels are about double California's air quality standards) and the current control programs for motor vehicles and industrial sources cost about $10 billion per year. In light of these underlying conditions it is critical that the air quality analysis be rigorous. The EIR is required to properly analyze the Projects' direct, indirect, and cumulative contribution to deteriorating air quality. FNSJ-6

A. SIGNIFICANT AIR QUALITY HAZARDS IN RIVERSIDE COUNTY

Riverside County has the dubious distinction of being one of the most polluted areas in the country. (American Lung Association 2005; American Lung Association 2008). The Project will directly result in an increase in construction emissions and vehicle trips per day which will increase the level of a broad number of criteria pollutants under the Clean Air Act. The Project will result in significant impacts to air quality that result from significant levels of emissions of Volatile Organic Compounds (VOCs), Nitrogen Oxides (NOx), Carbon Monoxide (CO), and Particulate Matter of 10 microns and 2.5 microns or less (PM10 and PM2.5). Increased diesel exhaust is particularly detrimental to long term human and lung health.

Ozone (O_3) is the chief component of the common pollutant known as "smog." Ozone is formed when emissions including reactive organic gases (ROG) and oxides of nitrogen (NOx) undergo photochemical reactions in sunlight and are transformed to O_3. Ozone irritates lung airways and causes inflammation much like a sunburn. Ozone causes wheezing, coughing, pain when taking a deep breath, and breathing difficulties during outdoor activities. The American Lung Association focuses on ozone as one of the most hazardous of the common air pollutants. (American Lung Association 2008). Repeated exposure to ozone pollution for several months may cause permanent lung damage. Children, the elderly, and those with respiratory problems are most at risk, but anyone who spends time outdoors may be affected. Even at very low levels, ozone triggers a variety of health problems including aggravated asthma, reduced lung capacity, and increased susceptibility to pneumonia and bronchitis. Ozone also interferes with the ability of plants to produce and store food, which makes them more susceptible to disease, insects, and weather, and damages the leaves of trees and plants, ruining the appearance of cities, national FNSJ-7

parks, and recreation areas. Ozone also reduces crop yields, and is, in fact, responsible for 98% of air quality related crop damage in California. A revised EIR must discuss the proposed project's production of ozone precursor emissions and the direct, indirect, and cumulative impact both on human health and on vegetation and wildlife habitat, especially habitat for threatened, endangered, and sensitive species.

Particulate matter (PM) is a category of pollutant which includes the respirable particles suspended in the the air. PM is classified into "coarse" particles, PM_{10}, or those under 10 microns in diameter, and "fine" particles, $PM_{2.5}$, or those under 2.5 microns in diameter, and comes from a variety of sources including diesel exhaust, windblown dust from agriculture and construction and motor vehicles. Because the human respiratory system's ability to filter out harmful particles decreases as particles size decreases, the smallest particles lodge deepest in the lungs and are especially dangerous. PM can contain at least 40 toxic chemicals including heavy metals, nitrates, sulfates, and aerosols, as well as soot, soil, and dust. FNSJ-7 (cont'd)

PM is associated with extreme health consequences. PM causes premature death, aggravates asthma, increases coughing, painful breathing, and chronic bronchitis, and decreases lung function. Lung inflammation caused by inhaling PM can also lead to changes in heart rhythm, constriction of blood vessels, blood coagulation, and increased risk of heart attacks. Unlike what is believed about some other air pollutants, there is no "safe" level of PM pollution: even very low levels of PM lead to health impacts. (EWG 2002 at 25). One study found that in Riverside County alone, 353 deaths per year are due to current PM10 levels, and 42,149 asthma attacks per year are due to current PM10 levels. (EWG 2002 at 19). The EIR's failure to address basic information on the link between air quality, health impacts, and impacts to biological resources render it inadequate. This and other information must be analyzed in a revised EIR so that the project's air quality impacts can be analyzed in the full environmental context.

B. THE EIR FAILS TO ADEQUATELY DESCRIBE THE PROJECT AND ENVIRONMENTAL SETTING

The EIR must provide a stable and accurate project description in order to properly inform decision makers and the public, as well as provide a proper basis for analysis of impacts and mitigation to address those impacts. Here the EIR fails to fully disclose and analyze the air quality impacts from diesel emissions. One of the project objectives is to "transition the existing site into a productive use" provided by over 900,000 square feet of industrial warehouse/distribution. (DEIR at 3-4). Presumably much of the transportation and traffic associated with industrial warehouse and distribution facilities will be diesel truck traffic, which poses a much greater threat to human health due to the carcinogenic effects of diesel exhaust and fine particulates associated with diesel emissions. However, the EIR fails to describe what types of vehicles will be accessing the facility, in what volumes, at what frequency, and during what times. The EIR must fully disclose the types of vehicles that will be associated with the Project because those different vehicles pose very different threats and must be analyzed and mitigated in different fashions. FNSJ-8

The EIR also fails to adequately describe the environmental baseline of the area affected and regional setting in order to properly inform the CEQA process. CEQA Guidelines § 15125(a) &(c). The EIR also fails to adequately describe the environmental baseline of the area affected and regional setting in order to properly inform the CEQA process. CEQA Guidelines § 15125(a) &(c). The Project is located across Fir Street from land that is zoned residential. The diesel trucks will enter and exit the project by using Fir and therefore will significantly impact future residents. Setting the building 250 feet back from these residential uses does not protect them from each and every diesel truck that enters and exit the Project. The direct, indirect and growth inducing impacts of this project have not been thoroughly analyzed – especially for the future residents immediately south of the project. The 2,000,000 sq. foot Highland Fairview Corporate Center/Skechers project and also the proposed 2,000,000 square foot ProLogis are on either side of this project and will also probably use Fir Street. The California Air Resources Board and others confirm that living close to high traffic and the associated emissions may lead to adverse health effects beyond those associated with regional air pollution in urban areas. (CARB 2005). Specifically, these studies found reduced lung function and increased asthma in children within 1,000 feet of heavy traffic. Id. In addition to the respiratory health effects, proximity to freeways increases potential cancer risk. Id.

FNSJ-8 (cont'd)

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. The South Coast Air Quality Management District ("SCAQMD") includes in its list of sensitive receptors, residences, schools, playgrounds, childcare centers, convalescent homes, retirement homes, rehabilitation centers, and athletic facilities. Sensitive population groups include children, the elderly, and the acutely and chronically ill, especially those with cardiorespiratory diseases. Residential areas are also considered to be sensitive to air pollution because residents tend to be home for extended periods of time, resulting in sustained exposure to any pollutant present. The Project fails to adequately identify the number and their distance from the 240 daily (24-7) moving diesel trucks related to this project as well as that of ProLogis and Highland Fairview Corporate Center/Skechers.

C. THE EIR FAILS TO ADEQUATELY EXAMINE THE PROJECT'S HEALTH RISKS

The EIR air quality analysis fails to adequately address the Project's effect on the community's health. Although the DEIR acknowledges that proximity to roads is related to adverse health outcomes, including respiratory problems, the document fails to conduct this critical study of demonstrating what the qualitative or quantitative risk is associated to nearby residents as result of the Project. The Project can lead to increased rates of asthma, decreased, lung or cardiac function, and other threats, but there is no analysis of what that means for the regional residents or visitors. As with other important impact analyses it appears that the EIR authors use their failure to gather data as an excuse for their inability to document the Project's impacts. Such an approach violates the fundamental tenets of CEQA. Without this information, it is all but impossible to accurately and effectively gauge the severity and extent of the health', effects that would result from building the proposed Project. Again, the agencies have a duty to "painstakingly ferret out" the Project's impacts. *Envt'l Planning and Information Council of W.*

FNSJ-9

El Dorado County v. County of El Dorado (1982) 131 Cal. App. 3d 350,357. It is critically important that the EIR emphasize the cumulative impacts of negative air quality and not simply dismiss those issues without thorough analysis and mitigation. FNSJ-9 (cont'd)

D. THE EIR FAILS TO ADEQUATELY ANALYZE AND IMPOSE MITIGATION MEASURES FOR SIGNIFICANT IMPACTS TO AIR QUALITY

In an attempt to subvert the procedural requirements of CEQA the EIR fails to adopt feasible mitigation measures that would have substantially lessened significant environmental impacts resulting from the Project. To effectuate its overarching purpose of reducing environmental harm, CEQA requires that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen" a Project's significant environmental effects. Pub. Res. Code § 21002; Guidelines 15021. CEQA's substantive mandate is clear, "each public agency shall mitigate or avoid the significant effects on the environment of projects that it caries out or approves whenever it is feasible to do so." Pub. Res. Code § 21002.1(b) (emphasis added).. Mitigation of a project's significant impacts is one of the "most important" functions of CEQA. *Sierra Club v. Gilroy City Counci*l, 222 Cal.App.3d 30, 41 (1990). FNSJ-10

There are numerous mitigation measures that could be adopted to reduce the significant air quality impacts associated with this project. Many of the mitigation measures outlined to reduce the significant impacts associated with greenhouse gas emissions can reduce criteria pollutants. Therefore the EIR should fully analyze all greenhouse gas and criteria pollutant mitigation measures in order to reduce the significant impacts to air quality, or describe why those mitigation measures are infeasible.

I. THE EIR MUST ADEQUATELY ADDRESS THE IMPACTS OF GLOBAL WARMING AND CLIMATE CHANGE

The Draft EIR must thoroughly evaluate alternatives and mitigation measures that would reduce the Project's greenhouse gas emissions. Curbing greenhouse gas emissions to limit the effects of climate change is one of the most urgent challenges of our time. Fortunately, the California Environmental Quality Act ("CEQA"), Cal. Pub. Res. Code §§ 21000 et seq., 14 Cal. Code Regs. § 15000 et seq. ("Guidelines"), set forth a clear and mandatory process to address the Project's greenhouse gas and global warming impacts. This letter sets forth how this analysis should be completed. FNSJ-11

A. THE EIR MUST ADDRESS THE IMPACT GLOBAL WARMING WILL HAVE ON THE PROJECT

Unfortunately, the EIR fails to address the impacts of global warming on the Project contrary to the requirements under CEQA. California's temperatures are expected to rise "dramatically" over the course of this century (Cayan 2007). These factors will impact the planned project, as well as exacerbate its own environmental impacts. Global warming will affect California's climate, resulting in such impacts as increased temperatures and wildfires, and FNSJ-12

a reduction in snowpack and precipitation levels and water availability. These factors will impact development under any Moreno Valley General Plan Update, as well as exacerbate its own environmental impacts. Therefore, these factors must be considered in the EIR. *See* Guidelines § 15126.2(a) (an EIR "shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected.") The EIR must use its best efforts to find out and disclose all it reasonably can about the impacts of climate change on the environment and—most importantly—use that information to form an educated opinion about how to plan and adapt for the impacts of climate change. (California Attorney General 2009). Examples of how global warming will impact development under the Moreno Valley General Plan and intensify the environmental impacts it will already have are discussed below. It is not an exhaustive list.

The rise in temperatures resulting from global warming will create a more conducive environment for air pollution formation (Cayan 2007). This will intensify the adverse effects the proposed project will already have on air quality in the project area and threaten residents' health (Cayan 2007).

Significantly for the state, as well as the project area, is global warming's impact on water supply. The IPCC specifically identified the American West as vulnerable, warning, "Projected warming in the western mountains by the mid-21st century is very likely to cause large decreases in snowpack, earlier snow melt, more winter rain events, increased peak winter flows and flooding, and reduced summer flows" (IPCC 2007b). Recently, researches found that an increase in atmospheric greenhouse gases has contributed to a "coming crisis in water supply for the western United States" (Barnett 2008). Using several climate models and comparing the results, the researches found that "warmer temperatures accompany" decreases in snow pack and precipitation and the timing of runoff, impacting river flow and water levels (Barnett 2008). These researchers concluded with high confidence that up to 60 percent of the "climate related trends of river flow, winter air temperature and snow pack between 1950-1999" are human-induced (Barnett 2008). This, the researchers wrote, is "not good news for those living in the western United States" (Barnett 2008).

FNSJ-12 (cont'd)

The California Center on Climate Change has also recognized the problem global warming presents to the state's water supply and predicts that if greenhouse gas emissions continue under the business-as-usual scenario, this snowpack could decline up to 70-90 percent, affecting winter recreation, water supply and natural ecosystems (Cayan 2007). Global warming will affect snowpack and precipitation levels, and California will face significant impacts, as its ecosystems depend upon relatively constant precipitation levels and water resources are already under strain (Cayan 2007). The decrease in snowpack in the Sierra Nevada will lead to a decrease in California's already "over-stretched" water supplies (Cayan 2007). It could also potentially reduce hydropower and lead to the loss of winter recreation (Cayan 2007). All of this means "major changes" in water management and allocation will have to be made (Cayan 2007). Thus, global warming may directly affect the City's ability to supply clean, affordable water to the residents, or force the City to change how it will utilize water, and it may also impact other activities outside the project area, such as agriculture.

Scientists indicate that climate change will also exacerbate the problem of flooding by increasing the frequency and magnitude of large storms, which in turn will cause an increase in the size and frequency of flood events (NRDC 2007). The increasing cost of flood damages and potential loss of life will put more pressure on water managers to provide greater flood protection (NRDC 2007). At the same time, changing climate conditions (decreased snowpack, earlier runoff, larger peak events, etc.) will make predicting and maximizing water supply more difficult (NRDC 2007). These changes in hazard risk and water supply availability must be considered during environmental review.

Water quality, in addition to water quantity and timing, will also be impacted. Changes in precipitation, flow, and temperature associated with climate change will likely exacerbate water quality problems (NRDC 2007). Changes in precipitation affect water quantity, flow rates, and flow timing (Gleick 2000). Shifting weather patterns are also jeopardizing water quality and quantity in many countries, where groundwater systems are overdrawn (Epstein 2005). Decreased flows can exacerbate the effect of temperature increases, raise the concentration of pollutants, increase residence time of pollutants, and heighten salinity levels in arid regions (Schindler 1997). FNSJ-12 (cont'd)

These are only examples of how global warming will impact the proposed project and intensify the environmental impacts the project will already have. It is not an exhaustive list. Thus, when assessing the impact of the Project on air quality, water supply, flood hazards, and biological resources, the EIR must take into account global warming. To ignore the impact of global warming on the Project and the resources impacted by the Project significantly understates the Project's impacts.

B. The EIR's Significance Determination is Flawed

i. The EIR Fails to Properly Frame the Question of the Significance of the Project's Greenhouse Gas Impacts

As the EIR properly recognizes, the greenhouse gas emissions generated by the Project constitute a significant impact. (DEIR at 4.3-110). However, the DEIR improperly limits the consideration of its determination of significance to whether the project would significantly hinder or delay California's ability to meet reduction targets contained in AB 32. While the emission reduction targets set by AB 32 are important, they are only a first interim step toward a longer emission reduction pathway necessary to avoiding dangerous anthropogenic interference (DAI) with the climate system. While Project impacts remain significant, the significance criteria should be revised to recognize California's long term emission targets set by Executive Order S-3-05 and consider the extent to which these reductions are consistent with the emission reduction pathway necessary to avoid DAI. FNSJ-13

The relevant environmental objective with regard to a project's impact on global warming is stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference ("DAI") with the climate system. Framing the objective of a threshold of significance in the context of preventing DAI with the climate system

is consistent with the policy of CEQA. As set forth in Public Resources Code Section 21000(d), "The capacity of the environment is limited, and it is the intent of the Legislature that the government of the state take immediate steps to identify any critical thresholds for the health and safety of the people of the state and take all coordinated actions necessary to prevent such thresholds being reached." With regard to climate change, the prevention of DAI is the critical threshold to protect the health and safety of the people of California. The prevention of DAI with the climate is also the objective adopted by the international community. As set forth in the United Nations Framework Convention on Climate Change, to which the United States is a party: "The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."[1]

Dangerous anthropogenic interference with the climate system is a defined concept from which a threshold of significance under CEQA can be derived. While environmental impacts from global warming are already being experienced, dangerous anthropogenic interference has typically been defined at temperature increases above 2°C from pre-industrial levels, or a 450 ppm atmospheric concentration of CO_2 eq. (Union of Concerned Scientists 2007). 2050 is the time frame commonly set by scientists in which to achieve the emission reductions necessary for climate stabilization. The emission reduction scenario set by AB 32 and Executive Order S-3-05, whereby emissions are reduced to 1990 levels by 2020 and then to 80% below 1990 levels by 2050, is consistent with a stabilization scenario in the +/- 450 ppm range.[2] FNSJ-13 (cont'd)

However, climate scientists, including NASA's premier climatologist, James Hansen, are increasingly calling for more stringent stabilization targets in order to sufficiently reduce the risk of catastrophic outcomes. The best available scientific evidence now indicates that a 2°C temperature increase from pre-industrial levels is well past the point where severe and irreversible impacts will occur. It is now estimated that a mean global temperature increase of 1.5°C above pre-industrial levels has the potential to trigger irreversible melting of the Greenland ice sheet, a process that would result in an eventual 7m sea level rise over and above that caused by thermal expansion of the oceans, and potentially causing an additional sea level rise of 0.75m as soon as 2100. (Warren 2006 at 95). Specific consequences of a 2°C temperature rise from pre-industrial levels include the loss of 97% of the world's coral reefs and the transformation of 16% of global ecosystems. Approximately one to three billion people would experience an increase in water stress, sea level rise and cyclones would displace millions from the world's coastlines and agricultural yields would fall in the developed world. (Warren 2006). In the Arctic, ecosystem disruption is predicted owing to complete loss of summer sea ice, with only 42% of the tundra remaining stable. This would destroy the Inuit hunting culture and cause the extinction of the polar bear and large losses in global populations of birds. Moreover, because

1 United Nations Framework Convention on Climate Change (UNFCCC), art. 2, May 9, 1992, *available at* http://unfccc.int/essential_background/convention/background/items/1349.php.

2 While the emission reduction targets embodied in AB 32 and Executive Order S-3-05 can inform a determination of significance thresholds, this is because they reflect scientific data on needed emissions reductions. Under CEQA, regulatory standards can serve as proxies for significance only to the extent that they accurately reflect the level at which an impact can be said to be less than significant. *See, e.g., Protect the Historic Amador Waterways v. Amador Water Agency*, 116 Cal. App. 4th 1099, 1109 (2004).

Arctic ice functions to reflect heat back into the atmosphere, its loss would allow more sunlight to heat the Arctic Ocean and further accelerate the buildup heat and the melting of the Greenland ice sheet. In the Antarctic, key marine mollusks are predicted to become extinct with damaging ramifications for the rest of the Antarctic marine ecosystem. (Warren 2006). As the devastating and irreversible impacts resulting from a 2°C mean global temperature rise are far in excess of any reasonable definition of "dangerous" interference with the climate, a 2°C target is not an acceptable objective for climate policy.

Moreover, equating a particular atmospheric concentration of greenhouse gases with a specific temperature increase involves a significant degree of uncertainty. This is because climate sensitivity – the extent to which temperatures will rise as a result of increasing concentrations of heat-trapping gases – depends on Earth's response to certain physical processes that are not fully understood. (Cayan 2007 at 4). For example, as greenhouse gas emissions cause temperatures to rise, the atmosphere can hold more water vapor, which traps heat and raises temperatures further – a positive feedback. Clouds created by this water vapor could absorb and re-radiate outgoing infrared radiation from Earth's surface (another positive feedback) or reflect more incoming shortwave radiation from the sun before it reaches Earth's surface (a negative feedback). (Cayan 2007). Thus, due to uncertainty in climate sensitivity, scientists estimate that the mean probability of exceeding 2°C where stabilizing greenhouse gases at a CO_2eq level of 450 ppm is 54% with a 30% probability that global average temperature would rise more than 3°C. (Cayan 2007; Union of Concerned Scientists 2007). This is effectively the equivalent of flipping a coin in the hopes that our children and grandchildren will not be confronted with the displacement of millions of people due to sea level rise, irreversible loss of entire ecosystems, and the triggering of multiple climatic "tipping points" wherein climate change begins to feed on itself and spin rapidly out of control.

FNSJ-13 (cont'd)

As noted by the Attorney General in a recent guidance on the treatment of climate change in general plans, "the targets set by AB 32 and Executive Order S-3-05 can inform the CEQA analysis." (California Attorney General 2009 at 4). However, while the emission reduction targets embodied in AB 32 and Executive Order S-3-05 can inform a determination of significance thresholds, this is because they reflect scientific data on needed emissions reductions. *See* Guidelines § 15064(b) ("[t]he determination of whether a project may have a significant effect on the environment calls for careful judgment … based to the extent possible on scientific and factual data."). Under CEQA, regulatory standards can serve as proxies for significance only to the extent that they accurately reflect the level at which an impact can be said to be less than significant. *See, e.g., Protect the Historic Amador Waterways v. Amador Water Agency*, 116 Cal. App. 4th 1099, 1109 (2004). Thus, to properly address the question of the significance of Project impacts, the EIR should set forth the environmental objective of stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent DAI with the climate system, discuss California's emission reduction targets and the extent to which these targets are sufficient to meet avoid DAI. In this manner, the EIR will set forth the issues related to the significance of Project impacts in a manner that accurately informs decision makers and the public.

ii. To Properly Evaluate Significance and Fulfill Its Informational Mandate, the EIR Must Compare Project Emissions with Emission Reduction Targets Set by AB 32 and Executive Order S-3-05

Although the EIR asserts that the Project would interfere with the goals of AB 32, the EIR fails to provide any data on Project emissions as compared with 1990 levels. Accordingly, it is impossible to analyze the extent to which the Project exceeds AB 32 emission reduction mandates. The EIR must be revised to provide this data.

Moreover, in a failure to adequately describe the Project, the EIR fails to note the year for which the Project envisions build-out. Should the next Moreno Valley General Plan update contemplate growth past 2020, its significance analysis should evaluate the extent to which the Project complies with Executive Order targets. While the trajectory of reductions under Executive Order S-3-05 has not been definitely established, the EIR should make an appropriate assumption, such as a linear decrease to 2050 to determine significance criteria for the undisclosed year of build-out. Thus, if Moreno Valley's General Plan is intended to accommodate growth until 2030, then the EIR could compare Project emissions with emissions approximately 27% below 1990 levels.

FNSJ-14

C. THE EIR MUST ANALYZE AND ADOPT ALL FEASIBLE MITIGATION MEASURES TO REDUCE THE PROJECT'S GREENHOUSE GAS EMISSIONS

In addition to thoroughly evaluating project alternatives, because it is clear that the project's greenhouse gas emissions will cumulatively contribute to global warming, "the EIR must propose and describe mitigation measures that will minimize the significant environmental effects that the EIR has identified." *Napa Citizens for Honest Gov't v. Napa County Bd. of Supervisors*, 91 Cal.App.4th 342, 360 (2001). CEQA requires that agencies "mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so." Pub. Res. Code § 21002.1(b). Mitigation of a project's significant impacts is one of the "most important" functions of CEQA. *Sierra Club v. Gilroy City Council*, 222 Cal.App.3d 30, 41 (1990). Therefore, it is the "policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures which will avoid or substantially lessen the significant environmental effects of such projects." Pub. Res. Code § 21002. Importantly, mitigation measures must be "fully enforceable through permit conditions, agreements, or other measures" so "that feasible mitigation measures will actually be implemented as a condition of development." *Federation of Hillside & Canyon Ass'ns v. City of Los Angeles*, 83 Cal.App.4th 1252, 1261 (2000).

FNSJ-15

There are any number of feasible measures that can be incorporated into a Climate Action Plan to reduce vehicle miles traveled, energy use, waste, water consumption and other sources of emissions. The California Air Pollution Control Officer's Association (CAPCOA) White Paper on CEQA and Climate Change identifies existing and potential mitigation measures that could be applied to projects during the CEQA process to reduce a project's GHG emissions. (CAPCOA 2008 at Appendix B). The California Office of the Attorney General also has developed a list of reduction mechanisms to be incorporated through the CEQA process. (California Office of the

Attorney General 2008b). These resources provide a rich and varied array of mitigation measures to be incorporated in both the programmatic and project level. Furthermore, substantial federal funding is available to implement these projects so that implementation of greenhouse gas mitigation measures is economically feasible.3 Because CEQA requires the adoption of all feasible mitigation measures to reduce significant impacts like climate change the Project must adopt all feasible mitigation measures to reduce GHGs or provide substantial evidence as to why the mitigation measures are infeasible. Pub. Res. Code § 21081(a)(3). FNSJ-15 (cont'd)

i. Land Use Measures Reducing Traffic Flow

The development plan for the proposed project should incorporate public transit into the project design and should attempt to facilitate the use of public transit. (California Office of the Attorney General 2008). Significant effort needs to be shown as to how carpooling will be instituted and alternative fueled cars will be encouraged with special onsite parking location/electrical plug-ins. Will there be on-site eating facilities with food in order to limit driving off site? FNSJ-16

ii. Land Use and Energy

The EIR should consider mitigation measures that will ensure the Project will use energy efficiently and conservatively. In doing so, it should analyze incorporating "green building" in the development. Green buildings are those buildings that lower energy consumption, use renewable energy, conserve water, harness natural light and ventilation, use environmentally friendly materials and minimize waste (Commission for Environmental Cooperation 2008).

Buildings create environmental impacts throughout their lifecycle, from the construction phase to their actual use to their eventual destruction (Commission for Environmental Cooperation 2008). In the United States, buildings account for 40 percent of total energy use, 68 percent of total electricity consumption, and 60 percent of total non-industrial waste (Commission for Environmental Cooperation 2008). Buildings also significantly contribute to the release of greenhouse gases. In the U.S. they account for 38 percent of total carbon dioxide emissions (Commission for Environmental Cooperation 2008). More specifically, residential buildings cause up to 1,210 megatons of carbon dioxide, while commercial building create approximately 1,020 megatons (Commission for Environmental Cooperation 2008). This is because buildings require a lot of energy for their day to day operations. Most of the coal-fired power plants – one of the biggest sources of greenhouse gas emissions – slated for development in the United States will supply buildings with the energy they need. In fact, 76 percent of the energy these plants produce will go to operating buildings in the U.S. (Commission for Environmental Cooperation 2008). FNSJ-17

3 Energy Efficiency and Conservation Block Grants are offered by the U.S. Department of Energy to municipalities in order to meet the following purposes: reduce fossil fuel emissions in a manner that is environmentally sustainable and, to the maximum extent practicable, maximizes benefits for local and regional communities; reduce the total energy use of the eligible entities; and improve energy efficiency in the building sector, the transportation sector, and other appropriate sectors. (US DOE 2009). See http://www.eecbg.energy.gov/

Using green building techniques, however, can substantially reduce buildings' influence in increasing greenhouse gas emissions. Green buildings help reduce the amount of energy used to light, heat, cool and operate buildings and substitute carbon-based energy sources with alternatives that do not result in greenhouse gas emissions (Commission for Environmental Cooperation 2008). Currently green buildings can reduce energy by 30 percent or more and carbon emissions by 35 percent. (Commission for Environmental Cooperation 2008). The technologies available for green building are already in wide-use and include "passive solar design, high-efficiency lighting and appliances, highly efficient ventilation and cooling systems, solar water heaters, insulation materials and techniques, high-reflectivity building materials and multiple glazing (IPCC 2007c). Additionally, the U.S. Green Building Council (USGBC), a private, nonprofit corporation, has established a nationwide green building rating system, called Leadership in Energy and Environmental Design ("LEED"). The LEED standard supports and certifies successful green building design, construction and operations. It is one of the most widely used and recognized systems, and to obtain LEED certification from the USGBC, project architects must verify in writing that design elements meet established LEED goals. We expect the project's minimum LEED certification to be Silver. And the EIR needs to explain why this would not be your goal.

FNSJ-17 (cont'd)

Specific mitigation for the greenhouse gas emissions generated by the Project's energy consumption include, but are not limited to:

- Analyzing and incorporating the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) or comparable standards for energy- and resource-efficient building during pre-design, design, construction, operations and management.
- Designing buildings for passive heating and cooling, and natural light, including building orientation, proper orientation and placement of windows, overhangs, skylights, etc.;
- Designing buildings for maximum energy efficiency including the maximum possible insulation, use of compact florescent or other low-energy lighting, use of energy efficient appliances, etc.
- Reducing the use of pavement and impermeable surfaces;
- Requiring water re-use systems;
- Installing light emitting diodes (LEDs) for traffic, street and other outdoor lighting
- Limiting the hours of operation of outdoor lighting
- Maximizing water conservation measures in buildings and landscaping, using drought-tolerant plants in lieu of turf, planting shade trees;
- Ensure that the Project is fully served by full recycling and composting services;
- Ensure that the Project's wastewater and solid waste will be treated in facilities where greenhouse gas emissions are minimized and captured.
- Installing the maximum possible photovoltaic array on the building roofs and/or on the project site to generate all of the electricity required by the Project, and utilizing wind energy to the extent necessary and feasible;
- Installing solar water heating systems to generate all of the Project's hot water requirements;
- Installing solar or wind powered electric vehicle and plug-in hybrid vehicle charging

FNSJ-18

stations to reduce emissions from vehicle trips.

FNSJ-18 (cont'd)

iii. Mitigation Related to Project Construction

- Utilize recycled, low-carbon, and otherwise climate-friendly building materials such as salvaged and recycled-content materials for building, hard surfaces, and non-plant landscaping materials;
- Minimize, reuse, and recycle construction-related waste;
- Minimize grading, earth-moving, and other energy-intensive construction practices;
- Landscape to preserve natural vegetation and maintain watershed integrity;
- Utilize alternative fuels in construction equipment and require construction equipment to utilize the best available technology to reduce emissions.

FNSJ-19

iv. Transportation Mitigation Measures

- Encourage and promote ride sharing programs through such methods as a specific percentage of parking spaces for ride sharing vehicles;
- Create a car sharing program within the planned community;
- Create a light vehicle network, such as a neighborhood electric vehicle (NEV) system;
- Provide necessary facilities and infrastructure to encourage residents to use low or zero-emission vehicles, for example, by developing electric vehicle charging facilities and conveniently located alternative fueling stations;
- Provide a shuttle service to public transit within and beyond the planned community;
- Incorporate bicycle lanes and routes into the planned community's street systems.

FNSJ-20

v. Carbon Offsets

After all measures have been implemented to reduce emissions in the first instance, remaining emissions that cannot be eliminated may be mitigated through offsets. Preference should be given to offset mitigation measures in that are in close proximity to the project. (SCAQMD 2008). In other words project applicants should prioritize first on mitigation onsite, then on mitigation in the neighborhood or air district, next in state, then finally out of state. (SQAQMD 2008). Care should be taken to ensure that offsets purchased are real (additional), permanent, and verified, and all aspects of the offsets should be discussed in the EIR. As demonstrated by the Office of the Attorney General and SCAQMD offsets are a feasible CEQA mitigation measures[4] once all feasible mitigation measures have been adopted to reduce the Project's carbon footprint and produce energy using renewable sources. (SCAQMD 2008).

FNSJ-21

4 The California Attorney General's Office has adopted CEQA settlements calling for the auditing, reduction, and offsetting of greenhouse gas emissions related with a Project demonstrating that offsets are a feasible way to reduce a Project's negative environmental effects on global warming. See http://ag.ca.gov/newsalerts/release.php?id=1466&category=global%20warming See generally http://ag.ca.gov/globalwarming/ceqa.php

II. THE EIR MUST CONSIDER A REASONABLE RANGE OF ALTERNATIVES

The EIR failed to consider a meaningful analysis of reasonable alternatives to the Project in order to lessen or avoid the Project's significant impacts. CEQA mandates that significant environmental damage be avoided or substantially lessened where feasible. Pub. Res. Code § 21002; Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d). A rigorous analysis of reasonable alternatives to the project must be provided to comply with this strict mandate. "Without meaningful analysis of alternatives in the EIR, neither courts nor the public can fulfill their proper roles in the CEQA process." *Laurel Heights Improvement Ass'n v. Regents of University of California*, 47 Cal.3d 376, 404 (1988). Moreover, "[a] potential alternative should not be excluded from consideration merely because it 'would impede to some degree the attainment of the project objectives, or would be more costly" even when that alternative includes Project development on an alternative site. *Save Round Valley Alliance v. County of Inyo*, 157 Cal. App. 4th 1437, 1456-57 (2007) (quotations omitted).

In analyzing the no-project alternative, the EIR must discuss the need for this project and whether the uses that would potentially utilize the Project can be accommodated in existing areas. As CAPCOA states in its white paper, one way local governments can avoid significant increases in greenhouse gas emissions and help solve the problem of global warming is to "facilitate more efficient and economic use of the lands" already developed within the community (CAPCOA 2008). Reinvesting in existing communities is "appreciably" more efficient than new development and may even result in a net reduction of greenhouse gases (CAPCOA 2008). The EIR should consider an alternative that relies more on higher-density mixed commercial/residential development projects on existing disturbed lands in order to support the reduction of vehicle trips, promote alternatives to individual vehicle travel, and encourage efficient delivery of services and goods (Office of the California Attorney General 2008). The Westridge Commerce Center does not have a tenant and the Project proponent does not plan to build the Project until they do. They already have at least one warehouse that sits empty. FNSJ-22

An analysis of alternatives should also quantify the estimated greenhouse gas emissions, quantified impacts to biological resources, water resources including water quality and water availability, and traffic resulting from each proposed alternative.

Biological Resources: To a great extent the Draft EIR avoids an actual on the ground biological resource impact assessment. Instead the Draft EIR makes the claim that the cumulative wildlife resource impacts of this project will be mitigated by the payment of the Stephens' Kangaroo Rat Habitat Conservation Plan (SKRHCP) mitigation fee and the Multi-Species Habitat Conservation Plan (MSHCP) mitigation fee. It is important to recognize neither the SKRHCP nor the MSHCP exempts this project from full compliance with the requirements of CEQA. The Draft EIR does not indicate the amount of the SKRHCP mitigation fee or the amount of the MSHCP mitigation fee the project proponent will pay in order to reduce the cumulative wildlife resource impacts of this project to a less than significant level. Nor does the document indicate the mitigation fee amounts the City has collected thus far for SKRHCP and MSHCP wildlife mitigation and to FNSJ-23

what extent those fees have been used to mitigate cumulative wildlife resource impacts from previously approved projects within the jurisdiction. A lead agency, in this case the City of Moreno Valley, must provide supporting facts and provide analysis to support its conclusion that the payment of SKRHCP and MSHCP mitigation fees will render the project cumulative wildlife resource impacts to less than significant. Absent this analysis, the cumulative wildlife resource impacts this project will incur must be viewed as cumulatively considerable.

FNSJ-23 (cont'd)

Thank you for the opportunity to comment on the Draft EIR for this project. The Friends would like to be informed of all documents, meetings and public hearings related to this project. Please provide us with a copy of the final EIR and other pertinent documents related to this project. Please contact us at our mailing address which is listed on the first page of this letter.

FNSJ-24

Sincerely

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FNSJ-25 (cont'd)

FRIENDS OF NORTHERN SAN JACINTO VALLEY

Letter Dated December 6, 2010

Response FNSJ-1

The commentor's opinions in regard to the "quality of the environmental document" will be forwarded to decision-makers for their consideration. The Draft EIR has been prepared to identify the environmental impacts that could result from Project implementation and, where feasible, provides mitigation measures to substantially lessen or avoid the significant effects on the environment. The City of Moreno Valley, the Lead Agency for this Project, is required to consider the Project in its entirety before determining whether to approve the adoption of overriding considerations. As noted in *CEQA Guidelines* § 15093:

(a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposal project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."

(b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

(c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.

The commentor concludes by correctly noting the Draft EIR's finding that the Westridge Commerce Center Project will result in certain significant and unavoidable impacts in regard to scenic vistas and air quality, but erroneously includes agriculture and global climate change in its summary of Project-related impacts. Specific topical concerns are addressed in the following Responses FNSJ-2 through FNSJ-5.

Response FNSJ-2

As discussed in the Draft EIR (Page 4.9-11), "[n]otwithstanding the proposed depressed building pad area, as illustrated in Figures 4.9-4 through 4.9-8, the Project will nonetheless interrupt the expansive views of open space and mountains from SR-60, Redlands Boulevard, Fir (future Eucalyptus) Avenue, and other areas surrounding the Project site. The building will be visible from higher elevations to the north, east, and south, and the rooftop of the building may be visible at a distance from higher elevations." This "interruption" of scenic views has been identified in the Draft EIR (Page 4.9-19 *et al.*) as an individually and cumulatively significant Project impact.

As further noted on Draft EIR Page 4.9-11, "[t]he Project's intent is to create a regional-serving warehouse/logistics facility. In order to minimize the viewshed impacts of the Project, the building height or overall scale would need to be substantially reduced. Reducing the height of the building is considered infeasible, since the facility's height is largely dictated by the logistics use, and the need to provide standard "dock-high" bays for the loading and unloading of trucks." A tenable high-cube warehouse design with a 25-foot building height (estimated internal clear height of 15-20 feet) such as offered by the commentor, does not exist, and is contrary to the very term "high cube." The high-cube warehouse building height concept defines the viability of its internal operations,

which are realized through closely-consolidated and easily-accessible warehoused goods, and use of efficient, high-lift material handling equipment. In another context, in order to accommodate the same volume of warehoused goods and logistics traffic, the floor area of a 45-foot high warehouse would have to be increased by a minimum of 80 percent if reconfigured as a 25-foot high structure. In the case of the Westridge Project, the currently proposed approximately 940,000-square-foot building would have to be at least 1.7 million square feet in size in order to accommodate comparable volume of warehoused goods. This increase in area does not even account for necessary additional internal aisle ways, utilities, service areas, vestibules, etc. Moreover, if constructed as a substantively larger but lower building footprint there would be the additional construction costs, expanded areas of disturbance, increased infrastructure costs, and decreased operational/energy efficiencies associated with such a large building footprint. The suggested 25-foot high building offered by the commentor is untenable and infeasible.

Despite the commentor's assertions to the contrary, the Draft EIR does address, at length, the alternatives that were considered and rejected as part of the review of Project alternatives, including alternative sites. The text on Draft EIR Pages 5-37 through 5-44 provides the basis upon which each of the considered alternative sites was rejected from further consideration. The results and conclusions of the Draft EIR are not affected.

Response FNSJ-3

As discussed in the Draft EIR (Pages 1-7 to 1-8), potential impacts regarding the conversion of farmland to non-agricultural uses were considered as part of the Draft EIR and found not to be potentially significant. Despite the commentor's assertions that the Draft EIR "dismisses mitigation measures included in the City's General Plan," the potential loss of agricultural land due to General Plan implementation was acknowledged in the General Plan Final Program EIR (GPEIR) as significant and unavoidable. The GPEIR (Page 5.8-10) states that, "[s]ince the feasible mitigation measures that are available to reduce the impact to loss of farmland within the planning

area are not consistent with the project objectives and land uses of the General Plan alternatives, no mitigation measure is proposed and the impact will be significant and unavoidable." Certification of the GPEIR required the City to adopt overriding considerations in regard to all impacts determined significant and unavoidable, including the potential for loss of agricultural lands. On this basis, the Project's Initial Study correctly concluded that the Project would not have the potential to result in significant impacts beyond those already addressed in the City's GPEIR. Because the Project's potential impacts are less-than-significant in this regard, no mitigation is required. The commentor's opinions to the contrary will be forwarded to decision-makers for their review. The results and conclusions of the Draft EIR are not affected.

Response FNSJ-4

The Draft EIR acknowledges the Project's potential impacts in regard to long-term operational exceedance of SCAQMD standards for the emission of the criteria pollutants VOC (volatile organic compounds) and NOx (oxides of nitrogen). Despite the commentor's assertions to the contrary, the Draft EIR addresses the Project's potential to result in health risks relative to diesel emission exposure on Pages 4.3-79 through 4.3-86. As discussed at Draft EIR Page 4.3-84, with implementation of Mitigation Measure 4.3-10, which would be implemented to control on-site idling, the Project's potential to expose sensitive receptors to substantial diesel emission-related pollutant concentrations were identified as less-than-significant. It may be noted that Mitigation Measure 4.3.5, as discussed in the Draft EIR (Page 4.3-62 *et al*.), specifically requires Project contractor(s) to ensure that all off-road heavy-duty construction equipment utilized during construction activity shall be CARB Tier 2 Certified or better. Additional mitigation is proposed within this Final EIR addressing operational and construction-source emissions (please refer to revised mitigation presented within the EIR Mitigation Monitoring Program, Final EIR Section 4.0. The commentor erroneously contends that "Since Highland Fairview Corporate Center Skechers project has been able to have 80 % of all off-road heavy-duty construction equipment utilized during construction activity certified as CARB Tier III or better, your project and analysis must do at least as well."

There is no requirement that the Project implement a given mitigation measure simply because it was applied elsewhere. Such an approach discounts appropriate nexus between impacts and mitigation.

Response FNSJ-5

The commentor misrepresents and misstates the findings of the Draft EIR with regard to the potential significance of the Project's GHG emissions impacts and the Project's potential GCC impacts.

In the Draft EIR's analysis of cumulative impacts (Page 5-13 to 5-14), it is specifically noted that "[i]n regard to the emission of greenhouse gases, the Project's Climate Change Analysis indicated that with the implementation of all Project design features and mitigation measures, greenhouse gas emissions would be reduced, and that the Project is consistent with state strategies to reduce greenhouse gases, including the California Air Resources Board (CARB) Scoping Plan's recommended measures, and the greenhouse gas emission reduction strategies set forth in the 2006 Climate Action Team (CAT) report.

Therefore, the Project would not hinder or delay implementation of AB 32. On this basis, the Project's individual and cumulative impact on climate change is less-than-significant. With specific regard to a cumulative-level analysis of GCC impacts, it is acknowledged that climate change is a global issue and the contribution of each greenhouse gas generated by the Project may have a cumulative effect. As noted in these responses, *CEQA Guidelines* Section 15064(h) (4) importantly provides that . . . "[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Moreover, the EIR qualitative assessment of the Project's impacts based upon consistency with the CARB Scoping Plan and the 2006 CAT Report supports the conclusion that the Project's greenhouse gas emissions are not cumulatively considerable.

The commentor cites various GHG/GCC mitigation schemes, none of which are required in this case since the Project's GHG/GCC individual and cumulative impacts are less-than-significant. Mitigation measures are not required for effects which are not found to be significant. CEQA Guidelines § 15126.4, subd. (a) (3).

Response FNSJ-6

The Lead Agency disagrees with the commentor's assertions regarding the adequacy of the Draft EIR's air quality analysis. Detailed analysis of the Project's potential air quality impacts are presented at EIR Section 4.3, "Air Quality." Supporting technical studies [*Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley*, *California* (Urban Crossroads, Inc.), February 3, 2010; *Westridge Commerce Center Health Risk Assessment, City of Moreno Valley, California* (Urban Crossroads, Inc.), February 3, 2010; and *Westridge Commerce Center Climate Change Analysis, City of Moreno Valley*, California (Urban Crossroads, Inc.), February 3, 2010] specifically. The cited analyses address the direct, indirect ,and cumulative impacts of the Project..

As detailed in the following responses FNSJ-7 through FNSJ-21, appropriate and enforceable mitigation of the Project's potentially significant individual and cumulative air quality impacts, including potential impacts related to global climate change, have been proposed within the Draft EIR. Appropriate mitigation measures have been carried forward into the Mitigation Monitoring Program included at Section 4.0 within this Final EIR. For each proposed mitigation measure, the MMP identifies: mitigation timing, the responsible mitigation implementation entity, the responsible mitigation monitoring/reporting entity, and mitigation monitoring/reporting frequency. In combination, these provision act to ensure mitigation enforceability.

Response FNSJ-7

The Draft EIR describes, at considerable length (Pages 4.3-4 through 4.3-10), the criteria air pollutants referenced by the commentor, including the possible health effects that have led to the monitoring and control of these pollutants as part of the environmental

review process. With specific regard to commentor-expressed ozone concerns, the Lead Agency has adopted SCAQMD regional thresholds for the ozone precursors NOx and VOC. These thresholds are based on the highest level of permitted emissions, and exceedance of these thresholds indicates that mitigation measures should be applied, not that specific health or other environmental damage would occur. The Project applies all feasible mitigation measures to reduce potentially significant Project-related ozone precursor emissions (NOx and VOCs). Significant NOx and VOC impacts resulting from the Project (regional threshold exceedances) are summarized at DEIR Page 1-17, 1-18. The Project will not exceed applicable localized significance thresholds for NO_2 (DEIR at Page 4.3-61 et al.). The AQMD has not established localized significance thresholds for VOC emissions.

Project NOx and VOC emissions are predominantly generated by mobile sources beyond control of the Lead Agency and/or the Applicant [approximately 99.9 percent of Project NOx emissions (by weight) are from vehicles; approximately 92.5 percent of Project VOC emissions (by weight) are from vehicles). Even after compliance with SCAQMD rules and regulations, and the application of EIR mitigation measures, operational pollutant emissions would exceed applicable SCAQMD regional emission thresholds for VOC and NOx. These impacts are therefore considered to be individually significant. It is noted however, that the Project land use and proposed development are consistent with development and associated air pollutant emissions impacts reflected in and anticipated by the applicable Air Quality Management Plan (AQMP).].

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. Collectively, these are referred to as localized significance thresholds (LSTs). The additional potential secondary effects of ozone to plants and habitat cited by the commentor are noted. There is no demonstrable evidence or support indicating that the Project would cause or substantively contribute to adverse effects to plants or habitat, and to conclude otherwise is speculative.

Lastly, it is noted that the Project is consistent with the applicable Air Quality Management Plan (see EIR at Pages 4.3-49 through 4.3-53) indicating that it would not interfere with projected downward-trending ozone levels within the SCAQMD.[5]

The commentor also provides information regarding $PM_{10}/PM_{2.5}$ characteristics. Applicable $PM_{10}/PM_{2.5}$ thresholds are established by the SCAQMD. Potential effects of Project-related temporary localized construction-source $PM_{10}/PM_{2.5}$ emissions impacts are discussed and disclosed in the EIR:

> For modeling purposes, receptors were conservatively placed at a distance of 25 meters (approximately 82 feet) from the site, which is the most conservative distance recommended for use by the SCAQMD. As previously discussed, even with application of all feasible mitigation measures, localized PM_{10} and $PM_{2.5}$ construction-source emissions will exceed applicable LSTs. More specifically, during construction activity (after mitigation), PM_{10} emissions concentrations will exceed applicable LSTs at receptors located 71 meters (approximately 233 feet) or nearer, and $PM_{2.5}$ emissions concentrations will exceed applicable LSTs at receptors located 35 meters (approximately 115 feet) or nearer.
>
> These LST exceedances represent a potentially significant impact to sensitive receptors in the Project vicinity for short-term construction activity. It is noted, however, that these exceedances would affect only one existing residence, located to the south of the Project site at 28855 Fir (future Eucalyptus) Avenue. Although parcels designated for residential land uses are present within the area of LST exceedance, they are largely

[5]*Summary Of The Ozone Air Quality Forum and Technical Roundtable*(Frederick W. Lurmann Sonoma Technology, Inc. for the South Coast Air Quality Management District) January 2007, Pages 2-5, 2-6.

> undeveloped. All other study area receptor locations (existing residences south of Eucalyptus (future Encilia) Avenue and north of SR-60, and area school sites) are well beyond the area of the Project's temporary LST exceedances for particulate matter.
>
> It is noted that these exceedances would occur temporarily and intermittently during site preparation and grading processes, and would not substantively affect any receptors at greater distances from the emissions source. Moreover, in that construction emissions are short-term and intermittent, they will not result in any chronic or long-term impacts (Draft EIR, Page 4.3-75).

The Project will not result in or cause long-term exceedance of applicable SCAQMD localized and/or regional thresholds PM_{10}/$PM_{2.5}$ emissions.

The commentor's opinions and statements will be forwarded to decision-makers for their review. Results and conclusions of the Draft EIR are not affected.

Response FNSJ-8

The commentor expresses concern about emissions from diesel trucks associated with the Project. A Health Risk Assessment (HRA) of Diesel Particulate Emissions was prepared to address Diesel Particulate Matter (DPM) generated by diesel trucks and the operation of heavy duty equipment. The HRA was 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* (SCAQMD 2003). The HRA is summarized within the Draft EIR (see Page 4.3-80) and presented in its entirety at Appendix C to the Draft EIR.

Contrary to the commentor's assertions otherwise, diesel and DPM emissions impacts are specifically evaluated and addressed in the DEIR (See DEIR at Pages 4.3-79 through 4.3-86, and the Project Health Risk Assessment (HRA) included at DEIR Appendix C.

Total anticipated trip generation of the Project, including a quantification of the types of vehicles expected to access the site, is identified at Draft EIR Table 4.2-6 (Page 4.2-19). This Table has been reproduced below for ease of reference.

Table 4.2-6

Westridge Commerce Center Trip Generation

Project Description	AM Peak Hour			PM Peak Hour			Daily
	Enter	Exit	Total	Enter	Exit	Total	PCE
High Cube Warehouse (937.260 thousand square feet)							
Passenger Cars	26	22	47	22	34	56	729
Truck Trips (PCE):							
2-axle	5	4	9	4	7	11	145
3-axle	16	13	29	13	21	34	440
4+axle	57	48	105	48	76	124	1,616
Net Truck Trips (PCE)	78	65	143	65	104	169	2,201
Total Trips (PCE)	**104**	**87**	**191**	**87**	**139**	**225**	**2,930**[1]

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).

[1] 2,930 PCE trips = 1,585 net vehicle trips (the raw arithmetic number of truck and passenger vehicle trips) generated by the Project. It should be noted that because different classes of vehicles (e.g., passenger cars, light trucks, heavy duty trucks) exhibit differing emissions characteristics that for the purposes of quantifying and evaluating air quality impacts, vehicle trips are quantified and segregated by vehicle type. In comparison, the Project's traffic study evaluates the effects of traffic at intersections and roadways, and therefore presents the total vehicle trips in terms of Passenger Car Equivalents (PCEs), thereby recognizing and acknowledging physical size differences in vehicles and related effects on roadways and at intersections.

As indicated in this summary of the Project's trip generation, approximately 75 percent of the Project's daily trips, on average, will be attributable to trucks. As noted at Draft EIR Page 4.3-79, the Project Air Quality analysis assumed, in order to ensure a conservative analysis, that all trucks associated with the Project will be diesel-powered.

In that vehicle class and type directly affect DPM emissions, the Project HRA (please refer to DEIR Appendix C, Table 1, Project Truck Trips) also explicitly defines anticipated daily truck trips (by type) entering/exiting the Project site, as follows:

- 97 two-axle trucks;
- 220 three-axle trucks; and
- 539 four-axle trucks.

Regionally, the SCAQMD has conducted a cumulative analysis of the toxic air contaminants (including DPM emissions) and their resulting health risks for all of Southern California. This study, Multiple Air Toxics Exposure Study in the South Coast Air Basin, or MATES III, indicates the average excess cancer risk level from exposure to TACs is approximately 1,200 in one million basin-wide. These estimates were based on monitoring data collected at ten fixed sites within the South Coast Air Basin.

None of the fixed monitoring sites are within the immediate Project area. However, MATES III has extrapolated cancer risk levels throughout the Basin by using grid-specific modeling. In this regard, MATES III grid modeling predicted a cancer risk of 524 in one million for the Project area. DPM is included in this cancer risk along with all other TAC sources, and accounts for the predominance (83.6 percent) of the total risk shown in MATES III. The Project will not contribute cumulatively to TACs other than DPM, however, the Project DPM emissions levels are not significant. That is, as discussed in Section 4.3 of the Draft EIR, the SCREEN3 screening analysis prepared for the Project indicates that the maximally impacted modeled receptor would be exposed to a mitigated inhalation cancer risk of no more than 8.6 in 1 million, which is less than the SCAQMD exposure threshold of 10 in 1 million.

Though the Project DPM emissions would add to existing levels of DPM within the basin, the Project's contribution and associated MICR as mitigated is not individually significant and is not cumulatively considerable. [6]

Contrary to commentor assertions otherwise, baseline (setting) information is provided throughout the EIR. For example, general air quality setting information is presented at EIR Pages 4.3-10 through 4.3-16. Additional applicable specific baseline/setting information is also presented where it is beneficial to related discussions, e.g., the GCC Regulatory Setting is introduced at EIR Page 4.3-24 within the context of GCC/GHG considerations.

The commentor requests analysis of mobile-source DPM emissions for transient vehicles traveling along area roadways. With regard to air quality impacts generated by Project traffic along area roads, regionally significant NOx emissions impacts would result as disclosed in the EIR and discussed here. However, no locally significant operational air quality impacts would result from the Project. In this latter regard, the

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6 [T]he 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 (South Coast Air Quality Management District White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, Appendix D, Page D-3).

Project Operational Localized Significance Threshold (LST) analysis considers potential worst case exposure by evaluating criteria pollutant concentrations at the Project site, which include pollutant emissions generated by all vehicles within the site in combination with emissions generated by stationary sources. As discussed in the Draft EIR, these emissions concentrations would not exceed applicable LST thresholds.

Draft EIR Table 4.3-12 (Page 4.3-69) presents the results of the Project operational LST analysis, indicating unmitigated conditions. As shown, results of the analysis indicate that long-term operational emissions will not exceed localized emissions thresholds established by the SCAQMD. Other operational mitigation measures presented in the EIR would act to further reduce already less-than-significant potential operational LST impacts.

Similarly, consistent with SCAQMD protocols and methodologies, the Project Health Risk Assessment considers maximum probable exposure to DPM concentrations, resulting from the entering, exiting and idling diesel vehicles within the Project site. Moreover, the analysis reflects long-term constant exposure (70 year, 24 hours per day) for residential receptors. With application of mitigation, even under this potential maximum exposure scenario, exposure to DPM concentrations would not exceed applicable SCAQMD thresholds (please refer to Draft EIR Table 4.3-17, Page 4.3-86).

As discussed in Section 4.3 of the Draft EIR, the SCREEN3 screening analysis prepared for the Project indicates that the maximally impacted modeled receptor would be exposed to a mitigated inhalation cancer risk of no more than 8.6 in 1 million, which is less than the SCAQMD exposure threshold of 10 in 1 million.

Regionally, the SCAQMD has conducted a cumulative analysis of the toxic air contaminants (including DPM emissions) and their resulting health risks for all of Southern California. This study, Multiple Air Toxics Exposure Study in the South Coast Air Basin, or MATES III, indicates the average excess cancer risk level from exposure to

TACs is approximately 1,200 in one million basin-wide. These estimates were based on monitoring data collected at ten fixed sites within the South Coast Air Basin.

None of the fixed monitoring sites are within the immediate Project area. However, MATES III has extrapolated cancer risk levels throughout the Basin by using grid-specific modeling. In this regard, MATES III grid modeling predicted a cancer risk of 524 in one million for the Project area. DPM is included in this cancer risk along with all other TAC sources, and accounts for the predominance (83.6 percent) of the total risk shown in MATES III. The Project will not contribute cumulatively to TACs other than DPM, and as noted above, the Project DPM emissions levels are not significant.

Though the Project DPM emissions would add to existing levels of DPM within the basin, the Project's contribution and associated MICR as mitigated is not individually significant and is not cumulatively considerable. [7]

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7 [T]he 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 (S*outh Coast Air Quality Management District White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution,* Appendix D, Page D-3).

Response FNSJ-9

Despite the commentor's assertion to the contrary, the Project has addressed the Project's potential to expose sensitive receptors to substantial pollutant concentrations. The analysis included in the Draft EIR (Pages 4.3-73 to 4.3-86) addresses (1) the potential effects of construction-source emissions at sensitive receptors; (2) potential carbon monoxide (CO) hotspots; and (3) the health risks of diesel particulate emissions. A Health Risk Assessment was prepared to address Diesel Particulate Matter (DPM) generated by diesel trucks and the operation of heavy duty equipment. The Health Risk Assessment was 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 (SCAQMD 2003). The Health Risk Assessment is summarized within the Draft EIR (see Page 4.3-80) and presented in its entirety as Appendix C to the Draft EIR.

As discussed above, Project and cumulative diesel emissions impacts are less-than-significant. Project impacts in regard to CO "hotspots" are similarly determined less-than-significant; while temporary construction-source emissions are acknowledged as significant. Please refer also to DEIR Section 4.3, Air Quality and supporting technical air quality studies presented at DEIR Appendix C.

Response FNSJ-10

As discussed in the following responses FNSJ-15, FNSJ-16, and FNSJ-18 through FNSJ-20, additional mitigation has been incorporated through the Final EIR process, to ensure that the Project's air quality and global climate change impacts are lessened to the extent feasible. These revisions are reflected in Final EIR Section 2.0, "Revisions and Errata," as well as in the Mitigation Monitoring Plan presented in Final EIR Section 4.0. Inclusion of these measures does not materially or substantively affect analysis or conclusions of the DEIR. That is, impacts that were previously determined to be less-than-significant remain less-than-significant; and impacts that were previously determined to be significant remain significant.

Response FNSJ-11

The referenced citations are acknowledged and addressed at Response FNSJ-12. Additionally, it is noted that the Project's GHG emissions impacts (as presented at Draft EIR Page 4.3-90) is consistent with Section 15064.4 of the *Guidelines*.

Response FNSJ-12

Other agency approaches to evaluation and mitigation of GHG emissions impacts are noted. It is also noted that CEQA directives allow for each Lead Agency to evaluate and address GHG emissions impacts within the context of Section 15064.4 of the *Guidelines*. The EIR analysis of GHG emissions/GCC impacts (DEIR Pages 4.3-90 through 4.3-11; DEIR Appendix C, Project Climate Change Analysis) is consistent with Section 15064.4 of the *Guidelines*.

Response FNSJ-13

The commentor misinterprets analysis and conclusions provided in the Project GCC Analysis. More specifically, the commentor misstates that the EIR analysis concludes that *greenhouse gas emissions generated by the Project constitute a significant impact.*

Such is not the case, as evidenced in germane excerpted GCC discussions presented below:

> **1.4 Summary of Findings**
>
> Results of the analysis indicate that the Project would generate GHG emissions that *may* [emphasis added] have a significant impact on the environment. However, the Project is consistent with, or otherwise not in conflict with (1) recommended measures and actions in the California Air Resources Board (CARB) December 2008 Scoping Plan (CARB Scoping Plan) setting forth strategies and measures to implement in order to achieve the GHG reductions goals set forth in the Global Warming Solutions Act of 2006 (AB 32); and (2) the GHG emission reduction strategies set forth in the 2006 Climate Action Team

> (CAT) Report, prepared in response to Executive Order S-3-05, which established total GHG emission targets for the State.
>
> As such, the Project GHG emissions are not cumulatively considerable. Further, mitigation measures are required for the Project that would further reduce GHG emissions associated with the Project beyond what is calculated herein. This analysis takes no credit for such GHG emissions reductions. Thus, this analysis conservatively estimates the overall Project impacts on climate change from GHG emissions and the actual impacts will be less than what is calculated herein (Westridge Commerce Center Climate Change Analysis, Pages 1-2).

To further clarify, germane suggested CEQA Guidelines topical questions include:

> Would the project:
> a) Generate greenhouse gas emissions, either directly or indirectly, that *may* [emphasis added] have a significant impact on the environment?

Language in the Project GCC study paraphrases and responds the Guidelines language. As also discussed in the Project GCC Study, it is likely that any GHG emissions reductions achieved locally and within the State will be offset by emissions increases in developing countries such as Brazil, Russia, India and China and that significant effects of climate change, such as global warming and sea level rise, will nevertheless occur due to the continuing effects of past and existing levels of emissions. In the absence of worldwide reduction commitments that are fully funded, any project level reduction measures cannot assure that significant effects on global temperatures and sea levels will be fully mitigated. That is, due to the potential global impacts [beyond the control of the Project] significant GCC impacts may occur even with implementation of the measures set forth in CARB's AB 32 Scoping Plan (see Climate Change Analysis, Page 42).

The commentor suggests alternative analysis/threshold considerations for evaluation of GCC/GHG impacts. Thresholds established in the Draft EIR are consistent with applicable provision of CEQA.

> **Findings and Recommendations**
>
> As indicated in Section 15064(b) of the CEQA Guidelines, the determination of significance of greenhouse gases is not "ironclad;" rather, the "determination of whether a project may have a significant effect on the environment calls for careful judgment" by the City "based to the extent possible on scientific and factual data." The City of Moreno Valley has not adopted a numeric threshold of significance for emissions of greenhouse gases. Nonetheless, the Project will not exceed the CARB or SCAQMD proposed quantitative thresholds. Therefore, Project GHG emissions impacts are considered less-than-significant (Draft EIR, Pages 4.3-93, 4.3-94).

Additionally, mitigation measures are required for the Project that would further reduce GHG emissions associated with the Project beyond what is calculated herein. The Draft EIR's analysis takes no credit for such GHG emissions reductions. Thus, the Draft EIR's analysis conservatively estimates the overall Project impacts on climate change from GHG emissions, and the actual impacts will be less than what is calculated in the Draft EIR and associated Westridge Commerce Center Climate Change Analysis, included as part of Draft EIR Appendix C.

Response FNSJ-14

Despite the commentor's statement to the contrary, the Draft EIR does not "assert that the Project would interfere with the goals of AB-32." On the contrary, the Draft EIR notes (on Page 4.3-95) that "[t]he Project's consistency with the AB 32 goals for reducing GHG emissions is assessed by determining whether the Project is consistent with or obstructs the 39 Recommended Actions identified by CARB in its Climate Change

Scoping Plan which includes nine Early Action Measures (qualitative approach). In addition, the analysis considers the numeric level of emissions generated by the Project to determine whether the emissions are cumulatively significant (quantitative approach)." Following a detailed presentation of the assessment criteria and analysis of the Project's consistency with these criteria, the Draft EIR finds (on Page 4.3-109) that "a project that is consistent with CAT strategies is consistent with the strategies suggested to reduce California's emissions to the levels proposed by Executive Order S-3-05 and AB 32, and therefore the Project will result in a less-than-significant cumulative impact on GCC."

In regard to the Project's "build-out" year, as discussed in the Draft EIR Project Description (Page 3-4), "construction is proposed to occur in one phase, with infrastructure and building construction following site preparation operations." As such, the Project would be effectively "built out" in its opening year, which is identified as 2011, as discussed at Draft EIR Page 4.2-15.

Response FNSJ-15

As discussed in the following Responses FNSJ-16 and FSNJ-18 through FNSJ-20, additional mitigation has been incorporated through the Final EIR process, to ensure that the Project's air quality and global climate change impacts are reduced to the extent feasible. These revisions are reflected in Final EIR Section 2.0, "Revisions and Errata," as well as in the Mitigation Monitoring Plan presented in Final EIR Section 4.0. It is also noted that air quality mitigation measures presented in the EIR will peripherally act to reduce GHG emissions. However, since the Project's potential GHG/GCC impacts are (individually and cumulatively) substantiated to be less-than-significant, specific mitigation of potential GHG/GCC impacts is not required. Mitigation measures are not required for effects which are not found to be significant. CEQA Guidelines § 15126.4, subd. (a) (3).

Response FNSJ-16

The commentor suggests that the Project should incorporate provisions for public transit, carpooling, and other measures as a means of reducing VMT and associated GHG emissions.

Mitigation Measure 4.3.13 has been revised, as indicated below, to include additional VMT/GHG emission reduction measures. For ease of reference, the text of this measure in its entirety is provided. Inclusion of these measures does not materially or substantively affect analysis or conclusions of the DEIR. That is, impacts that were previously determined to be less-than-significant remain less-than-significant; and impacts that were previously determined to be significant remain significant. Added measures are indicated as ***underline bold italicized*** font.

4.3.13 GHG emissions reductions measures shall also include the following:

- *The Project shall provide secure, weather-protected on-site bicycle storage/parking. Bicycle storage parking/quantity and location shall be consistent with City of Moreno Valley requirements;*
- *The Project shall provide pedestrian and bicycle connections to surrounding areas, consistent with provisions of the City of Moreno Valley General Plan. Location and configurations of proposed pedestrian and bicycle connections are subject to review and approval by the City. Prior to Final Site Plan approval, pedestrian and bicycle connections shall be indicated on the Project Site Plan;*
- ***The Project shall provide onsite showers (one for males and one for females). Lockers for employees shall be provided.***
- *Any traffic signals installed as part of the Project will utilize light emitting diodes (LEDs);*
- *The Project will establish a Transportation Management Association (TMA). The TMA will coordinate with other TMAs within the City to encourage and coordinate carpooling among building occupants. The TMA will advertise its*

services to building occupants, and offer transit and/or other incentives to reduce GHG emissions. Additionally, a shuttle will be provided during any one hour period where more than 20 employees or construction workers utilize public transit. A plan will be submitted by the TMA to the City within two months of Project completion that outlines the measures implemented by the TMA, as well as contact information;

- *The Project shall provide preferential parking for carpools and vanpool. Locations and configurations of proposed preferential parking for carpools and vanpools are subject to review and approval by the City. Prior to Final Site Plan approval, preferential parking for carpools and vanpools shall be delineated on the Project Site Plan;*
- *The Project shall provide at least two electric vehicle charging stations. Locations and configurations of proposed charging stations are subject to review and approval by the City. Prior to issuance of the first building permit, stub outs for charging stations shall be indicated on the Project building plans.*
- ***Lease/purchase documents shall identify that tenants are encouraged to provide incentives to realize the following:***
  - ***Implementation of compressed workweek schedules;***
  - ***SmartWay partnership;***
  - ***Achievement of at least 20% per year (as a percentage of previous percentage, not total trips) increase in percentage of consolidated trips carried by SmartWay carriers until it reaches a minimum of 90 %of all long haul trips carried by SmartWay 1.0 or greater carriers.***
  - ***Achievement of at least 15% per year (as a percentage of previous percentage, not total trips) increase in percentage of long haul trips carried by SmartWay carriers until it reaches a minimum of 85% of all consolidator trips carried by SmartWay 1.0 or greater carriers.***

- ***Use of fleet vehicles conforming to 2010 air quality standards or better.***
- ***Installation of catalytic converters on gasoline-powered equipment.***
- ***Inclusion of electric powered and/or compressed natural gas fueled trucks and/or vehicles in fleets;***
- ***Establishment and use of carpool/vanpool programs, complemented by parking fees for single-occupancy vehicles;***
- ***Provision of preferential parking for EV and CNG vehicles;***
- ***Use of electrical equipment (instead of gasoline-powered equipment) for landscape maintenance;***
- ***Use of electric (instead of diesel or gasoline-powered) yard trucks; and***
- ***Use of SmartWay 1.25 rated trucks.***

Response FNSJ-17

As discussed on Page 3-16 of the Draft EIR:

> "The Westridge Commerce Center Project reflects design and operational criteria established under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, a program developed by the United States Green Building Council. This program includes a rating system that can be applied to new construction as well as tenant improvement projects with performance goals in multiple environmental categories.
>
> LEED certification is contingent, among other requirements, on demonstrated and documented conservation and efficient use of available resources. It is recognized that not all LEED performance standards are applicable or appropriate for the Project, and that different standards may

be utilized by the Project's end user(s). However, the Project, as a whole, will be developed as a LEED-certified facility.

In support of LEED-certification, resources conservation, reduction in energy consumption and associated reductions in air pollutant emissions and greenhouse gases (GHGs), the Project will achieve a minimum of 20 percent in energy efficiencies beyond incumbent Title 24 Energy Efficiency standards, as well as compliance with other applicable state and federal energy standards."

The ultimate level of LEED certification cannot be determined at this time, since the tenant(s) for the Project, and therefore specific environmental strategies to be employed at the facility, are unknown. It is also important to note that no significant impacts have been identified in regard to the energy conservation attributes of the Project; nor would any of the identified significant impacts of the Project be reduced based on a certain level of LEED certification.

Response FNSJ-18

The commentor proposes numerous additional measures (presented in the following Table) as means to reduce Project-related greenhouse gas emissions relative to energy consumption. While the suggested measures may in part act to generally reduce Project energy consumption, none of the measures are required in order to achieve the mitigation of impacts identified in the Draft EIR. That is, since the Project's potential GHG/GCC impacts are (individually and cumulatively) substantiated to be less-than-significant, specific mitigation of potential GHG/GCC impacts is not required. Mitigation measures are not required for effects which are not found to be significant. CEQA Guidelines § 15126.4, subd. (a) (3).

Moreover, the commentor provides no indication as to the efficacy of the proposed measures in reducing Project impacts, nor is nexus provided between the proposed

measures and their implied environmental benefit vis-à-vis Project impacts. Certain other suggested "mitigation measures" proposed by the commentor replicate existing policies/requirements/regulations, and are not mitigation.

Additionally, in some instances, the commentor proposes measures that would further reducing environmental impacts that are already determined to be less-than-significant, or less-than-significant with application of measures already included in the Draft EIR. These measures proposed by the commentor are not included as mitigation, though the Lead Agency may impose these additional requirements; typically through Project Conditions of Approval.

Suggested Measure	Response
Analyzing and incorporating the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) or comparable standards for energy- and resource-efficient building during pre-design, design, construction, operations and management.	**Replicates existing requirements.** As discussed in the Draft EIR (Page 3-16), the Westridge Commerce Center Project reflects design and operational criteria established under the LEED Green Building Rating System.
Designing buildings for passive heating and cooling, and natural light, including building orientation, proper orientation and placement of windows, overhangs, skylights, etc.	
Designing buildings for maximum energy efficiency including the maximum possible insulation, use of compact florescent or other low-energy lighting, use of energy efficient appliances, etc.	
Reducing the use of pavement and impermeable surfaces.	**Replicates existing requirements.** As noted in the Draft EIR (Page 4.6-13), onsite bio-retention and detention basins, along with selected areas of pervious concrete and perimeter landscape areas are provided throughout the Project site. Additional detail is included in Draft EIR Appendix F, "Water Quality Management Plan."

Suggested Measure	Response
Requiring water re-use systems.	**Replicates existing requirements.** The Project is reliant on the Eastern Municipal Water District (EMWD) for the provision of reclaimed water, as well as potable water. Nonetheless, as noted on Draft EIR Page 4.5-25, "[t]he Project will use non-potable water for irrigation to the extent that such water sources are available to the Project. In anticipation of reclaimed/recycled water availability, the Project will design and implement all irrigation systems per EMWD recycled water facilities standards."
Installing light emitting diodes (LEDs) for traffic, street and other outdoor lighting.	**Replicates existing requirements.** Use of LEDs is currently required pursuant to EIR Mitigation Measure 4.3.13.
Limiting the hours of operation of outdoor lighting.	**Replicates existing requirements.** As stated on Draft EIR Page 3-17, the Project site is located within a 45 mile radius of Mt. Palomar Observatory. Consequently, the Project must comply with County Ordinance 655, which includes restrictions in regard to hours of outdoor lighting operations. See also: www.clerkoftheboard.co.riverside.ca.us/ords/600/655.htm
Maximizing water conservation measures in buildings and landscaping, using drought-tolerant plants in lieu of turf, planting shade trees.	**Replicates existing requirements.** Project landscaping will be provided pursuant to the requirements of the Moreno Valley Municipal Code (Section 9.17.030), which specifies a variety of options to meet the drought tolerant needs of the area while ensuring an aesthetically pleasing landscape. Shade trees will be provided pursuant to the requirements of Municipal Code Section 9.17.050 subd. (d)(3).
Ensure that the Project is fully served by full recycling and composting services.	**Replicates existing requirements.** As noted on Draft EIR Page 3-14, "[p]rior to issuance of a grading permit, the Project will have in place a City approved Solid Waste Diversion and Recycling Plan that demonstrates the diversion and recycling of all salvageable and re-useable wood, metal, plastic and paper products used during Project construction. A similar plan will be in place prior to occupancy that demonstrates the diversion and recycling of all wood, metal, plastic and paper products during ongoing operation of the warehouse and office portions of the Project. The plans will include the name of the waste hauler, their assumed destination for all waste and recycled materials, and the procedures that will be followed to ensure implementation of this measure.
Ensure that the Project's wastewater and solid waste will be treated in facilities where greenhouse gas emissions are minimized and captured.	**Not required.** As discussed in the Draft EIR (Pages 3-21 and 3-22), treatment of the Project's wastewater and solid waste will be accomplished by regional providers (i.e., Eastern Municipal Water District and Waste Management of the Inland Empire), and is outside the control of the Applicant and the City of Moreno Valley.

Suggested Measure	Response
Installing the maximum possible photovoltaic array on the building roofs and/or on the project site to generate all of the electricity required by the Project, and utilizing wind energy to the extent necessary and feasible	**Not required.** As currently noted under EIR Mitigation Measure 4.3.11: "All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design." There is no requirement or demonstrated nexus requiring full offset of Project electrical consumption through use of photovoltaics or "wind energy."
Installing solar water heating systems to generate all of the Project's hot water requirements.	
Installing solar or wind powered electric vehicle and plug-in hybrid vehicle charging stations to reduce emissions from vehicle trips.	

Response FNSJ-19

As discussed in the preceding Response FNSJ-18, the commentor's suggested mitigation measures to reduce Project impacts in regard to construction activities are addressed in the following table. It is again noted that since the Project's potential GHG/GCC impacts are (individually and cumulatively) substantiated to be less-than-significant, specific mitigation of potential GHG/GCC impacts is not required. Mitigation measures are not required for effects which are not found to be significant. CEQA Guidelines § 15126.4, subd. (a) (3).

Suggested Measure	Response
Utilize recycled, low-carbon, and otherwise climate-friendly building materials such as salvaged and recycled-content materials for building, hard surfaces, and non-plant landscaping materials.	**Not required.** Consistent with the Project's pursuit of LEED accreditation, the recommended building materials will be utilized to the extent available and feasible.
Minimize, reuse, and recycle construction-related waste.	**Replicates existing requirements.** As noted in the Draft EIR (Page 3-5), "[a]ny residual materials resulting from site preparation processes will be appropriately disposed of and/or recycled in accordance with the City's Source Reduction and Recycling Element (SRRE)."

Suggested Measure	Response
Minimize grading, earth-moving, and other energy-intensive construction practices.	**Not required, no nexus with significant impacts.** The Project will not cause or result in individually or cumulatively significant GHG/GCC impacts. There is no requirement to reduce construction-source GHG emissions. Moreover, within the context of Project-specific requirements (e.g., placement of structures approximately 25 feet below the existing grade of SR-60, and proper fill and re-compaction procedures to ensure proper foundation support, consistent with the recommendations of the Project Geotechnical Investigation, included as Draft EIR Appendix H), construction contractor(s) employ techniques and procedures so as to provide for the most efficient use of earth-moving and grading equipment as a matter of course.
Landscape to preserve natural vegetation and maintain watershed integrity.	**Replicates existing requirements.** Landscape improvements will be provided for the Project as required under the City's Zoning Code Section 9.17, "Landscape Requirements." To minimize risk of invasive non-native plants entering into the riparian habitat along the Quincy Channel, the Project includes mitigation (Measure 4.8.3) that prohibits the use of invasive non-native plant species within 150 feet of the Channel.
Utilize alternative fuels in construction equipment and require construction equipment to utilize the best available technology to reduce emissions.	**Incorporated** at revised Mitigation Measure 4.3.8.

Response FNSJ-20

As discussed in the preceding Response FNSJ-19, the commentor's suggested mitigation measures to reduce Project impacts in regard to transportation are addressed in the following table. It is again noted that since the Project's potential GHG/GCC impacts are (individually and cumulatively) substantiated to be less-than-significant, specific mitigation of potential GHG/GCC impacts is not required. Mitigation measures are not required for effects which are not found to be significant. CEQA Guidelines § 15126.4, subd. (a) (3).

Suggested Measure	Response
Encourage and promote ride sharing programs through such methods as a specific percentage of parking spaces for ride sharing vehicles.	**Incorporated** at revised Mitigation Measure 4.3.13.

Suggested Measure	Response
Create a car sharing program within the planned community.	**Incorporated** at revised Mitigation Measure 4.3.13.
Create a light vehicle network, such as a neighborhood electric vehicle (NEV) system.	**Incorporated** at revised Mitigation Measure 4.3.13.
Provide necessary facilities and infrastructure to encourage residents to use low or zero-emission vehicles, for example, by developing electric vehicle charging facilities and conveniently located alternative fueling stations.	**Incorporated** at revised Mitigation Measure 4.3.13.
Provide a shuttle service to public transit within and beyond the planned community.	**Incorporated** at revised Mitigation Measure 4.3.13.
Incorporate bicycle lanes and routes into the planned community's street systems.	**Replicates existing requirements.** The Project is required to provide pedestrian and bicycle connections to surrounding areas consistent with provisions of the City of Moreno Valley General Plan pursuant to the existing Mitigation Measure 4.3.13. This measure notes that the location and configurations of proposed pedestrian and bicycle connections are subject to review and approval by the City. Prior to Final Site Plan approval, pedestrian and bicycle connections shall be indicated on the Project Site Plan.

Response FNSJ-21

The commentor suggests that carbon offsets be purchased to address "remaining [greenhouse gas] emissions that cannot be eliminated." It is again noted that since the Project's potential GHG/GCC impacts are (individually and cumulatively) substantiated to be less-than-significant, specific mitigation of potential GHG/GCC impacts is not required. Mitigation measures are not required for effects which are not found to be significant. CEQA Guidelines § 15126.4, subd. (a) (3).

Response FNSJ-22

The Lead Agency disagrees with the commentor's assertions regarding the adequacy of the Draft EIR's analysis of alternatives. As further presented in the *CEQA Guidelines* Section 15126.6, subd. (a), an EIR need not consider every conceivable alternative, but rather, the discussion of alternatives and their relative merits and impacts should be provided in a manner that fosters informed decision-making and public participation.

To this end, the *CEQA Guidelines* indicate that the range of alternatives selected for examination in an EIR should be governed by "rule of reason," and requires the EIR to set forth only those alternatives necessary to permit an informed decision. Consistent with the provisions of the *CEQA Guidelines*, the Draft EIR's analysis of a No Project/No Build Alternative, a No Project/Existing Zoning Alternative, and a Reduced Intensity Alternative present a "reasonable range" of alternatives to the Project that would potentially lessen its environmental effects while allowing for attainment of most Project objectives.

The commentor's suggestion that "[t]he EIR should consider an alternative that relies more on higher-density mixed commercial/residential development projects on existing disturbed lands" is inconsistent not only with the Project objectives, but with the site's existing General Plan land use designation and zoning. Additionally, it is unclear that such an alternative would result in a lessening of the Project's environmental effects, particularly since commercial uses typically generate considerably higher average daily rates of traffic per square foot than light industrial uses, with correlating increases in air emissions. See for example Trip Generation 7th Edition (Institute of Traffic Engineers)trip generation rate for Specialty Retail (ITE Code 814), 44.32 trips/thousand square feet; vis-à-vis the Project trip generation rate of 3.12 trips/thousand square feet. On a related note, the EIR specifically considers a "No Project" alternative which assumes development consistent with site's current Business Park zoning designation. As with the mixed use concept proposed by the commentor, substantially increased trip generation could be expected if developed with business park uses when compared to industrial uses proposed under the Project.

> In this regard, for Traffic Analysis Zone (TAZ) 209 encompassing the Project site, the General Plan Buildout traffic model reflects development of the subject site with Business Park/Light Industrial uses, and projects approximately 4.18 times the trip generation for TAZ 209 than would otherwise be generated by logistics/distribution warehouse uses such as those proposed under the Project. The No Project Alternative considered

> herein approximates trip generation for the subject site under the General Plan Buildout Scenario at four (4) times that of the Project (Draft EIR, Page 5-32).

Based on the preceding, the commentor's suggested alternative concept fails as feasible alternative to the Project, and does not merit further analysis as part of the Project EIR.

In regard to the question of whether the Project could be accommodated elsewhere, the Draft EIR addresses, at length, the possible alternative sites that were considered as part of the review of Project alternatives (this discussion is found beginning on Draft EIR Page 5-37). As stated in the *CEQA Guidelines*, Section 15126.6 subd. (f)(1)(2)(A), the "key question and first step in [the] analysis [of alternative locations] is whether any of the significant effects of the project would be avoided or substantially lessened by putting the Project in another location."

An alternative site within the City would be considered generally viable if it were located along a regional freeway transportation corridor or at a regional transportation hub; was also locally accessible; was underutilized and currently available; could be developed and operated in a manner that was compatible with other proximate land uses; and was provided, or could feasibly be provided, adequate serving utilities infrastructure. Also supporting location of the Project elsewhere, an Alternative Site should have an appropriate size and configuration (approximately 50 acres and roughly rectangular); and either exhibit appropriate General Plan and Zoning designations or could be feasibly so-designated.

Only locations that would avoid or substantially lessen significant effects of the Project need be considered. To this end, four (4) possible alternative sites were located, as follows:

- Alternative Site 1: 70 acres located between Perris Boulevard and Grove View Road, and south of Indian Avenue to the southern City limits (APNs 316-210-071, -073, -075 and -076);

- Alternative Site 2: 92 acres located between Heacock Street and Indian Street, south of Cardinal Avenue and north of San Michele Road (APNs 316-180-010, 316-170-001, -002, -004, -006, -007, -008, -010, -013, and -014);

- Alternative Site 3: 72 acres located west of Indian Street between Iris Avenue and Krameria Avenue (APNs 316-020-002, -003, -004, -005, -012, -013, -014, -015, -016, -017, -018 and -019); and

- Alternative Site 4: Approximately 69 acres located at the southeast corner of Heacock Street and Iris Avenue (APNs 316-020-001, -006, -007, -028, and -010).

Each of the four (4) sites is currently vacant; is more than 50 acres in size and of a roughly rectangular configuration; is zoned for industrial use; and is adequately served by nearby utilities and infrastructure. Further, Alternative Sites 1 through 4 are proximate to the I-215 regional transportation corridor, and are also locally accessible. Notwithstanding, these sites are all currently unavailable. Alternative Site 1 currently has applications under review for a 1.6 million square foot warehouse distribution facility, while development plans have been submitted and approved for sites 2, 3 and 4.

Other potentially suitable and available properties are located easterly of the current Project site, along the SR-60 corridor. For the purposes of the Alternative Site analysis, the vacant property located southeasterly of the intersection of SR-60 at Theodore Street was selected for analysis, and is identified as Alternative Site 5 (shown in Figure 5.2-2 of the Draft EIR). This property exhibits an appropriate Business Park/Light Industrial General Plan Land Use designation; is of adequate size and is appropriately configured; and is provided access to regional and local roadways. Utilities and services are generally available to the site. The site appears to be available for purchase; however, it

is not currently owned or controlled by the Project Applicant, and a zone change from "Business Park" to "Light Industrial," would be required, similar to the change of zone requested by the Project.

Although development of the Project on Alternative Site 5 could achieve the Project's objectives, none of the Project's potentially significant impacts would be avoided or substantially reduced. Because Alternative Site 5 would not result in the avoidance or substantive reduction of Project-related impacts, this Alternative Site was also rejected from further consideration within the Draft EIR.

The commentor's states that "[t]he Westridge Commerce Center does not have a tenant and the Project proponent does not plan to build the Project until they do. They already have at least one warehouse that sits empty." No specific tenant(s) for the Project are currently under contract. Results and conclusions of the EIR are not affected.

The Draft EIR (on Pages 5-49 to 5-62) does provide a comparative analysis of the potential impacts of each alternative in regard to greenhouse gas emissions, biological resources, water supply, water quality, and traffic. As required under *CEQA Guidelines* Section 15126.6, subd. (d), this evaluation includes "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project."

Response FNSJ-23

The City disagrees with the commentor's assertion that "the Draft EIR avoids an actual on the ground biological resource impact assessment." Draft EIR Appendix G presents the Biological Resources Survey prepared for the Project, which consists of the following surveys and analysis, conducted throughout the Project area:

- General biological assessment of Project site and nearby off-site areas that could be affected by utility and circulation system improvements, as identified in the following Figure 4.8-1;

- General plant and wildlife surveys;
- Habitat assessment to examine potential for special status plant species;
- Habitat assessment to examine potential for special status wildlife species;
- Habitat assessment for burrowing owl (*Athene cunicularia*), following the recommendations of the California Department of Fish and Game, the burrowing owl survey protocol (CBOC 1993), and the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) Section 5.3.2 and MSHCP burrowing owl survey instructions; and
- A jurisdictional delineation, which was prepared pursuant to the requirements of the California Department of Fish and Game and the Army Corps of Engineers.

As further discussed in the Draft EIR (Page 4.8-14), "[p]ayment of the mitigation fee and compliance with the requirements of the MSHCP are intended to provide full mitigation under CEQA, although certain areas within the MSHCP boundaries require additional surveys to determine the presence or absence of specific MSHCP-covered resources, including sensitive plants, burrowing owls, and riparian or riverine areas." Although focused surveys for threatened, endangered and sensitive plant and wildlife species were not conducted as part of the Project's general Biological Assessment, protocol surveys were subsequently performed to determine the presence or absence of burrowing owls within areas of potential disturbance. The *Report on Burrowing Owl Surveys for the West Ridge Project Site* (Harsmworth Associates, July 2009) is also included in Draft EIR Appendix G.

In addition, implementation of Draft EIR Mitigation Measure 4.8.7, included in the Mitigation Monitoring Program presented in Final EIR Section 4.0, will ensure that a pre-construction survey be conducted to document the location of any occupied burrows on-site. With the implementation of this mitigation measure, as well as compliance with the requirements of the MSHCP, the Project's potential to impact burrowing owls is reduced to a less-than-significant level.

The City of Moreno Valley's current schedule of non-residential impact fees indicates that the Project would be subject to an MSHCP fee of $6,597 per acre, and an additional $500 per acre SKR (Stephens' kangaroo rat) mitigation fee. On this basis, the Project would contribute approximately $390,335 to meet its fair-share responsibility for regional plant and wildlife impacts. The amount collected by the City for wildlife mitigation to date, along with the effectiveness of such fee collections, is outside the scope of the Project's environmental analysis. The Draft EIR (Page 4.8-31) notes that "[t]he Project Biological Resources Assessment includes a discussion of MSHCP compliance, and determines that the Project 'is in full compliance with the Western Riverside County MSHCP, assuming the focused burrowing owl surveys are conducted in spring 2009.' These surveys were conducted in July 2009, and found no burrowing owls or evidence of their occupation on-site. This species has not been recorded within the Project area in the past and is presumed absent from the site. As such, the Project is in compliance with the MSHCP." The results and conclusions of the Draft EIR are not affected.

Response FNSJ-24

The commentor requests receipt of future information regarding the Project, and as such, has been added to the Project distribution list at the referenced address. A copy of the Project's Final EIR has also been provided to the commentor, as requested.

Response FNSJ-25

The commentor lists numerous publications and resources exhibits incorporated by reference. With the exception of certain web-linked publications, exhibits listed "as incorporated by reference" have not been provided. Nor has their disposition, availability, or specific relevance been otherwise identified.

From: sgcricket@aol.com
Sent: Monday, December 06, 2010 3:20 PM
To: Jeffrey Bradshaw
Subject: Western Ridge Commerce Center DEIR

Comments Regarding: West Ridge Commerce Center
From: Susan Gilchrist

The project under consideration requires a zoning change from Business Park to Light Industrial. It is my understanding that this is a speculative project and there is no tenant identified. This presents a problem for the residents of the eastern portion of the City. There are currently many unoccupied warehouse buildings on Cactus and along the 215 as well as many in other Inland Empire cities. The only logical reason for presenting this project at this time is to "ride the coattails" of Highland Fairview/Skechers and get approval for another megalithic structure. Since the City permitted a building 36 times the size of the General Plan recommendation, what will prevent the Council from approving another oversized structure? The only solution will be to retain the General Plan and wait for the economy to improve so that the long range goals of a diverse job base can be reached. SG-1

Ten to fifteen years ago, business park zoning was successful and in the future it will be that way again. If zoning changes could be reversed, this would be more acceptable, but they are not. It will never revert to Business Park zoning from Light Industrial and the vision of the eastern portion of the City will be changed forever. Those driving through Moreno Valley will think the City consists of warehouses and sound walls…how attractive!

Questions for the developer:

1. Is this a speculative project or is there a tenant ready to occupy a 900,000 sq ft building? SG-2

2. What benefit is there to the residents and the City for approving a zone change at this time? SG-3

3. Why is the City moving away from the General Plan without bringing the entire process back to the residents? Moreno Valley seems to be willing to accept anything offered rather than have high standards and long range goals. The desperation is obvious and not very reassuring. Surrounding cities of Temecula, Murrieta, Menifee, Riverside, and Redlands are constructing buildings with more style and substance than is seen in Moreno Valley. These cities are attracting a variety of businesses while our City accepts the dregs. SG-4

4. Should the Council change the zoning, will the property be sold to another developer? SG-5

5. As a condition for the zone change, will the developer be willing to put an appropriate buffer of 1500 feet on the south side of Fir and develop it as a City park with a block wall on the north side of the park? SG-6

6. Could the traffic flow from both Skechers and Western Ridge be restricted from Redlands Blvd? SG-7

7. Will the building be constructed to LEEDS standards to include reinforcing the roof and installing solar panels? Will the LEEDS standards equal or exceed the Highland Fairview/Skechers building? Will the developer be conditioned to lower the building so that views will be preserved? SG-8

8. What restrictions in hours of operation will be enforced? Will trucks move during daylight hours, night hours or both? How many trucks are estimated to use the facility? SG-9

Sincerely,
Susan Gilchrist

SUSAN GILCHRIST

Email dated December 6, 2010

Response SG-1

The commentor correctly notes that approval of the Westridge Commerce Center Project would involve a change of zone for the Project site, from Business Park to Light Industrial. The commentor's opinions regarding the proposed zone change will be forwarded to decision-makers for their consideration.

Response SG-2

The commentor inquires: "Is this a speculative project or is there a tenant ready to occupy a 900,000 square foot building?" At this time, no specific tenant(s) for the Project are under contract.

Response SG-3

The commentor inquires: "What benefit is there to the residents and the City for approving a zone change at this time?" The benefits of a project are not germane to an EIR pursuant to CEQA. Nevertheless, certain potential benefits to the residents and the City are reflected in the Project Objectives. More specifically, as noted at Draft EIR Page 3-4, the Primary Objectives of the Project as identified by the Project Applicant include the following:

- Transition the existing site into a productive use;
- Provide jobs-producing, light industrial uses to the City of Moreno Valley and local community; and
- Increase economic benefits to the City of Moreno Valley through increased tax generation and job creation.

Response SG-4

The commentor inquires: "Why is the City moving away from the General Plan without bringing the entire process back to the residents?" The commentor offers opinions on City development review and approval processes, and the character of local and regional development.

As discussed in the Draft EIR (Pages 4.1-6 through 4.1-9), implementation of the Project would not propose or require a change in the Project site's General Plan land use designation. The commentor's opinions in regard to the City's approval process and the character of local and regional development will be forwarded to decision-makers for their consideration.

Response SG-5

The commentor inquires: "Should the Council change the zoning, will the property be sold to another developer?" Should the Project be approved, it is the applicant's intention to develop the site as proposed. However, there are no restrictions to prohibit the sale of the subject property. It may be noted that, regardless of ownership, Project-specific mitigation measures and other applicable regulations relative to the Project's construction and operations, including those identified in the Draft EIR, would remain in force.

Response SG-6

The commentor inquires: "As a condition of the requested zone change, will the developer be willing to put an appropriate buffer of 1,500 feet on the south side of Fir (future Eucalyptus) Avenue and develop it as a City park with a block wall on the north side of the park?" As a point of clarification, the requested zone change cannot be lawfully conditioned as suggested. Moreover, there is no codified requirement or environmental impact nexus that would require or suggest a 1,500 setback or the creation of a park southerly of the Project site. The commentor's remarks are forwarded to the decision-makers for their consideration.

Response SG-7

The commentor inquires: "Could the traffic flow from both Skechers and Western Ridge [the proposed Westridge Project] be restricted from [using] Redlands Boulevard?" Direct and practical access to the Project site is provided via Redlands Boulevard, located less than one-quarter mile easterly of the Project site. The Project provides all necessary improvements to mitigate its direct traffic impacts affecting Redlands Boulevard to levels that are less-than-significant. Additionally, appropriate mitigation is provided for all potentially significant cumulative traffic impacts affecting Redlands Boulevard.

Opening Year access to and from the SR-60 to the Westridge Project site was assumed to utilize Redlands Boulevard exclusively. The Project TIA (included as Draft EIR Appendix B) does account for the fact that, upon the development of Eucalyptus Avenue to the ultimate configuration identified in the Moreno Valley General Plan Circulation Element, Project-related traffic could also access the SR-60 at Moreno Beach Drive.

Redlands Boulevard is a designated truck route in the County and a direct route to San Timoteo Canyon Road through Redlands (also designated as a truck route). It is appropriate for Redlands Boulevard to convey Project-related and area truck traffic. To maintain the continuity between affected agencies, the truck route designation for Redlands Boulevard cannot be practically removed. Moreover, there is no feasible means to restrict Redlands Boulevard to local truck trips only, given its direct connection, with no alternative routes, to the previously mention roadways. Further, there is no suggested or demonstrated environmental benefit that would result from restricting use of Redlands Boulevard by Project traffic. The commentor's remarks are forwarded to the decision-makers for their consideration.

Response SG-8

The commentor inquires: "Will the building be constructed to LEED standards to include reinforcing the roof and installing solar panels? Will the LEEDS standards equal or exceed the Highland Fairview/Skechers building? Will the developer be conditioned to lower the building so that views will be preserved?" Similar to the recently approved Highland Fairview/Skechers project, the Westridge Commerce Center will be built to LEED standards. The following discussion at Draft EIR Page 3-16 is presented here for ease of reference.

> The Westridge Commerce Center Project reflects design and operational criteria established under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, a program developed by the United States Green Building Council. This program includes a rating system that can be applied to new construction as well as tenant improvement projects with performance goals in multiple environmental categories.
>
> LEED certification is contingent, among other requirements, on demonstrated and documented conservation and efficient use of available resources. It is recognized that not all LEED performance standards are applicable or appropriate for the Project, and that different standards may be utilized by the Project's end user(s). However, the Project, as a whole, will be developed as a LEED-certified facility.
>
> In support of LEED-certification, resources conservation, reduction in energy consumption and associated reductions in air pollutant emissions and greenhouse gases (GHGs), the Project will achieve a minimum of 20 percent in energy efficiencies beyond incumbent Title 24 Energy Efficiency standards, as well as compliance with other applicable state and federal energy standards."

The ultimate level of LEED certification cannot be determined at this time, while the tenant and therefore specific environmental strategies to be employed at the facility, are unknown. It is also important to note that no significant impacts have been identified in regard to the energy conservation attributes of the Project; nor would any of the identified significant impacts of the Project be reduced based on a certain level of LEED certification. There is no requirement that LEED standards implemented by the Highland Fairview/Skechers development be similarly implemented by the instant Project.

As further described in the Aesthetics section of the Draft EIR (Page 4.9-11) and illustrated in Draft EIR Figure 4.9-3, the Project's building foundation is planned to be located approximately 25 feet lower in elevation than the existing elevation of SR-60. Substantial reduction of the height of the building is considered infeasible, since the facility's height is largely dictated by the logistics use, and the need to provide standard "dock-high" bays for the loading and unloading of trucks." The high-cube warehouse building height concept defines the viability of its internal operations, which are realized through closely-consolidated and easily-accessible warehoused goods, and use of efficient, high-lift material handling equipment.

In another context, in order to accommodate the same volume of warehoused goods and logistics traffic, the floor area of a 45-foot high warehouse would have to be increased by a minimum of 80 percent if reconfigured for example as a 25-foot high structure. In the case of the Westridge Project, the currently proposed approximately 940,000 square foot building would have to be at least 1.7 million square feet in size in order to accommodate a comparable volume of warehoused goods. This increase in area does not even account for necessary additional internal aisle ways, utilities, service areas, vestibules, etc. Moreover, if constructed as a substantively larger but lower building footprint there would be substantial additional construction costs, expanded areas of disturbance, increased infrastructure costs, and decreased operational/energy efficiencies associated with such a large building footprint.

Response SG-9

The commentor inquires: "What restrictions in hours of operation will be enforced? Will trucks move during daylight hours, night hours or both? How many trucks are estimated to use the facility?" As noted in the Draft EIR (Page 3-4), "[f]or the purposes of the EIR analysis, the Project is assumed to be operational 24 hours per day, seven (7) days per week, except as may be otherwise limited by applicable codes or regulations." Estimated opening-year average daily Project-generated truck trips ingressing/egressing the Project site include:

- 97 two-axle trucks;
- 220 three-axle trucks; and
- 539 four-axle trucks.

Please refer also to detailed trip generation and trip distribution analyses and supporting discussions as presented in the Project TIA (EIR Appendix B, TIA Pages 51-76).

HIGHLAND FAIRVIEW

14225 Corporate Way
Moreno Valley, CA 92553
Tel: 951.867.5300

December 6, 2010

Mr. Jeff Bradshaw
Associate Planner
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92553

SUBJECT: Westridge Commerce Center – Comments on Draft EIR

Dear Jeff,

Highland Fairview has reviewed the Draft EIR and is concerned with the manner in which the document addresses a number of environmental issues. As you know, the city imposed numerous mitigation measures and conditions of approval on the Highland Fairview Corporate Park (HFCP) project many of which are not applied to this project, despite the similarities of the two projects. Among these issues are air quality, water quality, freeway landscaping treatment, architectural design, sustainability, hazardous materials, biology, global climate change and many other environmental areas.

To address these concerns, we request a meeting with the City planning, traffic and engineering departments to review the proposed mitigations included in the Draft EIR. We are particularly concerned about the following subject areas:

1. The project's contribution to improvements to SR60 mainline and interchanges. HF-1
2. The project's contribution to improvements on Redlands Boulevard. HF has other projects in the area and insufficient improvements by this project should not be allowed.
3. Architectural standards and design comparable to that of the HFCP Skechers building should be articulated from the freeway.
4. The landscape treatment of the interface between the project and SR60 should be comparable to that required by the City for HFCP and should be consistent.
5. The need for a significant commitment from the project to address the visual relationship between the project and the SR60. For example, the HFCP project was lowered 25 feet so that its visual impact could be softened.

We request a meeting with City staff as soon as possible to address these concerns.

Sincerely,

Wayne Peterson
Vice President, Community Planning

HIGHLAND FAIRVIEW

Letter Dated December 6, 2010

Response HF-1

The subject line of this letter indicates that it contains comments on the Westridge Commerce Center Draft EIR; however, these comments do not appear to be intended to address the Draft EIR's technical analysis or findings. Instead, the comments focus on the Westridge Commerce Center's "contribution to improvements," and express concerns regarding the equity of mitigation between the Westridge Commerce Center Project and the recently approved Highland Fairview Project (a 2.6 million-square-foot light industrial/commercial development located south of SR-60 east of Redlands Boulevard). A meeting with City staff is requested "to address these concerns."

On this basis, specific technical responses are not warranted. Mitigation for the Project's potential impacts was included in the Draft EIR, and is detailed in the Project's Monitoring Program, provided in Final EIR Section 4.0. Further, the Project's architectural compatibility with City design standards, and with the Highland Fairview project, is addressed on Draft EIR Page 4.9-6.

The commentor's concerns will be forwarded to decision-makers, as requested. City staff will be pleased to meet with the commentor to discuss their concerns.

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December 3, 2010

City Council
City of Moreno Valley
14177 Frederick St.
Moreno Valley, CA 92552-0805

Community Development Director
City of Moreno Valley
14177 Frederick St.
Moreno Valley, CA 92552-0805

VIA U.S. MAIL

RE: Draft Environmental Impact Report for Westridge Commerce Center, State Clearinghouse No. 2009101008.

Greetings:

This firm submits the following comments on behalf of Residents for a Livable Moreno Valley, the Moreno Valley Group of the Sierra Club, and area residents after reviewing the Draft Environmental Impact Report.

General Comments:

The California Environmental Quality Act ("CEQA") was adopted as a disclosure and transparency document. The theory is that by providing a document that adequately describes the environmental consequences of a project to decision makers and the public, the decision makers will make a rational decision based upon the true environmental consequences of the project and if they do not, the electorate can hold them accountable for their decisions. The core of this statutory structure is the adequacy of the document as an informational document.

Unfortunately, the **DEIR for this Project fails as an informational document** as it fails to adequately and accurately consider cumulative impacts throughout the document. The DEIR also misleads decision makers and the public as to the extent and severity of the Project's environmental impacts. The DEIR is often conclusory and does not provide the analysis required by CEQA to inform the public and decision makers of the analytical pathway taken from facts to conclusion. This includes often omitting to provide the information required to properly assess impacts. JS-1

Moreover, CEQA requires that where feasible mitigation exists which can substantially lessen the environmental impacts of a project, **all feasible mitigation must be adopted**. In this way

CEQA goes beyond its informational role to require that projects substantively lessen their negative effects on the environment. It is critical to proper drafting of an EIR that all feasible mitigation measures be required of a project. This has not been done with this Project. Moreover, all mitigation measures required in the EIR must be fully enforceable and certain to occur. This Project fails to ensure that all feasible mitigation will occur with this Project and instead provides vague, uncertain, and unenforceable approximations of mitigation measures. The Project is also inconsistent with the City of Moreno Valley General Plan. This is unacceptable.

JS-1 (cont'd)

Project Overview:

The Westridge Commerce Center is a proposal, sponsored by ProLogis, for the construction of a 937,260 sq. ft. warehouse-distribution facility on approximately 54.66 acres of mostly undeveloped agricultural land located on the north side of Eucalyptus Avenue, west of Redlands Boulevard, near the SR-60/Redlands Boulevard interchange. The project will include approximately 173 loading docks and 14,000 square feet of office space to be divided between the southeast and southwest corners of the building. The future occupants and uses of the property are unknown at this time.

The project would require the removal of approximately 70,000 cubic yards of soil. The project would require the discretionary approval of a zone change (City Case # PA08-0098) from business park to light industrial. The project would also require an amendment to City of Moreno Valley Municipal Code section 9.05.020 B (City Case # PA10-0017) [Light Industrial Districts] due to the Project sites adjacency to residentially-zoned property and approval of Tentative Parcel Map No. 36207 (City Case # PA09-023). Adjacent to the project site is SR-60 to the north and Eucalyptus Avenue to the south. Properties to the south of the project are zoned Rural Residential ("RA-2") and designated Primary Animal Keeping Overlay ("PAKO") Zone. A residence is located near the southeasterly corner of the project site. To the west of the project site, although properties are currently under agricultural production, a proposal, also sponsored by ProLogis, has been made to develop, on 117 acres, six distribution warehouse facilities totaling 2.25 million square feet. Properties immediately to the east are designated commercial. Further east, across Redlands Boulevard, development of the 2.6 million square feet Highland Fairview Corporate Park Project has been approved. Regional access to the Project will be provided by the SR-60/Redlands Avenue interchange.

JS-2

The DEIR concludes that aesthetic impacts are significant and unavoidable. Noise impacts are significant and unavoidable for the construction phase. Air quality impacts are significant and unavoidable for construction and operation phases. The DEIR also concludes cumulative aesthetic, air quality, construction noise, and traffic impacts are significant.

Cumulative Impacts:

The cumulative impact analysis is brief, lacking in evidence and data, and generally insufficient. CEQA requires that in order to adequately discuss and analyze potential significant cumulative impacts, "[a] list of past, present, and probable future projects producing related or cumulative impacts" must be included in the DEIR. (Cal. Pub. Res. C. § 15130(b)(1)(A).) The lead agency must also "define the geographic scope of the area

JS-3

affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used." (Cal. Pub. Res. C. § 15130(b)(2).)

Here, the DEIR looks *only* at the cumulative effects from those "probable development proposals" within a two (2)-mile radius of the Project. **The analysis does not account for any past or present projects as required under CEQA and does not "provide a reasonable explanation" for why the two-mile radius was used.** Although a discussion as to why the Traffic Impact analysis was limited to a two-mile radius was provided in the DEIR, this reasoning does not support a basis for why the Cumulative Impact Analysis section of the DEIR was limited to such a small radius and purely probable future projects. Development within Moreno Valley is occurring on a large scale and the resulting impacts should not be ignored. (See Exhibits 1 – 3.) There is also a great amount of residential development within close proximity to the Project site, yet the impacts from these projects are not included in the analysis. For instance, The Moreno Highlands Specific Plan providing for 7,700 residential units located east of the Project site and the Aqua Belle Specific Plan providing for 2,922 "Active Adult" residential units located southwesterly of the Project site are neither included in the analysis nor mentioned in the DEIR. Also, the Centerpointe Project, a 353,859 square feet distribution center (PA07-0147, PA07-0157) which was approved by the Planning Commission in early 2010 was not included. This failure to analyze any impacts from past and present projects, as well as projects outside of the two-mile radius results in an inadequate analysis of the impacts to traffic, air quality, greenhouse gas emissions, and aesthetics, among others.

JS-3 (cont'd)

Furthermore, the cumulative impact section often fails to recognize that impacts which are less than significant on their own may nonetheless be cumulatively significant. The cumulative impact analysis also fails to summarize "the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available," as is required by CEQA. (Cal. Pub. Res. C. § 15130(b)(4).)

Therefore, the DEIR fails as an informational document as it does not provide an accurate analysis of the cumulative environmental effects that will result and therefore does not allow for sound and informed decision making on behalf of approving agencies.

General Plan Consistency:

CEQA requires that an EIR "discuss any inconsistencies between the proposed project and applicable general plans." (CEQA Guidelines 15125(d).)Yet, the DEIR fails to discuss the inconsistency of the Project with a number of applicable provisions contained within the General Plan.

JS-4

The project is inconsistent with the following General Plan provisions: Goal 2.2; Objective 2.13; and Policies 2.10.14, 2.13.1, and 2.13.3. Goal 2.2 requires that "the optimum degree of health, safety, well-being, and beauty for all areas of the community" be achieved yet the Project has numerous significant and unavoidable impacts to the safety, health and well-being of residents throughout Moreno Valley. Policy 2.10.14 requires that existing mature trees be preserved or relocated and only replaced when they cannot be preserved or relocated. Yet, although the Project will replace those existing mature pine trees along the

northerly boundary with a double-row of new trees, the DEIR fails to discuss whether these mature trees will be relocated and if not, how or why preservation or relocation of these mature trees is infeasible. Policy 2.13.3 of Objective 2.13 requires that "the sponsor of a development project…assure that all necessary infrastructure improvements…needed to support project development are available at the time that they are needed" yet, as will be discussed below, there is nothing to indicate that those improvements that will be required to mitigate for traffic will actually be implemented.

JS-4 (cont'd)

Agricultural Impacts:

Although the Project will result in the conversion of farmland to non-agricultural uses the DIER finds that the impact will be less than significant. This finding is not supported by substantial evidence when the Initial Study itself states that the site is designated as Farmland of Local Importance due to the high quality of soil at the site and the Project Description states that the land has actually been used for agricultural production within the last twenty (20) years. As such, mitigation for this loss of prime agricultural land is required. It is well documented that agricultural land is the largest part of Riverside's economy. **The EIR prepared for the City of Moreno Valley General Plan recognizes that due to this loss of agricultural land, impacts are potentially significant and feasible mitigation measures would effectively lessen this significant impact.** (See Exhibit 4.) Therefore, the following mitigation measures must be adopted:

JS-5

1. Purchase conservation easements on existing agricultural land to ensure that the land is never converted to urban uses.
2. Donate funds to a regional or statewide program that promotes and implements the use of agricultural land conservation easements.

Land Use and Planning:

This Project will have a significant impact to Land Use and Planning which was not adequately evaluated in the DEIR. The Project involves a zone change from Business Park to Light Industrial as well as an amendment to the Municipal Code as a result of its proximity to residential areas. The effects of the zone change and the amendment to the Muncipal Code are both potentially significant impacts which must be further evaluated and potentially mitigated in the DEIR.

JS-6

Additionally, as stated on page 2-4 of the Initial Study land south of the Project site contains a Primary Animal Keeping Overlay Zone ("PAKO Zone") "in order to maintain animal keeping and the rural character of the area" yet this is not even mentioned in the DEIR. The Project's effects on this zoned area and the extent that this Project will disrupt the ability of people to keep animals in this zone must be analyzed and potentially mitigated.

Air Quality and Greenhouse Gas Emissions/Climate Change:

JS-7

Air Quality

Air quality impacts will be significant and unavoidable during both the construction and operation phases.

Construction:

The air quality analysis is flawed and underestimates the impact on air quality during construction. The air quality analysis improperly assumes for Phase 2 Grading a value of zero Vehicle Miles Traveled (0 VMT) for on-road truck travel. This is improper as the analysis must account for the VMT by construction workers *to and from* the Project site. JS-7 (cont'd)

Even under the current analysis, without mitigation, construction of the project will result in levels of VOC, NOx, PM10, and PM2.5 exceeding SCAQMD Regional Thresholds, yet all feasible mitigation measures were not adopted to reduce construction related emissions, and the mitigation which was adopted does not sufficiently mitigate the impacts and is uncertain to occur. For example, MM 4.3.4 does not reduce VOC to the greatest extent feasible. MM 4.3.4 should be modified to require that all paints, coatings, and solvents are zero (0) VOC. JS-8

MM 4.3.1 does not sufficiently mitigate for air quality impacts and is uncertain and unenforceable. In recommending this mitigation measure, the air quality analysis stated that traffic speeds should be reduced in order to reduce PM10 and PM2.5 fugitive dust haul road emissions *by approximately 44%*. Yet, MM 4.3.1 clearly leaves out this, or an even more stringent, performance standard, as required to make the mitigation measure enforceable. MM 4.3.1 should require that traffic speeds be reduced to a level which will reduce dust emissions by 44%. This measure should also be modified to include the specific measures which the contractor shall take to ensure that traffic speeds on unpaved roads are reduced to 15 miles per hour, such as the placement of signage or other speed controlling devices. Mitigation measures should also be required to include measures which mitigate for and ensure dust control at the dump site where the soil from the project site will be placed. JS-9

MM 4.3.7 should not only require that electrical power sources "be provided" but also require that electrical construction equipment be *actually used* "whenever technically feasible." JS-10

Although the air quality analysis recommends that "[p]rior to issuance of a grading permit, the grading plans shall reference that a sign shall be posted on-site stating that construction workers need to shut off engines after five minutes of idling," this mitigation measure was not included in the DEIR. This is unacceptable, particularly since the DEIR states that air quality emissions are significant and unavoidable, and this mitigation measure is plainly feasible and would reduce air quality emission. Moreover, this measure is required by CARB, in Title 13, Chapter 10, Section 2485, Division 3 of the California Code of Regulations. This mitigation measure must be included in the DEIR. JS-11

The air quality analysis also states that in order to stabilize the soil and decrease impacts from fugitive dust due to fine and mass grading, a mitigation measure to replace ground cover in disturbed areas "quickly" should be adopted. Yet, the DEIR fails to include such a mitigation measure. Again, this is unacceptable particularly since the air quality emissions are significant and unavoidable and this mitigation would reduce both PM10 and PM2.5 by JS-12

an additional 10%. Mitigation must be included requiring that landscaping or other vegetation be planted as soon as possible after disturbance. JS-12 (con'd)

In analyzing air quality due to fine site grading activity, the air quality analysis assumes that a maximum of 13.66 acres per day will be disturbed by grading activity. In order to ensure that the effect on air quality from fugitive dust is not greater than that relied upon by the DEIR, a mitigation measure must be adopted that *limits* fine site grading activity to a level below 13.66 acres per day. In fact, an even lower maximum daily acreage should be required in order to further mitigate for these impacts. JS-13

Even after applying mitigation measures, construction air quality impacts are expected to be significant and unavoidable and well above the thresholds of significance for criteria pollutants. For example, with implementation of the mitigation measures listed in the DEIR, emissions of PM10 during construction will amount to 39.51 $\mu g/m^3$ over 24-hours, almost four times the 10.4 $\mu g/m^3$ SCAQMD Localized Significance Threshold, while emissions of PM2.5 during construction will amount to 12.40 $\mu g/m^3$ over 24-hours, well over the 10.4 $\mu g/m^3$ SCAQMD Localized Significance Threshold. Additionally, VOC will reach 205.37 lbs/day, more than two and one half times the 75 lbs/day SCAQMD Regional Significance Threshold and NOx will reach 287.12 lbs/day, almost three times the 100 lbs/day SCQAMD Regional Significance Threshold. Yet, the DEIR suggests adoption of only nine (9) mitigation measures and simply concludes that the remaining unmitigated emission are unavoidable. This is insufficient. In order to further reduce construction air quality emissions, the following additional mitigation measures should be adopted:

1. Require the purchase of NOx credits from a qualified broker to off-set construction-related air quality impacts.
2. Install gravel pads at all access points to prevent tracking of mud onto public roads.
3. Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect.
4. Complete all roadways, driveways, sidewalks, etc., as soon as possible. In addition, lay building pads as soon as possible after grading unless seeding or soil binders are used.
5. Pave all roads on construction sites as soon as technically possible.
6. Limit fugitive dust sources to 20 percent opacity.
7. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite.
8. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.
9. Require high pressure injectors on diesel construction equipment.*
10. Restrict engine size of construction equipment to the minimum practical size.*
11. Use Electric construction equipment where technically feasible.*
12. Substitute gasoline-powered for diesel-powered construction equipment.*
13. Require use of alternatively fueled construction equipment, using, e.g., compressed natural gas, liquefied natural gas, propane, or biodiesel.*
14. Implement activity management techniques including a) development of a comprehensive construction management plan designed to minimize the number of

JS-14

large construction equipment operating during any given time period; b) scheduling of construction truck trips during non-peak hours to reduce peak hour emissions; c) limitation of the length of construction work-day period; and d) phasing of construction activities.*

15. Install catalytic converters on gasoline-powered equipment.*
16. Use electricity from power poles rather than temporary diesel power generators.*
17. Alternative diesel fuels exist that achieve PM10 and NOx reductions. PuriNOx is an alternative diesel formulation that was verified by CARB on January 31, 2001 as achieving a 14% reduction in NOx and a 63% reduction in PM10 compared to CARB diesel. It can be used in any direct-injection, heavy-duty compression ignition engine and is compatible with existing engines and existing storage, distribution, and vehicle fueling facilities. Operational experience indicates little or no difference in performance and startup time, no discernable operational differences, no increased engine noise, and significantly reduced visible smoke.
18. Prior to the issuance of a grading and building permit, the applicant shall submit verification that a ridesharing program for the construction crew has been encouraged and will be supported by the contractor via incentives or other inducements.*
19. Minimize construction worker trips by requiring carpooling and providing for lunch onsite.*
20. Provide shuttle service to food service establishments/commercial areas.*
21. Provide shuttle service to transit stations/multimodal centers.*
22. Utilize only CARB certified equipment for construction activities.*
23. All forklifts shall be electric or natural gas powered.*
24. Extend grading period sufficiently to reduce air quality impacts below a level of significance.

JS-14 (cont'd)

Operational:

The Air Quality Analysis for operational emissions fails to note the variances from default values which are standard for the SCAQMD that were used when conducting the URBEMIS Analysis. **Further, the total number of trips analyzed in the air quality section (1,585.22) was over 54% less than the total number of trips estimated in the traffic analysis (2,930).** This renders the DEIR inadequate as an informational document as it does not allow one to accurately assess the Project impacts.

JS-15

The DEIR also inaccurately represents the values used in the LST Analysis. The Air Quality Analysis states that the average trip length used was 0.3 miles and the vehicle speed was 10 miles per hour. Yet, the DEIR incorrectly states that the average trip length used in the LST Analysis was 0.5 miles while the vehicle speed was 5 miles per hour. (DEIR, 4.3-68) Again, this failure in the DEIR to accurately reflect the values used in the LST Analysis renders the DEIR inadequate as an informational document.

JS-16

The DEIR and air quality analysis conclude that for long-term operational activities, even after mitigation, VOCs and NO_x will exceed SCAQMD's Regional Significance Thresholds. Without mitigation, the regional emissions of VOCs and NO_x are exceeded for both summer and winter, with NO_x greatly exceeding the threshold of 55 lbs/day with 739.69 lbs/day in the summer and 819.10 lbs/day in the winter. With the mitigation measures, the emissions of

JS-17

NO_x would be reduced by only a meager .03 lbs/day in summer and .17 lbs/day in winter and emissions of VOCs would be reduced by only .01 lbs/day. These reductions are clearly insignificant. **The mitigation measures do not actually mitigate for the significant operational impacts to NOx and VOC.**

JS-17 (cont'd)

MM 4.3.11 requires that the project surpass California Title 24 Energy Efficiency performance standards by a minimum of 20 percent. This goal is to be met by using any combination of a number of listed design features. Particularly since NOx emissions are significant this mitigation measure should require that the project surpass California Title 24 Energy Efficiency standards by at least 30 percent. In fact, all design features listed should be required to be implemented as a way to mitigate the significant effects on air quality.

JS-18

Additionally, many more operational mitigation measures are feasible and may be implemented through contract requirements in the purchase, sale, or lease agreement. Such mitigation must be required unless the incorporation into the contract of a mitigation measures is shown to be *infeasible*, not merely inconvenient. The following mitigation measures should be required to reduce Project operational impacts:

1. Require the utilization of zero VOC paint, coatings, and solvents.
2. Require the purchase of NOx credits from a qualified broker to off-set construction-related air quality impacts.
3. The operator of the primary facilities (buildings of 400,000 s.f. or more) shall become SmartWay Partner.*
4. The operator of the primary facilities (buildings of 400,000 s.f. or more) shall incorporate requirements or incentives sufficient to achieve at least 20% per year (as a percentage of previous percentage, not total trips) increase in percentage of long haul trips carried by SmartWay carriers until it reaches a minimum of 90% of all long haul trips carried by SmartWay 1.0 or greater carriers. Results, including backup data shall be reported to the Planning Department semi-annually.*
5. The operator of the primary facilities (buildings of 400,000 s.f. or more) shall incorporate requirements or incentives sufficient to achieve a 15% per year (as a percentage of previous percentage, not total trips) increase in percentage of consolidator trips carried by SmartWay carriers until it reaches a minimum of 85% of all consolidator trips carried by SmartWay 1.0 or greater carriers. Results, including backup data shall be reported to the Planning Department semi-annually.*
6. By the end of the year 2012 all fleet vehicles shall conform to 2010 air quality standards or better. Results, including backup data shall be reported to the Planning Department semi-annually.*
7. Install catalytic converters on gasoline-powered equipment.*
8. Alternative diesel fuels exist that achieve PM_{10} and NOx reductions. PuriNOx is an alternative diesel formulation that was verified by CARB on January 31, 2001 as achieving a 14% reduction in NOx and a 63% reduction in PM_{10} compared to CARB diesel. It can be used in any direct-injection, heavy-duty compression ignition engine and is compatible with existing engines and existing storage, distribution, and vehicle fueling facilities. Operational experience indicates little or no difference in performance and startup time, no discernable operational differences, no increased engine noise, and significantly reduced visible smoke.

JS-19

9. Electrical powered equipment must be utilized in-lieu of gasoline-powered engines where technically feasible.*
10. Require each user to establish a carpool/vanpool program.*
11. Provide on-site child care or contribute to off-site child care within walking distance.*
12. Provide preferential parking for carpool/vanpool vehicles.*
13. Provide secure, weather-protected bicycle parking for employees.*
14. Provide direct safe, direct bicycle access to adjacent bicycle routes.*
15. Provide showers and lockers for employees bicycling or walking to work.*
16. Short-term bicycle parking for retail customers and other non-commute trips.*
17. Connect bicycle lanes/paths to city-wide network.*
18. Design and locate buildings to facilitate transit access, e.g., locate building entrances near transit stops, eliminate building setbacks, etc.*
19. Prohibit idling of trucks for periods exceeding three minutes.*
20. Construct transit facilities such as bus turnouts/bus bulbs, benches, shelters, etc.*
21. Provide shuttle service to food service establishments/commercial areas.*
22. Provide shuttle service to transit stations/multimodal centers.*
23. Implement parking fee for single-occupancy vehicle commuters.*
24. Implement parking cash-out program for non-driving employees.*
25. Provide direct, safe, attractive pedestrian access from project to transit stops and adjacent development.*
26. Implement a compressed workweek schedule where feasible.*
27. Provide electrical vehicle ("EV") and compressed natural gas ("CNG") vehicles in vehicle fleets.*
28. Install EV charging facilities *for a minimum of 10% of all parking spaces*.*
29. Install a CNG fueling facility.*
30. Provide preferential parking locations for EVs and CNG vehicles.*
31. Utilize electrical equipment for landscape maintenance.*
32. Utilize only CARB certified equipment for construction activities.*
33. All forklifts shall be electric or natural gas powered.*
34. Provide subsidies or incentives to employees who use public transit or carpooling, including preferential parking.*
35. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.*
36. Utilize low pressure sodium fixtures for exterior lighting including parking lots.
37. Utilize electric yard trucks.*
38. All buildings shall be constructed to LEED Platinum standards.*
39. The operator shall meet SmartWay 1.25 ratings.*
40. The operator shall use only freight companies that meet SmartWay 1.25 ratings.*
41. The developer shall install photovoltaic solar systems sufficient to offset all electrical usage.*
42. The developer shall install photovoltaic solar systems sufficient to offset all vehicular emissions.*
43. The operator shall purchase only green power.*

JS-19 (cont'd)

<u>Climate Change/GHG emissions</u>:

According to the air quality analysis, this Project would generate GHG emissions that will have a significant effect on the environment. However, the DEIR concluded that GHG emissions are less than significant since the Project's emissions will not exceed the thresholds of significance proposed by SCAQMD (stationary source GHG emissions ≥ 10,000 metric tons per year of CO_2E) or CARB (7,000 metric tons per year of CO_2E from non-transportation related GHG sources). Not only is this conclusion improper but the analysis used to determine GHG emissions is also flawed. JS-20

The thresholds for significance for SCAQMD and CARB relate only to *non-transportation/stationary* sources. Therefore, the GHG emission analysis and conclusion of less than significance is deeply flawed as it fails to account for the majority of GHG emissions for the Project which are attributable to non-stationary/mobile sources. Of the total estimated 30,003.39 metric tons/year of CO_2E, 27,858.08 metric tons/year come from mobile sources, whereas only 7% of CO_2E is derived from stationary sources. JS-21

Furthermore, the same reduced number of trips used in the air quality analysis was used for determining the impact on global climate change. For the same reasons previously discussed, this is inappropriate and does not adequately represent the negative impact this Project will have on global climate change. When the 2,930 traffic trips used in the traffic analysis is used rather than the 1,585.22 traffic trips as suggested, the GHG emission for transportation sources increases more than double from 27,858.08 CO_2E to 51,490.77 CO_2E. **Clearly, GHG emissions are far greater than that estimated in the DEIR.** JS-22

The GHG emission analysis is also deeply flawed in assuming that no new mobile source of emissions will be created by this Project. Where the project consists of a new distribution center and truck parking, the vehicular emissions in fact create a "new" mobile source of emissions as they create new trucking jobs, and do not merely redistribute the existing traffic patterns as this analysis has assumed. JS-23

The DEIR incorrectly concludes that even though GHG emissions from the Project would be significant, since the Project is consistent with the CARB Scoping Plan and the 2006 CAT Report, GHG emissions are not cumulatively considerable. Yet, this project is, in fact, inconsistent with the CARB Scoping Plan. For instance, Action T-7 recommends that trucks/trailers be retrofitted with BAT and/or CARB-approved technology, yet this Project does not require this retrofit. The DEIR also states that the Project is consistent with Action E-4 (Million Solar Roofs) which sets a target for the installation of 3,000 megawatts (MW) of new solar capacity by 2017, yet the Project does not include nor require installation of a photovoltaic solar electricity system. In order to actually work to achieve this goal of new solar capacity, the Project should require, as a mitigation measure, the installation of a photovoltaic solar electricity system Such a system may be required through contract requirements in the purchase, sale, or lease agreement. JS-24

The DEIR also states that the Project is in compliance with 2006 CAT Report GHG Emission Reduction Strategies. Yet, these determinations of compliance are not supported by any *mandatory requirements,* but rather based on mitigation measures which are not fully enforceable or feasible. For example, the DEIR states that vehicles accessing the site will be in compliance with CARB vehicle standards to the "maximum extent feasible," but does not define this or implement any standard of performance. The DEIR also states that compliance JS-25

with the State's goal of achieving 50% Statewide Recycling will be met through including "provisions for tenants to recycle," yet, there is no requirement that this goal be met. Recycling of at least 50% by the future tenant should be mandatory and required as a mitigation measure through contract requirements in the purchase, sale or lease agreement. In stating that the Project is compliant with the requirement for water use efficiency, the DEIR states that implementation of water conserving devices should be required "to the extent feasible." This language is again vague and does not include any enforceable performance standards. Also, the Project does not require compliance with the California Solar Initiative, one of the strategies identified as critical for California to meet its greenhouse gas reduction targets. The Project merely *recommends* adoption of a requirement that "[a]ll buildings be designed to accommodate renewable energy sources, such as pholtovoltaic solar energy systems..." (DEIR, pg. 1-58) Again, this should be a *required*. Furthermore, the project is also inconsistent, and/or determined to not require compliance with several other CAT strategies, notably with respect to Alternative Fuels.

JS-25 (cont'd)

The DEIR fails to analyze or provide evidence as to how any alleged compliance with the strategies in the 2006 CAT Report or the CARB Scoping Plan would reduce GHG emissions from this Project so that cumulative GHG impacts would not be significant. Furthermore, the DEIR fails to show how the Project is consistent with statewide goals in AB32 of reducing carbon emissions to 1990 levels 2020 and of Executive Order S-3-05 of reducing carbon emissions to 80% below 1990 levels by 2050, when this project only contributes to and increases these carbon emissions.

JS-26

The California Air Pollution Control Officer's Association ("CAPCOA") has analyzed several means of determining the significance of a project's greenhouse gas impacts under CEQA in its CEQA & Climate Change White Paper. CAPCOA determined that a threshold of zero or a quantitative threshold designed to capture 90 percent or more of likely future discretionary projects (a 900-ton CO_2E threshold) are highly effective at reducing emissions and highly consistent with the emission reduction targets set forth under AB 32 and Executive Order S-3-05. (See Exhibit 5.) The Bay Area Air Quality Management District (BAAQMD) has also drafted guidance on the determination of significance for greenhouse gas impacts. BAAQMD has recognized that there is a "gap" between state action to reduce emissions and the need to further reduce emissions from land-use driven sectors in order to reach AB 32 targets. (See Exhibit 6.) After a series of calculations, BAAQMD then determined that projects above 1,100 tons (accounting for approximately 92% of all GHG emissions from new land use development) would be considered significant, thereby requiring the adoption of all feasible mitigation measures and helping to get nearer to meeting AB 32 targets after statewide regulations are taken into account. Additionally, in the EIR for the Highland Fairview project, the City adopted a zero emissions threshold for the assessment of impacts of GHG on climate change. The Project clearly exceeds the zero threshold. Accordingly, all feasible mitigation measures must be implemented and thus all suggested design features in Mitigation Measure 4.3.11 must be required to be implemented in the Project design.

JS-27

The DEIR improperly concludes that due to the Project's supposed consistency with the CARB Scoping Plan and the 2006 CAT Report "that the Project's greenhouse gas emissions are not cumulatively considerable." (DEIR, pg. 5-14) As discussed above, even if the Project were consistent with the CARB Scoping Plan and the 2006 CAT Report, GHG

JS-28

emissions from the Project are not less than significant. Additionally, the conclusion that GHG emissions are not cumulatively considerable just because the emissions are not individually considerable (although not actually true) completely ignores the concept of cumulative impacts. "'Cumulatively considerable' means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." Guidelines § 15064(h)(1). As the DEIR admits, climate change is a global issue as emissions from sources worldwide combine to create the most pressing environmental and social problem of our time resulting in increased flooding, decreased water supply, negative impacts to biological resources, as well as numerous other negative effects. These sources may "appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact." *Los Angeles Unified School Dist. v. City of Los Angeles,* 58 Cal.App.4th 1019, 1025 (1997). Here, the cumulative effects on GHG emissions were not adequately analyzed. GHG emissions, which are already estimated at over 30,000 metric tons of CO_2E per year for just this Project, will have a large cumulative effect and this impact must be addressed in the DEIR and be properly mitigated. **Adoption of air quality mitigation measures marked with an asterisk and provided above will help further mitigate GHG emissions.**

JS-28 (cont'd)

After all measures have been implemented to reduce emissions, any remaining emissions that cannot be eliminated may be mitigated through off-site measures. The Final Statement of Reasons for CEQA GHG Guidelines specifically contemplates off-site mitigation such as "community energy conservation projects." CAPCOA also found that a potential cost-effective offset and verifiable offset could include an energy-efficient retrofit of existing building stock in the Project area to offset the remainder of the Project's emissions. (See Exhibit 5 at 80.) Offsetting GHG emissions in the project area could also effectively reduce criteria pollutants.

JS-29

Noise:

Construction:

Intermittent noise levels due to construction at the Project site are expected to reach 89 dBA at the nearest residential properties, well in excess of the daytime 60 dBA Leq allowable under the Moreno Valley Municipal Code. Even at the more distant residential neighborhoods one quarter mile away from the Project site, noise levels during construction are expected to reach 60 to 65 dBA Leq. The DEIR concludes that even after implementing four mitigation measures, that construction noise will be significant and unavoidable. Yet, the DEIR does *not* adopt all feasible mitigation measures. Also note that Mitigation Measure 4.4.3, which limits constructions activities to between 7:00 a.m. and 8:00 p.m. does *not* mitigate the fact that noise levels of 89 dBA will be in excess of the City's noise ordinance during *daytime* hours. The fact that the ordinance establishes time frames does not eliminate or lessen the environmental impact it merely means that the impacts are not subject to criminal sanctions. The threshold of significance is therefore still exceeded during the day.

JS-30

Additionally, Mitigation Measure 4.4.4 merely requires that the Project plans include a statement that "for the duration of grading and site preparation activities, temporary construction noise curtains or similar line-of-sight noise reduction measures shall be

JS-31

installed along the Project's southerly boundary" and should "provide maximum reduction for noise sensitive uses...." The term "maximum reduction" is vague and unenforceable. In order to ensure that this mitigation measure actually reduces the level of noise, the measure should require that these sound barriers, which should also include temporary sound walls, actually **reduce noise at sensitive receptors to no more than 60 dBA Leq.**

JS-31 (cont'd)

The Noise Analysis recommends the following feasible mitigation measures which must be adopted:

1. Prepare and implement a noise mitigation program and designate whom is responsible for implementing the program, when such a program must be implemented and planned, and include such actions as noise monitoring at selected noise sensitive locations, monitoring complaints, and identification of the major sources of noise.
2. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.
3. Notify surrounding homeowners of expected, specific construction related noise impacts.

JS-32

In addition, the following mitigation measures, not mentioned in the Noise Analysis, should be adopted:

4. When technically feasible, electrical construction equipment should be utilized.
5. During project construction, the developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use or prohibit idling in excess of 3 minutes.

JS-33

Additionally, the DEIR improperly adopts as a threshold of significance, an audible increase in noise levels of 3.0 dBA or greater. This is an improper and inaccurate assumption and is certainly not supported by Appendix G of the *CEQA Guidelines* as stated in the DEIR. The threshold of significance is whether the project would result in "exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance...." Here, 60 dBA is the standard for residential uses and noise levels will be in excess of this standard.

JS-34

In terms of ground-borne vibration, there is no evidence pointed to in the DEIR that shows that vibrations would be less than significant even though heavy equipment used during construction "could potentially generate groundborne vibration impacts." Instead the DEIR makes the conclusory statement of insignificance without data or analysis to support such a determination. The DEIR also only mentions vibration impacts to *buildings* when it should also look at impacts to people. Therefore, the DEIR again fails as an informational document.

JS-35

<u>Operational - Cumulative Impacts:</u>

As previously discussed, the DEIR fails to look at all cumulatively related projects. This is improper.

JS-36

The DEIR finds that the cumulative effects on existing roadways will cause an increase in noise levels of up to 9.5 dB, yet, the DEIR improperly concludes that since the impact from the Project *on its own* is less than 3 dBA that the cumulative impact is not significant. Again, this analysis is completely improper. An increase of 3 dBA is not the threshold of significance adopted for the project. The threshold of significance is whether the project would result in "exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance …." Again, that standard for residential uses is 60 dBA and noise levels will be in excess of this standard. For example, with the project, noise levels 100 feet from Redlands Boulevard south of the SR-60 eastbound off-ramp will reach 69.3 dBA and noise levels 100 feet from SR-60 will range from 82.1 to 83.9 dBA. Further, the project will cause noise levels to *increase over levels without the project* at numerous roadway segments. This is a significant impact for which all feasible mitigation must be required. JS-37

Additionally, the Noise Analysis uses noise measurements previously taken at the G.I. Trucking facility in Pomona, California, although neither the Noise Analysis nor the DEIR provide information on this facility in order to show that the activity at the G.I. Trucking facility is comparable to that which would occur at this Project. Therefore the analysis is inadequate to determine the accuracy of potential noise impacts. JS-38

The following feasible mitigation measures must be adopted as recommended in the Noise Analysis:

1. All trucks, tractors and forklifts shall be operated with proper operating and well maintained mufflers.
2. Maintain quality pavement conditions that are free of bumps to minimize truck noise.
3. Limit the number of idling trucks on the southeastern portion of the site.

JS-39

Traffic and Circulation:

Interstate 15 ("I-15") and Interstate 215 ("I-215") provide access to the Project area and will most certainly be used to access the Project site. Yet, the DEIR fails to assess the impacts this Project will have on I-15 and I-215 and fails to provide feasible mitigation for projected increased traffic congestion to I-15 and I-215. In order to mitigate for the substantial impacts to these Interstates, mitigation must be included which requires the Project to contribute a fair share to CALTRANS in order to support implementation of improvements to the I-15 and I-215. JS-40

Numerous mitigation measures require that the project participate in fee programs, namely the TUMF and DIF Programs. While payment of fair share fees can be appropriate mitigation for cumulative traffic impacts, they are only adequate when there is an existing program, and that program is adequately funded. The DEIR does not provide any data to quantify roadway costs, projected revenues, or adequacy of funds for the improvements needed to mitigate traffic impacts for this project. The DEIR also fails to provide information as to the availability of existing fee programs and the financial capability of these programs to actually fund the required improvements for this project. JS-41

The traffic impact mitigation relying on the DIF program is inadequate and is not certain to mitigate traffic impacts. The City announced several months ago that the DIF fees were inadequate to actually construct all required improvements. At that time, the DIF fees were underfunded by approximately 50%. In addition, at the August 18, 2009 City Council Hearing, the City further reduced DIF fees, further increasing the shortfall. There is absolutely no evidence in the record to show that the existing program is adequately funded.

Additionally, these measures do not indicate when the fees will be paid. If required to be paid at the time of construction, the amount could be non-representative of the project's "fair share" in the future. Accordingly, there is absolutely nothing to indicate that the traffic mitigation needed can actually be completed, that mitigation will bring levels of service to acceptable levels, or that there will be adequate funding to install the improvements prior to their need.

JS-41 (cont'd)

Therefore, the following mitigation measures should also be adopted:

1. Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow.*
2. Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site.*
3. Reroute construction trucks away from congested streets and sensitive receptor areas.*
4. Configure construction parking to minimize traffic interference.*
5. Prior to the issuance of a grading and building permit, the applicant shall submit verification that a ridesharing program for the construction crew has been encouraged and will be supported by the contractor via incentives or other inducements.*
6. Minimize construction worker trips by requiring carpooling and providing for lunch onsite. *
7. Provide shuttle service to food service establishments/commercial areas for the construction crew.*
8. Provide shuttle service to transit stations/multimodal centers for the construction crew.*
9. Improve traffic flow by traffic synchronization.

JS-42

Again, the cumulative analysis of traffic impacts is insufficient as it fails to consider numerous projects as previously discussed.

JS-43

Water Supply/Sewer:

The DEIR improperly looks to potable water demand of the project (44 acre feet per year) to determine less than significant impact on water supply, instead of total water demand. The DEIR states that the "EMWD has determined that it will be able to provide adequate water supply to meet the **potable** water demand for the project…." There is no analysis of the impact of any additional water for the Project on diminishing water supplies for other uses such as agricultural uses, despite the fact that agricultural users have been put on mandatory water reductions because of water shortages.

JS-44

The DEIR fails to examine impacts from global warming and climate change to water supplies. Specifically, the DEIR does not account for decreased snow pack, expected levee failure, and salinity intrusion into coastal water tables, especially with the State Water Project. Additionally, the state-wide drought and low availability of water throughout southern California will cause water supply to likely be much lower than projected, and the project may have a very significant impact.

JS-45

In order to mitigate for these significant impacts, the following mitigation measures should be adopted:

1. Install permeable pavement in car parking areas.
2. Implement concave pooling areas in the landscaping to allow for groundwater recharge.

JS-45 (cont'd)

Hydrology and Water Quality:

As discussed in the Preliminary Hydrology Study, on page 6, in order to mitigate for impacts from runoff, the project should be required to "clean the sediment build up in the existing triple 60" pipes crossing under the 60 freeway as well as the existing 60" Pipe outleting into the Redlands Blvd. westerly drainage ditch. This mitigation measure must be included in the DEIR.

JS-46

The DEIR fails to analyze the impact at the southwesterly corner of the Project site if the future drainage improvements that are to eventually be constructed "by others in association with eventual bridged crossing of the Quincy Channel" are not constructed or construction is delayed. The DEIR fails to indicate when these drainage improvements are to be constructed and how they will be funded.

JS-47

Cultural Resources:

The DEIR fails to provide adequate information to evaluate whether prehistoric resources will be impacted as a below ground investigation was not conducted, merely a surface study, even though most prehistoric resources would be expected to be discovered underground and prehistoric resources have been identified at numerous sites within one mile of the Project site.

JS-48

Additionally, the mitigation measures provided to reduce cultural resources below a level of significance are insufficient and uncertain. CEQA prefers that underground cultural resources be preserved in situ whenever possible, yet this Project fails to account for this or require mitigation which requires that resources be preserved underground. MM 4.7.1 and 4.7.3 permit only temporary halts upon discovery of cultural resources, although longer halts and delays may be necessary to properly record and remove resources. These mitigation measures state that this delay is meant to "avoid construction delays." Therefore, it is likely that the cultural resources located onsite will be unearthed, damaged, improperly recorded, etc. in order to not inconvenience construction.

JS-49

Further mitigation is feasible. The mitigation measures should give the cultural resources monitor the power to halt construction for as long as necessary in order to properly unearth and remove resources, not merely do a piecemeal salvage job. Further, some option to preserve the resources in situ should be provided in the event of the discovery of extensive cultural resources.

JS-50

Biological Resources:

The DEIR and biological survey conclude, without providing adequate evidence or analysis, that although common wildlife would potentially be impacted by loss of this ruderal agricultural land, that this impact would not be significant. This is a conclusory statement not supported by evidence in the DEIR. The development of farmland and open space results in a loss of habitat and in turn, wildlife. The impacts to biological resources must be accurately analyzed and mitigated. JS-51

Aesthetics:

The Project is expected to change scenic vistas and cause a significant and unavoidable aesthetic impact and cumulatively result in a substantial adverse effect on scenic views in the Project area. In an attempt to mitigate these effects, the Project should be required to conduct off-site mitigation and preserve a separate off-site scenic area within Moreno Valley, or if not feasible, within Western Riverside County. JS-52

Project Alternatives:

CEQA requires that an EIR consider a reasonable range of project alternatives that lessen significant project impacts and meet basic project objectives. In this case, the DEIR fails to satisfy this mandate by not analyzing a "reasonable range" of alternatives because besides the no-project alternatives, the DEIR only actually considers the Reduced Intensity Alternative and Alternative Site 5. Further, Alternative Site 5 would not lessen significant project impacts. Although mentioned in the DEIR, Alternative Sites 1, 2, 3, and 4 were not actually considered as these sites are unavailable since other development is already planned for these sites. Further, any rejection of project alternatives has to be supported by findings supported by substantial evidence and this evidence does not appear in the record. JS-53

Thank you for your consideration.

Sincerely,

Raymond W. Johnson, Esq. AICP
JOHNSON & SEDLACK

Encl: Exh (11)

EXHIBITS

(1) Moreno Valley New Project Maps with Commercial Development Activity, New Housing and Planned New Housing. (Accessed from the City of Moreno Valley website, December 2, 2010).

(2) Moreno Valley Residential Development Projects. (Accessed from the City of Moreno Valley website, December 2, 2010).

(3) Moreno Valley Commercial Development Projects. (Accessed from the City of Moreno Valley website, December 2, 2010).

(4) Final Environmental Impact Report, Moreno Valley General Plan: 5.8, Agricultural Resources. (July 2006).

(5) California Air Pollution Control Officers Association. (January 2008) *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act.*

JS-54

(6) Bay Area Air Quality Management District. (December 7, 2009) *California Environmental Quality Act Guidelines Update, Proposed Thresholds of Significance.*

(7) U.S. Department of Transportation, Federal Highway Administration. (August 2006) *Construction Noise Handbook, Chapter 4.0 Construction Noise Criteria and Descriptors.*

(8) U.S. Department of Transportation, Federal Highway Administration. (August 2006) *Construction Noise Handbook, Chapter 9.0 Construction Equipment Noise Levels and Ranges.*

(9) U.S. Department of Housing and Urban Development. (March 1985) *The Noise Guidebook.*

(10) Suter, Dr. Alice H., Administrative Conference of the United States. (November 1991) *Noise and Its Effects.*

(11) Federal Interagency Committee on Urban Noise. (June 1980) *Guidelines for Considering Noise in Land Use Planning and Control.*

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Johnson & Sedlack, an Environmental Law firm representing plaintiff environmental groups in environmental law litigation, primarily CEQA.

City Planning:

Current Planning

- Two years principal planner, Lenexa, Kansas (consulting)
- Two and one half years principal planner, Lee's Summit, Missouri
- One year North Desert Regional Team, San Bernardino County
- Twenty-five years subdivision design: residential, commercial and industrial
- Twenty-five years as applicants representative in various jurisdictions in: Missouri, Texas, Florida, Georgia, Illinois, Wisconsin, Kansas and California
- Twelve years as applicants representative in the telecommunications field

JS-55

General Plan

- Developed a policy oriented Comprehensive Plan for the City of Lenexa, Kansas.
- Updated Comprehensive Plan for the City of Lee's Summit, Missouri.
- Created innovative zoning ordinance for Lenexa, Kansas.
- Developed Draft Hillside Development Standards, San Bernardino County, CA.
- Developed Draft Grading Standards, San Bernardino County.
- Developed Draft Fiscal Impact Analysis, San Bernardino County

Environmental Analysis

- Two years, Environmental Team, San Bernardino County
  - Review and supervision of preparation of EIR's and joint EIR/EIS's
  - Preparation of Negative Declarations
  - Environmental review of proposed projects
- Eighteen years as an environmental consultant reviewing environmental documentation for plaintiffs in CEQA and NEPA litigation

Representation:

- Represented various clients in litigation primarily in the fields of Environmental and Election law. Clients include:
  - Sierra Club
  - San Bernardino Valley Audubon Society
  - Sea & Sage Audubon Society
  - San Bernardino County Audubon Society
  - Center for Community Action and Environmental Justice
  - Endangered Habitats League
  - Rural Canyons Conservation Fund
  - California Native Plant Society
  - California Oak Foundation
  - Citizens for Responsible Growth in San Marcos
  - Union for a River Greenbelt Environment
  - Citizens to Enforce CEQA
  - Friends of Riverside's Hills
  - De Luz 2000
  - Save Walker Basin
  - Elsinore Murrieta Anza Resource Conservation District

Education:

- B. A. Economics and Political Science, Kansas State University 1970
- Masters of Community and Regional Planning, Kansas State University, 1974
- Additional graduate studies in Economics at the University of Missouri at Kansas City
- J.D. University of La Verne. 1997 Member, Law Review, Deans List, Class Valedictorian, Member Law Review, Published, Journal of Juvenile Law

JS-55 (cont'd)

Professional Associations:

- Member, American Planning Association
- Member, American Institute of Certified Planners
- Member, Association of Environmental Professionals

Johnson & Sedlack, Attorneys at Law
26785 Camino Seco 12/97- Present
Temecula, CA 92590
(951) 506-9925

Principal in the environmental law firm of Johnson & Sedlack. Primary areas of practice are environmental and election law. Have provided representation to the Sierra Club, Audubon Society, AT&T Wireless, Endangered Habitats League, Center for Community Action and Environmental Justice, California Native Plant Society and numerous local environmental groups. Primary practice is writ of mandate under the California Environmental Quality Act.

Planning-Environmental Solutions
26785 Camino Seco 8/94- Present
Temecula, CA 92590
(909) 506-9825

Served as applicant's representative for planning issues to the telecommunications industry. Secured government entitlements for cell sites. Provided applicant's representative services to private developers of residential projects. Provided design services for private residential development projects. Provided project management of all technical consultants on private developments including traffic, geotechnical, survey, engineering, environmental, hydrogeological, hydrologic, landscape architectural, golf course design and fire consultants.

San Bernardino County Planning Department
Environmental Team 6/91-8/94
385 N. Arrowhead
San Bernardino, CA 92415
(909) 387-4099

Responsible for coordination of production of EIR's and joint EIR/EIS's for numerous projects in the county. Prepared environmental documents for numerous projects within the county. Prepared environmental determinations and environmental review for projects within the county.

San Bernardino County Planning Department
General Plan Team 6/91-6/92
385 N. Arrowhead
San Bernardino, CA 92415
(909) 387-4099

Created draft grading ordinance, hillside development standards, water efficient landscaping ordinance, multi-family development standards, revised planned development section and fiscal impact analysis. Completed land use plans and general plan amendment for approximately 250 square miles. Prepared proposal for specific plan for the Oak Hills community.

JS-55 (cont'd)

San Bernardino County Planning Department
North Desert Regional Planning Team
15505 Civic 6/90-6/91
Victorville, CA
(619) 243-8245

Worked on regional team. Reviewed general plan amendments, tentative tracts, parcel maps and conditional use permits. Prepared CEQA documents for projects.

Broadmoor Associates/Johnson Consulting
229 NW Blue Parkway
Lee's Summit, MO 64063
(816) 525-6640 2/86-6/90

Sold and leased commercial and industrial properties. Designed and developed an executive office park and an industrial park in Lee's Summit, Mo. Designed two additional industrial parks and residential subdivisions. Prepared study to determine target industries for the industrial parks. Prepared applications for tax increment financing district and grants under Economic Development Action Grant program. Prepared input/output analysis of proposed race track Provided conceptual design of 800 acre mixed use development.

Shepherd Realty Co.

Lee's Summit, MO
6/84-2-86

Sold and leased commercial and industrial properties. Performed investment analysis on properties. Provided planning consulting in subdivision design and rezoning.

Contemporary Concepts Inc.
Lee's Summit, MO
9/78-5/84
Owner

Designed and developed residential subdivision in Lee's Summit, Mo. Supervised all construction trades involved in the development process and the building of homes.

Environmental Design Association
Lee's Summit, Mo.

Project Coordinator
6/77-9/78

Was responsible for site design and preliminary building design for retirement villages in Missouri, Texas and Florida. Was responsible for preparing feasibility studies of possible conversion projects. Was in charge of working with local governments on zoning issues and any problems that might arise with projects. Coordinated work of local architects on projects. Worked with marketing staff regarding design changes needed or contemplated.

JS-55 (cont'd)

City of Lee's Summit, MO
220 SW Main
Lee's Summit, MO 64063
Community Development Director 4/75-6/77

Supervised Community Development Dept. staff. Responsible for preparation of departmental budget and C.D.B.G. budget. Administered Community Development Block Grant program. Developed initial Downtown redevelopment plan with funding from block grant funds. Served as a member of the Lee's Summit Economic Development Committee and provided staff support to them. Prepared study of available industrial sites within the City of Lee's Summit. In charge of all planning and zoning matters for the city including comprehensive plan.

Howard Needles Tammen & Bergendoff
9200 Ward Parkway
Kansas City, MO 64114
(816) 333-4800 5/73-4/75
Economist/Planner

Responsible for conducting economic and planning studies for Public and private sector clients. Consulting City Planner for Lenexa, KS.

Conducted environmental impact study on maintaining varying channel depth of the Columbia River including an input/output analysis. Environmental impact studies of dredging the Mississippi River. Worked on the Johnson County Industrial Airport industrial park master plan including a study on the demand for industrial land and the development of target industries based upon location analysis. Worked on various airport master plans. Developed policy oriented comprehensive plan for the City of Lenexa, KS. Developed innovative zoning ordinance heavily dependent upon performance standards for the City of Lenexa, KS.

JS-55 (cont'd)

JOHNSON & SEDLACK

Letter Dated December 6, 2010

Response JS-1

The City disagrees with the commentor's generalized assertions regarding the adequacy of the Westridge Commerce Center Draft EIR. As detailed in the following responses, appropriate and enforceable mitigation of the Project's potentially significant individual and cumulative impacts has been identified within the Draft EIR. As appropriate, additional measures suggested by the commentor have been incorporated to further reduce impacts, but these changes do not alter the conclusions or analysis contained in the DEIR. These mitigation measures, as amended herein, have been carried forward into the Mitigation Monitoring Plan included as Section 4.0 within this Final EIR. Similarly, the commentor's contention that the Project is inconsistent with the City's General Plan is addressed in the following responses.

Response JS-2

This comment incorrectly identifies the "Project Sponsor" as ProLogis. As noted on Draft EIR Page 2-2, the Project proponent is actually Ridge Property Trust. Otherwise, the commentor has accurately summarized the general aspects of the proposed Project and its significant impacts.

Response JS-3

This comment incorrectly infers that the Draft EIR's analysis of cumulative impacts was limited to a limited geographical area surrounding the Project site. In addition to the eleven existing and planned development projects identified in Draft EIR Table 5.1-1 (please refer to Draft EIR Page 5-2), the Draft EIR notes that "the cumulative impacts analysis assumes development of the area in a manner consistent with the City of Moreno Valley General Plan, and reflecting the anticipated growth of the region. The analysis of cumulative impacts considers potentially significant impacts that could be

considered cumulatively considerable when viewed in the context of known related projects and generalized ambient growth of the City and region" (Draft EIR Page 5-4).

Affected Draft EIR discussions at Pages 5-1 through 5-25 are revised, as indicated below by **bold underlined text,** providing clarification of considered parameters and geographic scope for each cumulative impact topic.

5.1 CUMULATIVE IMPACT ANALYSIS

CEQA requires that an EIR identify any significant cumulative impacts associated with a project [Guidelines, Section 15130 (a)]. When potential cumulative impacts are not deemed significant, the document should explain the basis for that conclusion. "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." [*CEQA Guidelines*, Section 15355 (a l)]. Thus, a legally adequate cumulative impact analysis is an analysis of a particular project viewed over time and in conjunction with other related past, present and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand. CEQA notes that the discussion of cumulative impacts should be guided by standards of practicality and reasonableness [Guidelines, Section 15130 (b)]. Only those projects whose impacts might compound or interrelate with those of the project under consideration require evaluation. CEQA does not require as much detail in the analysis of cumulative environmental impacts as must be provided for the project alone.

The Guidelines identify two basic methods for satisfying the cumulative impacts analysis requirement: the list-of-projects methodology and the summary-of-projections methodology. Because each environmental resource is affected by its surroundings in different

ways, either of the two methodologies, or a combination of both, may be applied to the analysis of cumulative impacts to each resource. For example, because the approval process and construction phase of development typically takes at least one to two years, the list-of-projects method is likely to provide a more accurate projection of growth in the near term. This method may overstate potential cumulative impacts because the considered list-of-projects may include proposals that will never be developed. Similarly, because development proposals are rarely publicly known until within five (5) years of the expected development, the summary-of-projections method provides a more accurate projection of growth over the long term. This method may not accurately predict growth in any given year, but aggregates various growth trends over the long term. Unless otherwise noted, potential cumulative impacts of the Project are considered in the context of known or probable development proposals (related projects) as well as anticipated ambient growth of the City and region.

As noted previously, the Guidelines identify "that only those projects whose impacts might compound or interrelate with those of the Project under consideration require evaluation." In this regard, it is recognized that within the context of the cumulative impacts analysis, varied criteria are employed in determining the scope and type of "cumulative projects" to be considered. For example, the analysis of cumulative traffic impacts evaluates the Project's traffic impacts in the context of other known or probable development proposals that would discernibly affect traffic conditions within the Traffic Impact Analysis Study Area, though such projects may not affect other environmental considerations.

The manner in which each resource may be affected also dictates the geographic scope of the cumulative impacts analysis. For example, cumulative traffic impacts will typically be localized to the vicinity of a given project site because after a relatively short distance, traffic patterns tend to normalize. Similar considerations factor in evaluating potential cumulative impacts for each of the EIR's environmental topics (Land Use and Planning, Traffic and Circulation, Air Quality, Noise, Water Supply, Hydrology and Water Quality, Cultural Resources, Biological Resources, and Aesthetics).

Unless otherwise noted herein, the cumulative impact analysis ultimately evaluates effects of the Project within the context of anticipated buildout of the City as envisioned under the General Plan and related regional plans. Specific cumulative projects have also been identified where this information may be different, more detailed than that provided within the General Plan or applicable regional plans, or where such specific information otherwise benefits the cumulative impact analyses.

Potential cumulative impacts of the Project are considered in the context of known or probable development proposals, as well as anticipated generalized ambient growth of the region. As identified at Table 5.1-1, and illustrated in Figure 5.1-1, a number of current or anticipated "related projects" have been identified within the cumulative scope of the Westridge Commerce Center Project. Related projects have been identified in consultation and coordination with the Lead Agency. . . .

. . . It should be noted that, with the exception of specific Project-related traffic, air quality, noise and aesthetic impacts, which are forecast to remain significant and unavoidable even after application of all feasible

mitigation, implementation of the mitigation measures identified in this Draft EIR (found in Table 1.10-1) would reduce impacts to a level that is considered less-than-significant.

5.1.1 DISCUSSION OF CUMULATIVE IMPACTS

Potential cumulative impacts for each topic of environmental concern considered in this EIR and associated Initial Study are discussed below. Assessments of potential cumulative impacts are based on development scenarios and growth projections presented in the City's General Plan, related analyses of cumulative impacts presented in the General Plan EIR, as well as potential cumulative effects of the previously-identified related projects.

5.1.1.1 Cumulative Impacts Related to Land Use and Planning

The cumulative impact area when considering potential cumulative land use and planning issues generally includes areas that are currently, or are anticipated to be, subject to provisions of the City General Plan and Zoning Ordinance. These areas include the currently incorporated areas of the City of Moreno Valley and unincorporated areas of the County of Riverside lying within the City's Sphere of Influence.

Implementation of the Westridge Commerce Center Project would result in the introduction of a new industrial use in an area of the City that has, until recently, been largely undeveloped. It is acknowledged that development of the Project would result in a permanent change to the perceived rural character of the Project area. . . .

5.1.1.2 Cumulative Impacts Related to Traffic and Circulation

The cumulative impact area for traffic circulation impacts is generally defined by the Traffic Impact Study Area as detailed within the Project

Traffic Impact Analysis (EIR Appendix B). This Area includes, but is not limited to potentially affected roadways and intersections within the City of Moreno Valley, and also considers all potentially affected Caltrans and Congestion Management Program facilities.

Project-Specific Impacts Are Reduced To Levels That Are Less-Than-Significant

Project-specific traffic impacts are addressed through implementation of on-site improvements and mitigation to be completed prior to issuance of the first Certificate of Occupancy for the Project. . . .

5.1.1.3 Cumulative Impacts Related to Air Quality

The cumulative impact area for air quality considerations is generally defined by the encompassing Air Basin and boundaries of jurisdictional air quality management agency, in this case, the South Coast Air Basin (SCAB) and the South Coast Air Quality Management District (SCAQMD) respectively. Project emissions within the context of SCAQMD's regional emissions thresholds provide an indicator of potential cumulative impacts within the jurisdictional Air Basin. Impacts to air quality from cumulative projects may occur within the entire Air Basin. Due to the defining geographic and meteorological characteristics of the Air Basin, criteria pollutant emissions that would potentially cumulatively impact air quality would be, for practical purposes, restricted to the Air Basin. Accordingly, the Basin geographic area is the appropriate limit for this cumulative Air Quality analysis. Cumulative localized impacts for pollutants are also considered, and reflect Project air pollutant emissions in the context of ambient air quality conditions more immediate to the Project site.

Global Climate Change impacts are by definition, cumulative and global in scope.

Construction-Source Pollutant Emissions

EIR Section 4.3, "Air Quality," and EIR Appendix C address potential air quality impacts of the Project. As discussed, even after compliance with all rules and regulations, Project-related construction activities will temporarily result in exceedances of applicable SCAQMD regional thresholds for VOC and NOx. . . .

5.1.1.4 Cumulative Impacts Related to Noise

The cumulative impact area for noise considerations is generally defined as surrounding properties that could receive Project-generated noise (either construction or operational), and would also include roadway corridors affected by Project-related traffic and associated vehicular noise (existing EIR discussion at Page 5-14).

5.1.1.5 Cumulative Impacts Related to Water Supply

The cumulative impact area for water is the Eastern Municipal Water District (EMWD) service area and encompassing Metropolitan Water District (MWD) jurisdiction. Water supply issues germane to the Project including cumulative water supply impacts are comprehensively addressed within The Project Water Supply Assessment, (Eastern Municipal Water District) June 4, 2008. The Project Water Supply Assessment is presented at Draft EIR Appendix E.

As discussed in Draft EIR Section 4.5, potential cumulative impacts attributable to water demands of the Project are adequately planned and provided for under local and regional water management plans. . . .

5.1.1.6 Cumulative Impacts Related to Hydrology and Water Quality

The cumulative impact area for hydrology/water quality impact considerations is generally defined as the area encompassed by the jurisdictional Regional Water Quality Control Board (RWQCB), in this case the Santa Ana Regional Water Quality Control Board. Local oversight is also provided by the City of Moreno Valley and Riverside County.

Potential hydrology and water quality impacts of the Project are addressed in EIR Section 4.6, "Hydrology and Water Quality." As discussed in the EIR, Project-related storm water management will be realized through a system of on-site detention basins and controlled release of storm waters to existing and proposed drainage facilities. . . .

5.1.1.7 Cumulative Impacts Related to Cultural Resources

The cumulative impact area for prehistoric, archaeological, and historic resources is the Perris Plain/Perris Valley area (including the Cities of Moreno Valley and Perris, and surrounding unincorporated communities). Impacts to any cultural resources within the Perris Plain/Perris Valley area would be site-specific. In the event that similar resources are encountered at any other project sites, specific mitigation measures would be applied before development could proceed.

As discussed in Draft EIR Section 4.7, potential impacts to cultural resources are determined to be less-than-significant as mitigated. . . .

5.1.1.8 Cumulative Impacts Related to Biological Resources

The cumulative impact areas for biological resources are generally defined by available habitat, species' range(s), physical constraints, and other

limiting factors as discussed within the Project Biological Resources Assessment, Draft EIR Appendix G (existing discussion at EIR Page 5-20).

5.1.1.9 Cumulative Impacts Related to Aesthetics

The cumulative impact area for aesthetic impact considerations is generally defined as the city of Moreno Valley General Plan Area. More specific to the Project, cumulative impacts of concern are impacts to views and viewsheds along SR-60 in the Project vicinity.

As presented in EIR Section 4.9, "Aesthetics," new industrial uses proposed by the Project will substantially alter the existing visual sense of the subject property, which is currently a vacant site. . . .

Related development proposals that would potentially interact with Project traffic are summarized in the Draft EIR (Draft EIR at Page 4.2-16) and identified graphically at TIA Exhibit 5-11. The developments referenced by the commentor, including the Moreno Highlands Specific Plan (adopted in 1992), the Aqua Bella Specific Plan (adopted in 2005), and Centerpointe Business Park Project (approved in 2006) are reflected in the City's most recent General Plan Amendment, which was adopted in 2006. Traffic generated by these projects is modeled in traffic planning estimates and projections of the Moreno Valley General Plan buildout condition. As clarified previously in these responses, unless otherwise noted herein, the cumulative impact analysis ultimately evaluates effects of the Project within the context of anticipated buildout of the City as envisioned under the General Plan and related regional plans. Specific cumulative projects have also been identified where this information may be different, more detailed than that provided within the General Plan or applicable regional plans, or where such specific information otherwise benefits the cumulative impact analyses.

Response JS-4

The Draft EIR addresses the Project's consistency with applicable General Plan goals, objectives and policies for each topic of analysis (please refer to Draft EIR Land Use Table 4.1-1 on Pages 4.1-18 through 4.1-20; Traffic and Circulation Table 4.2-8 on Pages 4.2-23 and 4.2-24; Air Quality Table 4.3-4 on Page 4.3-18; Noise Table 4.4-3 on Pages 4.4-10 and 4.4-11; Water Supply Table 4.5-10 on Pages 4.5-24 and 4.5-25; Hydrology and Water Quality Table 4.6-2 on Pages 4.6-13 and 4.6.14; Cultural Resources Table 4.7-1 on Page 4.7-10; Biological Resources Table 4.8-1 on Pages 4.8-11 and 4.8-12; and Aesthetics Table 4.9-1 on Pages 4.9-5 through 4.9-7).

The commentor asserts that "the Project has numerous significant and unavoidable impacts to the safety, health, and well-being of residents throughout Moreno Valley." The Project's significant and unavoidable impacts have been identified as follows: cumulative traffic impacts affecting levels of service at certain intersections, roadway segments and freeway mainline segments; individual and cumulative short-term construction source exceedance of localized air quality thresholds for particulates (PM_{10} and $PM_{2.5}$); individual and cumulative long-term operational emissions exceedances for ozone precursors (VOC and NOx); individual and cumulative short-term construction noise impacts; and individual and cumulative aesthetic impacts related to changes to scenic vistas.

The Draft EIR acknowledges that increased air emissions could affect the health of area residents (please refer to Draft EIR Section 4.3, pages 4.3-4 through 4.3-10 *et al.*). The Draft EIR further acknowledges that the Project's temporary exceedance of the South Coast Air Quality Management District's Localized Significance Thresholds (LSTs) represents a potentially significant impact to sensitive receptors in the Project vicinity for the duration of Project construction. It is noted, however, that these exceedances would affect only one existing residence, located to the south of the Project site at 28855 Fir (future Eucalyptus) Avenue. Although parcels designated for residential land uses are present within the area of LST exceedance, they are largely undeveloped. All other

study area receptor locations (existing residences south of Eucalyptus (future Encilia) Avenue and north of SR-60, and area school sites) are well beyond the area of the Project's temporary LST exceedances for particulate matter. Additionally, the Draft EIR included a Health Risk Assessment which was prepared in order to specifically address potential health risks that could result from exposure to Project-generated Diesel Particulate Matter (DPM). No health risks related to DPM were identified, and potential impacts in this regard were found to be less-than-significant (please refer to Draft EIR pages 4.3-79 to 4.3-86).

Similarly, the potential for long-term increases in noise generation to lead to health impacts are acknowledged in the Draft EIR (please refer to Draft EIR pages 4.4-3 through 4.4-4, *et al*. However, the Draft EIR identified no long-term exceedances of existing noise standards due to Project operations (please refer to Draft EIR pages 4.4-21 through 4.4-26). The significant noise impacts identified in the Draft EIR were the result of Project construction activities, and as such, would be temporary and intermittent.

The Project will implement all feasible mitigation as summarized at revised Table 1.10-1. Notwithstanding, significant impacts are anticipated to occur from Project construction and/or operations. These significant impacts are summarized at EIR Table 1.8-1 (Draft EIR Pages 1.1-17 through 1.1-20). CEQA does not prohibit the Lead Agency from approving a project with significant impacts. As provided for under CEQA Section 15093 subd. (a):

> (a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits**,** including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits,

> of a proposal project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."

Should the Project be approved, the Lead Agency is required to adopt Findings of Fact and a Statement of Overriding Considerations acknowledging the Project's significant environmental impacts, and substantiating that the Project benefits outweigh the unavoidable adverse environmental effects, such that the adverse environmental effects may be considered acceptable. General Plan goal, objective, and policies cited by the commentor are provided in their entirety in the following table, along with a discussion of the Project's consistency with each of these provisions.

Goal/Objective/Policy	Project Consistency
Goal 2.2: An organized, well-designed, high quality, and functional balance of urban and rural land uses that will meet the needs of a diverse population, and promote the optimum degree of health, safety, well-being, and beauty for all areas of the community, while maintaining a sound economic base.	**Consistent**. The Project is permitted under the site's current General Plan Land Use Designation, reflecting consistency with the City's goal to establish an organized, well-designed, high quality, and functional balance of urban and rural land uses that will meet the needs of a diverse population. The Project establishes contemporary industrial facilities. As noted at EIR Page 3-5, "[f]inal designs of the Project building will be realized consistent with industrial design requirements and standards identified under Municipal Code Section 9.05.040, "Industrial Site Development Standards." Site plan and design concepts are articulated at EIR Section 3.0, Project Description. Moreover, the Project is required to comply with Development Plan Review provisions established within City of Moreno Valley Municipal Code Section 9.02.030. The Project will contribute to a functional balance by affecting the City's economic base through increased property tax revenues based on improvement of the vacant site. The Project proposes new industrial development within the City, and will create additional job opportunities (temporary construction jobs and as well as permanent warehouse staff and management positions)anticipated to be filled from local employment pools. At buildout, the Project is anticipated to generate up to approximately 900 permanent jobs.
Objective 2.13: Coordinate development activity with the provision of public infrastructure and services to eliminate possible gaps in service provision.	**Consistent.** The Project will provide all necessary infrastructure improvements to ensure safe and efficient operations. As discussed in the Draft EIR (Pages 1-10 to 1-11), no possible gaps in public services or utilities have been identified in regard to Project implementation. Please refer also to the discussion of Project infrastructure presented at Draft EIR Pages 3-21 through 3-23. The Project will also be responsible for providing on-site and off-site roadway infrastructure improvements, prior to the issuance of occupancy permits, as presented at Draft EIR pages 3-7 and 3-8.

Goal/Objective/Policy	Project Consistency
Policy 2.10.14: Preserve or relocate existing mature trees and vegetation where practical. Mature trees shall be replaced when they cannot be preserved or relocated.	**Consistent.** The Project design concept as well as programmed Caltrans improvements to adjacent SR-60 would require elimination of certain mature pine trees existing along the existing northerly boundary of the subject property. That is, these trees will be displaced by Project and Caltrans improvements, and cannot be maintained in place. As discussed at Draft EIR Page 4.9-19, the Project will replace the existing, mature pine trees along its northerly boundary (adjacent to SR-60) with a double-row of new trees, in order to visually screen the Project from the view of freeway travelers. Pursuant to the City's criteria for the removal of mature trees, at least three new trees will be planted in the place of each mature tree that is removed. New trees will be drought-resistant, and will be planted and irrigated in coordination with Caltrans and City requirements.
Policy 2.13.1: Limit the amount of development to that which can be adequately served by public services and facilities, based upon current information concerning the capability of public services and facilities.	**Consistent.** As discussed in the Draft EIR (Pages 1-10 to 1-11), no possible gaps in public services or utilities have been identified in regard to Project implementation. The Project's potential to result in Projects-specific impacts due to insufficient roadway infrastructure have been addressed within the Draft EIR (Section 4.3, "Traffic and Circulation," Mitigation Measures 4.2.1, 4.2.2), and are identifies as less-than-significant as mitigated.
Policy 2.13.3: It shall be the ultimate responsibility of the sponsor of a development project to assure that all necessary infrastructure improvements (including system wide improvements) needed to support project development are available at the time that they are needed.	

It is acknowledged that not every provision of the General Plan was addressed within the Westridge Draft EIR; however, the Lead Agency disagrees with the commentor's assertion that the Draft EIR is thus inconsistent with the General Plan. The results and conclusions of the Draft EIR are not affected.

Response JS-5

The commentor correctly notes that the Draft EIR identifies potential impacts regarding the conversion of farmland to non-agricultural uses to be a less-than-significant impact. However, the comment misconstrues the findings of the City's General Plan in regard

to this issue. As referenced in the discussion of Agricultural Resources analysis from the Moreno Valley General Plan Final Program EIR, which was attached to the commentor's letter and identified by the commentor as "Exhibit 4," and has been included in Appendix A of this Final EIR), the potential loss of agricultural land due to General Plan implementation was acknowledged in the General Plan Final Program EIR (GPEIR) as significant and unavoidable. The GPEIR states that, "[s]ince the feasible mitigation measures that are available to reduce the impact to loss of farmland within the planning area are not consistent with the project objectives and land uses of the General Plan alternatives, no mitigation measure is proposed and the impact will be significant and unavoidable." Certification of the GPEIR required the City to adopt overriding considerations in regard to all impacts determined significant and unavoidable, including the potential for loss of agricultural lands. The Project land uses are consistent land uses reflected in the General Plan, and the Project would not result in impacts to farmlands differing substantively from those considered and evaluated in the GPEIR.

Moreover, relevant CEQA threshold considerations address lands defined as "Prime Farmland," "Unique Farmland," or "Farmland of Statewide Significance." In the case of the Project, the subject site does not qualify as any of these.[8] The mitigation measures identified by the commentor are unnecessary. The results and conclusions of the Draft EIR are not affected.

Response JS-6

This comment is unclear about the nature of the significant impact that will result should the Project's proposed zone change and Municipal Code amendment be

[8]State of California Department of Conservation, Division of Land Resources Protection, Farmland Mapping and Monitoring Program Riverside County Important Farmland 2008 (Sheet 1 of 3) identifies the Project site as "Farmland of Local Importance."

adopted. The proposed code amendment provides additional protection of residential uses in instances where industrial uses may be proposed within adjacent zone districts. The amendment would apply City-wide. The Code Amendment Application is on file with the City. The Draft EIR addresses the proposed zone change and Municipal Code amendment as part of the Land Use analysis (please refer to Draft EIR Pages 4.1-20 through 4.1-23. Specifically, the following discussion appears in regard to this topic.

> The Project proposes a change of zone from Business Park to Light Industrial, and the City General Plan envisions and allows for extensive implementation of either or both types of land uses along the southerly edge of SR-60 as it traverses the City. While both types of uses (business park and/or light industrial, including distribution warehouse uses) are provided for under the General Plan, the site's current Business Park zoning designation does not permit these uses within single structures of more than 50,000 square feet. The Light Industrial zone designation requested by the Applicant does permit single structures of more than 50,000 square feet. The impetus of the zone change requested by the Project Applicant is to therefore to allow for construction of a single warehouse use greater than 50,000 square feet in size.
>
> Key to compatibility of the Project's proposed Light Industrial zoning with adjacent residentially zoned land uses is design, implementation, and operation of the Project in a manner consistent with the high performance standards required of uses proposed within the City's Light Industrial zone district. Supporting the proposed zone change, and codifying design solutions proposed the Project, a Municipal Code Amendment is also proposed. The proposed Municipal Code Amendment requires a minimum separation of 250 feet between light industrial uses and residentially-zoned properties. This 250-foot minimum separation shall be increased as required to fully mitigate any

potentially significant health risks and/or potentially significant operational noise impacts at adjacent residential properties (Draft EIR Pages 4.1-22, 23).

The Draft EIR adequately and appropriately considers all potential land use and planning impacts, consistent with the methods set forth in the CEQA Guidelines. To these ends, the Draft EIR considers all pertinent land use plans, policies, regulations. There is no substantiation or indication that the Project would result in or cause potential interference with animal keeping on nearby properties. The Draft EIR acknowledges that "development of the Project would result in a permanent change to the perceived rural character of the Project area" (Draft EIR Page 5-5). Moreover, zone changes and amendments to the municipal code do not trigger any of the thresholds of significance under CEQA Guidelines Appendix G.

However, this change is consistent with the existing General Plan designation for the Project site. Further, potential effects on adjacent land uses are minimized by the 250-foot buffer area that would be provided by the Municipal Code amendment referenced above.

With approval of the Project's requested zone change and requested Municipal Code amendment to establish objective standards for the development of Light Industrial uses adjacent to residentially-zoned property, the Project's potential to result in significant land use impacts was determined to be less-than-significant. The results and conclusions of the Draft EIR are not affected.

Response JS-7

Despite the commentor's assertions to the contrary, the Project's air quality analysis does account for construction worker travel to and from the site. As noted in the Draft EIR (Page 4.3-56), "[c]onstruction emissions for construction worker vehicles traveling to and from the Project site, as well as vendor trips are also accounted for within the

Project construction emissions modeling." Worker trips for all construction phases are clearly identified and accounted for in the air quality modeling (see URBEMIS construction emission modeling data in Draft EIR Appendix C. Specifically, please refer to Appendix A of the Project Air Quality Impact Analysis). No indication of zero VMT for construction workers is found. The results and conclusions of the EIR are not affected.

Response JS-8

The commentor states that "all feasible mitigation measures were not adopted . . . and the mitigation which was adopted does not sufficiently mitigate the impacts and is uncertain to occur." The commentor requests Mitigation Measure 4.3.4 to specifically include zero VOC applications for all "paints, coatings, and solvents."

Draft EIR Mitigation Measure 4.3.4 serves as a formal restatement a of SCAQMD rules. As noted in the Draft EIR (Page 4.3-61), "[i]n order to facilitate monitoring and compliance, applicable SCAQMD and CARB regulatory requirements are restated as mitigation measures, and shall be incorporated in all Project plans, specifications and contract documents." Complementing SCAQMD rule compliance, the Draft EIR incorporates additional requirements as mitigation measures. "Additional mitigation required of the Project is identified below, and shall be incorporated in all Project plans, specifications and contract documents." (Draft EIR Page 4.3-62) Mitigation Measure 4.3.8 currently requires Zero VOC paint applications. In response to the commentor's suggestion, Mitigation Measure 4.3.7 is amended to read as follows:

> ~~*Zero Volatile Organic Compounds paints (no more than 150 grams/liter of VOC) and/or High Pressure Low Volume (HPLV) applications*~~***"Zero-Volatile Organic Compounds" paints, coatings, and solvents with a VOC content lower than required under Rule 1113. The Project shall surpass Rule 1113 minimum requirements through specification that VOC content shall not exceed 150 grams/liter; 1.25 pounds/gallon. High Pressure Low Volume***

> ***(HPLV) applications of paints, coatings, and solvents shall be*** *consistent with South Coast Air Quality Management District Rule 1113. Alternatively, the Applicant shall use materials that do not require painting or are pre-painted.*

This revision has been reflected in Final EIR Section 2.0, "Revisions and Errata," and incorporated in the Final EIR's Mitigation Monitoring Program, presented at Section 4.0. Other than suggested language modification of SCAQMD rules, the commentor offers no new or revised mitigation for consideration here. Absent specific suggestions or requested revisions, further response in this regard is not possible. The conclusions of the EIR are not affected.

Response JS-9

The commentor appears to misinterpret Air Quality modeling protocols and outputs, stating that " . . . [i]n recommending this mitigation measure, the air quality analysis stated that traffic speeds should be reduced in order to reduce PM_{10} and $PM_{2.5}$ fugitive dust haul road emissions by approximately 44%. Yet, Mitigation Measure 4.3.1 clearly leaves out this, or an even more stringent, performance standard, as required to make the mitigation measure enforceable. Mitigation Measure 4.3.1 should require that traffic speeds be reduced to a level which will reduce dust emissions by 44%."

To clarify, Mitigation Measure 4.3.1 is a formal restatement of SCAQMD Rule 403 provisions. URBEMIS modeling of the Rule application yields a 44 percent reduction in PM_{10} emissions. As suggested by the commentor, additional language specifying on-site speed controls is added to Mitigation Measure 4.3.1:

- ***In support of Project plan specifications and contract document language; and as means of controlling on-site construction vehicle speeds, for the duration of Project construction activities, speed limit signs (15 mph maximum) shall be posted at entry points to the Project***

site, and along any unpaved roads providing access to or within the Project site and/or any unpaved designated on-site travel routes.

This revision has been reflected in Final EIR Section 2.0, "Revisions and Errata," and incorporated in the Final EIR's Mitigation Monitoring Program, presented at Section 4.0. Results and conclusions of the EIR are not affected.

Response JS-10

The commentor suggests explicit notation indicating required use of available electrical power during construction activities. In response to the commentor's suggestion, Mitigation Measure 4.3.6 is amended as follows:

*4.3.6 During Project construction, existing electrical power sources (e.g., power takeoffs from existing or temporary power poles) shall be ~~provided for~~ **utilized to** power electric construction tools including saws, drills and compressors, to minimize the need for diesel or gasoline powered electric generators.*

This revision has been reflected in Final EIR Section 2.0, "Revisions and Errata," and incorporated in the Final EIR's Mitigation Monitoring Program, presented at Section 4.0. Results and conclusions of the EIR are not affected.

Response JS-11

Please note that introductory language included prior to the introduction of construction-source emissions mitigation measures states: "*To facilitate monitoring and compliance, applicable SCAQMD and CARB regulatory requirements are restated as Mitigation Measures 4.3.1 through 4.3.4 below, and shall be incorporated in all Project plans, specifications and contract documents.*"

Existing Mitigation Measure 4.3.2, which read, "[t]he contractor shall minimize pollutant emissions by maintaining equipment engines in good condition and in proper

tune according to manufacturer's specifications and during smog season (May through October) by not allowing construction equipment to be left idling for more than five minutes (per California law)"is deleted and replaced with the following:

> ***4.3.2 The contractor shall minimize pollutant emissions by maintaining equipment engines in good condition and in proper tune according to manufacturer's specifications and by not allowing construction equipment to be left idling for more than five minutes (per California law).***

Response JS-12

The commentor states that "[t]he air quality analysis also states that in order to stabilize the soil and decrease impacts from fugitive dust due to fine and mass grading, a mitigation measure to replace ground cover in disturbed areas 'quickly' should be adopted." In fact, this statement does not appear to be included in the Project Air Quality Analysis. The mitigation input calling for the Project to replace ground cover in disturbed areas quickly is, however, a parameter reflected in the URBEMIS modeling output. Revised Mitigation Measure 4.3.1 is amended to reflect this specific parameter:

- ***Ground cover shall be replaced, and/or non-toxic soil stabilizers shall be applied (according to manufacturers' specifications) to any inactive construction areas (previously graded areas inactive for ten days or more);***

This revision has been reflected in Final EIR Section 2.0, "Revisions and Errata," and incorporated in the Final EIR's Mitigation Monitoring Program, presented at Section 4.0. Results and conclusions of the EIR are not affected.

Response JS-13

The commentor notes that an estimated disturbance area of 13.66 acres per day is reflected in the Air Quality modeling. The commentor suggests that a mitigation measure be included limiting site disturbance to less than 13.66 acres per day. The estimated disturbance of 13.66 acres per day (approximately one-quarter of the Project site) likely overstates actual disturbance and is employed for emissions modeling purposes and to develop mitigation addressing the likely maximum impact scenario. To assume or propose unrealistically limited grading of the site is contrary to CEQA disclosure mandates. Further, due to daily limits on grading, there would be incrementally increased impacts due to extended periods of fugitive dust, extended exposure to construction noise, and extended traffic disturbance. The commentor is referred to EIR Section 5.2.2.1, "Extended Construction Alternative Considered and Rejected," which specifically considers and rejects limited grading of the Project site. To ensure consistency with URBEMIS modeling assumptions, new Mitigation Measure 4.3.1 is revised to include the following specification:

- ***Site disturbance during mass grading and fine grading activities shall not exceed 13.66 acres per day.***

This revision has been reflected in Final EIR Section 2.0, "Revisions and Errata," and incorporated in the Final EIR's Mitigation Monitoring Program, presented at Section 4.0. Results and conclusions of the EIR are not affected.

Response JS-14

The commentor proposes numerous additional measures (following) as means to reduce Project-related construction-source emissions air quality impacts. Each of these measures is evaluated in the table which follows. Measures offered by the commentor are not required in order to achieve the level(s) of mitigation identified in the Draft EIR. Moreover, the commentor provides no indication as to the efficacy of the proposed

measures in reducing Project impacts, nor is nexus provided between the proposed measures and their implied environmental benefit vis-à-vis Project impacts.

As detailed in the Table which follows, in certain instances, the measures proposed by the commentor would likely result in net increased detrimental environmental effects (e.g., suggested prolonging of construction activities, premature implementation of unproven technologies to address GHG emissions). Certain other suggested "mitigation measures" proposed by the commentor replicate existing policies/requirements/regulations, and are not mitigation. Please refer also to the following text from the Draft EIR:

> . . . In some cases, these impacts may appear to be potentially significant. However, existing public policies, regulations, and procedures adequately address these potential effects, thereby reducing them to a less-than-significant level, without the need for additional mitigation (Draft EIR Page 4-2).

It is further noted that in some instances, the commentor proposes additional operational emission measures as means of further reducing environmental impacts that are already determined to be less-than-significant, or less-than-significant with application of measures already included in the Draft EIR. These measures proposed by the commentor are not included as mitigation, though the Lead Agency may, at its discretion, impose these additional requirements; typically through Project Conditions of Approval. Lastly, the Lead Agency's experience with many of the measures suggested by the commentor indicates that while good in concept, the suggested measures prove to be ineffective, or otherwise inordinately cumbersome in their application; to the extent that the measures cannot be realistically or practically implemented. Accordingly, such measures are noted as recommendations, but are not required.

Suggested Measure	Response
1. Require the purchase of NOx credits from a qualified broker to offset construction-related air quality impacts.	**Infeasible.** NOx emissions credits are generally applied toward operational emissions at major source facilities (e.g., refineries, power plants, etc.). NOx emissions credits are not commonly used to address short-term construction emissions. It would be impractical to purchase offsets for the Project's construction impacts since the actual amount of construction emissions set forth in the Draft EIR represent an overestimation of actual emissions (i.e., the Air Quality Analysis assumes all construction equipment is operating eight hours per day as a "worst-case" scenario), and because the actual Project construction schedule (duration) is not known with a great deal of certainty and is subject to change based on availability of contractors, equipment, materials, etc. Further, any emission reduction credits would not result in any reduction to construction emissions on-site or in the immediate vicinity of the Project. The suggested measure is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental and technological factors and is therefore infeasible.
2. Install gravel pads at all access points to prevent tracking of mud onto public roads.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
3. Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
4. Complete all roadways, driveways, sidewalks, etc. as soon as possible. In addition, lay building pads as soon as possible after grading unless seeding or soil binders are used.	**Incorporated** at revised Mitigation Measure 4.3.1, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
5. Pave all roads on construction sites as soon as technically possible.	**Infeasible.** It is infeasible and ineffective to pave roads within construction sites or at construction site access points. Such pavement is destroyed in the process of construction and/or is in perpetual state of disrepair. Paving temporary roads within construction areas unnecessarily increases VOC generation, with little or no discernible reduction in other air pollutant emissions. The suggested measure is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental and technological factors and is therefore infeasible.
6. Limit fugitive dust sources to 20 percent opacity.	**Replicates existing requirements.** Please refer to SCAQMD Rule 403.
7. The contractor or builder shall designate a person or person(s) to monitor the dust control program and	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."

Suggested Measure	Response
to order increased watering, as necessary, to prevent transport of dust offsite.	
8. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The person shall take corrective action within 24 hours.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
9. Require high pressure injectors on diesel construction equipment.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
10. Restrict engine size of construction equipment to the minimum practical size.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
11. Use electric construction equipment where technically feasible.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
12. Substitute gasoline-powered for diesel powered construction equipment.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
13. Require use of alternatively fueled construction equipment, using, e.g., compressed natural gas, liquefied natural gas, propane or biodiesel.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
14. Implement activity management techniques including: a) development of construction management plan to minimize the number of large construction equipment operating during any given time period; b) scheduling of construction truck trips during non-peak hours to reduce peak hour emissions; c) limitation of the length of construction work-day period; and d) phasing of construction activities.	**Not required, counterproductive.** Construction contractor(s) employ techniques and procedures so as to provide for the most efficient operation of their construction activities. No demonstrated or suggested nexus between the suggested measures and project impacts. The commentor indicates further that this measure would reduce greenhouse gas emissions; however, none of the measures would demonstrably reduce total greenhouse gas emissions. As also discussed in these responses, measures acting to prolong construction (e.g., restricted use of equipment, limitation of the length of construction work-day period; phasing of construction activities) tend to increase rather than decrease environmental impacts due to extended and periods of disturbance.
15. Install catalytic converters on gasoline-powered equipment.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
16. Use electricity from power poles rather than temporary diesel power generators.	**Replicates existing requirements.** This requirement is currently reflected at EIR Mitigation Measure 4.3.6, presented , in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
17. Alternative diesel fuels exist that achieve PM_{10} and NOx reductions. PuriNOx is an alternative diesel	**Infeasible.** The Lead Agency has determined that Lubrizol, the producer of PuriNox ceased production of PuriNox in December 2006. Furthermore, conversations with South

Suggested Measure	Response
formulation that was verified by ARB on January 31, 2001 as achieving a 14 percent reduction in NOx and a 63 percent reduction in PM_{10} compared to CARD diesel fuel. It can be used in any direct-injection, heavy-duty compression ignition engine and is compatible with existing engines in existing storage, distribution, and vehicle fueling facilities. Operational experience indicates that little or no difference in performance and start-up time, no discernable operational differences, no increased engine noise, and significantly reduced visible smoke.	Coast Air Quality Management (District representatives James Koizumi and Steve Smith) confirmed that PuriNox is not expected to be commercially available in the foreseeable future. The suggested measure is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental and technological factors and is therefore infeasible.
18. Prior to the issuance of a grading and building permit, the applicant shall submit verification that a ride-sharing program for the construction crew has been encouraged and will be supported by contractor via incentives or other inducements.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
19. Minimize construction worker trips by requiring carpooling and providing for lunch onsite.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
20. Provide shuttle service to food service establishments/commercial areas.	**Incorporated.** Shuttle services for construction workers provided pursuant to revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
21. Provide shuttle service to transit stations/multimodal stations.	**Incorporated.** Shuttle services for construction workers provided pursuant to revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
22. Utilize only CARB certified equipment for construction activities.	**Replicates existing requirements.** As a matter of California law, all construction equipment, whether or not it is used for this Project, is required to meet California Air Resources Board (CARB) emissions standards.
23. All forklifts shall be electric or natural gas powered.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan.".

Suggested Measure	Response
24. Extend grading period sufficiently to reduce air quality impacts below a level of significance.	**Infeasible, counterproductive.** Extending the grading schedule would (1) increase the Project's grading costs; (2) hinder effective management, organizing, and scheduling of construction tasks; and (3) result in adverse environmental trade-offs as a result of prolonged disturbance in the Project area, including but not limited to: extended periods of increased noise levels; prolonged generation of fugitive dust and VOCs; increased erosion exposure and associated water quality issues; and additional traffic disturbances associated with on-site construction activities. The suggested measure is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental and technological factors and is therefore infeasible.

Response JS-15

The commentor states: "[t]he Air Quality Analysis for operational emissions fails to note the variances from default values which are standard for the SCAQMD that were used when conducting the URBEMIS Analysis. Further, the total number of trips analyzed in the air quality section (1,585.22) was over 54% less than the total number of trips estimated in the traffic analysis (2,930). This renders the DEIR inadequate as an informational document as it does not allow one to accurately assess the Project impacts."

It appears that the commentor has incorrectly interpreted and applied default URBEMIS values. SCAQMD does not typically conduct project-level URBEMIS modeling for other than their own projects. Moreover, default values are just that, the "default" condition. Changes to default values are appropriate when specific Project attributes or operational characteristics are known, as is the case for the Project. In this regard, the Air Quality analysis specifically recognizes vehicle types and trip generation characteristics of the Project. Known vehicle trip generation characteristics provide a more accurate assessment of Project vehicular-source emissions impacts than does application of default URBEMIS values.

The commentor appears to misinterpret and misapply vehicle trip generation characteristics and their use in developing estimated air pollutant emissions impacts vis-à-vis use of trip generation estimates for the purposes of traffic modeling. More specifically, as noted in the Project Air Quality Analysis, Project operational (vehicular) impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The Project related operational air quality impact centers primarily on the approximate 1,585 net vehicle trips generated by the Project (at project buildout). Trip characteristics available from the *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads, Inc., October 8, 2009, included in Draft EIR Appendix B) were utilized in this analysis. It should be noted that the Project's traffic study presents the total Project vehicle trips in terms of Passenger Car Equivalents, or PCEs (the 2,930 PCE value cited by the commentor) in an effort to recognize and acknowledge the effects of heavy vehicles at the study area intersections. For purpose of the air quality study, emissions were calculated based on the type of vehicle (e.g., passenger cars and trucks) a more detailed discussion of how the actual number of vehicles were programmed into the model is presented in Draft EIR Appendix C. Specifically, page 37 of the Project Air Quality Analysis refers to its own Appendix B for review. Parallel information is provided in the Draft EIR, and reprinted below for ease of reference.

> 2,930 PCE trips = 1,585 net vehicle trips (the raw arithmetic number of truck and passenger vehicle trips) generated by the Project. It should be noted that because different classes of vehicles (e.g., passenger cars, light trucks, heavy duty trucks) exhibit differing emissions characteristics that for the purposes of quantifying and evaluating air quality impacts, vehicle trips are quantified and segregated by vehicle type. In comparison, the Project's traffic study evaluates the effects of traffic at intersections and roadways, and therefore presents the total vehicle trips in terms of Passenger Car Equivalents (PCEs), thereby recognizing and

> acknowledging physical size differences in vehicles and related effects on roadways and at intersections (Draft EIR Page 4.2-19).

Project operational (vehicular) impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. Assessment of the Project's operational air quality impact centers primarily on the approximately 1,585 net vehicle trips generated by the Project (or, the arithmetic sum of truck and passenger vehicle trips). Trip generation characteristics for the Project are presented in Draft EIR Appendix B, the *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads, Inc., October 8, 2009). The results and conclusions of the Draft EIR are not affected.

Response JS-16

The commentor notes discrepancies between the Draft EIR text and the Air Quality Study regarding vehicle trip length and vehicle speed employed in the LST analysis. Notwithstanding, the quantified LST emissions impacts reported in the Draft EIR (Table 4.3-12) are consistent with the LST values presented in the Air Quality Analysis (Table 4-5). The typographic error at Draft EIR Page 4.3-68 is corrected (below) consistent with the described trip length/vehicle speed reported in Air Quality Analysis.

> Therefore, for purposes of the operational LST analysis the average trip length in URBEMIS was altered to ~~0.5~~ **0.3** miles which conservatively characterizes on-site vehicle travel. Additionally, the vehicle speed in URBEMIS was altered to ~~five~~ **ten** miles per hour as a conservative measure to account for on-site vehicular travel.

These corrections have been incorporated in Final EIR Section 2.0, "Revisions and Errata." The results and conclusions of the Draft EIR are not affected.

Response JS-17

The commentor provides opinions regarding the efficacy of mitigation proposed as means of reducing Project operational NOx and VOC emissions. It is important to note that substantially all of the estimated NOx emissions are from mobile sources – principally vehicle exhaust, and vehicle tail pipe source emissions are regulated by CARB and USEPA. The Lead Agency cannot control emissions from the tailpipes of vehicles traveling to/from the facility.

In addition, the Project is compliant with the SCAQMD's attainment plans, as the use of the site for industrial purposes was included in the previous SCAQMD's ozone and PM attainment plans. The Project implements all feasible mitigation measures and complies with all applicable CARB and SCAQMD Rules directed toward reduction of NOx and VOC emissions. The Lead Agency will however, adopt and implement EIR mitigation measures that minimize vehicle emissions generated on-site and by employees, but those vehicle miles are minor compared with the total vehicle miles used in the studies; and further, URBEMIS does not account for any reductions for those measures.

The Draft EIR clearly states that even with application of proposed mitigation, Project operational NOx and VOC emissions will exceed applicable SCAQMD regional thresholds. Should the Project be approved, the Lead Agency is required to adopt a Statement of Overriding Considerations acknowledging Project exceedances for operational-source NOx and VOC emissions.

Response JS-18

The commentor arbitrarily suggests a 30 percent increase in energy efficiency beyond the requirements provided under Title 24 Building Energy Efficiency Standards, inferring a somehow substantial resultant decrease in NOx emissions. Consistent with the provisions of Executive Order, S-20-04 (CA 2004),which sets a goal of reducing energy use in public and private buildings by 20 percent by 2015 (as compared with

2003 levels), the Project will achieve a minimum 20 percent increase in building efficiencies beyond Title 24 requirements (please refer to Mitigation Measure 4.3.11).

As noted previously, the predominance of Project operational NOx emissions are vehicle-generated, and beyond the control of the Applicant or Lead Agency. Any reduction in NOx emissions resulting from increased building/facility energy efficiencies would be, at best, nominal. Even assuming "zero" NOx emissions from building/area sources, NOx emissions would be reduced by approximately 0.09 to 0.11 percent (0.0009 to 0.0011), and would still exceed applicable SCAQMD regional thresholds. No additional Title 24 enhancements are proposed, nor are any required. Results and conclusions of the EIR are not affected.

Response JS-19

The commentor proposes numerous additional measures as a means to reduce Project-related operational-source air quality impacts. Each of these measures is evaluated in the Table which follows. While the suggested measures may in part act to generally reduce Project impacts, none of the measures are required in order to achieve the levels of mitigation identified in the Draft EIR. Moreover, the commentor provides no indication as to the efficacy of the proposed measures in reducing Project impacts, nor is nexus provided between the proposed measures and their implied environmental benefit vis-à-vis Project impacts.

With specific regard to proposed measures targeting GHG emissions reductions, arguably, the proposed measures may prove of little net benefit, while imposing significant cost and economic burdens. Case studies have indicated that GHG measures implemented to date have yielded marginal benefits when compared to economic costs. Moreover, premature implementation of unproven measures would be detrimental by diverting resources that could be made available to other, more effective strategies. Please refer also to the attached: *The AB 32 Challenge: Reducing*

California's Greenhouse Gas Emissions (Gregory Freeman, Nancy D. Sidhu, PhD, Myasnik Poghosyan) January 2008.

As discussed in the Table which follows, in certain instances, the measures proposed by the commentor would likely result in net increased detrimental environmental effects (e.g., suggested prolonging of construction activities, premature implementation of unproven technologies to address GHG emissions). Certain other suggested "mitigation measures" proposed by the commentor replicate existing policies/requirements/regulations, and are not mitigation. Please refer also to Draft EIR Page 4-2:

> . . . In some cases, these impacts may appear to be potentially significant. However, existing public policies, regulations, and procedures adequately address these potential effects, thereby reducing them to a less-than-significant level, without the need for additional mitigation. . . .

It is further noted that in some instances, the commentor proposes additional measures as means of further reducing environmental impacts that are already determined to be less-than-significant, or less-than-significant with application of measures already included in the Draft EIR. These measures proposed by the commentor are not included as mitigation, though the Lead Agency may, at its discretion, impose these additional requirements; typically through Project Conditions of Approval. Lastly, the Lead Agency's experience with many of the measures suggested by the commentor indicates that while good in concept, the suggested measures prove to be ineffective, or otherwise inordinately cumbersome in their application; to the extent, that the measures cannot be realistically or practically implemented. Accordingly, such measures are noted as recommendations, but are not required.

Suggested Measure	Response
1. Require the utilization of zero VOC paint, coatings and solvents.	**Incorporated.** This requirement is reflected at EIR Mitigation Measure 4.3.7, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan." Mitigation Measure language has been revised as suggested by SCAQMD.
2. Require the purchase of NOx credits from a qualified broker to off-set construction-related air quality impacts.	**Infeasible.** Please refer to Response JS-14, item No. 1.
3. The operator of the primary facilities (buildings of 400,000 s.f. or more) shall become a SmartWay partner.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
4.The operator of the primary facilities (buildings of 400,000 s.f. or more) shall incorporate requirements or incentives sufficient to achieve at least 20% per year (as a percentage of previous percentage, not total trips) increase in percentage of long haul trips carried by SmartWay carriers until it reaches a minimum of 90%of all long haul trips carried by SmartWay 1.0 or greater carriers. Results including backup data shall be reported to the Planning Department semi-annually.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
5. The operator of the primary facilities (buildings of 400,000 s.f. or more) shall incorporate requirements or incentives sufficient to achieve at least 15% per year (as a percentage of previous percentage, not total trips) increase in percentage of long haul trips carried by SmartWay carriers until it reaches a minimum of 85% of all consolidator trips carried by SmartWay 1.0 or greater carriers. Results including backup data shall be reported to the Planning Department semi-annually.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
6. By the end of the year 2012 all fleet vehicles shall conform to 2010 air quality standards or better. Results, including backup data shall be reported to the Planning Department semi-annually.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
7. Install catalytic converters on gasoline-powered equipment.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."

Suggested Measure	Response
8. Alternative diesel fuels exist that achieve PM_{10} and NOx reductions. PuriNOx is an alternative diesel formulation that was verified by ARB on January 31, 2001 as achieving a 14 percent reduction in NOx and a 63 percent reduction in PM_{10} compared to CARD diesel fuel. It can be used in any direct-injection, heavy-duty compression ignition engine and is compatible with existing engines in existing storage, distribution, and vehicle fueling facilities. Operational experience indicates that little or no difference in performance and start-up time, no discernable operational differences, no increased engine noise, and significantly reduced visible smoke.	**Infeasible.** The Lead Agency has determined that Lubrizol, the producer of PuriNox ceased production of PuriNox in December 2006. Furthermore, conversations with South Coast Air Quality Management District representatives James Koizumi and Steve Smith confirmed that PuriNox is not expected to be commercially available in the foreseeable future. The suggested measure is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental and technological factors and is therefore infeasible.
9. Electrical powered equipment must be utilized in-lieu of gasoline-powered engines where technically feasible.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
10. Require each user to establish a carpool/vanpool program.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
11. Provide on-site child care or contribute to off-site child care within walking distance.	**Infeasible, counterproductive.** Childcare facilities are not compatible with the proposed industrial warehouse uses. Moreover, there is no demonstrated nexus with Project-related operational emissions impacts requiring or suggesting implementation of childcare facilities. The suggested measure is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental and technological factors and is therefore infeasible.
12. Provide preferential parking for carpool/vanpool vehicles.	**Replicates existing requirements.** Preferential parking for carpools/vanpools is currently required pursuant to EIR Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
13. Provide secure, weather-protected bicycle parking for employees.	**Incorporated** at revised EIR Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
14. Provide direct, safe bicycle access to adjacent bicycle routes.	**Replicates existing requirements.** Direct, safe bicycle access is currently provided pursuant to Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
15. Provide showers and lockers for employees bicycling or walking to work.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."

Suggested Measure	Response
16. Short-term bicycle parking for retail customers and other non-commute trips.	**Replicates existing requirements.** The Project does not propose retail uses. Bicycle parking is currently provided pursuant to Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
17. Connect bicycle lanes/paths to city-wide network.	**Replicates existing requirements.** Bicycle path connections are currently provided pursuant to EIR Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
18. Design and locate buildings to facilitate transit access, e.g. locate building entrances near transit stops, eliminate building setbacks, etc.	**Infeasible, counterproductive.** No transit stops exist proximate to the Project site such that building orientation would have any material effect on use of, or access to transit. Elimination of building setbacks as suggested would increase potential air quality, noise and visual impacts when compared to the Project as proposed. The suggested measure is not germane to the Project, and is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental and technological factors and is therefore infeasible.
19. Prohibit idling of trucks for periods extending three minutes.	**Replicates existing requirements.** EIR Mitigation Measure 4.3.11 currently prohibits the idling of trucks for more than three (3) minutes.
20. Construct transit facilities such as bus turnouts/bus bulbs, benches, shelters, etc.	**Not required per Responsible Agency.** Riverside Transit Agency (RTA) provides fixed-route bus service regionally along SR-60, and locally via Moreno Beach Drive, allowing for the possibility of future connections near the Project site. The Lead Agency has coordinated with RTA and determined that installation of a bus stop or turn-out will not be required of the Project.
21. Provide shuttle service to food service establishments/commercial areas.	**Replicates existing requirements.** EIR Mitigation Measure 4.3.13 currently includes provisions for shuttle services.
22. Provide shuttle service to transit stations/multimodal centers.	**Replicates existing requirements.** EIR Mitigation Measure 4.3.13 currently includes provisions for shuttle services.
23. Implement parking fee for single-occupancy vehicle commuters.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
24. Implement parking cash-out program for non-driving employees.	**Not applicable.** In that there is no current or proposed parking subsidy, there is no available parking "cash out" resource or mechanism. As noted herein, other tenable incentives are provided as means of reducing vehicle trips.

Suggested Measure	Response
25. Provide direct, safe, attractive pedestrian access from project to transit stops and adjacent development.	**Replicates existing requirements.** The site is not currently provided transit service, nor is pedestrian access to the nearest transit stop possible at this time. Pursuant to the requirements of the City's Master Plan of Trails, the Project will dedicate and construct an 11-foot wide community trail segment along the southerly Project boundary, on the north side of Fir Avenue (future Eucalyptus Avenue). Upon development of the adjacent parcel(s), the trail is planned to continue off-site to the east and to the west, as part of the future Quincy Channel overcrossing.
26. Implement a compressed workweek schedule where feasible.	**Incorporated** at revised Mitigation Measure 4.3.13.
27. Provide electrical vehicle (EV) and compressed natural gas (CN) vehicles in vehicle fleets.	**Incorporated** at revised Mitigation Measure 4.3.13.
28. Install EV charging facilities for a minimum of 10% of all parking spaces.	**Infeasible.** The Project will provide, at minimum, two EV charging stations, as required by Mitigation Measure 4.3.13. There is no demonstrable evidence that installation of additional EV charging facilities would substantially reduce or eliminate the Project's operational emissions because chargeable electric vehicles represent a small percentage of vehicles on the road. Moreover, on a regional basis, increased power demands at electrical outlets/EV charging stations tend to increase power plant emissions, acting to offset any potential emissions reductions from individual sources such as motor vehicles. Further, it is noted that next generation transportation technologies are in flux. It is premature, inefficient and counter-productive to assign substantial assets to predetermined transportation solutions. The suggested measure is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental and technological factors and is therefore infeasible.

Suggested Measure	Response
29. Install a CNG fueling facility.	**Infeasible.** As noted above, next generation transportation technologies are in flux. It is premature, inefficient and counter-productive to assign substantial assets to predetermined transportation solutions. Further, for CNG fuel to be a reasonable alternative to diesel fuel for the logistics industry, a reasonable distribution network must be in place so that drivers can be assured that they can re-fuel when making deliveries across the region. No such distribution system is presently in place nor is one likely to be developed in the near future. The installation of a stand-alone CNG fueling facility at this location would provide no benefit because no reasonable distribution system is in place. CNG-fueled vehicles have been found to be most useful for limited range, closed-circuit usage such as municipal fleets (refuse collection, city vehicles, and buses), taxi fleets, and local delivery services. Lastly, as with the commentor's suggestion for EV facilities, the installation of a CNG fueling facility is unlikely to substantially reduce or eliminate the Project's operational emissions because CNG vehicles represent a small percentage of vehicles on the road. Furthermore, the Draft EIR has not evaluated the potential environmental impacts related to the construction and operation of a CNG fueling facility. A Lead Agency is under no obligation to impose Mitigation Measures that in and of themselves may constitute a new "project" for purposes of CEQA. (See e.g., *Concerned Citizens of South Central L.A. v. Los Angeles Unified School District*, 24 Cal.App.4th, 826 (1994)). The suggested measure is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental and technological factors and is therefore infeasible.
30. Provide preferential parking locations for EVs and CNG vehicles.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
31. Utilize electrical equipment for landscape maintenance.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
32. Utilize only CARB-certified equipment for construction activities.	**Replicates existing requirements.** As a matter of California law, all construction equipment, whether or not it is used for this Project, is required to meet California Air Resources Board (CARB) emissions standards.
33. All forklifts shall be electric or natural gas powered.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
34. Provide subsidies or incentives to employees who use public transit or carpooling, including preferential parking.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."

Suggested Measure	Response
35. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.	**Replicates existing requirements.** Please refer to City of Moreno Valley Municipal Code 9.17.050 (D) (3).
36. Utilize low pressure sodium fixtures for exterior lighting, including parking lots.	**Replicates existing requirements.** As stated on Draft EIR Page 3-17, the Project site is located within a 45 mile radius of Mt. Palomar Observatory. Consequently, the Project must comply with County Ordinance 655 which requires that all outdoor lighting within the Project area will be provided by low-pressure sodium hooded lights.
37. Utilize electric yard trucks.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
38. All buildings shall be constructed to LEED Platinum standards.	**Not required, no nexus with significant impacts.** As discussed on Pages 3-18 and 5-79 of the Draft EIR, the Project, as a whole, will be developed as a LEED-certified facility. LEED certification is contingent, among other requirements, on demonstrated and documented conservation and efficient use of available resources. It is recognized that not all LEED performance standards are applicable or appropriate for the Project, and that different standards may be utilized by the Project's end user(s). Additionally, the LEED rating system is not the appropriate standard for determining building efficiency. The California Title 24 Building Energy Efficiency Standards are the appropriate baseline. As set forth in the Draft EIR, the Project will achieve a minimum of 20 percent in energy efficiencies beyond incumbent Title 24 Energy Efficiency standards, as well as compliance with other applicable state and federal energy standards. There is no requirement for LEED certification as mitigation of Project impacts. While LEED-certified facilities may tend to reduce various environmental effects, LEED certification is a voluntary exercise to be pursued by the Applicant outside of and independent of CEQA mandates.
39. The operator shall meet SmartWay 1.25 ratings.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
40. The operator shall use only freight companies that meet SmartWay 1.25 ratings.	**Incorporated** at revised Mitigation Measure 4.3.13, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
41. The developer shall install photovoltaic solar systems sufficient to offset all electrical usage.	**Not required, no nexus with significant impacts.** As currently noted under EIR Mitigation Measure 4.3.11: "All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design." There is no requirement or demonstrated nexus requiring full offset of Project electrical consumption through use of photovoltaics.

Suggested Measure	Response
42. The developer shall install photovoltaic solar systems sufficient to offset all vehicular emissions.	**Not required, no nexus with significant impacts.** As currently noted under EIR Mitigation Measure 4.3.11: "All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design." There is no requirement or demonstrated nexus requiring full offset of Project vehicular emissions through use of photovoltaics.
43. The operator shall purchase only green power.	**Infeasible, not required, no nexus with significant impacts.** Power to the Project will be provided from the locally available electrical grid. The term "green power" is undefined, and moreover the Lead Agency has no practical way to require that power be provided from specified sources, "green" or otherwise. The suggested measure is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental and technological factors and is therefore infeasible. There is no requirement or demonstrated nexus requiring the Project to "purchase only 'green power'."

Results and conclusion of the Draft EIR are not affected.

Response JS-20

The commentor appears to misinterpret analysis and conclusions provided in the Project GCC Analysis. More specifically, the commentor misstates that the analysis concludes that the Project ***will*** *[emphasis added]* have a significant effect on the environment.

To further clarify, germane suggested CEQA Guidelines topical questions include:

> Would the project:
> a) Generate greenhouse gas emissions, either directly or indirectly, that ***may*** *[emphasis added]* have a significant impact on the environment?

In the absence of worldwide reduction commitments that are fully funded, any project level reduction measures cannot assure that significant effects on global temperatures and sea levels will be fully mitigated. That is, due to the potential global impacts

[beyond the control of the Project] significant GCC impacts may occur even with implementation of the measures set forth in CARB's AB 32 Scoping Plan (see *Climate Change Analysis*, Page 42).

The commentor states that the finding of "less-than-significant" Project GCC impacts is based on non-exceedance of (draft) CARB and SCAQMD GHG emissions thresholds. Though this is the case, the GCC Study clearly states that these thresholds are not applicable to the Project:

> CARB's Draft Threshold Of Significance For Industrial Projects Has Not Been Finalized And Is Not Applicable To The Proposed Project (*Climate Change Analysis*, Page 40).
>
> SCAQMD's Adopted GHG Threshold Applies Only To Projects Where It Is The Lead Agency And Is Not Applicable To The Proposed Project (*Climate Change Analysis*, Page 41).

As discussed in the *Climate Change Analysis*, there are no adopted quantitative GHG emissions thresholds applicable to the Project. Absent such quantified thresholds, the CARB and SCAQMD GHG emissions standards nonetheless provide an indication of current policies and strategic approaches employed in evaluating and addressing GHG emissions and potential GCC impacts, and may portend similar future statewide, regional, and/or local quantified thresholds. The clearly stated threshold considerations applicable to the Project are:

1. Would the proposed project generate GHG that may have a cumulatively significant impact on the environment; and

2. Would the proposed project conflict with GHG reduction measures identified in CARB's AB 32 Scoping Plan.

As concluded in the *Climate Change Analysis*, the answer to both of the preceding questions is "no," yielding the conclusion that the Project GCC impacts are less-than-significant. Moreover, as also discussed in the *Climate Change Analysis*, Project GHG emissions would not exceed either CARB or SCAQMD GHG emissions thresholds, further supporting the conclusion that the Project GCC impacts are less-than-significant. As a matter of clarification, the abbreviated conclusion presented at Draft EIR Page 4.3-94 is expanded/revised as follows:

~~Nonetheless, the Project will not exceed the CARB or SCAQMD proposed quantitative thresholds. Therefore, Project GHG emissions impacts are considered less-than-significant.~~ **As noted in the preceding discussions, it is generally accepted that the magnitude of global climate change effects is so substantial and the contribution of an individual project to global climate change is so extremely minuscule that direct significant adverse impacts would be highly unlikely.**

In evaluating the potential global climate change impacts of the Project, every attempt has been made to accurately and comprehensively quantify the greenhouse gas emissions associated with the Project. However, a number of inherent limitations are unavoidable in compiling or estimating project-level GHG emissions. Among these limitations, the use of models that measure overall emissions increases without accounting for existing emissions tend to substantially overstate the GHG emissions impacts of a new development projects. This makes an accurate analysis of GHG emissions substantially different from other air quality impacts, where the "addition" of redistributed emissions can make a substantial difference to overall air quality. Notably, not all the vehicular trips that result from the Project will be "new" vehicle trips, but that a majority of these trips already occur elsewhere, and currently generate GHG

emissions within a global context. For example, the Project will not create entirely new truck trips (globally). However, implementation of the Project would establish a new destination point for trucks already utilizing the area roadway system. Within the scope of limitations and considerations noted herein, a Project GHG emissions inventory has been prepared as recommended under OPR's technical advisory.

The City of Moreno Valley has not adopted a numeric threshold of significance for emissions of greenhouse gases. However, guidance and an indication of the potential significance of the Project's GHG emission impacts is inferred by comparing Project GHG emissions levels against germane proposed or adopted GHG emissions impacts thresholds. To this end, Project GHG emissions have been compared to GHG emissions thresholds developed by state Responsible Agencies charged with oversight and regulation of air pollutant emissions, the SCAQMD and CARB. As indicated herein, Project GHG emissions would not exceed the thresholds developed by those agencies.

Based on the preceding discussions and supporting analysis provided in the Project Global Climate Change Analysis included at EIR Appendix C, the Project's potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment is less-than-significant.

This revision has been reflected in Final EIR Section 2.0, "Revisions and Errata," and incorporated in the Final EIR's Mitigation Monitoring Program, presented at Section 4.0. Results and conclusions of the EIR are not affected.

Response JS-21

The commentor reiterates the Draft EIR discussion that the CARB and SCAQMD GHG emissions thresholds consider only non-transportation sources. To clarify, the thresholds address all stationary GHG sources, but do not include mobile sources. To a certain extent this limitation on threshold considerations reflect the previously noted limitations involved in attempting to estimate "new" emissions associated with vehicle trips to/from new facilities. Nonetheless, the thresholds and their interpretation and application are correct as stated in the EIR and Project *Climate Change Analysis* (included at EIR Appendix C).

Contrary to the commentor's assertion, the *Climate Change Analysis* is not "deeply flawed" through an omission of mobile-source GHG emissions. Mobile-source emissions are clearly identified and quantified at *Climate Change Analysis*, Page 45, Table 2-4 (27,858.08metric tonsCO2E) and at Draft EIR Table 4.3-18 (Page 4.3-92). Mobile source emissions are not however, by CARB and SCAQMD-defined thresholds, utilized by those agencies in determining GHG emissions significance for their facilities. Project facilities emissions of GHG would not exceed GHG thresholds established by CARB and SCAQMD for their facilities. As noted above, this fact is considered within the entirety of the Climate Change Analysis, and in evaluating the Project's potential GCC impact significance, which is, as correctly concluded in the EIR, less-than-significant.

Response JS-22

The commentor reiterates incorrect calculation and interpretation of Project vehicle trip generation. Please refer to Responses JS-15, JS-20, and JS-21. Results and conclusions of the EIR are not affected.

Response JS-23

The commentor states that "[t]he GHG emission analysis is also deeply flawed in assuming that no new mobile source of emissions will be created by this Project." This

opinion, along with the commentor's related statements and conclusions, are addressed in preceding Responses JS-15, JS-20 and JS-21, which provide clarification regarding mobile-source GHG emissions evaluated and addressed in the EIR. The Draft EIR analyzes both the mobile and stationary GHG emissions associated with the Project. The EIR analysis conservatively does not assume mere redistribution of existing GHG emissions, particularly with regard to vehicle emissions when considered in a global context. Results and conclusions of the EIR are not affected.

Response JS-24

The commentor provides opinions on GHG emissions thresholds and GHG emissions reductions strategies. The commentor disagrees with finding that Project GHG emissions are not cumulatively considerable. Commentor opinions and statements are forwarded to the decision-makers for their consideration.

Contrary to commentor opinions and statements, in point of fact, an exhaustive and accurate assessment of the Project's GHG emissions impacts and related potential GCC impacts are presented in the Draft EIR (Pages 4.3-23 through 4.3-47, Pages 4.3-88 through Pages 4.3-111, at al.), and supporting technical Global Climate Change Analysis included at Draft EIR Appendix C. These discussions not only establish Project consistency with the CARB Scoping Plan (one component of the EIR analysis), but also provide detailed discussion of the sources and effects of GHG emissions, consider and evaluate the Project in the context of existing and proposed GHG emissions reductions strategies, and provides an analysis of Project GHG emissions vis-à-vis adopted and anticipated thresholds. Importantly, the analysis provided in the EIR is consistent with applicable CEQA directives:

> Based on the direction provided in Section 15064.4 of the *Guidelines*, a lead agency should make a good-faith effort, based on available information, to describe, calculate, or estimate the amount of greenhouse gas emissions associated with a project. Because the methodologies for

> performing this assessment are anticipated to evolve over time, a lead agency shall have discretion to determine, in the context of a particular project, whether to:
>
> 1. Use a model or methodology to quantify greenhouse gas emissions associated with a project and which of any available model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should also include a qualitative discussion or analysis regarding the limitations of the particular model or methodology selected for use.
>
> 2. Rely on qualitative or other performance based standards for estimating the significance of greenhouse gas emissions (Draft EIR Page 4.3-35).

Substantial evidence provided in the Draft EIR, as summarized above, supports the conclusion that the Project's greenhouse gas emissions are not cumulatively considerable.

The commentor notes *recommended* [emphasis added] CARB Scoping Plan Actions, and misinterprets these as Project requirements. The commentor cites specifically, **Action T-7**: Sector-Transportation; Recommended Action-Heavy Duty Vehicle Greenhouse Gas Emission Reduction Measure - Aerodynamic Efficiency; and **Action E-4**: Sector-Electricity and Natural Gas-Recommended Action-Million Solar Roofs. As noted in the Draft EIR (Pages 4.3-99, 4.3-100), the Project will not conflict with applicable recommended Actions. Consistent with other revisions proposed herein, Action T-7, Action E-4 applicability discussions at Page 4.3-102 are deleted and replaced with the following:

- Action T-7 **recommends existing trucks/trailers to be retrofitted with the best available technology and/or CARB-approved technology. Implementation of such a standard is not within the purview of the Project. GHG emissions reductions would be achieved however through standards compliance by vehicles accessing the Project. Further, pursuant to EIR Mitigation Measure 4.3.13, tenants are encouraged to provide incentives to realize Smartway certification, and to use fleet vehicles conforming to CARB 2010 emissions standards or better, thereby reducing GHG emissions. The Project supports, and would not interfere with Action T-7.**

  Action E-4 **promotes solar generated electricity. As discussed within this EIR, the Project design accommodates renewable energy sources, such as photovoltaic solar electricity systems. (Draft EIR Mitigation Measure 4.3.11 requires in part that: "*All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design.*") The Project supports, and would not interfere with Action E-4.**

It is further noted that the AB-32 Scoping Plan merely sets forth concepts, the implementation of which will be refined during the rulemaking process contemplated under AB-32. Thus, merely because Action T-7 recommends that existing trucks/trailers be retrofitted with the best available technology and/or CARB-approved technology; and/or that Action E-4 promotes solar generated electricity does not mean that a given project must require best available technology retrofits; nor install PV solar panels on its roof in order to be consistent with the Scoping Plan.

Please refer also to the complete discussion of Project consistency with applicable recommended CARB Scoping Plan Actions presented at Draft EIR Pages 4.3-98 through 4.3-103. The results and conclusions of the EIR are not affected.

Response JS-25

The commentor reiterates opinions on GHG emissions thresholds and GHG emissions reductions strategies. The commentor disagrees with finding that Project GHG emissions are not cumulatively considerable, but provides no supporting analysis or evidence. In point of fact, as supported by the discussion in the EIR, the project will not result in significant GHG/GCC emissions impacts, and no mitigation is required. Measures included in the EIR, including those addressing recycling, water conservation, and solar energy systems, therefore further reduce GHG/GCC impacts that, even absent mitigation, are less-than-significant. Commentor's citation to EIR statements that: "*vehicles accessing the site will be in compliance with CARB vehicle standards to the maximum extent feasible"* are not found. Adopted applicable CARB standards are regulatory in nature, and required of all vehicles. Please refer also to the preceding Response JS-24.

Response JS-26

The commentor reiterates opinions on GHG emissions thresholds and GHG emissions reductions strategies. The commentor cites various 2006 CAT Report GHG Emission Reduction Strategies, contending the Project does not support applicable strategies. The commentor incorrectly interprets the strategies as requirements of the Project. Specific citations of the commentor include compliance with CARB vehicle standards, source reduction and recycling, California solar initiative recommendations, and the use of alternative fuels.

The approach suggested by the commentor is not required under the CEQA Guidelines, and is not the approach employed by the Lead Agency here. Comparison of this Project with the CAT strategies and AB-32 Scoping Plan concepts is made for the purpose of evaluating whether the project conflicts with an applicable plan, policy, or regulation adopted for the purposes of reducing emissions of greenhouse gases. That is the applicable threshold under the CEQA Guidelines. Upon determining that the Project does not conflict with these plans, the Lead Agency appropriately concluded

that the impacts are less than significant, and therefore, no mitigation is required. Project support of, and compliance with, applicable 2006 CAT Report GHG Emission Reduction Strategies is presented at Draft EIR Pages 4.3-103 through 4.3-110. With specific regard to Project compliance with CARB vehicle standards, search of the EIR text does not yield the phrase "maximum extent feasible" as suggested by the commentor. EIR discussions of strategies noted by the commentor as excerpted from Draft EIR Table 4.3-20, are presented below.

Table 4.3-20
Project Compliance with Applicable 2006 CAT Report
Greenhouse Gas Emission Reduction Strategies

Strategy	Applicability/Compliance
California Air Resource Board	
Vehicle Climate Change Standards AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the CARB in September 2004.	Enforcement of State regulation is beyond the scope of the Project. The Project will not interfere or conflict with AB 1493 (Pavley).
Other Light Duty Vehicle Technology New standards would be adopted to phase in beginning in the 2017 model.	Enforcement of State standards for Light Duty Vehicles is beyond the scope of the Project. The Project will not interfere or conflict with new standards adopted for Light Duty Vehicles.
Heavy-Duty Vehicle Emission Reduction Measures Increased efficiency in the design of heavy-duty vehicles and an education program for the heavy-duty vehicle sector.	Enforcement of State standards for Heavy Duty Vehicles is beyond the scope of the Project. The Project will not interfere or conflict with new standards adopted for Heavy Duty Vehicles.
Diesel Anti-Idling In July 2004, the CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	Heavy-duty diesel trucks that access the Project site will be required to limit idling to no more than three (3) minutes (EIR Mitigation Measure 4.3.10).
Alternative Fuels: Biodiesel Blends CARB would develop regulations to require the use of 1 to 4 percent biodiesel displacement of California diesel fuel.	When CARB adopts regulations for the use of biodiesel fuel in heavy duty trucks, trucks supplying the commercial uses will comply with this measure.
Hydrogen Highway The California Hydrogen Highway Network (CA H2 Net) is a State initiative to promote the use of hydrogen as a means of diversifying the sources of transportation energy.	Not Applicable.

Table 4.3-20
Project Compliance with Applicable 2006 CAT Report
Greenhouse Gas Emission Reduction Strategies

Strategy	Applicability/Compliance
Integrated Waste Management Board	
Achieve 50 percent Statewide Recycling Goal Achieving California's 50 percent waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48 percent has been achieved on a statewide basis. Therefore, a 2 percent additional reduction is needed.	In support of AB 939, the Project will comply with requirements of the City of Moreno valley Source reduction and Recycling Element (SRRE), to include additional waste reduction/waste recycling measures as may be implemented by the City. Project design will include provisions for tenants to recycle.
Zero Waste - High Recycling Additional recycling beyond the State's 50 percent recycling goal.	In support of AB 939, the Project will comply with requirements of the City of Moreno valley Source reduction and Recycling Element (SRRE), to include additional waste reduction/waste recycling measures as may be implemented by the City. Project design will include provisions for tenants to recycle.
Department of Water Resources	
Water Use Efficiency Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions.	In support of water Use Efficiency strategies, the Project will implement U.S. EPA Certified WaterSense labeled or equivalent faucets and high-efficiency toilets (HETs), and implement water-conserving shower heads to the extent feasible.
California Energy Commission (CEC)	
Building Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	As required through the EIR air quality mitigation measures noted herein, and based on energy efficiency/sustainability attributes of the Project presented in the EIR Project Description (EIR Section 3.0), energy efficiencies achieved by the Project will surpass incumbent Title 24 Energy Efficiency Standards by at least 20 percent. Verification of increased energy efficiencies is documented in Title 24 Compliance Reports provided by the Applicant, and reviewed and approved by the City prior to the issuance of the first building permit. Energy efficient Project designs and operational programs will facilitate Applicant-initiated LEED Certification actions.

Table 4.3-20
Project Compliance with Applicable 2006 CAT Report
Greenhouse Gas Emission Reduction Strategies

Strategy	Applicability/Compliance
California Solar Initiative Installation of 1 million solar roofs or an equivalent 3,000 MW by 2017 on homes and businesses; increased use of solar thermal systems to offset the increasing demand for natural gas; use of advanced metering in solar applications; and creation of a funding source that can provide rebates over 10 years through a declining incentive schedule.	In support of the California Solar Initiative, the Project design accommodates potential future installation and use of renewable energy sources, such as photovoltaic solar energy systems. (See EIR Section 3.0, Project Description).

Contrary to the commentor's assertions, as indicated at Table 4.3-20, the Project complies with and supports applicable 2006 CAT Report Greenhouse Gas Emission Reduction Strategies. There is no mandate or specific requirement or singular methodology for strategy compliance as suggested by the commentor. The results and conclusions of the EIR are not affected.

Response JS-27

The commentor cites various recommended or adopted thresholds of other agencies addressing GHG emission and GCC impacts. The commentor erroneously states that "in the EIR for the Highland Fairview Project, the City adopted a zero emissions threshold for the assessment of impacts of GHG on climate change."

Other agency approaches to evaluation and mitigation of GHG emissions impacts are noted. The commentor is referred to previous responses and CEQA directives allowing for each Lead Agency to evaluate and address GHG emissions impacts within the context of Section 15064.4 of the Guidelines. The EIR analysis of GHG emissions/GCC impacts is consistent with Section 15064.4 of the Guidelines. Please refer also to response JS-24.

No "zero emissions threshold" for GHG emissions neither appears, nor was applied, in the EIR for the Highland Fairview Project. The commentor is referred to *Draft*

Environmental Impact Report Highland Fairview Corporate Park PA07-0088 (CZ), PA07-0089 (GPA), PA07-0090 (TPM 35629), and PA07-0091 (PP) City of Moreno Valley, Riverside County, California State Clearinghouse No. 2007101132 (Michael Brandman Associates) August 4, 2008, Page 5.16-5:

> AB 32 states that, "global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." Although it is unknown if AB 32 alone is enough to reduce California's fair-share contribution to global greenhouse gas inventory, it is currently the only well-defined and widely accepted benchmark for greenhouse gas emissions in California. Therefore, for purposes of this analysis, the following significance thresholds have been used:
>
> **Impact GCC-1** Does the project comply with the provisions of an adopted Greenhouse Gas Reduction Plan or Strategy? If no such Plan or Strategy is applicable, would the project significantly hinder or delay California's ability to meet the reduction targets contained in AB 32?
>
> **Impact GCC-2** Would the impacts of climate change significantly impact the project?

The Highland Fairview Project EIR concluded that project had the potential to significantly hinder California's ability to meet the reduction targets contained in AB 32, and therefore reached a conclusion of "potentially significant" GHG emissions impacts for that project.

Such is not the case for the proposed Westridge Commerce Center Project as supported by the analysis presented in the Westridge Commerce Center Project EIR and supporting Global Climate Change analysis.

Continuing at Page 5.16-6, the Highland Fairview EIR also importantly notes that:

> The thresholds and the analysis contained below *may not be relevant to other projects. This analysis does not establish thresholds for the City or set precedents for the type of analysis in a climate change analysis, as this discipline is still evolving. [emphasis added]*

Clearly, whatever thresholds and analysis may have been employed in the Highland Fairview EIR were for that project only, and not intended or necessarily applicable to the proposed Westridge Commerce Center Project. The results and conclusions of the EIR are not affected.

Response JS-28

The commentor considers the term "cumulatively considerable" established under the *CEQA Guidelines* Section 15064, subd. (h)(1), and appears to misapply it in evaluating Project GHG emissions and potential Project-related Global Climate Change impacts. In total, *CEQA Guidelines* Section 15064, subd. (h)(1) cited by the commentor, and excerpted below, provides guidance as to whether an EIR is required based on the potential for a given project to cause or result in cumulatively considerable impacts.

> (h)(1) When assessing whether a cumulative effect requires an EIR, the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable. An EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

The Lead Agency had previously determined through the Initial Study process that an EIR is required for the Project, to include an analysis of all potential cumulatively considerable impacts, including potential GHG/GCC impacts.

The EIR analysis supports the conclusion that Project-specific GHG/GCC impacts are individually less-than-significant and not cumulatively considerable (see EIR Section 3.0, Project Description, Pages 3-17 through 3-20; EIR Section 4.3, Air Quality, Pages 4.3-88 through 4.3-110; EIR Section 5.0, Other CEQA Considerations, Pages 5-13, 5-14; and Global Climate Change Analysis included at EIR Appendix C). To this end, not only are the Project's incremental GHG/GCC impacts substantiated to be less-than-significant. As noted in the Draft EIR, with regard to global climate change, it is generally accepted that the magnitude of global climate change effects is so substantial and the contribution of an individual project to global climate change is so extremely minuscule that direct significant adverse impacts would be highly unlikely.

Within the scope of limitations and considerations noted herein, a Project GHG emissions inventory has been prepared as recommended under OPR's technical advisory. The City of Moreno Valley has not adopted a numeric threshold of significance for emissions of greenhouse gases. However, guidance and an indication of the potential significance of the Project's GHG emission impacts is assessed by comparing Project GHG emissions levels against germane proposed or adopted GHG emissions impacts thresholds. To this end, Project GHG emissions have been compared to GHG emissions thresholds developed by state Responsible Agencies charged with oversight and regulation of air pollutant emissions, the SCAQMD and CARB. As indicated herein, Project GHG emissions would not exceed the thresholds developed by those agencies.

Additionally, as discussed in the Draft EIR . . . "to facilitate their monitored implementation throughout Project development and operations, design features and operational attributes of the Project are incorporated into this EIR as Mitigation

Measures 4.3.10 through 4.3.13 . . . These measures act to reduce Project-related operational source air pollutants and GHG emissions, and promote sustainability through conservation of energy and other natural resources" (Draft EIR at Page 4.3-94). As amended in these Responses, additional mitigation has been also been provided, further reducing already less-than-significant Project GHG emissions levels. Please refer also to previous discussions at Responses JS-20 through JS-27, substantiating less-than-significant Project GHG/GCC impacts.

As provided for under *CEQA Guidelines* Section 15064(h)(2), "[w]hen a project might contribute a significant cumulative impact, but the contribution will be rendered less than cumulatively considerable through mitigation measures . . . [the supporting analysis] shall briefly indicate and explain how the contribution has been rendered less than cumulatively considerable." Design features, operational programs, and mitigation measures included in the Draft EIR (see EIR Section 3.0, Project Description, Pages 3-17 through 3-20; EIR Section 4.3, Air Quality, Pages 4.3-88 through 4.3-110; EIR Section 5.0, Other CEQA Considerations, Pages 5-13, 5-14; and Global Climate Change Analysis included at EIR Appendix C) render the Project's potential contribution to Global Climate Change impacts to levels that are less than cumulatively considerable.

As further provided under *CEQA Guidelines* Section 15064(h)(3), . . . "a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including, but not limited to, water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make

specific the law enforced or administered by the public agency. When relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable."

The general arena of GHG emissions regulations remains preliminary and still formative, and there are no plans (as yet) with the effect of law that would be applicable to the Project. Notwithstanding, the CARB Scoping Plan and 2006 CAT Report are considered indicative of likely future guidelines and requirements. The Project supports and is consistent with CAT strategies and other means suggested to reduce California's emissions to the levels proposed by Executive Order S-3-05 and AB 32. Qualitative assessment of the Project's impacts based upon consistency with the CARB Scoping Plan and the 2006 CAT Report (Draft EIR Pages 4.3-94 through 4.3-110) supports the conclusion that the Project's greenhouse gas emissions are not cumulatively considerable.

Continuing, *CEQA Guidelines* Section 15064(h) (4) importantly provides that . . . "[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." The commentor's assertion that because cumulative GCC impacts exist or are likely to occur, the project's incremental impacts in this regard must be cumulatively considerable is not supported by CEQA.

It is further noted cumulative effects of Global Climate Change would be considered significant irrespective of any increment of GHG emissions generated by, or reduced through, implementation of the Project. Moreover, absent similar commitments worldwide, even full state-level reduction of GHGs as provided for under California

statute would not notably or discernibly affect a difference in global climate change. In this regard, the World Resources Institute estimates California GHG emissions comprised an estimated 1.3 percent of worldwide GHG emissions as of 2000.[9] Further, whereas California since 2000 continued to implement further energy efficient technologies and other means that directly or indirectly reduce GHG emissions and thereby reduce its proportionate impacts, these reductions have been more than offset by increasing growth and industrialization worldwide. This speaks to *CEQA Guidelines* Section 15064(h) (4) provisions, which provide that the mere existence of significant cumulative GCC impacts caused by other projects (worldwide growth and industrialization) alone does not constitute substantial evidence that the Westridge Commerce Center Project's incremental GCC effects are cumulatively considerable.

Based on the preceding the project will not result in or cause cumulatively considerable GCC impacts. Results and conclusions of the EIR are not affected.

Response JS-29

The commentor summarizes various provisions of the *Final Statement of Reasons for Regulatory Action* (California Natural Resources Agency) December 2009 which allow for off-site mitigation of GHG impacts.

As substantiated in the EIR and discussed in these Responses, Project-related GHG emissions impacts are less-than-significant and are not cumulatively considerable. Off-site mitigation is not proposed nor is it required. Results and conclusions of the EIR are not affected.

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9 *The AB 32 Challenge: Reducing California's Greenhouse Gas Emissions* (Gregory Freeman, Nancy D. Sidhu, PhD, Myasnik Poghosyan) January 2008, Page 8.

Response JS-30

Temporary and intermittent significant construction-source noise impacts noted by the commentor are fully discussed and disclosed in the Draft EIR:

> **Level of Significance after Mitigation:** Mitigation Measures 4.4.1 through 4.4.4 will qualitatively reduce construction-source noise and its perceived impacts to the extent feasible. The proposed use of noise curtains during the most noise intensive activities (grading/site preparation) may reduce received noise levels by 10-20 dBA at the nearest receptors. Nonetheless, it is anticipated that construction-source noise received at the nearest affected residential receptor adjacent may temporarily and periodically reach the maximum anticipated exterior noise level of 89 dBA Leq. This condition would occur in particular when heavy equipment is used for the construction of adjacent Fir (future Eucalyptus) Avenue. At more distant residential neighborhoods, the maximum received noise level is conservatively estimated at 60 to 65 dBA Leq. As such, even with the application of proposed mitigation, Project construction equipment activities would exceed the City's maximum permissible sound level for daytime hours as received at a residential land use (60 dBA Leq), and consequently would be considered a substantial temporary and periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project (Draft EIR Page 4.4-20).

Mitigation of construction-source noise impacts is addressed in the following responses JS-31 and JS-32. Results and conclusions of the Draft EIR are not affected.

Response JS-31

The commentor provides opinions on Draft EIR Mitigation Measure 4.4.4, which is presented in its entirety here:

4.4.4 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that for the duration of grading and site preparation activities, temporary construction noise curtains or similar line-of-sight noise reduction measures shall be installed along the Project's southerly boundary. Noise curtains shall be installed so as to provide maximum reduction for noise sensitive uses (at present a single residence located southerly of the Project site) and shown on the grading plans prepared for the Project.

The commentor states that the mitigation language "[n]oise curtains shall be installed so as to provide maximum reduction for noise sensitive uses" is "unenforceable." The commentor fails to note or recognize that construction activities by their nature are fluid and mitigation addressing such activities is similarly fluid. The stipulation that noise curtains be installed so as to achieve the maximum reduction in noise accommodates site and use-specific variations in construction activities and construction noise that may affect proximate sensitive receptors. As discussed at Draft EIR Page 4.4-18, "[t]he closest noise sensitive receptor that will be subject to potential construction noise impacts is the residence located at 28855 Fir Avenue (future Eucalyptus Avenue),approximately 150 feet southerly of the Project site's southernmost boundary. Because roadway improvements along future Eucalyptus Avenue are also part of Project development, an overall grading noise level of 89 dBA at 50 feet has been used as the worst-case, maximum exterior noise level when heavy equipment is nearest this sensitive receptor. At the nearest residential neighborhood, located more than one-quarter mile from the Project site, received construction-related noise levels would be reduced by 30 decibels or more based on physical separation between these residences and the Project site.

As also noted in the Draft EIR, the noise curtains required pursuant to Mitigation Measure 4.4.4 would conservatively provide an estimated 10 to 20 dBA of noise

reduction acting to reduce noise at proximate receptors. Worst-case construction noise levels (estimated to be 89 dBA at 50 feet) would occur as roadway improvements occur along future Eucalyptus Avenue. To ensure that the single residential use would not be temporarily and intermittently exposed to construction noise levels exceeding 60 dBA would in effect require construction of a barrier along the southerly edge of the Fir (future Eucalyptus Avenue) right-of-way, extending at a minimum the length of the affected receptor property line (approximately 620 feet) providing line-of sight interruption of noise yielding a 29 dBA noise reduction. Alternatively, an encapsulating 620 foot by 620 foot, 29 dBA noise-reducing barrier could be constructed around the receptor property in question.

For construction equipment with a 12-foot high exhaust stack, and not accounting for grade differentials, line of-sight noise protection would require a minimum 15 foot high wall (noise source height plus three feet).Under laboratory conditions a 4-inch thick concrete wall (or equivalent @ 30 lbs./s.f.) would provide approximately 37 dB noise attenuation (one side of a barrier to the other); and under uncontrolled exterior conditions could hypothetically provide 29 dBA noise reduction in protected areas immediately adjacent to the wall, within the noise "shadow zone." However noise diffracted over the top of or sides of the wall would still affect more distant unprotected receptors. Moreover, a 4-inch thick concrete wall, 15 feet in height is not structurally stable without significant reinforcing (envision a 15-foot high freestanding brick wall); and in practical application would constitute a permanent structure with anchoring footings or caissons.

The commentor suggests that "temporary sound walls" be implemented. As indicated, such walls would not be temporary. Moreover, construction of the "temporary" walls themselves, as well as their demolition, would generate noise levels equaling or exceeding those resulting from the Project. That is, the noise barrier's own construction and its subsequent demolition, would occur at the southerly right of-way line, and would require use of construction equipment in addition to, and for periods of time

greater than, that otherwise required to implement the Project. This would arguably increase rather than decrease net adverse effects construction noise.

Response JS-32

Please refer to the following Response JS-33.

Response JS-33

The commentor's suggested additional measures to reduce construction-source noise are addressed below.

Suggested Measure	Response
1.Prepare and implement a noise mitigation program and designate whom is responsible for implementing the program, when such a program must be implemented and planned, and include such actions as noise monitoring at selected noise sensitive locations, monitoring complaints, and identification of the major sources of noise.	**Not required, no nexus with significant impacts.** The Noise Impact Analysis states that this program is merely recommended not required. Nor are the recommended measures reflected in or required to attain the "mitigated condition" presented in the Draft EIR. The Lead Agency may, at its discretion, impose additional Conditions of Approval (such as recommendations within studies) supplementing the EIR Mitigation Measures. The Draft EIR contains comprehensive mitigation to address noise impacts of the Project. These measures are included as part of the Mitigation Monitoring Plan, presented in Section 4.0 of this Final EIR. The Mitigation Monitoring Plan: 1) assigns responsibility for, and ensures proper implementation of Mitigation Measures; 2) assigns responsibility for, and provides for monitoring and reporting of compliance with Mitigation Measures; and 3) provides the mechanism to identify areas of noncompliance and need for enforcement action before irreversible environmental damage occurs. The City will monitor and report on all mitigation activities.
2.The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.	**Incorporated** at revised EIR Mitigation Measure 4.4.3.

Suggested Measure	Response
3.Notify surrounding homeowners of expected, specific construction-related noise impacts.	**Not required, no nexus with significant impacts.** Please refer to preceding discussion of recommendations vis-à-vis noise-related requirements. The public, including surrounding homeowners, has been notified of the Project via direct mailing and public notice, consistent with the provisions of the City of Moreno Valley Municipal Code. Copies of the Draft EIR are available upon request.
4.When technically feasible, electrical construction equipment should be utilized.	**Incorporated** at revised Mitigation Measure 4.3.8.
5.During project construction, the developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use or prohibit idling in excess of 3 minutes.	**Replicates existing requirements.** Mitigation Measure 4.3.10, as currently presented in the Draft EIR, prohibits the idling of trucks for more than three (3) minutes.

Response JS-34

The commentor appears to misinterpret and/or misapply noise limitations established under the City's Noise Ordinance, noise standards provided for under the General Plan, and their application within the EIR. The commentor erroneously states " *. . . the DEIR . . . adopts as a threshold of significance, an audible increase in noise levels of 3.0 dBA greater*." The commentor suggests that the City Noise Ordinance threshold of 60 dBA Leq be universally applied irrespective of existing conditions, noise source, or noise duration.

To clarify, as noted in the Draft EIR . . . "[t]he City's Noise Ordinance applies to 'stationary source' noise occurring on one property, which may affect a neighboring property (Draft EIR at Page 4.4-13). Mobile source (roadway noise) is not regulated under the City Noise Ordinance. The Noise Ordinance is directed toward discrete, identifiable stationary or area source noise. Noise thresholds established in the Ordinance are expressed in Leq, acknowledging noise levels occurring within a limited and defined time frame (in this case one-hour).

As described and discussed in the EIR, the Noise Ordinance's most restrictive threshold conditions of 60 dBA Leq daytime/55 dBA Leq nighttime for residential land uses are appropriately applied in evaluating discrete area/stationary source noise generated by the Project and received at proximate residential land uses. As discussed in the Draft EIR (Pages 4.4-23 through 4.4-26), at receiving residential land uses, Project operational stationary/area source noise will not exceed 60 dBA Leq daytime /55 dBA Leq nighttime.

The Noise Ordinance is not intended or constructed to address modeled areawide ambient noise levels increases, such as occur over time due to ambient increases in areawide traffic. Nor is it appropriate to evaluate or consider long term increases in ambient noise levels (such as increases in roadway corridor noise) in terms of Leq. It is the 24-hour average weighted noise level (CNEL) that accurately and appropriately describes the effective ambient noise condition, and indicates whether there would be a substantial permanent increase in noise levels due to the effects of a given project.

CNEL guidelines applicable to increases in ambient noise conditions, including noise generated by Project-related mobile sources (traffic) are established under the City General Plan Noise Element. As discussed in the Draft EIR:

> The Safety Element of the City's General Plan discusses noise and future projected noise levels within the City. For planning purposes, the City employs a 65 CNEL standard for noise-sensitive outdoor areas (e.g., rear yards of single family homes), and an indoor noise standard of 45 CNEL for residential developments (Draft EIR Page 4.4-14).

As supported by analysis presented in the EIR (see EIR Section 4.0, Noise; EIR Appendix D, noise Impact Analysis) the Project will not result in or cause operational noise levels exceeding applicable standards established under the Noise Ordinance and/or General Plan. Results and conclusions of the EIR are not affected.

Response JS-35

The commentor states that "*. . . the Draft EIR makes a conclusory statement of insignificance without data or analysis . . .*" with regard to potential vibration impacts of the Project. The commentor also states that the Draft EIR only addresses vibration impacts to buildings, but fails to address such impacts to people.

For ease of reference, the EIR discussion of vibration impacts is excerpted below:

> **Impact Analysis:** Groundborne vibration refers to groundborne noise and perceptible motion. Typical sources of groundborne vibration include the use of heavy-duty construction equipment to be employed at the Project site. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where motion may be discernible but without the accompanying effects (e.g., the shaking of a building).
>
> Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Vibration-caused building damage is not a factor for normal projects, with the occasional exception of blasting and pile driving during foundation construction, neither of which is anticipated as part of construction of the Project considered here.
>
> The City of Moreno Valley does not currently have adopted vibration regulations. Notwithstanding, germane vibration criteria has been established by the California Department of Transportation (Caltrans) and is employed in analyses presented here.

> The Project does not propose activities or uses that would result in long-term substantial or even perceptible vibration levels. However, heavy equipment employed during Project construction could potentially generate groundborne vibration impacts at adjacent land uses. 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. Construction vibration is generally associated with pile driving and rock blasting. Occasionally, proximate operations of large bulldozers and loaded trucks can cause perceptible vibration levels, notwithstanding, according to the *Transportation and Construction-Induced Vibration Guidance Manual* prepared for Caltrans, groundborne vibration from construction activities and equipment such as such as D-8 and D-9 Caterpillar bulldozers, earthmovers and haul trucks at distances of 10 feet do not create vibration amplitudes that would cause structural damage to nearby structures. The proposed Project is not anticipated to employ any pile driving equipment, nor require blasting activities. Further, the nearest heavy equipment operations would occur at a distance of 40 to 50 feet from the nearest residential use (28855 Fir Avenue). Impacts from construction-source groundborne vibration are therefore anticipated to be less-than-significant (Draft EIR Pages 4.4-27 to 4.4-28).

As indicated above, the City has no adopted vibration thresholds, much less a threshold adopted to address speculative "vibration impacts to people" suggested by the commentor. Structural damage is a defined concern addressed by Caltrans, and would be considered to constitute excessive groundborne vibration or groundborne noise levels**.** This concern is likewise is considered in the EIR. Occasional perceptible vibration levels should they occur, do not constitute excessive groundborne vibration or groundborne noise levels**.** Any vibration impacts perceived at off-site locations would, as noted, be temporary and intermittent due to transient construction vehicles.

There are no sensitive historic structures or instruments located proximate to the Project that would somehow be affected by temporary and transient construction-source vibration.

As supported by the preceding and the analysis presented in the EIR, the Project will not result in or cause exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels. Results and conclusions of the EIR are not affected.

Response JS-36

Please refer to the following Response JS-37.

Response JS-37

The commentor again appears to misinterpret and/or misapply noise thresholds, now within a cumulative analysis context, and incorrectly states threshold considerations applicable to the Project.

In brief, the City Noise Ordinance regulates stationary/area source noise generated by the Project will not result in operational noise that would exceed Ordinance Standards (60 dBA Leq daytime/55 dBA Leq nighttime). Ambient noise increases, including traffic noise generated by the Project would not exceed the applicable 65 CNEL residential standard established by the General Plan. (The commentor misstates the threshold as 60 dBA Leq). Noise levels of less than 65 dBA CNEL are acceptable. In the instance noted by the commentor, vehicular noise levels due to cumulative growth (including noise generated by the Project traffic) would increase by 9.8 dBA CNEL over time, totaling an estimated 61.1 dBA CNEL at General Plan Buildout. Vehicular noise levels of 61.1 dBA CNEL are less than the threshold condition of 65 dBA CNEL, and impacts are therefore not cumulatively considerable. In instances where pre-existing noise levels exceed 65 dBA CNEL, or such traffic noise levels would occur due to cumulative growth absent the Project, the Project's incremental contribution would

range from 0.0 dBA to 0.4 dBA, and would not be discernible. In these instances, perceived noise conditions would the same with, or without the Project. As noted previously in these responses, *CEQA Guidelines* Section 15064(h) (4) importantly provides that . . . "[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." The commentor's assertion that because cumulative noise impacts exist or are likely to occur, the project's incremental impacts in this regard must be cumulatively considerable is not supported by CEQA.

Project operational source noise would not exceed applicable standards established under the Noise Ordinance and/or General Plan. In no instance would Project noise cause a transition from acceptable ambient conditions to conditionally acceptable conditions or from conditionally acceptable conditions to unacceptable conditions.

As supported by the preceding and the analysis presented in the EIR, the Project will not result in or cause cumulatively considerable operational noise levels exceeding applicable standards established under the Noise Ordinance and/or General Plan. Results and conclusions of the EIR are not affected.

Response JS-38

The commentor notes that modeling of noise based on measurements taken at the G.I trucking facility (Pomona CA) may not yield noise levels comparable to those that would be generated by the Project.

The G.I. trucking facility conducts logistics warehousing operations, including acceptance and dispatch of big-rig long-haul and consolidated freight trucks, similar to operations anticipated under the Project. The G.I. trucking facility noise measurements are not intended to precisely replicate noise generated by the Project operations site on any given day or at any given time. The empirical data collected does however provide a real world snapshot of anticipated noise sources and noise conditions typical of

heavy-duty, long-haul trucking operations conditions, and is considered superior to an assumed estimate of noise sources and noise levels. Results and conclusions of the EIR are not affected.

Response JS-39

The commentor's suggested additional measures to reduce operational-source noise are addressed below.

Suggested Measure	Response
1. All truck, tractors and forklifts shall be operated with proper operating and well-maintained mufflers. 2. Maintain quality pavement conditions that are free of bumps to minimize truck noise. 3. Limit the number of idling trucks on the southeastern portion of the site.	**Not required, no nexus with significant impacts.** Please refer to preceding discussion of recommendations in Response JS-32 vis-à-vis noise-related requirements. As noted in the Noise Impact Analysis, all operational noise impacts are less-than-significant. No additional mitigation of operational noise impacts is required.

Response JS-40

The commentor incorrectly states that "Interstate 15 (I-15) and Interstate 215 (I-215) provide access to the Project are and will most certainly be used to access the Project site." It is noted that I-215 was constructed to run roughly parallel to I-15 between Murrieta (approximately 30 miles south of the Project site) and Devore (located approximately 25 miles to the north of the Project site). In the vicinity of Moreno Valley, while I-215 is acknowledged as providing access, I-15 is located approximately 20 miles to the west. At these distances, I-15 does not provide direct access to the Project site, and on this basis, was not considered as part of the Project's traffic analysis.

With respect to commentor's concerns regarding potential Project-related impacts to I-215, a basic freeway segment analysis has been conducted between Box Springs

Road/Fair Isle Drive and the I-215 Freeway along the SR-60 Freeway, and included in the Project's Traffic Impact Analysis (TIA Appendix 7.8, included as part of Draft EIR Appendix B). As indicated in the Introduction to this Study (Page 7.8-3), "[i]t should be noted that this analysis was not requested due to potential impacts from the project itself, as these impacts would be nominal, but rather to analyze the current and future projected operations within the segment based on freeway lane geometrics."

The study concludes that "[a]s vehicular traffic increases on the freeway mainline under each of the future analysis scenarios, the densities on each basic freeway segment are anticipated to increase and peak hour level of service operations are anticipated to progressively worsen." It is in part on this basis that the Draft EIR acknowledges significant cumulative traffic impacts affecting freeway segments in the Project area. As noted in the summary of mitigation on Draft EIR Page 1-51, "[u]nder Opening Year Cumulative Conditions and General Plan Buildout Conditions, cumulative LOS impacts of traffic generated by the project in combination with traffic generated by ambient growth and other development projects will result in potentially significant cumulative traffic impacts affecting SR-60 freeway segments within the Study Area." Because freeway mainline improvements such as widening are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency, no mitigation was identified that could be feasibly implemented. Nor is there an established fair share fee program for potentially affected SR-60 freeway segments. As such, the Draft EIR found that the Project would have a significant and unavoidable impact in regard to exceedance of LOS thresholds on certain study area freeway segments.

Response JS-41

Despite the commentor's assertion that "[t]he Draft EIR does not provide any data to quantify roadway costs, projected revenues, or adequacy of funds for the improvements needed to mitigate traffic impacts for this project," the Project TIA (Draft EIR Appendix B) provides a summary of the Project's fee obligations in Table 8-

2. The application of fee-based mitigation is summarized at Draft EIR Pages 4.2-25 to 4.2-26; and discussed in greater detail at TIA Pages 200 through 206. The majority of the required improvements identified in the Draft EIR involve Caltrans facilities, improvement of which is outside the control of the Applicant or the City of Moreno Valley. The payment of TUMF and DIF is considered the appropriate mechanism for the Project to contribute to future off-site roadway improvements. The commentor's concerns regarding the adequacy of these funding mechanisms will be forwarded to decision-makers for their consideration.

Response JS-42

The commentor's suggested additional measures to reduce traffic-circulation impacts are addressed below. The results and conclusions of the Draft EIR are not affected.

Suggested Measure	Response
1. Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow. 2. Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site. 3. Reroute construction trucks away from congested streets and sensitive receptor areas.	**Replicates existing requirements.** As discussed in the Draft EIR (Page 4.2-85), "[i]t is also recognized that temporary and short-term traffic detours and traffic disruption will result during Project construction activities. These impacts are adequately addressed through the preparation and submittal of a construction area traffic management plan as required by the City Engineer. The required construction area traffic management plan will identify traffic control for any street closure, detour, or other disruption to traffic circulation. The plan also identifies construction vehicle access routes, hours of construction traffic, traffic controls and detours." No additional mitigation is required.
4. Configure construction parking to minimize traffic interference.	**Replicates existing requirements.** Construction parking is one of many components considered in the required construction traffic management plan. No additional mitigation is required.
5. Prior to the issuance of a grading and building permit, the applicant shall submit verification that a ridesharing program for the construction crew has been encouraged and will be supported by the contractor via incentives or other inducements.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
6. Minimize construction worker trips by requiring carpooling and providing for lunch onsite.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."

Suggested Measure	Response
7. Provide shuttle service to food service establishments/commercial areas for the construction crew.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
8. Provide shuttle service to transit stations/ multimodal centers for the construction crew.	**Incorporated** at revised Mitigation Measure 4.3.8, presented in Final EIR Table 4.2-1, "Mitigation Monitoring and Reporting Plan."
9. Improve traffic flow by traffic synchronization.	**Replicates existing requirements.** Signal synchronization is currently effected by the City, beyond control or purview of the Applicant. Modification of signal synchronization (if required) based on additional Project traffic will be accomplished by the City based on observed traffic conditions.

Response JS-43

Please refer to the preceding Response JS-3.

Response JS-44

Contrary to the commentor's assertion, the Project's total water demand is disclosed in the Draft EIR. As discussed in Draft EIR Section 4.5, "Water Supply," and supported by the Water Supply Assessment prepared for the Project by Eastern Municipal Water District (EMWD), the Project's estimated maximum water demand would be 44 acre-feet per year (please refer to Draft EIR Table 4.5-8 on Page 4.5-17). As noted in the Draft EIR, "[w]ater demand for this Project is calculated for planning purposes only, and reflects potential maximum demand conditions. Actual water use will be reduced through conservation, use of water efficient devices, and use of recycled water as it becomes available" (Draft EIR Page 4.5-17).

Response JS-45

The commentor's suggested additional measures to reduce hydrology/water resources/impacts are addressed below.

Suggested Measure	Response
1. Install permeable pavement in car parking areas. 2. Implement concave pooling areas in the landscaping to allow for groundwater recharge.	**Not required, no nexus with significant impacts.** As discussed in the Draft EIR, potential water supply and hydrology/water quality impacts are less-than-significant as mitigated. No additional mitigation is required. The Lead Agency may, at its discretion, impose additional Conditions of Approval supplementing the EIR Mitigation Measures.

Response JS-46

Maintenance of municipal storm drains is not customarily the responsibility of surrounding property owners. Sediment collected within the SR-60 culverts, which are located upstream from the Project site, is removed in the course of regular maintenance activities performed under the direction of the Riverside County Flood Control and Water Conservation District.

In the interest of accuracy, it may be noted that the Project's Hydrology study actually states, "[t]he development may be conditioned to clean the existing sediment build up in the existing triple 60-inch pipes crossing under the 60 Freeway as well as the existing 60-inch pipe [discharging]into the Redlands Boulevard westerly drainage ditch." City Engineering staff may, as part of pre-construction review, include this recommendation as a condition of Project approval. However, despite the assertions of the commentor, the removal of sediment in culverts upstream of the Project is not required "to mitigate for impacts from runoff." Nor would any such requirement be rationally related to impacts by the Project. Potential Project-related drainage impacts are addressed in Draft EIR Section 4.6, Hydrology and Water Quality. No significant impacts requiring mitigation have been identified in regard to hydrology or storm water management.

Response JS-47

As noted on Pages 4.6-22 through 4.6-23 of the Draft EIR, the Project's drainage plan was purposely designed to ensure that runoff from the site does not enter the Quincy Channel. Future drainage improvements associated with the Quincy Channel and its

proposed overcrossing will not affect, nor be affected by, implementation of the Project. The future improvements are noted in the Draft EIR merely as a point of reference.

Response JS-48

The Cultural Resources Investigation prepared for the Project included a records search and above-ground reconnaissance survey, which is customary for pre-development review. No underground investigation is required under the CEQA guidelines, or any federal, state, or local laws or regulations.

The Cultural Resource Investigation and the Draft EIR acknowledge the possibility of historic and/or prehistoric cultural resources being present on the site in a buried context, but no evidence exists to indicate the probability of any on-site archeological or paleontological resources or human remains. Mitigation is provided that requires the use of professional monitors during all Project-related excavation and grading activities. Relevant text from the Draft EIR (Pages 4.7-11 through 4.7-13) has been included below for ease of reference.

> The Project Cultural Resources Investigation report notes that "there was early occupation in the area and evidence of this occupation may be present in a buried context – e.g., evidence of the water well in the center of the property, buried refuse deposits, privies, irrigation systems, foundations, etc. If evidence of such remains is uncovered during the grading of this property, the proponent should contact a qualified archaeologist to assess the find(s) and to make recommendations for a monitoring program to oversee the remainder of the grading program." The report further notes that "the paleontological monitor [discussed below] can also serve to oversee archaeological monitoring and negate the need for two monitors." The following mitigation measures will ensure that the recommendations of the Project Cultural Resources Investigation are implemented during Project development.

Mitigation Measures:

4.7.1 A professional cultural resources monitor (Project Paleontological Monitor) shall conduct full-time monitoring throughout site excavation and grading activities. The monitor shall be equipped to salvage and record the location of historic and/or archaeological resources as they may be unearthed to avoid construction delays. The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens or finds and to allow the preparation of recovered resources to a point of identification. One monitor for both archaeological and paleontological resources is sufficient if the monitor is qualified in both disciplines to the satisfaction of the City of Moreno Valley.

4.7.2 Should historic or prehistoric resources of potential significance be identified, a qualified archaeologist shall be contacted to assess the find(s) and make recommendations in regard to further monitoring. All recovered resources shall then be curated in an established, accredited museum repository with permanent retrievable archaeological/historic resource storage. A report of findings shall also be prepared by a qualified archaeologist, and shall include an itemized inventory of any specimens recovered. The report and confirmation of curation of any recovered resources from an accredited museum repository shall signify completion of the program to mitigate impacts to archaeological/historic resources. If disturbed resources are required to be collected and preserved, the applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2.

The results and conclusions of the Draft EIR are not affected.

Response JS-49

The commentor appears to misconstrue the intent of Mitigation Measure 4.7.1, the text of which is provided as part of the preceding Response GB-48. As stated in this measure, the monitor is to be adequately "equipped to salvage and record the location of historic and/or archaeological resources as they may be unearthed to avoid construction delays." Further, no time limit or emphasis on urgency is placed on the "temporary" halt on construction activities. Rather, Measure 4.7.1 states, "[t]he monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens or finds and to allow the preparation of recovered resources to a point of identification." Mitigation Measure 4.7.3, included below for ease of reference, contains wording similar to that of Measure 4.7.1, specifically in regard to the potential occurrence of paleontological resources.

> *4.7.3 Prior to the issuance of a grading permit, a City-approved Project Paleontologist shall be retained to initiate and supervise paleontological mitigation-monitoring in all areas of the Project site, subject to the following certain constraints:*
>
> - *Once excavations reach ten (10) feet in depth, monitoring of excavation in areas identified as likely to contain paleontologic resources by a qualified paleontologic monitor or his/her representative must take place;*
> - *A paleontological mitigation-monitoring plan shall be developed before grading begins;*
> - *Paleontological monitors shall 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; and*
> - *Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon*

exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.

In order to ensure that, where appropriate, cultural resources are preserved in place, the following amendments to Mitigation Measures 4.7.1, 4.7.2, and 4.7.3 have been incorporated.

4.7.1 *A professional cultural resources monitor (Project Paleontological Monitor) shall conduct full-time monitoring throughout site excavation and grading activities. The monitor shall be equipped to salvage and record the location of historic and/or archaeological resources as they may be unearthed to avoid construction delays,* ***consistent with the requirements of California Public Resources Code Section 21083.2.*** *The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens or finds and to allow the preparation of recovered resources to a point of identification. One monitor for both archaeological and paleontological resources is sufficient if the monitor is qualified in both disciplines to the satisfaction of the City of Moreno Valley.*

4.7.2 *Should historic or prehistoric resources of potential significance be identified, a qualified archaeologist shall be contacted to assess the find(s) and make recommendations in regard to further monitoring. Consistent with the requirements of Public Resources Code section 21083.2.,* ***resources shall be left in an undisturbed state. Where preservation in place is infeasible, aAll*** *recovered resources shall then be curated in an established, accredited museum repository with permanent retrievable archaeological/historic resource storage. A report of findings shall also be prepared by a qualified archaeologist, and shall include an itemized inventory of any specimens recovered. The report and confirmation of curation of any recovered resources from an accredited museum*

repository shall signify completion of the program to mitigate impacts to archaeological/historic resources. If disturbed resources are required to be collected and preserved, the applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2.

4.7.3 Prior to the issuance of a grading permit, a City-approved Project Paleontologist shall be retained to initiate and supervise paleontological mitigation-monitoring in all areas of the Project site, subject to the following certain constraints:

- *Once excavations reach ten (10) feet in depth, monitoring of excavation in areas identified as likely to contain paleontologic resources by a qualified paleontologic monitor or his/her representative must take place;*
- *A paleontological mitigation-monitoring plan shall be developed before grading begins;*
- *Paleontological monitors shall be equipped to salvage **and record the location of** 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; and*
- *Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.*

To ensure monitoring and enforcement, these revisions to Mitigation Measures are reflected in the Project Mitigation Monitoring Plan (Final EIR Section 4.0), and in Final EIR Section 2.0, Revisions and Errata.

Response JS-50

As noted in the preceding response JS-49, despite the commentor's assertions to the contrary, Draft EIR Mitigation Measures 4.7.1 and 4.7.3 do not include restrictions or limitations on the time that would be allowed for adequate monitoring and recording of cultural resources. As further discussed in the preceding response JS-49, the wording of these measures has been amended to clarify that, if found, cultural resources would be preserved in place where appropriate.

Response JS-51

Despite the commentor's assertions to the contrary, the Project's potential effects on common wildlife species have been addressed in *Report On Habitat Assessments and Biological Surveys for the West Ridge Project Site* (Harmsworth Associates) October 2008, presented at Draft EIR Appendix D. Relevant text is excerpted below for ease of reference.

> **5.8 Direct impacts to wildlife**
>
> **5.8.1 Common Wildlife**
>
> The primary impacts of the project on common wildlife species/resources are the removal and disruption of habitat and the loss and displacement of wildlife, resulting in a potentially less diverse and less abundant local faunal population. Adverse significant impacts to wildlife are generally associated with the degree of habitat loss and fragmentation from the standpoint of physical character, quality, diversity, and abundance of vegetation. Implementation of the project would result in the loss of ruderal agricultural land. The removal of this habitat would potentially impact common wildlife species. These impacts would not be expected to reduce general wildlife populations below self-sustaining levels within the region, given the large blocks of contiguous preserved open space in Riverside County associated with the MSHCP. Impacts to common wildlife species would not represent a significant impact when evaluated

in the context of the substantial areas of open space preserved in Riverside County under the MSHCP (Report on Habitat Assessments, Page 36).

This same material discussion appears in the body of the Draft EIR.

Common Wildlife Species

The primary impacts of the Project on common wildlife species/resources are the removal and disruption of habitat and the loss and displacement of wildlife, resulting in a potentially less diverse and less abundant local faunal population. Adverse significant impacts to wildlife are generally associated with the degree of habitat loss and fragmentation from the standpoint of physical character, quality, diversity, and abundance of vegetation. Implementation of the Project would result in the loss of ruderal agricultural land. The removal of this habitat would potentially impact common wildlife species. However, these impacts would not be expected to reduce general wildlife populations below self-sustaining levels within the region, given the large blocks of contiguous preserved open space in Riverside County associated with the MSHCP. Impacts to common wildlife species would not represent a significant impact when evaluated in the context of the substantial areas of open space preserved in Riverside County under the MSHCP (Draft EIR Page 4.8-25).

No potentially significant impacts have been identified, and no mitigation is required. The results and conclusions of the Draft EIR are not affected.

Response JS-52

The commentor recommends additional measures to be implemented to reduce the Project's adverse effect on scenic views in the Project area. The Draft EIR acknowledges, in Section 4.9, "Aesthetics," that implementation of the Project would obstruct or alter views from major roadways and surrounding areas, and would therefore have a

substantial adverse effect on a scenic vista, which is a significant individual and cumulative impact.

No feasible mitigation measures were identified within the Draft EIR which would reduce this loss of viewshed. All other potential aesthetic impacts of the Project were determined less-than-significant.

The particular mitigation measure suggested by the commentor is presented and responded to below:

1) *Preserve a separate off-site scenic area within Moreno Valley, or if not feasible, within Western Riverside County.*

The City does not currently conduct a program that would allow for the purchase of off-site areas for "scenic preservation," as suggested by the commentor, nor is it aware of other such programs offered by agencies or organizations within the Western Riverside County area. Moreover, preserving another existing scenic view elsewhere would not serve to mitigate the impacts of this Project. While the value of off-site mitigation for certain environmental impacts (e.g., biological habitat areas) has been demonstrated, the application of the proposed measure in regard to aesthetic impacts is considered infeasible.

Response JS-53

As noted in the Draft EIR (Pages 5-25 and 5-26), §15126.6 of the *CEQA Guidelines* states that an EIR must describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain the Project objectives, but would avoid or substantially lessen any of the significant environmental effects of the proposal. As further presented in the *CEQA Guidelines*, an EIR need not consider every conceivable alternative, but rather, the discussion of alternatives and their relative merits and impacts should be provided in a manner that fosters informed decision-making and public participation. To this end, the *CEQA Guidelines* indicate that the

range of alternatives selected for examination in an EIR should be governed by "rule of reason," and requires the EIR to set forth only those alternatives necessary to permit an informed decision. Consistent with the provisions of the *CEQA Guidelines*, the Draft EIR's analysis of a No Project/No Build Alternative, a No Project/Existing Zoning Alternative, and a Reduced Intensity Alternative present a "reasonable range" of alternatives to the Project that would potentially lessen its environmental effects while allowing for attainment of Project Objectives.

Despite the commentor's assertions to the contrary, the Draft EIR does address, at length, the alternatives that were considered and rejected as part of the review of Project alternatives. The text on Draft EIR Pages 5-35 through 5-44 provides the basis upon which each of the considered alternatives was rejected from further consideration. The results and conclusions of the Draft EIR are not affected.

Response JS-54

The exhibits identified by the commentor and provided as part of these comments have been included in Appendix A of this Final EIR.

Response JS-55

The commentor attaches various professional references. No response is required.

From: Shelly Mesa [shellymesa@roadrunner.com]
Sent: Monday, December 06, 2010 1:35 PM
To: Jeffrey Bradshaw

Subject: Questions about Sketchers, Westridge Commerce Center and Pro Logis projects.

Dear Jeffrey,

Hello, I am a concerned homeowner my name is Shelly Mesa, we bought out here 5-years ago and have been enjoying our beautiful view of the Badlands as well San Bernadino Mountains. I am concerned about all the changes that are taking place around us! I have been active an obtaining signatures against this project, just to be disappointed in our City Officials who over rode the City"s Planning Commision Votes, because their back pockets were padded by Mr. Benzeevi, as well as The Sequoia Club being bought, who had an active interest as well about the Enviromental Impact this will have on our "Beautiful Land." I intended to be out here thru our "Retirement Years". But what is to become of the East end of Moreno Valley? SM-1

1. How will the toxic diesal truck emmisions affect the people who will live on the south side of Fir when both the Warehouse and Pro Logis as well as Sketchers are at full operation? SM-2

2. What measures could be implemented during the construction and operation of this warehouse which could lesson the impact on noise, air quality and global warming, but which you are not going to put in place? SM-3

3. What will you do to protect the Warehouse Wokers from the effects of toxic diesal pollution? SM-4

4. How many toxic diesal trucks do you calculate to use Redlands Blvd. to come north out of town when Sketchers, Westridge Commerce Center and Pro Logis are in full operation? SM-5

I am concerned that if we don't take a stand we will have nothing but warehouses and low income apartments here in our community! SM-6

Sincerely
Shelly Mesa

SHELLY MESA

Email Dated December 6, 2010

Response SM-1

The commentor's concerns and opinions will be forwarded to decision-makers for their consideration.

Response SM-2

As discussed in Draft EIR Section 4.2, the Project's potential to expose sensitive receptors to substantial diesel emission-related pollutant concentrations were identified as less-than-significant with mitigation, on both an individual and cumulative basis (i.e., with the Project alone and with the development of the ProLogis and Highland Fairview project, as well as other anticipated cumulative growth). Please refer also to Responses LA-1, FNSJ-8, *et al.* addressing diesel emissions impacts.

Response SM-3

The commentor asks if there are additional mitigation measures not currently contained within the Draft EIR which would lessen noise, air quality, and global warming impacts of the Project. It should be noted that no significant Project-related impacts regarding global warming have been identified. All feasible mitigation measures have otherwise been employed within the Draft EIR to reduce any potentially significant impacts. As discussed at FEIR Section 2.0, additional/revised mitigation has been incorporated based on comments received on the Draft EIR. Inclusion of these measures does not however, materially or substantively affect analysis or conclusions of the DEIR. That is, impacts that were previously determined to be less-than-significant remain less-than-significant; and impacts that were previously determined to be significant remain significant.

As disclosed in the DEIR, even with the application of mitigation, the Project will result in certain significant and unavoidable air quality and noise impacts. A summary of significant impacts is presented at DEIR Pages 1-17 through 1-20.

Response SM-4

As discussed in the Draft EIR (Page 4.3-80), South Coast Air Quality Management District (SCAQMD) guidance does not require assessment of the potential health risk to on-site workers. Similarly, the following excerpt from the California Office of Health Hazard Assessment (OEHHA) document *Air Toxics Hot Spots Program Risk Assessment Guidelines-The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 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.

> On-site workers are protected by the California Division of Occupational Safety and Health (CAL/OSHA) and do not have to be evaluated under the Hot Spots program, unless the worker also lives on the facility site, or property. Occasionally, facilities like prisons, military bases, and universities have worker housing within the facility. In these situations the evaluation of on-site cancer risks, and/or acute and chronic non-cancer hazard indices is appropriate under the Hot Spots program.

Since none of these provisions apply to the Project, risk to on-site workers was not evaluated in the Draft EIR.

Response SM-5

Opening Year Cumulative Conditions for area roadway segments, including Redlands Boulevard, are identified in the Draft EIR at Table 4.2-13 (Pages 4.2-61 to 4.2-62). Section 4.2 of the Draft EIR further identifies the number of trucks that will be accessing the site

and vicinity projects on Page 4.2-18. This discussion is presented below for ease of reference.

> As seen in [Draft EIR] Table 4.2-5, "passenger car equivalent" (PCE) factors, ranging from 1.5 to 3.0, have been applied to ensure that truck volumes are accurately accounted for in terms of their proportional contributions to traffic impacts. More specifically, the Project Trip Generation Forecast equates two-axle trucks to 1.5 passenger cars. Three-axle trucks are considered the equivalent of two (2) passenger cars; and trucks with four (4) or more axles are counted as the equivalent of three passenger cars. Employing these PCE factors, the Project is anticipated to generate 2,930 Passenger Car Equivalent (PCE) trips per day, with 191 PCE trips occurring during the AM peak hour, and 225 PCE trips occurring during the PM peak hour.

Estimated opening-year average daily Project-generated truck trips ingressing/egressing the Project site via Redlands Boulevard are as follows:

- 97 two-axle trucks;
- 220 three-axle trucks; and
- 539 four-axle trucks.

Please refer also to detailed trip generation and trip distribution analyses and supporting discussions are presented in the Project TIA (EIR Appendix B, TIA Pages 51-76).

Cumulative opening year average daily traffic along Redlands Boulevard north of Fir (future Eucalyptus) Avenue is estimated at 30, 400 trips (see TIA Page 115, Exhibit 6-10), This is inclusive of all trips/all vehicle categories generated by existing, proposed or

anticipated development, and includes trips generated by the Westridge Project, Skechers, and Pro Logis cited by the commentor.

Redlands Boulevard is a designated truck route in the County and a direct route to San Timoteo Canyon Road through Redlands (also designated as a truck route). It is appropriate for Redlands Boulevard to convey Project-related and area truck traffic. To maintain the continuity between affected agencies, the truck route designation for Redlands Boulevard cannot be practically removed. Moreover, there is no feasible means to restrict Redlands Boulevard to local truck trips only, given its direct connection, with no alternative routes, to the previously mention roadways. Further, there is no suggested or demonstrated environmental benefit that would result from restricting use of Redlands Boulevard by Project traffic.

Notwithstanding the above-cited average daily truck/traffic volumes, the more germane issue with regard to potential truck traffic impacts is peak hour passenger car equivalent (PCE) intersection traffic volumes. As substantiated in the Draft EIR, all Project-specific traffic impacts, inclusive of truck traffic impacts, are reduced to levels that are less-than-significant. If the commentor's concerns are not really truck traffic volumes, but rather truck-generated diesel emissions, the Project Health Risk Assessment (HRA) summarized at EIR Section 4.4, "Air Quality," and discussed in detail in the Project HRA Study (included at EIR Appendix C) substantiates that with application of mitigation, Project-related diesel emissions will not result in significant adverse health risks.

Response SM-6

The commentor's concerns will be forwarded to decision-makers for their consideration.

From: ned newkirk [ned_newkirk@verizon.net]
Sent: Monday, December 06, 2010 3:00 PM
To: Jeffrey Bradshaw
Subject: Proposed West Ridge Commerce Center

Name: Ned and Dawn Newkirk Phone: 951-242-3055 Address: 29080 Dracaea Avenue--
MorenoValley, Ca. 92555
Email Address: ned_newkirk@verizon.net

How does the the building of numerous warehouses in one area at the eastern end of Moreno Valley fit in with the Moreno Valley Beautification Plan? NDN-1

As new warehouses such as Skechers and the proposed West Ridge Commerce Site are very near to residential areas, what measures will be required to reduce the size and starkness of the warehouses that are very close to these residential areas? If you do not require measures for warehouses to esthetically fit into the neighborhood, residential property values could be dramatically affected and reduced. NDN-2

How will the toxic diesel truck emissions affect the people who will live on the south side of Fir when both this warehouse and Pro Logis as well as Skechers are at full operation? NDN-3

What warehouses are under consideration for the Eastern end of the City of Moreno Valley consisting of the area from Moreno Beach to Gilman Springs Road and Ironwood Ave to south of Alessandro Blvd? NDN-4

What measures could be implemented during the construction and operation of this warehouse which could lessen the impact on noise, air quality and global warming, but which you are not going to put into place? NDN-5

What will you do to protect the warehouse workers from the effects of toxic diesel pollution? NDN-6

What will you do to protect nearby residents from the effects of toxic diesel pollution? NDN-7

I understand that you do not have a tenant for the building and do not plan to build until you do. Are there any large amounts toxic materials which you would allow to be warehoused at this location? This includes materials which become toxic when burning. If such tenants do occupy this warehouse what are you planning to do in order to protect the residents/workers from the smoke plumes and spills? NDN-8

Why are you not making sure this almost 1,000,000 sq foot building is built to Leadership in Energy and Environmental Design (LEED) standards? The very minimum should be Silver. Please explain why your company will not build and advertise that this will be at least a LEED Silver project and reject any attempt by the tenant to prevent such building standards? NDN-9

How will this project be growth inducing for similar projects? NDN-10

How many toxic diesel trucks do you calculate to use Redlands Blvd to come/go north out of town that are either coming or going from your warehouse? How many large diesel trucks do you calculate will use Redlands Blvd to come/go north out of town when Skechers, WestRidgeCommerceCenter and Pro Logis are in full operation? NDN-11

Since there is only one lane that allows drivers to continue west out of town-- the other forces you off at Central Ave-- how will this project impact the merger to this single lane? How many diesel trucks will come form your project, Skechers and Pro Logis combined during a typical 24 hour day? How will these trucks impact that single lane heading west? What Level of Service (LOS) presently exists and what will the LOS be as a result of these three warehouses? NDN-12

NED AND DAWN NEWKIRK

Email Dated December 6, 2010

Response NDN-1

The commentor inquires: "How does the building of numerous warehouses in one area at the eastern end of Moreno Valley fit in with the Moreno Valley Beautification Plan."

The commentor's inquiry is not specific to the Project or the EIR and absent further explanation, does not allow for on-point response. Moreover, there is no formal adopted "Moreno Valley Beautification Plan." Notwithstanding, as discussed in the Draft EIR (Pages 4.1-17 to 4.1-20), uses proposed by the Project are consistent with applicable General Plan Land Use Policies. It is presumed that other projects proposed for development within the Project area (warehouses or other uses) will be subject to a similar consistency analysis.

Individually and cumulatively significant aesthetic impacts of the Project are also acknowledged in the Draft EIR.

AESTHETICS **Project-Specific Significant Impacts**

Change to Scenic Vistas

Construction of the proposed Project would result in interrupted or obstructed views of off-site scenic areas. This is recognized as a significant and unavoidable aesthetic impact.

Cumulatively Significant Impacts

The Project will restrict or interrupt both near and distant views in the Project area, and in combination with other vicinity development, will cumulatively result in a substantial adverse effect on scenic views in the Project area. The cumulative effects of the Project in regard to scenic vistas are determined to be significant.

(Source: Draft EIR Table 1.8-1, Pages 1-19, 1-20)

Should the Project be approved, the Lead Agency is required to adopt Findings of Fact and a Statement of Overriding Considerations acknowledging the Project's significant environmental impacts, and substantiating that the Project benefits outweigh the unavoidable adverse environmental effects, such that the adverse environmental effects may be considered acceptable.

Response NDN-2

The Draft EIR's discussion of Aesthetics (Section 4.9) addresses the Project's potential to substantially degrade the existing visual character or quality of the site and its surroundings. The Draft EIR acknowledges that the proposed alteration of the Project site from its current undeveloped state to light industrial development will represent a noticeable change in baseline visual characteristics. However, the analysis concludes that no potentially significant impacts would occur in this regard. The relevant text from Draft EIR Page 4.9-22 is provided here for ease of reference.

> Properties to the south of Fir (future Eucalyptus) Avenue are currently zoned for large lot residential uses. To provide a visual transition and buffer between southerly adjacent properties and the Project site, the Project incorporates a substantial landscaped setback along its southerly boundary (please refer to EIR Section 3.0, Project Description, Figure 3.5-1, Site Plan Concept). This setback area extends approximately 250 feet northerly from the southerly Project boundary, continuing to the 14-foot high masonry screenwall which defines the Project's southerly loading area boundary. This wall will be planted with vines on the public-facing sides to provide a landscape screen and deter graffiti.
>
> As supported by the preceding discussions, and with implementation of the Project's design features, the Project's potential to substantially degrade the existing visual character or quality of the site and its surroundings is less-than-significant.

Response NDN-3

The commentor expresses concerns about the effect of diesel truck emissions on the sensitive receptors located on the South side of Fir Avenue.

A Health Risk Assessment of Diesel Particulate Emissions was prepared to address Diesel Particulate Matter (DPM) generated by diesel trucks and the operation of heavy duty equipment. The Health Risk Assessment was 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 (SCAQMD 2003). The Health Risk Assessment is summarized within the Draft EIR (see Page 4.3-80) and presented in its entirety as Appendix C to the Draft EIR.

As discussed in Section 4.3 of the Draft EIR, the SCREEN3 screening analysis prepared for the Project indicates that the maximally impacted modeled receptor would be exposed to a mitigated inhalation cancer risk of no more than 8.6 in 1 million, which is less than the SCAQMD exposure threshold of 10 in 1 million.

Regionally, the SCAQMD has conducted a cumulative analysis of the toxic air contaminants (including DPM emissions) and their resulting health risks for all of Southern California. This study, Multiple Air Toxics Exposure Study in the South Coast Air Basin, or MATES III, indicates the average excess cancer risk level from exposure to TACs is approximately 1,200 in one million basin-wide. These estimates were based on monitoring data collected at ten fixed sites within the South Coast Air Basin.

None of the fixed monitoring sites are within the immediate Project area. However, MATES III has extrapolated cancer risk levels throughout the Basin by using grid-specific modeling. In this regard, MATES III grid modeling predicted a cancer risk of 524 in one million for the Project area. DPM is included in this cancer risk along with all other TAC sources, and accounts for the predominance (83.6 percent) of the total risk

shown in MATES III. The Project will not contribute cumulatively to TACs other than DPM, and as noted above, the Project DPM emissions levels are not significant.

Though the Project DPM emissions would add to existing levels of DPM within the basin, the Project's contribution and associated MICR as mitigated is not individually significant and is not cumulatively considerable. [10]

Response NDN-4

As identified at Draft EIR Table 5.1-1, and illustrated in Figure 5.1-1, eleven existing and planned development projects were identified within the cumulative scope of the Westridge Commerce Center Project. These include the recently approved Highland Fairview Corporate Park, and the proposed ProLogis warehouse project. To date, no further inquiries, applications, or other proposals have been received by the City in regard to development of the types of land uses referenced by the commentor.

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10 [T]he 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 (S*outh Coast Air Quality Management District White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution,* Appendix D, Page D-3).

It may be noted that a "Logistics Modified General Plan" development concept was included in the Highland Fairview Draft EIR (available for review at the City of Moreno Valley Planning Department, addressed on Pages 8-2 through 8-16). This development concept addressed the possible future development of a substantial number of warehouse facilities in the eastern end of the City.

For the purposes of the Westridge Commerce Center Draft EIR analysis, the City does not consider the "Logistics Modified General Plan" (LGMP) proposal included within the Highland Fairview Draft EIR to be a probable future project. On this basis, this development concept was not included among those identified as "related projects" for analysis in either the Highland Fairview Draft EIR or the Westridge Commerce Center Project Draft EIR. As stated in the Highland Fairview Draft EIR (Page 8-2), "[a]s no pre-application or application filing for such a concept has been made with the City, a LGMP is not included in Section 6, Cumulative Impacts, for comparative analysis with the Existing GP [General Plan]. The logistics modified concept does not represent a specific development proposal; however, it is included for public information as an alternative plan that may ultimately be proposed and processed as an amendment to the [Moreno Highlands Specific Plan] MHSP."

Response NDN-5

The commentor asks if there are additional mitigation measures not currently contained within the Draft EIR which would lessen noise, air quality, and global warming impacts of the Project. It should be noted that no significant Project-related impacts regarding global warming have been identified. All feasible mitigation measures have been employed within the Draft EIR to reduce any potentially significant impacts. However, the Project will result in certain significant and unavoidable air quality and noise impacts.

Response NDN-6

As discussed in the Draft EIR (Page 4.3-80), South Coast Air Quality Management District (SCAQMD) guidance does not require assessment of the potential health risk to on-site workers. Similarly, the following excerpts from the California Office of Health Hazard Assessment (OEHHA) document *Air Toxics Hot Spots Program Risk Assessment Guidelines-The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 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.

> On-site workers are protected by the California Division of Occupational Safety and Health (CAL/OSHA) and do not have to be evaluated under the Hot Spots program, unless the worker also lives on the facility site, or property. Occasionally, facilities like prisons, military bases, and universities have worker housing within the facility. In these situations the evaluation of on-site cancer risks, and/or acute and chronic non-cancer hazard indices is appropriate under the Hot Spots program.

Since none of these provisions apply to the Project, risk to on-site workers was not evaluated in the Draft EIR.

Response NDN-7

As discussed in Draft EIR Section 4.2, the Project's potential to expose sensitive receptors to substantial diesel emission-related pollutant concentrations were identified as less-than-significant as mitigated.

Response NDN-8

The commentor is concerned about the future tenants of the proposed Project, and whether or not hazards materials would be housed at the site. As stated within the

Hazards and Hazardous Materials section of the Project Initial Study, presented as Appendix A to the Draft EIR:

> "During construction activities, the Project will require limited transport of potentially hazardous materials (e.g., paints, solvents, fertilizer, etc.) to and from the Project site. Additionally, operation of the Project could involve the temporary storage and handling of potentially hazardous materials such as pesticides, fertilizers, or paint products that are pre-packaged for distribution and use. This type of storage, transfer, use and disposal of potentially hazardous materials is extensively regulated at the local, State and federal levels. It is not anticipated that the development of the Project would result in conditions that are not currently addressed by existing regulations…"

No potentially hazardous materials, beyond those described above, are anticipated to be handled at the site. Any such materials used/housed on-site will be subject to applicable local, State and federal laws.

Response NDN-9

Contrary to the commentor's assertion that the Project will not be built to Leadership in Energy and Environmental Design (LEED) standards, the following discussion can be found on Page 3-16 of the Draft EIR:

> "The Westridge Commerce Center Project reflects design and operational criteria established under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, a program developed by the United States Green Building Council. This program includes a rating system that can be applied to new construction as well as tenant improvement projects with performance goals in multiple environmental categories.

> LEED certification is contingent, among other requirements, on demonstrated and documented conservation and efficient use of available resources. It is recognized that not all LEED performance standards are applicable or appropriate for the Project, and that different standards may be utilized by the Project's end user(s). However, the Project, as a whole, will be developed as a LEED-certified facility.
>
> In support of LEED-certification, resources conservation, reduction in energy consumption and associated reductions in air pollutant emissions and greenhouse gases (GHGs), the Project will achieve a minimum of 20 percent in energy efficiencies beyond incumbent Title 24 Energy Efficiency standards, as well as compliance with other applicable state and federal energy standards."

The ultimate level of LEED certification cannot be determined at this time, while the tenant and therefore specific environmental strategies to be employed at the facility, are unknown. It is also important to note that no significant impacts have been identified in regard to the energy conservation attributes of the Project; nor would any of the identified significant impacts of the Project be reduced based on a certain level of LEED certification.

Response NDN-10

The commentor expresses concern regarding the growth inducing effects of the proposed Project. The California Environmental Quality Act (CEQA) requires a discussion of the ways in which a project could be growth-inducing. (Pub. Resources Code, § 21100, subd. (b)(5); CEQA Guidelines, §§ 15126, subd. (d), 15126.2, subd (d).) To this end, Section 5.3, "Growth-Inducing Impacts of the Proposed Action" of the Draft EIR, contains such a discussion.

As presented on Pages 5-67 through 5-68 of the Draft EIR, it is unlikely that the Project would directly result in any significant population growth. Moreover, the Project is consistent with the adopted General Plan, would not result in population growth for the City beyond that reflected in adopted growth forecasts.

Development of the Project as envisioned will entail upgrade of infrastructure in the immediate Project vicinity, including abutting roadways, the local water distribution and sewer collection systems, and storm drainage conveyance facilities. It is acknowledged within the Draft EIR that infrastructure improvements necessitated by the implementation of the Project may facilitate and encourage development of nearby properties. The City will review all proposed development to ensure compatibility with evolving City and regional land use plans acting to reduce or avoid potentially adverse effects of growth.

Response NDN-11

Estimated opening-year average daily Project-generated truck trips ingressing/egressing the Project site via Redlands Boulevard are as follows:

- 97 two-axle trucks;
- 220 three-axle trucks; and
- 539 four-axle trucks.

Please refer also to detailed trip generation and trip distribution analyses and supporting discussions are presented in the Project TIA (EIR Appendix B, TIA Pages 51-76).

Cumulative opening year average daily traffic along Redlands Boulevard north of Fir (future Eucalyptus) Avenue is estimated at 30, 400 trips (see TIA Page 115, Exhibit 6-10), This is inclusive of all trips/all vehicle categories generated by existing, proposed or

anticipated development, and includes trips generated by the Westridge Project, Skechers, and Pro Logis cited by the commentor.

Redlands Boulevard is a designated truck route in the County and a direct route to San Timoteo Canyon Road through Redlands (also designated as a truck route). It is appropriate for Redlands Boulevard to convey Project-related and area truck traffic. To maintain the continuity between affected agencies, the truck route designation for Redlands Boulevard cannot be practically removed. Moreover, there is no feasible means to restrict Redlands Boulevard to local truck trips only, given its direct connection, with no alternative routes, to the previously mention roadways. Further, there is no suggested or demonstrated environmental benefit that would result from restricting use of Redlands Boulevard by Project traffic. The commentor's remarks are forwarded to the decision-makers for their consideration.

Notwithstanding the above-cited average daily truck/traffic volumes, the more germane issue with regard to potential truck traffic impacts is peak hour passenger car equivalent (PCE) intersection traffic volumes. As substantiated in the Draft EIR, all Project-specific traffic impacts, inclusive of truck traffic impacts, are reduced to levels that are less-than-significant. If the commentor's concerns are not really truck traffic volumes, but rather truck-generated diesel emissions, the Project Health Risk Assessment (HRA) summarized at EIR Section 4.4, "Air Quality," and discussed in detail in the Project HRA Study (included at EIR Appendix C) substantiates that with application of mitigation, Project-related diesel emissions will not result in significant adverse health risks.

Additionally, with regard to cumulative traffic impacts, Page 4.2-67 of the Draft EIR states:

> As indicated at Table 4.2-13, with completion of the improvements recommended under Mitigation Measure 4.2.7, 4.2.18 and 4.2.19,

acceptable V/C and LOS conditions would be realized at all Study Area roadway segments under Opening Year Cumulative Conditions with the Project. Improvements necessary to mitigate potentially significant Opening Year Cumulative Condition roadway segment impacts would be accomplished in part by the Project, with the balance of required improvements realized under combined TUMF, DIF, and fair share fee traffic improvement programs. However, timely completion of the required improvements in total cannot be assured based on Project participation in mandated traffic impact fee programs (TUMF, DIF, and fair share). Further, roadway segment improvements at or affecting the SR-60 at Redlands Boulevard interchange improvements are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency. ***The Project's incremental contributions to Opening Year Cumulative Traffic Impacts at, or affecting, the following roadway segments are therefore considered cumulatively significant and unavoidable:***

- Redlands Boulevard north of the SR-60 Westbound Ramps to Eucalyptus (future Encilia) Avenue;

- Quincy Street south of Fir (future Eucalyptus) Avenue (future street); and

- Fir (future Eucalyptus) Avenue west of Quincy Street to the westerly Project boundary (future street) and Fir (future Eucalyptus) Avenue east of Redlands Boulevard.

Response NDN-12

In response to the commentor's concerns regarding the levels of service on westbound State Route 60, the Project's Traffic Impact Analysis (TIA, included as Draft EIR

Appendix B) examined performance on the SR-60 as part of Appendix 7.8. The City of Moreno Valley requested that a basic freeway segment analysis be conducted between Box Springs Road/Fair Isle Drive and the I-215 Freeway along the SR-60 Freeway, and included in the TIA. As indicated in the Introduction to this Study (Page 7.8-3), "[i]t should be noted that this analysis was not requested due to potential impacts from the project itself, as these impacts would be nominal, but rather to analyze the current and future projected operations within the segment based on freeway lane geometrics."

The study concludes that "[a]s vehicular traffic increases on the freeway mainline under each of the future analysis scenarios, the densities on each basic freeway segment are anticipated to increase and peak hour level of service operations are anticipated to progressively worsen." It is in part on this basis that the Draft EIR acknowledges significant cumulative traffic impacts affecting freeway segments in the Project area. As noted in the summary of mitigation on Draft EIR Page 1-51, "[u]nder Opening Year Cumulative Conditions and General Plan Buildout Conditions, cumulative LOS impacts of traffic generated by the project in combination with traffic generated by ambient growth and other development projects will result in potentially significant cumulative traffic impacts affecting SR-60 freeway segments within the Study Area." Because freeway mainline improvements such as widening are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency, no mitigation was identified that could be feasibly implemented. As such, the Draft EIR found that the Project would have a significant and unavoidable impact in regard to exceedance of LOS thresholds on certain study area freeway segments.

From: Late98765@aol.com
Sent: Monday, December 06, 2010 5:16 PM
To: Jeffrey Bradshaw; John Terell
Subject: DEIR Comments for Ridge-1
To: Jeff Bradshaw,

These are my comments and questions concerning the Westridge Commerce Center Project.

My biggest concern and questions are regarding the cumulative effects of the 35 million square feet of warehousing proposed for this area of the city. The law requires that the FEIR address the cumulative impacts of the entire known proposal. The Agency (the city of Moreno Valley) is well aware of the fact the developer that owns most the raw land in this area wants to turn this area into another Mira Loma type warehouse district encompassing 35 million square feet of warehousing. The city has an obligation to make sure that the impacts of all 35 million square feet are addressed in this document. It is not acceptable for the city to pretend it doesn't know about these other planned warehouses. The fact they have not submitted an application yet has no bearing on the known intended plan. I will include the Press-Enterprise article in which these35 million square feet warehousing plan was detailed. DR1-1

There is only one actual lane on the westbound 60that leaves Moreno Valley and continues to Riverside. How are all these trucks going to affect the traffic going west on the 60? How is the truck traffic from the other 30 million square feet of warehouses going to affect the truck traffic?Is the city going to let this developer lie about the traffic the way they let Highland Fairview lie? Is this developer going to be allowed to show unrealistic videos of dream traffic or they going to be required to tell the truth? What is the impact of the additional truck traffic from this approximately one million square foot warehouse on the one actual lane that leaves Moreno Valley and continues to Riverside?What is the impact of the truck traffic from all 35 million square feet of warehousing on the one lane of the 60 that leaves Moreno Valley and continues to Riverside? DR1-2

We know we are not going to meet our 2015air quality targets. How are we going to meet them by adding warehousing that is not even required to meet LEED standards? Why would we add anything that is not required to meet LEED standards? How much farther over our target will we be with the addition of a one million square foot warehouse? How much farther will we be over our target with the entire 35 million square feet of warehousing proposed? DR1-3

The City of Moreno Valley has some of the most beautiful vistas in the Inland Empire. Why does the consortium this developer belongs to think it is ok to rape the views of this city when other locations would serve the same function without doing so? Why does this consortium of developers think so little of the beauty of Moreno Valley that they would destroy it just to make a couple extra bucks? There are plenty of parcels in the flat area where warehousing was intended to go. I know because my home overlooks this area. Why is this consortium of developers destroying the vistas of people who have lived in their homes many over 20 years when they don't have to? Nobody that cared for our city would so callously destroy it! Why would we want to do business with developers who care nothing for our city? DR1-4

Why is this consortium of developers building off the 60 when the 215 is a much better location? The 215 has millions of federal money spent and planned to be spent on it. The 60 has no plans to add more than the one and only west bound lane that leaves the city and continues into Riverside. March Global Port by the 215 has an airport and is nearer to the railroad. Why isn't this warehouse being proposed in the area of the city that was intended for a warehouse? Why not the March Global Port? DR1-5

The Skechers project caused animosity that still has not been resolved. This developer knows that. Why does this developer and the consortium he is aligned with think it is ok to emotionally tear a city apart? Why doesn't this developer care about the quality of life of the residents most affected by this project?

Knowing how you feel and knowing what you want to say is much easier than typing it. I sincerely hope you will answer all my concerns about this project. DR1-6

PS. I referenced newspaper articles that I will send separately

Sincerely,
Deanna Reeder
17351 Riva Ridge Dr
Moreno Valley CA 92555

DEANNA REEDER, LETTER 1

Email Dated December 6, 2010

Response DR1-1

The commentor expresses concern regarding "the cumulative effects of the 35 million square feet of warehousing proposed . . . ," citing an article from the *Press Enterprise* newspaper dated August 21, 2008 which references a "Logistics Modified General Plan" development concept included in the Highland Fairview Draft EIR (available for review at the City of Moreno Valley Planning Department, addressed on Pages 8-2 through 8-16).

The *CEQA Guidelines* (Section 15130, subd. (b)(1)(A)) state that "a list of past, present and probable future projects" may be used to provide an adequate discussion of significant cumulative impacts. No active application exists for Logistics Modified General Plan (LGMP) proposal. Nor does the City consider the LGMP proposal cited within the Highland Fairview Draft EIR to be a probable future project. On this basis, this development is not included as a "related project" for analysis in either the Highland Fairview Draft EIR or the Westridge Commerce Center Project Draft EIR. As stated in the Highland Fairview Draft EIR (Page 8-2), "[a]s no pre-application or application filing for such a concept has been made with the City, a LGMP is not included in Section 6, Cumulative Impacts, for comparative analysis with the Existing GP [General Plan]. The logistics modified concept does not represent a specific development proposal; however, it is included for public information as an alternative plan that may ultimately be proposed and processed as an amendment to the [Moreno Highlands Specific Plan] MHSP."

To date, no further inquiries, applications, or other proposals have been received by the City in regard to the possible amendment of the General Plan or the Moreno Highlands Specific Plan to support the type of development referenced by the commentor. As

identified at Draft EIR Table 5.1-1, and illustrated in Figure 5.1-1, eleven existing and planned development projects were identified within the cumulative scope of the Westridge Commerce Center Project. In addition, the Draft EIR notes that "the cumulative impacts analysis assumes development of the area in a manner consistent with the adopted City of Moreno Valley General Plan, and reflecting the anticipated growth of the region. The analysis of cumulative impacts considers potentially significant impacts that could be considered cumulatively considerable when viewed in the context of known related projects and generalized ambient growth of the City and region" (Draft EIR Page 5-4).

The commentor's concerns and opinions regarding future development within the City are forwarded to the decision-makers for their consideration.

Response DR1-2

In regard to cumulative traffic impacts, please refer to the preceding Response DR1-1. In response to the commentor's concerns regarding the levels of service on westbound State Route 60, the Project's Traffic Impact Analysis (TIA, included as Draft EIR Appendix B) examined performance on the SR-60 as part of Appendix 7.8. The City of Moreno Valley requested that a basic freeway segment analysis be conducted between Box Springs Road/Fair Isle Drive and the I-215 Freeway along the SR-60 Freeway, and included in the TIA. As indicated in the Introduction to this Study (Page 7.8-3), "[i]t should be noted that this analysis was not requested due to potential impacts from the project itself, as these impacts would be nominal, but rather to analyze the current and future projected operations within the segment based on freeway lane geometrics."

The study concludes that "[a]s vehicular traffic increases on the freeway mainline under each of the future analysis scenarios, the densities on each basic freeway segment are anticipated to increase and peak hour level of service operations are anticipated to progressively worsen." It is in part on this basis that the Draft EIR acknowledges significant cumulative traffic impacts affecting freeway segments in the Project area. As

noted in the summary of mitigation on Draft EIR Page 1-51, "[u]nder Opening Year Cumulative Conditions and General Plan Buildout Conditions, cumulative LOS impacts of traffic generated by the project in combination with traffic generated by ambient growth and other development projects will result in potentially significant cumulative traffic impacts affecting SR-60 freeway segments within the Study Area." Because freeway mainline improvements such as widening are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency, no mitigation was identified that could be feasibly implemented. As such, the Draft EIR found that the Project would have a significant and unavoidable impact in regard to exceedance of LOS thresholds on certain study area freeway segments.

Response DR1-3

Contrary to the commentor's assertion that the Project will not be built to Leadership in Energy and Environmental Design (LEED) standards, the following discussion can be found on Page 3-16 of the Draft EIR:

> "The Westridge Commerce Center Project reflects design and operational criteria established under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, a program developed by the United States Green Building Council. This program includes a rating system that can be applied to new construction as well as tenant improvement projects with performance goals in multiple environmental categories.
>
> LEED certification is contingent, among other requirements, on demonstrated and documented conservation and efficient use of available resources. It is recognized that not all LEED performance standards are applicable or appropriate for the Project, and that different standards may be utilized by the Project's end user(s). However, the Project, as a whole, will be developed as a LEED-certified facility.

> In support of LEED-certification, resources conservation, reduction in energy consumption and associated reductions in air pollutant emissions and greenhouse gases (GHGs), the Project will achieve a minimum of 20 percent in energy efficiencies beyond incumbent Title 24 Energy Efficiency standards, as well as compliance with other applicable state and federal energy standards."

Although the ultimate level of LEED certification cannot be determined at this time, since the tenant and therefore specific environmental strategies to be employed at the facility, are unknown, it is important to note that no significant impacts have been identified in regard to the energy conservation attributes of the Project; nor would any of the identified significant impacts of the Project be reduced based on a certain level of LEED certification.

The commentor refers to "our 2015 air quality targets" but does not quantify or otherwise specify "our targets." The Project is consistent with land uses plans, and emissions reductions programs, and emission control strategies outlined in the applicable Air Quality Management Plan (DEIR at Pages 4.3-49 through 4.3-52). The Project further incorporates all feasible measures to reduce its air quality impacts. Please refer also to the preceding Response DR1-1. The commentor's statements are forwarded to the decision-makers.

Response DR1-4

The Draft EIR addresses the Project's potential aesthetic impacts in Section 4.9, and acknowledges that implementation of the Project would have a substantial adverse effect on scenic vistas, which is considered a significant and unavoidable impact. The suggested relocation of the Project is addressed in the following Response DR1-5. The commentor's statements and opinions regarding future development within the City are forwarded to the decision-makers for their consideration.

Response DR1-5

In regard to the commentor's suggestion that the Project be located in another area of the City, several alternative sites were analyzed as part of the Draft EIR (this discussion is found beginning on Draft EIR Page 5-37). As stated in the *CEQA Guidelines*, Section 15126.6 subd. (f)(1)(2)(A), the "key question and first step in [the] analysis [of alternative locations] is whether any of the significant effects of the project would be avoided or substantially lessened by putting the Project in another location."

An alternative site within the City would be considered generally viable if it were located along a regional freeway transportation corridor or at a regional transportation hub; was also locally accessible; was underutilized and currently available; could be developed and operated in a manner that was compatible with other proximate land uses; and was provided, or could feasibly be provided, adequate serving utilities infrastructure. Also supporting location of the Project elsewhere, an Alternative Site should have an appropriate size and configuration (approximately 50 acres and roughly rectangular); and either exhibit appropriate General Plan and Zoning designations or could be feasibly so-designated.

Only locations that would avoid or substantially lessen significant effects of the Project need be considered. To this end, four (4) possible alternative sites were located, as follows:

- Alternative Site 1: 70 acres located between Perris Boulevard and Grove View Road, and south of Indian Avenue to the southern City limits (APNs 316-210-071, -073, -075 and -076);

- Alternative Site 2: 92 acres located between Heacock Street and Indian Street, south of Cardinal Avenue and north of San Michele Road (APNs 316-180-010, 316-170-001, -002, -004, -006, -007, -008, -010, -013, and -014);

- Alternative Site 3: 72 acres located west of Indian Street between Iris Avenue and Krameria Avenue (APNs 316-020-002, -003, -004, -005, -012, -013, -014, -015, -016, -017, -018 and -019); and

- Alternative Site 4: Approximately 69 acres located at the southeast corner of Heacock Street and Iris Avenue (APNs 316-020-001, -006, -007, -028, and -010).

Each of the four (4) sites is currently vacant; is more than 50 acres in size and of a roughly rectangular configuration; is zoned for industrial use; and is adequately served by nearby utilities and infrastructure. Further, Alternative Sites 1 through 4 are proximate to the I-215 regional transportation corridor, and are also locally accessible. Notwithstanding, these sites are all currently unavailable. Alternative Site 1 currently has applications under review for a 1.6 million square foot warehouse distribution facility, while development plans have been submitted and approved for sites 2, 3 and 4.

Other potentially suitable and available properties are located easterly of the current Project site, along the SR-60 corridor. For the purposes of the Alternative Site analysis, the vacant property located southeasterly of the intersection of SR-60 at Theodore Street was selected for analysis, and is identified as Alternative Site 5 (shown in Figure 5.2-2 of the Draft EIR). This property exhibits an appropriate Business Park/Light Industrial General Plan Land Use designation; is of adequate size and is appropriately configured; and is provided access to regional and local roadways. Utilities and services are generally available to the site. The site appears to be available for purchase; however, it is not currently controlled by the Project Applicant, and a zone change from "Business Park" to "Light Industrial," would be required, similar to the change of zone requested by the Project.

Although development of the Project on Alternative Site 5 could achieve the Project's objectives, none of the Project's potentially significant impacts would be avoided or substantially reduced. Because Alternative Site 5 would not result in the avoidance or

substantive reduction of Project-related impacts, this Alternative Site was also rejected from further consideration within the Draft EIR.

Response DR1-6

The commentor's concerns and opinions are forwarded to decision-makers for their consideration.

From: Late98765@aol.com
Sent: Monday, December 06, 2010 5:23 PM
To: Jeffrey Bradshaw
Subject: DEIR Comments Ridge-2
To Jeff Bradshaw,

This is the article I referenced in the first email.

Sincerely,
Deanna Reeder
17351 Riva Ridge Dr
Moreno valley CA 92555

DR2-1

More distribution centers proposed for Moreno Valley's eastern side

Download story podcast

10:00 PM PDT on Thursday, August 21, 2008

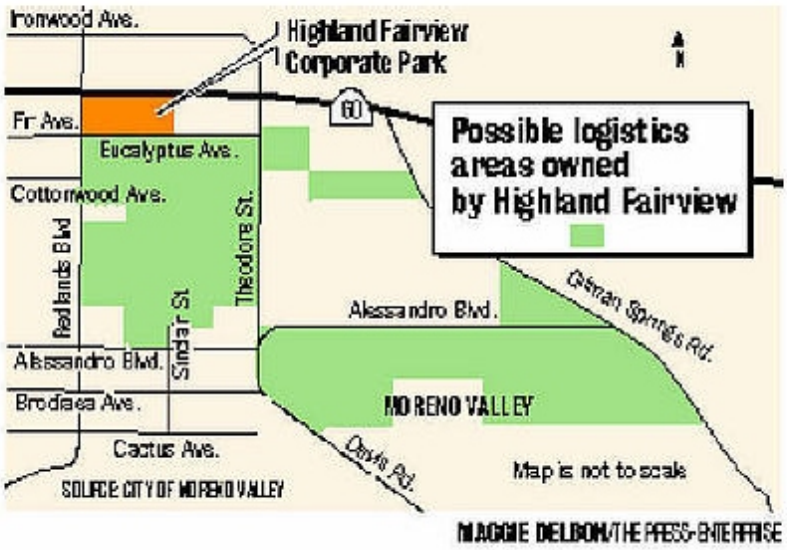
By DAN LEE
The Press-Enterprise

MORENO VALLEY - Highland Fairview Properties, the developer of the Aquabella residential project and the Skechers logistics facility, is considering plans to build as much as 35 million square feet in distribution centers on the eastern side of town.

That potential scenario was included in the draft environmental impact report that the Michael Brandman Associates consulting firm prepared for the Skechers project. It would affect about 1,800 acres south of Highway 60 and between Redlands Boulevard and Gilman Springs Road, reducing the number of homes allowable in the Specific Plan in the area and increasing the land devoted to industrial uses.

Although the 1.8 million-square-foot Skechers building is a separate project, Highland Fairview President Iddo Benzeevi said the scenario was included in the report because residents had asked what might happen if that area, known as the Moreno Highlands, was developed into a business park. Highland Fairview has not formally submitted any proposal for logistic centers in the Moreno Highlands area.

Story continues below



"It is an alternative that will be evaluated," Benzeevi said by phone. "We're looking at every possibility."

Any such proposal would require revising the Moreno Highlands Specific Plan, which would require the city Planning Commission and the City Council to hold public hearings prior to approval, city Planning Official John Terell said by phone.

Jobs

The City Council had approved the Moreno Highlands plan in 1992. The 3,000-acre, master-planned community would include 7,700 homes, a 600-acre business park, schools, golf courses and 120 acres of city parks. It would add as many as 30,000 new residents to Moreno Valley and 21,000 jobs, according to city estimates at the time.

Environmental activists sued the city over the plan, claiming that traffic, air pollution and potential earthquake hazards were not adequately addressed. They also argued that the planned community threatened the nearby San Jacinto Wildlife Area.

Although the projects' developers decided not to shelve their construction plans in June 1993, citing the economic downturn at that time, a judge in May 1994 ruled that the city had approved the Moreno Highlands plan properly. The Moreno Highlands community remains unbuilt.

Benzeevi said it is critical that Moreno Valley develop more of an employment base: Only about 3 percent of Moreno Valley's land can generate jobs, compared with the 10-20 percent in most cities. Without sufficient local jobs, residents are forced to commute out of town for work, creating traffic and causing them to have less time with their families, he said.

"It is just not acceptable," Benzeevi said. "We need to build sustainable communities."

A big part of the original Highlands plan already was intended for industrial uses, the developer added. With the addition of distribution centers the Moreno Highlands area could generate more than 26,700 jobs, according to Michael Brandman Associates.

Jamil Dada, chairman of the Moreno Valley Chamber of Commerce, said he agrees that Moreno Valley needs jobs. Dada has supported the Skechers project and proposals by ProLogis and First Industrial Trust to build distribution centers nearby.

Dada added, however, that he would like to see city officials determine what Moreno Valley residents want on the eastern end. He also said he would like to know what the environmental impact of the proposed changes might be.

'Still a Mess'

A new grassroots group called Residents for a Livable Moreno Valley is expressing concern about the proposed distribution centers. Spokesman Bob Franz said he is not opposed to growth or creating more jobs, but building distribution centers in eastern Moreno Valley does not make sense, given the traffic and pollution.

"It's already still a mess heading west (on Highway 60)," Franz said by phone. "I don't think it's a good idea taking trucks east through the Badlands."

The addition of logistics buildings to the Moreno Highlands would result in less traffic and overall pollution emissions than the land uses under the existing plan, according to Michael Brandman Associates. However, it would result in increased diesel emissions, the consulting firm found in its report.

Benzeevi said any logistics or distribution centers built in the Moreno Highlands area would be built to the same standard as the Skechers building, which is seeking the highest rating under the Leadership in Energy and Environmental Design standards. The developer added that Highland Fairview would take the necessary steps to minimize the effects on air quality and traffic as much as possible.

The logistics proposal and the future of eastern Moreno Valley are expected to be issues in the Nov. 4 election for the 3rd Council District seat, which represents the area.

Incumbent Frank West has said his constituents are concerned about building distribution centers on the eastern end of Moreno Valley. But West has four challengers: Robin Hastings, Mike Rios, Ray Carbajal Jr. and Robert Burks.

Moreover, the Moreno Valley Taxpayers Association has spent about $120,000 on a campaign to oust West and fellow incumbent Councilman Charles White. Highland Fairview Properties has contributed $60,000 to the effort, according to the most recent campaign finance reports that have been submitted.

Reach Dan Lee at 951-763-3457 or dlee@PE.com

DEANNA REEDER, LETTER 2

Email Dated December 6, 2010

Response DR2-1

Receipt of the article referenced in the commentor's preceding correspondence (referenced in this document as "Deanna Reeder, Letter 1") is acknowledged. The preceding responses DR1-1 through DR1-6 are provided to address the commentor's specific concerns.

From: sgcricket@aol.com
Sent: Friday, December 03, 2010 11:58 AM
To: Jeffrey Bradshaw
Subject: Public Comment on West Ridge Commerce Center

Comments: West Ridge Commerce Center Draft EIR
From: Residents for a Livable Moreno Valley

Residents for a Livable Moreno Valley is concerned that the City of Moreno Valley is not moving in the direction as stated in the General Plan. The eastern end of the City has the potential to develop into something the residents can be proud to share. There are mountain views, Lake Perris Recreational Area, Riverside County Conservation Area land, San Jacinto Wildlife Area and San Timoteo State Park surrounding this portion of Moreno Valley. The pathway chosen by Council and reflected in past General Plan changes is a concern. The City must:

1. Increase employment
2. Improve high school and college graduation rates
3. Raise the median income of the City
4. Provide a variety of housing for the residents
5. Protect the health and safety of the residents

RLMV-1

Warehousing provides none of these benefits to the citizens. The number of employees per square foot of warehouse is minimal, the education requirements are marginal, the salary of a warehouse employee will not provide a middle/upper middle class life style, the location of warehouses will discourage construction of large, estate homes, the accumulated pollution will create health hazards for residents, and the dangerous conditions on SR 60 will not be addressed.

My questions to the developer (and Council, which has power to approve General Plan amendments):

1. Employment
   - How many permanent employees per square foot will be working on site after construction? How many employees per square foot are employed at a Business Park designation?
   - If the public wants to know the number of employees, will the tenant's personnel offer to provide this?
   - If Moreno Valley residents are expected to tolerate the pollution, traffic and noise associated with warehouses, what percentage of City residents will be hired for the facility and will personnel make proof of residency available?

2. Education
   - If the education needed for a warehouse position does not require a high school diploma or equivalency, how will this project improve the incentive for students to graduate?
   - What percentage of positions will require post-high school education?
   - What percentage of positions will require a 4 year college degree?
   - What support will the employees receive to attend RCC or trade schools?

3. Income
   - What will be the median and average salaries for the proposed warehouse employees?
   - Will the median and average be above or below the median and average income for Moreno Valley?
   - If the median and average is below that of the current City income, how will the warehouse help to raise that statistic?

4. Housing
   - Where in Moreno Valley will the "estate" housing be built?
   - Warehousing presents a stigma for the development of upper end housing. How will this provide a positive direction for the City?
   - For every apartment unit built for homeless and low income warehouse employees, why isn't a home built that is above the average home cost?
   - How will warehousing stop the downward spiral of low cost housing that is not balanced with an increase in upper end homes?
   - What will stop the median home cost from going down and making the City look less attractive to those with money to buy?

RLMV-2

5. Health and Safety
   - Why is Caltrans not being tasked to provide safe improvements to Highway 60 BEFORE the increase in truck traffic?
   - Why are overpass improvements considered sufficient to improve traffic flow?
   - Why is the cumulative effect of future development not considered?

RLMV-3

Why are two lanes in each direction considered sufficient when they are immediately impacted by one truck passing another?
Why is the one lane merge from the 60 to the 215 considered a final solution when accidents occur daily and deaths occasionally? What amount of "backup" is considered tolerable?

RLMV-3 (cont'd)

What buffer is provided between residential zoning and the project? Business Park is considered a buffer between Light Industrial and residential. Does this mean that should the zoning be changed to Light Industrial to accommodate the project, the land south of the project will be rezoned as BP?

RLMV-4

Sincerely,
Residents for a Livable Moreno Valley
3 December 2010

RESIDENTS FOR A LIVEABLE MORENO VALLEY

Letter Dated December 3, 2010

Response RLMV-1

The commentor's views in regard to the City's direction and potential, along with their concerns regarding warehouse development, are forwarded to decision-makers for their consideration.

Response RLMV-2

The purpose of the California Environmental Quality Act (CEQA) is to identify and determine the significance of the environmental effects caused by a project. As noted in *CEQA Guidelines* Section 15064 subd. (e), "[e]conomic and social changes resulting from a project shall not be treated as significant effects on the environment."

No physical changes resulting from the Project's potential economic or social changes have been identified, and as such, the Project's potential economic effects were not addressed within the Draft EIR. While outside the scope of the Draft EIR, the commentor's questions regarding employment, education, income and housing are forwarded to decision-makers. It may be noted that no amendment to the General Plan is proposed as part of the Westridge Commerce Center Project, nor would a General Plan amendment be required in order to approve the Project.

Response RLMV-3

The timing of roadway improvements on the SR-60, which are jurisdictionally controlled by Caltrans, is outside the control of the Applicant and the Lead Agency (the City of Moreno Valley). It is in part on this basis that the Draft EIR acknowledges significant cumulative traffic impacts affecting freeway segments in the Project area.

The commentor's question in regard to overpass improvements appears to misconstrue the findings of the Draft EIR. The commentor is referred to Draft EIR Section 4.2, "Traffic and Circulation," which identifies a combination of Project improvements and mitigation measures mitigation to address the Project's potentially significant traffic impacts. While the overpass improvements identified in the Project's Traffic Impact Analysis (and summarized in Draft EIR Table 4.2-15) are expected to improve traffic flow, the Project was found to result in significant cumulative traffic impacts that cannot be sufficiently addressed by overpass improvements alone.

The Draft EIR considers, at some length, the cumulative effects of future development. As identified at Draft EIR Table 5.1-1, and illustrated in Figure 5.1-1, eleven existing and planned development projects were identified within the cumulative scope of the Westridge Commerce Center Project. A discussion of the Project's potential cumulative impact is included in each of the Draft EIR's topical analysis sections, and potential impacts are summarized in Section 5.1, "Cumulative Impact Analysis" (Pages 5-1 through 5-25).

The number of lanes required for local streets within the Project vicinity is determined by the City of Moreno Valley General Plan Circulation Element, which is available for review at the City's Planning Department, or online at the following website: http://www.moreno-valley.ca.us/city_hall/general-plan/06gpfinal/gp/5-circu.pdf.

In regard to the referenced "one lane merge from the 60 to the 215," the Project's Traffic Impact Analysis (TIA, included as Draft EIR Appendix B) examined performance on the SR-60 as part of Appendix 7.8. The City of Moreno Valley requested that a basic freeway segment analysis be conducted between Box Springs Road/Fair Isle Drive and the I-215 Freeway along the SR-60 Freeway, and included in the TIA. As indicated in the Introduction to this Study (Page 7.8-3), "[i]t should be noted that this analysis was not requested due to potential impacts from the project itself, as these impacts would be

nominal, but rather to analyze the current and future projected operations within the segment based on freeway lane geometrics."

The study concludes that "[a]s vehicular traffic increases on the freeway mainline under each of the future analysis scenarios, the densities on each basic freeway segment are anticipated to increase and peak hour level of service operations are anticipated to progressively worsen." It is in part on this basis that the Draft EIR acknowledges significant cumulative traffic impacts affecting freeway segments in the Project area. As noted in the summary of mitigation on Draft EIR Page 1-51, "[u]nder Opening Year Cumulative Conditions and General Plan Buildout Conditions, cumulative LOS impacts of traffic generated by the project in combination with traffic generated by ambient growth and other development projects will result in potentially significant cumulative traffic impacts affecting SR-60 freeway segments within the Study Area." Because freeway mainline improvements such as widening are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency, no mitigation was identified that could be feasibly implemented. As such, the Draft EIR found that the Project would have a significant and unavoidable impact in regard to exceedance of LOS thresholds on certain study area freeway segments.

Effects of cumulative development of concern to the commentor are addressed at DEIR Section 5.1, "Cumulative Impact Analysis." Topical areas considered therein include:

- Cumulative Impacts Related to Land Use and Planning;
- Cumulative Impacts Related to Traffic and Circulation;
- Cumulative Impacts Related to Air Quality;
- Cumulative Impacts Related to Noise;
- Cumulative Impacts Related to Water Supply;
- Cumulative Impacts Related to Cultural Resources;
- Cumulative Impacts Related to Biological Resources; and
- Cumulative Impacts Related to Aesthetics.

Response RLMV-4

As presented in the Draft EIR (Page 4.9-22), "[t]o provide a visual transition and buffer between southerly adjacent properties and the Project site, the Project incorporates a substantial landscaped setback along its southerly boundary (please refer to EIR Section 3.0, Project Description, Figure 3.5-1, Site Plan Concept). The proposed buffer/setback incorporated in the Project design also provides physical separation between the Project's operational activities and southerly adjacent land uses, acting to reduce potential environmental impacts (e.g. noise and air quality impacts) received at off-site land uses. This setback area extends approximately 250 feet northerly from the southerly Project boundary, continuing to the 14-foot high masonry screenwall which defines the Project's southerly loading area boundary."

Related to design and implementation of the Project setback described above, the Project includes a discretionary action (Amendment to Municipal Code Section 9.05.020 B (City Case # PA10-0017) [Light Industrial Districts]. The proposed code amendment requires buffering between Residential districts and industrial and warehouse structures greater than 50,000 square feet in building area (such as the Project). More specifically, as provided under proposed Code Section 9.05.040 Industrial Site Development Standards, Section B, 9. :

> 9. In the LI district, industrial and warehouse structures greater than 50,000 square feet in building area shall be separated from any Residential district as determined by an air quality and noise impact analysis. The minimum separation distance for such uses shall be 250 feet between the Residential district and the building, truck court or loading area.

The above requirements would apply to the Project and would act to ensure the protection of the health, safety and welfare of future residents. While it is acknowledged that the Project proposes a change of zone from Business Park to Light Industrial, no other zone changes are proposed.

From: George Hague [gbhague@gmail.com]
Sent: Monday, December 06, 2010 4:52 PM
To: Jeffrey Bradshaw
Subject: Please confirm = II Additional Sierra Club comments to Westridge Commerce Center's DEIR

From: George Hague [mailto:gbhague@gmail.com]
Sent: Monday, December 06, 2010 11:40 AM
To: Jeffrey Bradshaw
Subject: Additional Sierra Club comments to Westridge Commerce Center's DEIR

Good morning Mr Bradshaw,

Please use these comments instead of what I sent you at 11:40 am today.

Re: Comments to the Westridge Commerce Center Draft Environmental Impact Report (DEIR)

During Thursdays Informational meeting the Consultant said that Appendix B would show that the Moreno Highlands project would be included. Using cumulative development from Chpater 5 and appendix B one does not find the Moreno Highlands Project. You do not even include Moreno Highlands at build out, but instead use 2013 as some magical date. Based on this standard if Moreno Highlands is not build for another 20 years then we can just approve all other lands with projects which would use all of SR 60 capacity-without factoring Moreno Highlands into the equation. How can Moreno Valley allow what is shown on Exhibit 7-2 where the SR-60 westbound traffic is Four times the present level in 25 years? SR-60 can not handle the traffic we presently have. The Final EIR will be inadequate unless you can show the LOS at the point where SR-60 & I- 215 connect heading west with today's traffic, with this project added and 25 years from now with its ultimate improvement according to the RCTC. The same needs to be done heading east on SR-60 at the point it passes over Pigeon Pass/Frederick Street. The City then needs to explain how anyone will want to do business in a city that doesn't allow you to move through except at a crawl. SC-1 SC-2

Whenever Skechers or the Highland Fairview project is mentioned you need to include both approved warehouses on their site as well as all the other commercial and land uses approved-- not just the single Skechers warehouse. This is true for not only for all Sierra Club comments, but all other comment letters on this project-- or your EIR will be inadequate. SC-3

How many diesel truck trips are expected to/from this project site and during what times of the day? Please respond to all question submitted to this DEIR within the Final EIR and not redirecting the public to someplace in the DEIR. SC-4

Building to LEED certification is good, but explain why the project will not try for at least Silver. There are many good ideas which could be designed/built into this huge warehouse to make it a environmentally superior and healthier project for Moreno Valley. The FEIR must list all those ideas which you will not incorporate into the project and fully explain why not. This must include those ideas which would lessen the projects impacts on Air Quality, Greenhouse Gas, and Global Warming. How will this project either help meet the goals of AB 32 or hinder our City's fair share in meeting its goals and standards? SC-5

The Sierra Club believes the impacts to Agricultural resources are considerable and need to be thoroughly discussed in the FEIR. The Lands of Local importance can not be just dismissed. Your project is growth inducing and could lead to the destruction of one of the last citrus groves in our city with the approval of Pro Logis. SC-6

How many diesel Trucks trips are calculated to use Redlands Blvd to enter/exit the city from your project? When combined with Skechers and ProLogis how many truck trips are calculated to use Redlands Blvd to enter/exit Moreno Valley. When you combine all three of these warehouses, operating a full capacity, with the existing background traffic, how many diesel trucks trips will use Redlands Blvd to enter/exit our city? SC-7

Since all diesel trucks must use Fir Street to enter/exit the project, how can you say the project is a safe distance from the property zoned residential across the street from your project? How will all the diesel trucks impact these future residents during your 24-7 operation? How does the toxic diesel emissions change during acceleration/deceleration as the trucks enter/exit the project? Your analysis of impacts must take this into consideration. With your growth inducing impacts how many diesel trucks will be using the improved Fir Street, adjacent to your project and future residents, when both approved warehouses at the Highland Fairview project, and Pro Logis are in full operation? SC-8

Please explain why reclaimed water will not be used? Between this project and Skechers you should be able to bring it north to serve both the needs of both sites. SC-9

The Sierra Club believes the DEIR fails to fully explain all the direct, indirect, growth inducing and cumulative impacts. The cumulative development list is not complete. The alternatives need to be further developed--especially since this project will not be built for perhaps years and there are existing warehouses sitting unoccupied. SC-10

The Sierra Club appreciates the opportunity to continue to add comments to this project's environmental documents. Please keep me informed of all future meetings and documents by using the address below. SC-11

Sincerely,

George Hague
Sierra Club
Moreno Valley Group
Conservation Chair

26711 Ironwood Ave
Moreno Valley Ca. 92555

SIERRA CLUB (GEORGE HAGUE)

Email Dated December 6, 2010

Response SC-1

It is presumed that the commentor's references to the "Moreno Highlands project" are intended to mean the Moreno Highlands Specific Plan, which was approved in 1992. Because approval of this Specific Plan preceded the adoption of the City's existing General Plan, the land uses approved as part of the Specific Plan are reflected in the adopted General Plan land use designations, which were the basis for the Draft EIR's consideration of ambient growth.

The year 2013 is utilized within the Project's Traffic Impact Analysis (TIA) and identified in the Draft EIR as the Project's anticipated opening year. As noted on Draft EIR Page 4.2-15, "[t]he City requires development TIAs to analyze a horizon year that is a minimum of five (5) years from baseline existing (2008) conditions reflected in the TIA. Accordingly, the potential traffic impacts of the Project are determined for 2013 ("Opening Year") conditions. This includes the application of an assumed background growth factor, to which traffic generated by known or probable 'related projects' was added."

Response SC-2

In regard to the commentor's concerns regarding traffic growth on SR-60, the Project TIA (included as Draft EIR Appendix B) examined performance on the SR-60 as part of Appendix 7.8. The City of Moreno Valley requested that a basic freeway segment analysis be conducted between Box Springs Road/Fair Isle Drive and the I-215 Freeway along the SR-60 Freeway, and included in the TIA. As indicated in the Introduction to this Study (Page 7.8-3), "[i]t should be noted that this analysis was not requested due to potential impacts from the project itself, as these impacts would be nominal, but rather

to analyze the current and future projected operations within the segment based on freeway lane geometrics."

The study concludes that "[a]s vehicular traffic increases on the freeway mainline under each of the future analysis scenarios, the densities on each basic freeway segment are anticipated to increase and peak hour level of service operations are anticipated to progressively worsen." It is in part on this basis that the Draft EIR acknowledges significant cumulative traffic impacts affecting freeway segments in the Project area. As noted in the summary of mitigation on Draft EIR Page 1-51, "[u]nder Opening Year Cumulative Conditions and General Plan Buildout Conditions, cumulative LOS impacts of traffic generated by the project in combination with traffic generated by ambient growth and other development projects will result in potentially significant cumulative traffic impacts affecting SR-60 freeway segments within the Study Area." Because freeway mainline improvements such as widening are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency, no mitigation was identified that could be feasibly implemented. As such, the Draft EIR found that the Project would have a significant and unavoidable impact in regard to exceedance of LOS thresholds on certain study area freeway segments.

Response SC-3

As identified at Draft EIR Table 5.1-1, and illustrated in Figure 5.1-1, eleven existing and planned development projects were identified within the cumulative scope of the Westridge Commerce Center Project. Included for the Highland Fairview Corporate Park were the following anticipated land uses: Logistics (2,410,000 square feet); Retail/Outlet Center (10,000 square feet); and Community Commercial (200,000 square feet). A review of the Highland Fairview Draft EIR (available at the City of Moreno Valley Planning Department) indicates that this is the maximum development scenario for this recently approved project.

Response SC-4

Estimated opening-year average daily Project-generated truck trips ingressing/egressing the Project site via Redlands Boulevard are as follows:

- 97 two-axle trucks;
- 220 three-axle trucks; and
- 539 four-axle trucks.

Please refer also to detailed trip generation and trip distribution analyses and supporting discussions are presented in the Project TIA (EIR Appendix B, TIA Pages 51-76).

Redlands Boulevard is a designated truck route in the County and a direct route to San Timoteo Canyon Road through Redlands (also designated as a truck route). It is appropriate for Redlands Boulevard to convey Project-related and area truck traffic. To maintain the continuity between affected agencies, the truck route designation for Redlands Boulevard cannot be practically removed. Moreover, there is no feasible means to restrict Redlands Boulevard to local truck trips only, given its direct connection, with no alternative routes, to the previously mention roadways.

Cumulative opening year average daily traffic along Redlands Boulevard north of Fir (future Eucalyptus) Avenue is estimated at 30, 400 trips (see TIA Page 115, Exhibit 6-10), This is inclusive of all trips/all vehicle categories generated by existing, proposed or anticipated development, and includes trips generated by the Westridge Project, Skechers, and Pro Logis cited by the commentor.

Total anticipated trip generation of the Project, including a quantification of the types of vehicles expected to access the site, is identified at Draft EIR Table 4.2-6 (Page 4.2-19). This Table has been reproduced below for ease of reference.

Table 4.2-6

Westridge Commerce Center Trip Generation

Project Description	AM Peak Hour			PM Peak Hour			Daily
	Enter	Exit	Total	Enter	Exit	Total	PCE
High Cube Warehouse (937.260 thousand square feet)							
Passenger Cars	26	22	47	22	34	56	729
Truck Trips (PCE):							
2-axle	5	4	9	4	7	11	145
3-axle	16	13	29	13	21	34	440
4+axle	57	48	105	48	76	124	1,616
Net Truck Trips (PCE)	78	65	143	65	104	169	2,201
Total Trips (PCE)	**104**	**87**	**191**	**87**	**139**	**225**	**2,930[1]**

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).

[1] 2,930 PCE trips = 1,585 net vehicle trips (the raw arithmetic number of truck and passenger vehicle trips) generated by the Project. It should be noted that because different classes of vehicles (e.g., passenger cars, light trucks, heavy duty trucks) exhibit differing emissions characteristics that for the purposes of quantifying and evaluating air quality impacts, vehicle trips are quantified and segregated by vehicle type. In comparison, the Project's traffic study evaluates the effects of traffic at intersections and roadways, and therefore presents the total vehicle trips in terms of Passenger Car Equivalents (PCEs), thereby recognizing and acknowledging physical size differences in vehicles and related effects on roadways and at intersections.

The germane issue with regard to potential truck traffic impacts is peak hour passenger car equivalent (PCE) intersection traffic volumes. As substantiated in the Draft EIR, all Project-specific traffic impacts, inclusive of truck traffic impacts, are reduced to levels that are less-than-significant. If the commentor's concerns are not really truck traffic volumes, but rather truck-generated diesel emissions, the Project Health Risk Assessment (HRA) summarized at EIR Section 4.4, "Air Quality," and discussed in detail in the Project HRA Study (included at EIR Appendix C) substantiates that with application of mitigation, Project-related diesel emissions will not result in significant adverse health risks.

As noted in the Draft EIR (Page 3-4), "[f]or the purposes of the EIR analysis, the Project is assumed to be operational 24 hours per day, seven (7) days per week, except as may be otherwise limited by applicable codes or regulations."

Response SC-5

The ultimate level of LEED certification cannot be determined at this time, since the tenant(s) for the Project, and therefore specific environmental strategies to be employed at the facility, are unknown. It is also important to note that no significant impacts have been identified in regard to the energy conservation attributes of the Project; nor would any of the identified significant impacts of the Project be reduced based on a certain level of LEED certification.

As noted on Draft EIR Page 4.3-110, "the Project is consistent with, or otherwise not in conflict with the CARB Scoping Plan recommended measures and actions and the GHG emission reduction strategies set forth in the 2006 CAT Report. As such, a qualitative assessment of the Project impacts based upon consistency with the CARB Scoping Plan and the 2006 CAT Report, supports the conclusion that the Project GHG emissions are not cumulatively considerable. [Draft EIR] Table 4.3-21 identifies the various sources of guidance for determining the significance of impacts from GHG emissions, and the applicability of each source to this Project. Further, Project GHG emissions will be further reduced with implementation of the Project design features and mitigation measures."

Contrary to the commentor's assertion otherwise, the FEIR need not list and evaluate all mitigation measures offered. With specific regard to potential GHG/GCC impacts (and measures offered to reduce potential GHG/GCC impacts), the Project's individual and cumulative impacts GHG/GCC impacts are substantiated to be less than-significant (DEIR Pages 4.3-88 through 4.3-11; DEIR Appendix C, Global Climate Change Study). Mitigation measures are not required for effects which are not found to be significant. CEQA Guidelines § 15126.4, subd. (a) (3).

Additional mitigation has been incorporated through the Final EIR process, to ensure that the Project's air quality and global climate change impacts are lessened to the extent feasible. These revisions are reflected in Final EIR Section 2.0, "Revisions and

Errata," as well as in the Mitigation Monitoring Plan presented in Final EIR Section 4.0. Inclusion of these measures does not materially or substantively affect analysis or conclusions of the DEIR. That is, impacts that were previously determined to be less-than-significant remain less-than-significant; and impacts that were previously determined to be significant remain significant.

Response SC-6

Despite the commentor's assertions, the Draft EIR does not "just dismiss" potential impacts to agricultural resources. As discussed in the Draft EIR (Pages 1-7 to 1-8), potential impacts regarding the conversion of farmland to non-agricultural uses were considered as part of the Draft EIR and found not to be potentially significant. The potential loss of agricultural land throughout the City attributable to General Plan implementation was acknowledged in the General Plan Final Program EIR (GPEIR, available for review at the City of Moreno Valley Planning Department) as significant and unavoidable. The GPEIR (Page 5.8-10) states that, "[s]ince the feasible mitigation measures that are available to reduce the impact to loss of farmland within the planning area are not consistent with the project objectives and land uses of the General Plan alternatives, no mitigation measure is proposed and the impact will be significant and unavoidable." Certification of the GPEIR required the City to adopt overriding considerations in regard to all impacts determined significant and unavoidable, including the potential for loss of agricultural lands. On this basis, the Project's Initial Study correctly concluded that the Project would not have the potential to result in significant impacts beyond those already addressed in the City's GPEIR. Because the Project's potential impacts are less-than-significant in this regard, no mitigation is required.

The commentor's opinions in regard to the potential impacts of the proposed ProLogis project are forwarded to decision-makers for their consideration.

Response SC-7

Estimated opening-year average daily Project-generated truck traffic ingressing/ egressing the Project site via Redlands Boulevard includes:

- 97 two-axle trucks;
- 220 three-axle trucks; and
- 539 four-axle trucks.

Please refer also to detailed trip generation and trip distribution analyses and supporting discussions are presented in the Project TIA (EIR Appendix B, TIA Pages 51-76).

Redlands Boulevard is a designated truck route in the County and a direct route to San Timoteo Canyon Road through Redlands (also designated as a truck route). It is appropriate for Redlands Boulevard to convey Project-related and area truck traffic. To maintain the continuity between affected agencies, the truck route designation for Redlands Boulevard cannot be practically removed. Moreover, there is no feasible means to restrict Redlands Boulevard to local truck trips only, given its direct connection, with no alternative routes, to the previously mention roadways.

Exhibit 5-4 in the Project TIA (Draft EIR Appendix B) identifies the truck trip distribution anticipated at General Plan Buildout, which includes traffic generated by the Project, the Projects referenced by the commentor, and all other known and probable development that is anticipated to occur at the SR-60/Redlands Boulevard Interchange.

Response SC-8

The commentor expresses concerns regarding diesel emissions from vehicles traveling along Fir (future Eucalyptus Avenue) and their potential impacts at adjacent residential uses. A Health Risk Assessment of Diesel Particulate Emissions was prepared to

address Diesel Particulate Matter (DPM) generated by diesel trucks and the operation of heavy duty equipment. The Health Risk Assessment (HRA) was 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 (SCAQMD 2003). The Health Risk Assessment is summarized within the Draft EIR (see Page 4.3-80) and presented in its entirety as Appendix C to the Draft EIR.

The Project HRA considers and evaluates maximum potential exposure to maximum DPM concentrations consistent with established SCAQMD methodologies. The methodology considers not only DPM source emissions (the highest concentrations of which would occur on the Project site) but also considers other exposure/risk determinants including but not limited to: relative distance to and location of receptors, wind patterns, and topography.

With specific regard to DPM emissions air quality impacts generated by Project traffic along area roads, the Project HRA arguably consider potential worst case cancer risk exposure by evaluating pollutant concentrations at the Project site, which include pollutant emissions generated by all vehicles within the site in combination with emissions generated by on-site stationary sources. It is further noted that the cancer risk exposure scenario is in and of itself a conservative assessment of potential cancer risks arising from DPM exposure. That is, pursuant to the adopted SCAQMD/EPA methodologies, calculated DPM-source cancer risks are predicated on extended 70-year/30-year exposure scenarios. Both the 70-year and 30-year cancer risk assessments considered in the Draft EIR represent estimates of theoretic DPM-source cancer risks, and are based on the assumption that a person is exposed to the emission source 24 hours a day for 365 days a year for the entire length of the assumed exposure period. Individuals are typically not stationary at any given outdoor location, and a portion of each 24-hour cycle is spent indoors. In addition, individuals and families at a given location for 70 or even 30 years would be considered the exception rather than the norm. The California OEHHA has indicated that based on EPA studies, the EPA

recommends a central tendency estimate of 9 years for residency at a given location, and a high-end estimate of 30 years for residency time. Thus, the methodologies used to determine cancer risk (e.g., the assumption of a 24- hour exposure for a 30 or 70 year period) represent a maximum theoretic cancer risk, and is not intended to account for or represent DPM exposures based on residency and occupancy tendencies. As discussed in the Draft EIR, with application of mitigation, applicable cancer risk thresholds are not exceeded. Draft EIR Table 4.3-17 (Page 4.3-86) summarizes maximum mitigated potential cancer risk exposures.

In comparison, DPM emission concentrations generated by Project vehicles traveling along area roads would be substantively reduced in that they reflect only a portion of transient vehicle traffic/emissions, and these emissions are dispersed through vehicle movements and localized winds.

In response to the commentor's specific concerns regarding potential cumulative effects of DPM emissions, regionally, the SCAQMD has conducted a cumulative analysis of the toxic air contaminants (including DPM emissions) and their resulting health risks for all of Southern California. This study, Multiple Air Toxics Exposure Study in the South Coast Air Basin, or MATES III, indicates the average excess cancer risk level from exposure to TACs is approximately 1,200 in one million basin-wide. These estimates were based on monitoring data collected at ten fixed sites within the South Coast Air Basin.

None of the fixed monitoring sites are within the immediate Project area. However, MATES III has extrapolated cancer risk levels throughout the Basin by using grid-specific modeling. In this regard, MATES III grid modeling predicted a cancer risk of 524 in one million for the Project area. DPM is included in this cancer risk along with all other TAC sources, and accounts for the predominance (83.6 percent) of the total risk shown in MATES III. The Project will not contribute cumulatively to TACs other than DPM, however, the Project DPM emissions levels are not significant. That is, as

discussed in Section 4.3 of the Draft EIR, the SCREEN3 screening analysis prepared for the Project indicates that the maximally impacted modeled receptor would be exposed to a mitigated inhalation cancer risk of no more than 8.6 in 1 million, which is less than the SCAQMD exposure threshold of 10 in 1 million.

Though the Project DPM emissions would add to existing levels of DPM within the basin, the Project's contribution and associated MICR as mitigated is not individually significant and is not cumulatively considerable. [11] Please refer also to Response SC-4.

Response SC-9

Developments within the Project area are reliant on the Eastern Municipal Water District (EMWD) for the provision of reclaimed water, as well as potable water. Ultimate timing and provision of recycled water to the Project will be determined by EMWD, not the Applicant or the Lead Agency. To assert or assume otherwise is speculative. As noted on Draft EIR Page 4.5-25, "[t]he Project will use non-potable water for irrigation to the extent that such water sources are available to the Project. In

11 [T]he 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 (S*outh Coast Air Quality Management District White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution,* Appendix D, Page D-3).

anticipation of reclaimed/recycled water availability, the Project will design and implement all irrigation systems per EMWD recycled water facilities standards."

Response SC-10

The commentor's opinions in regard to the Draft EIR's adequacy are forwarded to decision-makers for their consideration during deliberations on the Project. The cumulative project list was compiled in consultation with City staff, and includes Projects that are consistent with those of other EIRs that have been prepared by the City for development proposals in the vicinity of the Project. The commentor is also directed to Draft EIR Section 5.2, which includes a comprehensive discussion of the potential for other approved warehouse projects to serve as an alternative to the proposed Project site.

Response SC-11

As requested, the commentor will be included on the City's distribution list for future noticing related to Project review and public hearings.

Thomas Thornsley
29177 Stevens Street
Moreno Valley, CA 92555

December 5, 2010

Mr. Jeff Bradshaw
City of Moreno Valley
14177 Frederick Street/P.O. Box 88005
Moreno Valley, California 92552

Via e-mail: JeffreyB@moval.org

Dear Mr. Bradshaw:

Re: Draft Environmental Impact Report (DEIR) Westridge Commerce Center, SCH#: 2009101008

As a concerned residents on the east end I have reviewed the Draft Environmental Impact Report (DEIR) for the proposed Westridge Commerce Center. I can not agree with some of the conclusions because it appears that some impacts are being written off because the City simply has not taken a progressive stand on potential development impacts or adopted stricter criteria for development (i.e.: enhanced development standard and limited design guidelines, or full improvements with future restitution.). As with most projects requirinig EIRs this project has some significant impacts that, quite simply, are being written off because the impact can not be completely mitigated to below a level of significance. However, several impacts could be lessened with further mitigated than what is proposed; most notable with regard to Traffic Impacts. In these instances it would be prudent to impose mitigation(s) to further lessen those impacts, thereby, leaving a smaller intensity of impacts that to be overridden by the City Council. TT-1

Project Description – So much of this document reads like "boilerplate text" and it fails to provide complete account of the entire project in any one location. The full project description is hard to quantify without looking in several places in two separate chapters. Even then the proposed Amendment to the Municipal Code related to providing "objective standards for the development of Light Industrial uses adjacent to residentially zoned property," fails to be detailed anywhere in the text and I am unable to determine what changes are being made. So therefore I ask: TT-2

- Why are you not providing a detailed description of the code amendment?
- What are the details of the proposed amendment? (Provide current text and proposed text.)

Aesthetics

Loss of Scenic Vista – The DEIR states that there is no feasible way to reduce impact (lost view of the surrounding hills) below a level of significance which may be true, but man-made enhancements along the 60-Freeway can offer a new pleasurable scenic vista thus mitigating a substantial amount of the loss. As such this issue should be addressed in greater detail to enhance what is lost for the community. TT-3

- Why is this project not offing to better enhance and screen the view from 60-Freeways with more extensive architectural relief, landscaping and a screen wall? TT-3 cont'd.

The photo simulations in the DEIR fails to depict the actual view from the roadways or what the view would be like for passing motorist after freeway expansion. Each simulation is a straight ahead view from each particular roadway/highway. Since the 60-Freeway is a General Plan designated Scenic Corridor true views are 360 degrees (and primarily southward as shown in Figure 4.9-1) and as such this document needs to be amended to show the impacted views from the 60 Freeway looking south across the project site to show how the building and loading docks will be buffered and compliment by landscaping and the screen wall as required by the development code. TT-4

- Why doesn't this document show a true view southward across the site as it would be viewed from the 60-Freeway by passing motorist?
- Why doesn't this document show the screening method of the building and loading docks?
- Why isn't there a visualization of the site screening method at full build-out of the Freeway?

Under the current zoning, building sizes are limited to 50,000 s.f. thus offering the opportunity for smaller buildings, greater elevation variations, and views through and between buildings if built and scattered across the same project area. So far the warehouse projects approved and proposed along the 60-Freeway corridor far exceed the original zoning building size limitations and as proposed are creating what will appear to be a mile long wall blocking almost all vistas to the south. TT-5

- Why is it not feasible to create smaller buildings for what is a speculative project at this time in a down economy?

Recommendation: **Mitigation measures** should be added to this project to require a sufficient landscape area and screen wall along the 60-Freeway to effectively screen the building and the loading dock and to act as an alternate aesthetic feature in place of the lost Scenic Vista. TT-6

Building – It is hard to understand the need for such a tall building unless it contains multiple internal stories which would then conflict with the floor area ratio (another issue). Under the existing zoning it was much more likely that the site would develop with smaller buildings and thus lower building profiles. One method to better preserve the scenic vistas would be limiting the overall building height to 25-30 feet. This would permit the building to go almost unnoticed if is truly built 20 plus feet below grade. As such a **mitigation measure** reducing the height of the structure to preserve some of the scenic vistas should be imposed. Thus, mitigating the impact to scenic vistas may not require the City to override this impact as proposed. Additionally, building relief (offsets) appears to be non existent on all elevations with limited compliance with General Plan Policy 2.10.3. Mitigation measures should be included requiring greater wall offsets relative to the expanse (1,300 foot length) of the building elevation. TT-7

- Building function is not necessarily compromised by building plane variations so why are there not more telling offsets to the building exterior? This applies to all four sides.

Light and Glare – The east end of Moreno Valley as enjoyed a rural atmosphere for decades and as such would be significantly impacted if project site lighting is not controlled. Additionally, this area falls just within the Mount Palomar Observatory Dark Skies area and should comply with their limitation to prevent light pollution. The International Dark-Sky Association web site at: www.darksky.org lists lighting fixtures and methods to meet dark sky specifications. Add a Mitigation Measure (beyond city policy) to assure that site lighting is compatible with "Dark-Sky" specifications or limit lighting to only the use of low pressure sodium lights, full shielding above a horizontal plain and no building or pole mounted lighting fixtures that project light outward horizontally beyond the property boundary to TT-8

eliminate the potential for nighttime light glare to motorist. This last request is especially relevant to freeway motorist.

- Why is there not a mitigation measure include with this project that assures full compliance and extra measure beyond the basic restrictions listed in the city?

TT-8, cont'd

<u>*Screen Walls*</u> – Page 3-9 makes mention of an 8-foot screen wall along the 60-Freeway yet there is no mention of this wall in Section 3.5.12. Neither the site plan nor the cross sections in this document list any screen wall along the 60-Freeway frontage. Since the City's General Plan Policies (2.10.2, 2.10.4, 2.10.5) and Development Code requires the screening of loading areas a **Mitigation Measure** needs to be added that will assure a wall of sufficient height will be installed along the project's north property line to screen the view down into the loading dock from the 60-Freeway and the eastbound off-ramp. Additionally, due to the massive length of this wall the screen wall should have significant vertical wall plain offsets and other variations (texture, style, height) to avoid visual monotony along the freeway.

- What type of adequate full screening method will be provide along the north property boundary adjacent to the 60-Freeway in compliance with city code?

<u>*Landscaping*</u> – Extensive landscaping is provided along the southern boundary of the project as a buffer for visibility of the project. The same level of treatment should be provided along the north property line in compensation for the lost Scenic Vista. The northern most landscaping provided on site is on what appears to be a 2:1 slope dropping immediately from the freeway right-of-way down to the parking and loading area. Since all of this landscaping is below freeway grade it will provide little complimentary relief to the massive building. Additionally, city code requires screening of parking and loading areas with a minimum 10-foot landscape buffer utilizing walls and burms to screen these elements.

TT-9

- Why is there not a sufficient landscape buffer and screen wall along the northern most project boundary along the freeway right-of-way?
- How does this project proposes to meet the 10-foot landscape requirement for buffering if all of this area is below grade?

Traffic

The DEIR states that "the Project cannot feasibly construct the required improvements and/or Payment of fees will not assure their timely completion" and "Pending completion of required improvements the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting (certain) intersections are considered cumulatively significant and unavoidable." Since most of the studied intersection are not currently impacted this project will be the ultimate source causing them to be impacted and as such this project should be held responsible to further eliminate those impacts beyond just "paying the TUMF" and letting the improvement happen when they may. The following passage, "The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts," is utilized time and again in MMs 4.2.3 through 4.2.9 in what appears to be the project proponents out for making some simple fixes such as stripping for right-turn lanes. These types of simple fixes should be the responsibility of the development.

TT-10

Since it appear that it could be quite some time before full improvement are made to connect Fir Avenue through from Redlands Boulevard to the terminus of Eucalyptus Avenue the added traffic burden to Redlands Boulevard will greatly impact travel and completely diminish the level of service currently available The project proponent needs to provide a supplemental or alternative analysis in the form of a

tiered level of improvements that can be made that diminishes the impacts at Opening Year. Additionally, the cost burden undertaken by the developer should be determined for reimbursement.

- What additional improvements can be made prior to building occupancy that will address the immediate impact at Redlands Boulevard and the 60-Freeway in exchange for fees paid for improvements elsewhere?
- Since the city will reimburse developers for improvement costs beyond those associated with their project why is this project not proposing to make the extra improvements to lessen the impacts and better serve its future users and the neighboring community?

TT-10 (cont'd)

If these improvements are not made by the time the project is in its Opening Year what will be the timelines for making these improvements and what criteria (money, Caltrans approval, other projects…) have to be met before the mitigation measure are carried out?

- How will Air Quality suffer by not actually completing the necessary traffic improvements which will lead to traffic congestion and excessive idling for prolongs time periods?

Air Quality

There is no doubt that any urban development on the project site will generate long-term operational emissions that will exceed the South Coast Air Quality District's regional thresholds. However, the types of pollutants vary by the activities associated with different land uses, some of which may not be as hazardous to the health of those in the surrounding community. Since most of the cancer risk from air pollution is from diesel exhaust it would be best to rethink the land uses of a community as a whole and limit those that pose the greatest risk to health. Maintaining the existing zoning would prevent uses such as this distribution center which requires extensive use of trucks burning diesel fuel. Under the current zoning the range of business permitted are likely to generate more vehicle trips but fewer emissions by trips from diesel fueled vehicles.

This type of project would also be best suited for a location where it could utilizes rail transport for the massive daily volume of trips associated with warehouses or logistic centers. For this reason alone, the City should not approve the zone change and this project should locate to a site with more efficient transportation infrastructure better suited to meet speculative users' needs with fewer environmental impacts.

TT-11

It is unrealistic for the City of Moreno Valley and the project proponent to disregard the cumulative impacts this project will have on this area when utilizing a scenario where much of the surrounding area is converted to industrial and warehouse uses. This analysis should be undertaken so as to find what level of incremental increase this project will have on the overall community.

- Why in there now effort made to look at the real possibility of cumulative impacts from this project and the likely land use changes surrounding this project site?

However, because I believe that the City will approve this project; additional tougher mitigation should be added to offset local and regional impacts to the fullest extent possible before overriding what can not be achieved. If these mean reducing the size of the project to reduce environment impacts, as a suggested in the alternatives, then it should be seriously considered. Also, there should be mitigation measures requiring a percentage of the fleet vehicle (diesel trucks) of future tenants to be low to zero emission vehicles. Also, diesel trucks delivering to the site shall include soot filters or the latest technological equipment available.

Additionally, MM 4.3.11 addresses improvements to the project that will allow the project to exceed Title 24 standards by 20 percent. This is a nice thing but more should be offered. The final item on the list of improvements states that the building should be structurally designed to handle the installation of roof mounted solar panels. This should be mitigation measure unto its own along with requiring the project proponent to work with energy providers and vendors to install such equipment to offset fuels used to generate electricity. There are numerous vendors and utilities interested in joint projects to install these systems, and they are always looking for places to install systems, and this should be made a part of this project. This measure also works well to mitigate the issues associated with greenhouse gases.

- Why can't this project be required to have all buildings designed forthwith to accommodate renewable energy sources such as photovoltaic solar electricity systems appropriate to their architectural design?
- Why is there no mention of the project proponent working to insure the opportunity to utilize this structure is know in the industry?

TT-11 (cont'd)

As stated in the Traffic section may intersection improvements will not be undertaken by the project but will instead only be mitigated through the payment of improvement fees. If this is true the project will create traffic impacts that do not currently exist.

- Therefore, how will Air Quality suffer by not actually completing the necessary traffic improvements which will lead to traffic congestion and excessive idling for prolongs time periods?

Climate Change and Greenhouse Gases

Since the state has enacted legislation to lower greenhouse gas emissions any and all possible measures to lower emissions that could be undertaken by this project should be listed, discussed and analyzed for their effectiveness, not just a list of improvements that will exceed Title 24 by 20 percent. The City should then include mitigation measures that significantly reduce (though they may not entirely mitigate impacts) associated impacts prior to any consideration to override them as the DEIR suggests.

TT-12

- Why is the project not being designed to meet some of the highest LEEDS standards and only offering to exceed Title 24 by 20 percent?

Thank you for the opportunity to comment on the Draft EIR for this project. I request to be informed of all meetings and public hearings related to this project or other consideration in east end of Moreno Valley. Please let me know if it is possible to review a copy of the project plans so that I may provide constructive comments related to the development proposal prior to its next appearance before the Planning Commission or City Council. I would also like to request copies of any follow-up documents related to this project (2nd DEIR and/or Final EIR). Feel free to contact me if you have any questions regarding my comments.

TT-13

Sincerely,

Thomas Thornsley
909-797-1397
e-mail: tomthornsley@msn.com

THOMAS THORNSLEY

Letter Dated December 6, 2010

Response TT-1

The City disagrees with the commentor's assertion that potentially significant impacts of the Project are being "written off." As required by CEQA, the Draft EIR identifies the feasible and enforceable mitigation measures that have been determined necessary to reduce the Project's potentially significant environmental impacts. The commentor's references to additional traffic mitigation are addressed more specifically in the subsequent Response TT-10. The commentor's opinions in regard to the Draft EIR's adequacy are forwarded to decision-makers for their consideration.

Response TT-2

The commentor's opinions in regard to the Draft EIR's organization are forwarded to decision-makers for their consideration. The actual wording of the proposed Municipal Code Amendment was not available at the time the Draft EIR was completed. The proposed amendment will be crafted by City staff and made available prior to its consideration by Planning Commission or City Council, consistent with the City's standard procedures for the adoption of Municipal Code Amendments.

For the purposes of the Draft EIR's analysis, the code section to be amended is identified (Section 9.05.020 B, City Case # PA10-0017) on Draft EIR Page 3-24. Further, the intent of the proposed code amendment is summarized as follows.

> The proposed Code Amendment would mandate minimum separation/ buffer requirements (250 feet) between proposed light industrial use and residentially-zoned properties. As further required under the proposed Code Amendment, this setback/buffer area shall be increased should the minimum 250-foot separation/buffer prove insufficient to eliminate

significant health risks or project operational noise impacts as reflected in project-specific air quality and noise analysis (Draft EIR Page 4.1-19, *et al.*).

The proposed code amendment provides additional protection of residential uses in instances where industrial uses may be proposed within adjacent zone districts. The amendment would apply City-wide. The Code Amendment Application is on file with the City.

Response TT-3

As acknowledged in the Draft EIR's analysis of the Project's potential aesthetic impacts, "[d]eterminations of visual character and quality are inherently subjective by nature." The commentor's suggestion that "man-made enhancements along the 60-Freeway" be utilized to mitigate the Project's adverse effect on scenic vistas could be perceived as exacerbating the potential change to existing views. It is further noted that land adjacent to SR-60 is within a Caltrans easement, and is reserved for future freeway improvements that are outside the jurisdictional authority of the Applicant or the City of Moreno Valley. The Project has nonetheless proposed a wall of trees at the property line along the top of the slope to further soften views of the Project from the adjacent SR-60. The trees will be configured and planted in a double row the northwestern portion of the site, and in a single row along the future off-ramp.

The Project's potentially significant visual impacts are attributable to potential view obstruction, not architectural design or appearance of the Project (please refer to the summary of significant aesthetic impacts presented at DEIR Pages 1-19, 1-20). Architectural revisions or additional screening suggested by the commentor do not act to review the project's identified view obstruction. Moreover, as described on Draft EIR Page 4.9-21, "[i]n order to ensure visually acceptable and compatible development, and subject to the proposed change of zone from Business Park to Light Industrial, the Project will be designed and constructed consistent with applicable Light Industrial design and performance standards articulated at Municipal Code Chapter 9.05,

Industrial Districts. To these ends, the Project site plan, landscaping, and architectural concepts provided at EIR Section 3.0, Project Description demonstrate consistency with Municipal Code Section 9.05.040, B., Special Site Development Standards."

Response TT-4

The Draft EIR acknowledges the designation of SR-60 as a scenic route, and the Project's location within a scenic view corridor (Draft EIR Page 4.9-10). Despite the commentor's assertions to the contrary, the Draft EIR's view simulations provide actual pre-development views from the SR-60, with post-development photo simulations reflecting the facilities and landscape screening of the Project. A direct southerly view of the Project from Ironwood Avenue, located approximately 2,500 feet north of the freeway, is provided in Draft EIR Figure 4.9-8. The Project's landscape screening has been conceptually illustrated in Draft EIR Figures 3.5-4 and 3.5-5, and is reflected in the previously referenced Draft EIR's Post-Development View Simulations (Draft EIR Figures 4.9-4 through 4.9-8). It may be noted that because the Project's facilities will be located approximately 25 feet below the grade of the SR-60, the loading docks will not be visible from the SR-60, or from other properties not located at a considerably higher elevation than SR-60. (Draft EIR Figures 4.9-2, 4.9-3)

In regard to the commentor's concerns regarding views in the Project vicinity following freeway expansion, it is noted that although the Project has been designed to accommodate future interchange improvements planned by Caltrans, these improvements will be constructed by Caltrans, and are not a part of the proposed Project. Improvements adjacent to the Project site have been neither programmed nor funded at this time. The preparation of view simulations incorporating these improvements would be speculative, and as such, were not undertaken as part of the Draft EIR.

Response TT-5

As discussed in the Draft EIR's analysis of alternatives (Pages 5-36 to 5-37), the possibility of limiting the Project's building size was considered, but rejected as infeasible. The relevant discussion is presented below for ease of reference.

> In order to potentially avoid or reduce view obstruction/view interruption resulting from the large consolidated warehouse structure proposed under the Project, an alternative site design employing multiple smaller structures of 50,000 square feet (per the site's current Business Park zoning requirements) was considered. However, the intent of the Project is to achieve full utility of the available site while providing region-serving logistic warehouse facilities. Feasibility and function of the proposed regional warehouse is dependent on its size and configuration, allowing for centralized and consolidated storage and transfer of large (numerically and dimensionally) inventories serving smaller local and end-use facilities. Division of the proposed building into substantively smaller components (50,000 square feet maximum buildings) is not practically or economically feasible.
>
> Moreover, such division of the Project would act to unnecessarily duplicate or expand serving utilities, would result in multiple and redundant internal operations (e.g., intersite transfer of inventories), would restrict flexibility of warehouse operations and use of warehouse space; and may necessitate additional access to adjacent roadways in order to serve the individual buildings, with potentially increased circulation/access impacts. Lastly, it is noted that the Project design is typical of other regional distribution warehouses implemented within the City, surrounding Riverside County, and throughout southern California. Empirical evidence indicates that the Project design is an established functional and efficient format for regional distribution warehouse

facilities. For these reasons, an alternative based on a compartmentalized building design scenario resulting in multiple smaller buildings was not further considered.

The commentor's concerns in regard to the Project's feasibility in the current economic climate are forwarded to decision-makers for their consideration.

Response TT-6

Please refer to the preceding Response TT-3. The commentor's opinions in regard to the provision of an 'alternate aesthetic feature' are forwarded to decision-makers for their consideration.

Response TT-7

The commentor requests explanation of the proposed building design, and specifically the proposed building height.

The high-cube warehouse building height concept defines the viability of its internal operations, which are realized through closely-consolidated and easily-accessible warehoused goods, and use of efficient, high-lift material handling equipment. While multiple stories are not proposed, the high-cube building design typically requires internal clear heights of 30 feet or more. In another context, in order to accommodate the same volume of warehoused goods and logistics traffic, the floor area of a 45-foot high warehouse would have to be increased by a minimum of 80 percent if reconfigured as a 25-foot high structure. In the case of the Westridge Project, the currently proposed approximately 940,000-square-foot building would have to be at least 1.7 million square feet in size in order to accommodate comparable volume of warehoused goods. This increase in area does not even account for necessary additional internal aisle ways, utilities, service areas, vestibules, etc. Moreover, if constructed as a substantively larger but lower building footprint there would be the additional construction costs, expanded areas of disturbance, increased infrastructure costs, and decreased operational/energy

efficiencies associated with such a large building footprint. The suggestion that architectural "offsets" be required is forwarded to decision-makers for their consideration.

Response TT-8

The Project's potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area is addressed in Draft EIR Section 4.9. As noted on Draft EIR Page 4.9-22, "[o]n-site lighting, including parking lot and loading dock lighting, will be required to comply with all applicable sections of the City's zoning ordinance," which are detailed within this discussion. As further noted on Draft EIR Page 3-17, "[t]he Project lies within 45 miles of the Mt. Palomar Observatory, and would comply with applicable provisions of County of Riverside Ordinance 655 which addresses protection of the night sky from light pollution that would interfere with astronomical observations." Additional mitigation suggested by the commentor has not been included because no potential impacts relative to the Project's potential to create light or glare have been identified. Mitigation measures are not required for effects which are not found to be significant. CEQA Guidelines § 15126.4, subd. (a) (3).

It is further noted that the City is considering a "Dark Sky" ordinance that would act to prevent or reduce light pollution.

Response TT-9

Consistent with the commentor's observation, the text at DEIR Section 3.5.12, Page 3-17 (excerpt following) is amended to also include screening discussed previously at DEIR Page 3-9:

> **3.5.12 Screening**
>
> Screening within the Project site will be provided for under Zoning Code Section 9.08.150, "Screening Requirements," and Section 9.10.160, "Outdoor Storage, Trash Areas, and Service Areas." As required under

> these portions of the Code, the Project final site plan and building designs shall incorporate screening of mechanical equipment and trash areas. Southerly facing loading docks and adjacent truckyard areas will be screened from off-site views by an approximately 14-foot high screenwall spanning approximately 1,200 feet, across the length of southerly-facing truckyard areas. ***Project loading areas will be screened from view on the north and the northernmost portion of the east side by 8-foot high masonry screenwalls*** . . . .

Results and conclusions of the DEIR are not affected.

As noted on Draft EIR Page 4.9-21, "the Project will be designed and constructed consistent with applicable Light Industrial design and performance standards articulated at Municipal Code Chapter 9.05, Industrial Districts." The landscape buffer proposed along the Project's northernmost boundary, adjacent to SR-60, is, as noted by the commentor, a landscaped slope, with a depth of approximately 41 feet, or more than four times the required ten-foot landscape buffer. Additionally, as noted in the preceding Response TT-3, the Project also includes the planting of a double row of trees along the site's northwestern property line. As demonstrated in the line of sight illustration provided as Draft EIR Figure 4.9-3, loading areas on the north side of the Project will not be visible from SR-60. The commentor's opinions in regard to the adequacy of the Project's proposed landscape screening are forwarded to decision-makers for their consideration.

Response TT-10

It appears that the commentor is unclear in regard to which potential traffic-related impacts are considered significant due to the Project, and those that are forecast to occur as a result of cumulative growth. As discussed in the Draft EIR (Pages 4.2-15 to 4.2-16), , the Project's Traffic Impact Analysis (TIA) identifies ambient growth using a standard annual growth factor of two percent per year to account for non-specific development

within the Study Area, as well as anticipated growth in traffic volumes generated by projects outside the Study Area. The ambient growth factor of two percent per year was applied to existing Year 2008 traffic volumes, yielding a ten percent (10%) growth in existing volumes over the five intervening years until the Project Opening Year, 2013. As discussed in the Draft EIR (Pages 4.2-34 to 4.2-35), under the "Opening Year Ambient Condition" defined above, only two intersections would be affected by Project-related traffic. Mitigation for impacts at these two intersections is provided in Draft EIR Mitigation Measures 4.2.1 and 4.2.2, which are provided below for ease of reference.

4.2.1 Redlands Boulevard at SR-60 Westbound Ramps Improvements:

- *Install a traffic signal.*

This improvement is currently approved, programmed, and permitted by Caltrans. If not otherwise completed prior to Project opening, the required traffic signal shall be constructed by the Applicant prior to issuance of the first Certificate of Occupancy.

4.2.2 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements - Prior to issuance of the first Certificate of Occupancy, the Applicant shall construct the following improvements:

- *Install a traffic signal;*
- *Construct a southbound right turn auxiliary lane which extends the full length of the segment of Redlands Boulevard between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue for a southbound lane configuration of one shared left-through lane and one right turn lane; and*
- *Construct an eastbound left-turn lane with 300 feet of storage for an eastbound lane configuration of one left-turn lane and one shared through-or-right-turn-lane.*

With implementation of these mitigation measures, the Project's potential impacts are identified as less-than-significant. All other traffic-related impacts identified in the Draft EIR occur in the cumulative condition, which is defined (on Draft EIR Page 4.2-16) as including other known or probable related projects assumed to be occupied and operational by the Project's opening in 2013. A map of the approved and pending projects is included in EIR Section 5.1 (Cumulative Impacts Analysis). Additional detail regarding the trip generation of these related projects is also presented in the Project TIA (EIR Appendix B).

Despite the commentor's assertion that "simple fixes should be the responsibility of the development," it is noted that the majority of the required improvements are within Caltrans facilities, which are outside the control of the Applicant or the City of Moreno Valley. The payment of TUMF and DIF is considered the appropriate mechanism for the Project to contribute to future off-site roadway improvements. The application of fee-based mitigation is discussed further in the Draft EIR on Pages 4.2-25 to 4.2-26. The commentor's opinions regarding "alternative analysis in the form of a tiered level of improvements" will be forwarded to decision-makers for their consideration.

The Draft EIR's air quality analysis (Section 4.3) is based on the Project TIA, and as such, comprehensively addresses the Project's potential traffic-related impacts, along with other potential effects on air quality. The commentor speculates that required traffic improvements will not be completed. Please refer to the discussion of improvements programs and the implementation of improvements required pursuant to those programs presented in detail in the Project TIA at TIA Pages 205-208. As noted therein, the TUMF program was implemented to ensure timely completion of region-serving transportation improvements. Locally, the City has an established, proven track record with respect to implementing the City's DIF Program. Many of the roadway segments and intersections included within the study area for this Traffic Impact Analysis are at various stages of widening and improvement based on the City's collection of DIF fees. Under this Program, as a result of the City's continual monitoring of the local

circulation system, the City insures that DIF improvements are construction prior to when the level of service would otherwise fall below the City's established performance criteria. The commentor's statements are forwarded to the decision-makers.

Response TT-11

The commentor's opinions related to the best use of the Project site in regard to air quality considerations will be forwarded to decision-makers for their consideration. With regard to statements concerning diesel emissions, please refer to response FNSJ-8, et al. presented herein.

With regard to comments addressing air quality, alternatives, and maintaining the site's existing zoning designation, the Draft EIR includes a "No Project Alternative" analysis which assumes development of the subject site consistent with the existing Zoning Designation of "Business Park." A comparative analysis of operational air quality emissions under each of the Project's alternatives is provided on Draft EIR Page 5-53 – acknowledges that "the vehicle mix under the No Project Alterative would likely reflect incrementally decreased heavy truck traffic, with related decreases in diesel particulate emissions when compared to the Project." However, as also noted on Draft EIR Page 5-53, the Project's significant operational air quality impacts consist of exceedances of SCAQMD regional thresholds for VOC and NOx emissions. As noted on Draft EIR Page 4.3-84, potential environmental impacts from Project-related diesel particulate emissions were determined to be less-than-significant with mitigation. On this basis, the suggested continuance of the site's existing Business Park zoning would not necessarily result in a lessening of environmental impacts.

Evaluation of Alternative Sites (also of concern to the commentor) is presented in the DEIR (DEIR at Pages 5-38 through 5-34). As substantiated in the DEIR four (4) of the considered Alternative Sites (Sites 1-4) were ultimately determined infeasible. Alternative Site 5 would not result in the avoidance or substantive reduction of Project related impacts, this Alternative Site was also rejected from further consideration.

The commentor incorrectly states that cumulative impacts are disregarded. Please refer to DEIR Section 5.1, Cumulative Impact Analysis, DEIR Pages 5-1 through 5-25. With specific regard to energy consumption and potential GHG/GCC impacts (and measures offered to reduce potential energy/GHG/GCC impacts), the Project's individual and cumulative impacts are substantiated to be less than-significant (DEIR Section 5.6 Energy Conservation; DEIR Pages 4.3-88 through 4.3-11 (GHG/GCC impacts); and DEIR Appendix C, Global Climate Change Study). Mitigation measures are not required for effects which are not found to be significant. CEQA Guidelines § 15126.4, subd. (a) (3).

Additional mitigation has been incorporated through the Final EIR process, to ensure that the Project's air quality and global climate change impacts are lessened to the extent feasible. These revisions are reflected in Final EIR Section 2.0, "Revisions and Errata," as well as in the Mitigation Monitoring Plan presented in Final EIR Section 4.0. Inclusion of these measures does not materially or substantively affect analysis or conclusions of the DEIR. That is, impacts that were previously determined to be less-than-significant remain less-than-significant; and impacts that were previously determined to be significant remain significant.

In regard to the use of photovoltaics, as currently noted under EIR Mitigation Measure 4.3.11: "All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design." As such, the Project supports, and would not interfere with use of solar energy. The commentor's opinions regarding "joint projects" will be forwarded to decision-makers for their considerations.

Traffic concerns have been addressed in the preceding Response TT-10.

Response TT-12

The commentor's opinions in regard to further lowering the Project's greenhouse gas emissions are forwarded to decision-makers for their consideration. It may be noted that

because the Project's Global Climate Change Analysis identified no significant impact on the environment, overriding considerations in regard to greenhouse gas emissions would not be required. Further, mitigation measures 4.3.11 through 4.3.13 were provided as part of the Draft EIR in order to reduce Project related operational source air pollutants and greenhouse gas emissions to the extent feasible, and to promote sustainability through conservation of energy and other natural resources, rather than to reduce potentially significant impacts.

In regard to the commentor's concerns regarding Leadership in Energy and Environmental Design (LEED) standards, the following discussion can be found on Page 3-16 of the Draft EIR:

> "The Westridge Commerce Center Project reflects design and operational criteria established under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, a program developed by the United States Green Building Council. This program includes a rating system that can be applied to new construction as well as tenant improvement projects with performance goals in multiple environmental categories.
>
> LEED certification is contingent, among other requirements, on demonstrated and documented conservation and efficient use of available resources. It is recognized that not all LEED performance standards are applicable or appropriate for the Project, and that different standards may be utilized by the Project's end user(s). However, the Project, as a whole, will be developed as a LEED-certified facility.
>
> In support of LEED-certification, resources conservation, reduction in energy consumption and associated reductions in air pollutant emissions and greenhouse gases (GHGs), the Project will achieve a minimum of 20

> percent in energy efficiencies beyond incumbent Title 24 Energy Efficiency standards, as well as compliance with other applicable state and federal energy standards."

The ultimate level of LEED certification cannot be determined at this time, while the tenant and therefore specific environmental strategies to be employed at the facility, are unknown. It is also important to note that no significant impacts have been identified in regard to the energy conservation attributes of the Project; nor would any of the identified significant impacts of the Project be reduced based on a certain level of LEED certification.

Response TT-13

As requested, the commentor will be included on the City's distribution list for future noticing related to Project review and public hearings. As requested, noticing of other projects in the area will also be provided. Project plans are available for review at the City of Moreno Valley Planning Department.

City of Moreno Valley

Public Information Meeting for West Ridge Commerce Center Project Draft Environmental Impact Report (DEIR)

PUBLIC COMMENT CARD

Thank you for your interest in the proposed West Ridge Commerce Center project for a warehouse distribution building of 937,260 square feet located on the south side of State Route (SR) 60 and 650 west of Redlands Boulevard on the north side of Eucalyptus Avenue. The applicant for this project is Ridge Rancho Belago, LLC. Please provide your comments below and submit this card during the public information meeting or mail/fax to the numbers listed below by 5:30 p.m. on Monday, December 6, 2010. This will conclude the required 45 day comment period for the project's Draft Environmental Impact Report. Please attach additional pages, if necessary. Your participation and comments are appreciated.

*Name (Required): AMORA JOHNSON Phone: _____

*Address (Required): 13301 McGehee Dr, Moreno Valley 92555 E-Mail: _____

***Note: Your name and contact information will become part of the public record for this project.**

☑ Yes, I would like to be added to your project mailing list to receive information on the EIR notice of availability and future public hearings. AJ-C-1

Please provide your comments below:

Date: 12-6-2010

AJ-C-2

My main concern would be the effect on the wildlife in the area, with more vehicles - especially the diesel trucks' output, - the wildlife's preservation attempts thus far will be undermined by the construction activities and the afterward affect will be detrimental to what good work the preservation has in humans' quality of life, too.

Being able to enjoy these migrating birds and all the other animals that most of us can't see within the cities, anywhere, will give younger generation appreciation of the existence of some rare animals, birds, creatures, bugs and other micro organism. Taking children to enjoy our open spaces, clean, clear air and to watch these rare creatures are much more important than seeing these block buildings that can be seen everywhere else. Whereas the San Jacinto wildlife area can be made into a destination for younger generation.

City of Moreno Valley needs to see the future, not just the $ for the present by ignoring the future of the next generations. -

Thank you for your comments. Please submit this form by 5:30 p.m. on Monday, December 6, 2010 to:

City of Moreno Valley
Community Development Department/Planning Division
ATTN: Jeff Bradshaw
14177 Frederick Street
P.O. Box 88005
Moreno Valley, CA 92552-0805
Jeffreyb@moval.org
Fax: (951) 413-3210

AMORA JOHNSON

Via Public Comment Card

Response AJ-C-1

The commentor requests to receive future information regarding the Project, and as such, has been added to the Project distribution list.

Response AJ-C-2

The commentor expresses concern regarding the effects of the Project on wildlife in the area.

The biological assessment for the Project consisted of the following surveys and analysis, conducted throughout the Project area:

- General biological assessment of Project site and nearby off-site areas that could be affected by utility and circulation system improvements;
- General plant and wildlife surveys;
- Habitat assessment to examine potential for special status plant species;
- Habitat assessment to examine potential for special status wildlife species;
- Habitat assessment for burrowing owl (*Athene cunicularia*), following the recommendations of the California Department of Fish and Game, the burrowing owl survey protocol (CBOC 1993), and the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) Section 5.3.2 and MSHCP burrowing owl survey instructions; and
- Jurisdictional delineation.

As supported by the analysis presented in Section 4.8, "Biological Resources" of the Draft EIR, with application of proposed mitigation measures, the Project's potential impacts to biological resources are less-than-significant.

Additionally, the commentor references the San Jacinto Wildlife Area. It is noted that this area is located approximately 3.5 miles to the southeast of Project site, and will not be affected by the Project.

City of Moreno Valley
Public Information Meeting for West Ridge Commerce Center Project
Draft Environmental Impact Report (DEIR)
PUBLIC COMMENT CARD

Thank you for your interest in the proposed West Ridge Commerce Center project for a warehouse distribution building of 937,260 square feet located on the south side of State Route (SR) 60 and 650 west of Redlands Boulevard on the north side of Eucalyptus Avenue. The applicant for this project is Ridge Rancho Belago, LLC. Please provide your comments below and submit this card during the public information meeting or mail/fax to the numbers listed below by 5:30 p.m. on Monday, December 6, 2010. This will conclude the required 45 day comment period for the project's Draft Environmental Impact Report. Please attach additional pages, if necessary. Your participation and comments are appreciated.

*Name (Required): Richard Johnson Phone: 951-243-0804

*Address (Required): 13301 McGEHEE Dr. MV 92555 E-Mail: _____

***Note: Your name and contact information will become part of the public record for this project.**

☐ Yes, I would like to be added to your project mailing list to receive information on the EIR notice of availability and future public hearings.

Please provide your comments below:

Date: 12/8/2010

I believe the project will overburden the present areas infrastructure, from the streets to the 60 FWY and beyond the 215 as well. The estimates along with future planning seems to set no limit for continued development of the area and it will be a very dangerous roadway system to be driving in this area. Future warehouse building will make it a very difficult place to drive a car. The vision of this area has now been lost. These buildings and the businesses may turn out to be a continued trend for dumbing down the area overall.

RJ-C-1

Thank you for your comments. Please submit this form by 5:30 p.m. on Monday, December 6, 2010 to:

City of Moreno Valley
Community Development Department/Planning Division
ATTN: Jeff Bradshaw
14177 Frederick Street
P.O. Box 88005
Moreno Valley, CA 92552-0805
Jeffreyb@moval.org
Fax: (951) 413-3210

RECEIVED
DEC - 6 2010
CITY OF MORENO VALLEY

RICHARD JOHNSON

Via Public Comment Card

Response RJ-C-1

The commentor's concerns regarding the effects of the Project on regional traffic safety and opinions regarding development trends within the City are forwarded to decision-makers for their consideration.

City of Moreno Valley

Public Information Meeting for West Ridge Commerce Center Project Draft Environmental Impact Report (DEIR)

PUBLIC COMMENT CARD

Thank you for your interest in the proposed West Ridge Commerce Center project for a warehouse distribution building of 937,260 square feet located on the south side of State Route (SR) 60 and 650 west of Redlands Boulevard on the north side of Eucalyptus Avenue. The applicant for this project is Ridge Rancho Belago, LLC. Please provide your comments below and submit this card during the public information meeting or mail/fax to the numbers listed below by 5:30 p.m. on Monday, December 6, 2010. This will conclude the required 45 day comment period for the project's Draft Environmental Impact Report. Please attach additional pages, if necessary. Your participation and comments are appreciated.

*Name (Required): Deanna Reeder Phone: _____

*Address (Required): 17351 Riva Ridge Rd E-Mail: latc98765@aol.com

***Note: Your name and contact information will become part of the public record for this project.**

☒ Yes, I would like to be added to your project mailing list to receive information on the EIR notice of availability and future public hearings. DR-C-1

Please provide your comments below:

Date: 12/2/2010

I want to know the cumulative impacts of this and all proposed projects as well the entire 35 million sq ft of warehouses that are proposed for this area. DR-C-2

This report most include all the impacts of all 35 million sq ft in order, to be of actual value to the community.

Thank you for your comments. Please submit this form by 5:30 p.m. on Monday, December 6, 2010 to:

City of Moreno Valley
Community Development Department/Planning Division
ATTN: Jeff Bradshaw
14177 Frederick Street
P.O. Box 88005
Moreno Valley, CA 92552-0805
Jeffreyb@moval.org
Fax: (951) 413-3210

DEANNA REEDER

Via Public Comment Card

Response DR-C-1

Commentor's contact information is noted and will be added to the Project mailing list to receive any subsequent environmental documentation for this Project and/or notification of any future public hearing(s) to consider the Project and EIR.

Response DR-C-2

The commentor expresses concern regarding the cumulative impacts of the Project and all proposed projects in the vicinity. As identified at Draft EIR Table 5.1-1, and illustrated in Figure 5.1-1, eleven existing and planned development projects were identified within the cumulative scope of the Westridge Commerce Center Project. In addition, the Draft EIR notes that "the cumulative impacts analysis assumes development of the area in a manner consistent with the City of Moreno Valley General Plan, and reflecting the anticipated growth of the region. The analysis of cumulative impacts considers potentially significant impacts that could be considered cumulatively considerable when viewed in the context of known related projects and generalized ambient growth of the City and region." Please also refer to the preceding Response DR1-1 (Draft EIR Page 5-4).

The commentor's statements and opinions regarding the Project are forwarded to the decision-makers for their consideration.

City of Moreno Valley
Public Information Meeting for West Ridge Commerce Center Project
Draft Environmental Impact Report (DEIR)
PUBLIC COMMENT CARD

Thank you for your interest in the proposed West Ridge Commerce Center project for a warehouse distribution building of 937,260 square feet located on the south side of State Route (SR) 60 and 650 west of Redlands Boulevard on the north side of Eucalyptus Avenue. The applicant for this project is Ridge Rancho Belago, LLC. Please provide your comments below and submit this card during the public information meeting or mail/fax to the numbers listed below by 5:30 p.m. on Monday, December 6, 2010. This will conclude the required 45 day comment period for the project's Draft Environmental Impact Report. Please attach additional pages, if necessary. Your participation and comments are appreciated.

*Name (Required): George B. Hague (Sierra Club) Phone: _____

*Address (Required): 26711 Ironwood Ave MV 92555 E-Mail: _____

***Note: Your name and contact information will become part of the public record for this project.**

☒ Yes, I would like to be added to your project mailing list to receive information on the EIR notice of availability and future public hearings. SC-C-1

Please provide your comments below:

Date: 12-2-10

Comments to DEIR

land zoned for
Comment of 250' buffer to ^V housing is not enough SC-C-2
because the trucks will use Air and therefore impact
the homes to be built. USC + UCLA studies show that
250' would not be enough.

Your Traffic study needs to show the amount of SC-C-3
Truck Traffic that will use Redlands Blvd.

RATE
Hwy 60/215 ultimate ^V improvements will allow only SC-C-4
two lanes heading west and the traffic analysis needs
to show this. Right now we have only one lane that
Continues West - the other lane forces you off at Central Ave.

Thank you for your comments. Please submit this form by 5:30 p.m. on Monday, December 6, 2010 to:

City of Moreno Valley
Community Development Department/Planning Division
ATTN: Jeff Bradshaw
14177 Frederick Street
P.O. Box 88005
Moreno Valley, CA 92552-0805
Jeffreyb@moval.org
Fax: (951) 413-3210

SIERRA CLUB

Via Public Comment Card

Response SC-C-1

The commentor requests to receive future information regarding the Project, and as such, has been added to the Project distribution list.

Response SC-C-2

The commentor offers information from unknown, unvetted "USC & UCLA studies" however, the commentor does not provide adequate citation to allow meaningful response to the contention that the Project setback of 250 feet [from the ultimate northerly right-of-way for Fir/future Eucalyptus Avenue] "would not be enough."

This 250 foot setback is designed to provide adequate separation between the Project's highest activity areas (the most intense "worst case" sources of DPM emissions) and adjacent residential properties, so that with incorporation of mitigation, diesel emissions impacts are reduced to levels that are less-than-significant.

Moreover, as discussed in the DEIR:

> Key to compatibility of the Project's proposed Light Industrial zoning with adjacent residentially zoned land uses is design, implementation, and operation of the Project in a manner consistent with the high performance standards required of uses proposed within the City's Light Industrial zone district. Supporting the proposed zone change, and codifying design solutions proposed the Project, a Municipal Code Amendment is also proposed. The proposed Municipal Code Amendment requires a minimum separation of 250 feet between light industrial uses and residentially-zoned properties.

> This 250 foot minimum separation shall be increased as required to fully mitigate any potentially significant health risks and/or potentially significant operational noise impacts at adjacent residential properties. In addition to reducing potential air quality and noise impacts, this required setback would tend to diminish visual impacts of the Project as seen from southerly vantages and while increasing the extent of potential viewsheds (DEIR, Page 5-24).

In order to evaluate the potential effects of Project diesel emissions (of noted concern to the commentor) a Health Risk Assessment (HRA) was prepared to address Diesel Particulate Matter (DPM) generated by diesel trucks and the operation of heavy duty equipment. The Health Risk Assessment was 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 (SCAQMD 2003). The Health Risk Assessment is summarized within the Draft EIR (see Page 4.3-80) and presented in its entirety as Appendix C to the Draft EIR.

As discussed in Section 4.3 of the Draft EIR, the HRA prepared for the Project indicates that the maximally impacted modeled receptor would be exposed to a mitigated inhalation cancer risk of no more than 8.6 in 1 million, which is less than the SCAQMD exposure threshold of 10 in 1 million. The Project HRA considers and evaluates maximum potential exposure to maximum DPM concentrations consistent with established SCAQMD methodologies. The methodology considers not only DPM source emissions (the highest concentrations of which would occur on the Project site) but also considers other exposure/risk determinants including but not limited to: relative distance to and location of receptors, wind patterns, and topography.

With specific regard to DPM emissions air quality impacts generated by Project traffic along area roads, the Project HRA considers potential worst case cancer risk exposures by evaluating pollutant concentrations at the Project site, which include pollutant

emissions generated by all vehicles within the site in combination with emissions generated by on-site stationary sources. It is further noted that the cancer risk exposure scenario is in and of itself a conservative assessment of potential cancer risks arising from DPM exposure. That is, pursuant to the adopted SCAQMD/EPA methodologies, calculated DPM-source cancer risks are predicated on extended 70-year/30-year exposure scenarios. Both the 70-year and 30-year cancer risk assessments considered in the Draft EIR represent estimates of theoretic DPM-source cancer risks, and are based on the assumption that a person is exposed to the emission source 24 hours a day for 365 days a year for the entire length of the assumed exposure period. Individuals are typically not stationary at any given outdoor location, spending a portion of each 24-hour cycle indoors. In addition, individuals and families remaining at a given location for 70 or even 30 years would be considered the exception rather than the norm.

The California OEHHA has indicated that based on EPA studies, the EPA recommends a central tendency estimate of 9 years for residency at a given location, and a high-end estimate of 30 years for residency time. Thus, the methodologies used to determine cancer risk (e.g., the assumption of a 24- hour exposure for a 30 or 70 year period) represent a maximum theoretic cancer risk, and is not intended to account for or represent DPM exposures based on residency and occupancy tendencies. As discussed in the Draft EIR, with application of mitigation, applicable cancer risk thresholds are not exceeded. Draft EIR Table 4.3-17 (Page 4.3-86) summarizes maximum mitigated potential cancer risk exposures.

In comparison, DPM emission concentrations generated by Project vehicles traveling along area roads (such as Fir Avenue noted by the commentor) would be substantively reduced in that they reflect only a portion of transient vehicle traffic/emissions, and these emissions are dispersed through vehicle movements and localized winds.

Response SC-C-3

Estimated opening-year average daily Project-generated truck traffic ingressing/ egressing the Project site via Redlands Boulevard includes:

- 97 two-axle trucks;
- 220 three-axle trucks; and
- 539 four-axle trucks.

Please refer also to detailed trip generation and trip distribution analyses and supporting discussions are presented in the Project TIA (EIR Appendix B, TIA Pages 51-76).

Redlands Boulevard is a designated truck route in the County and a direct route to San Timoteo Canyon Road through Redlands (also designated as a truck route). It is appropriate for Redlands Boulevard to convey Project-related and area truck traffic. To maintain the continuity between affected agencies, the truck route designation for Redlands Boulevard cannot be practically removed. Moreover, there is no feasible means to restrict Redlands Boulevard to local truck trips only, given its direct connection, with no alternative routes, to the previously mention roadways.

Response SC-C-4

In response to the commentor's concerns regarding traffic at the intersection of SR-60 and I-215, the Project's Traffic Impact Analysis (TIA, included as Draft EIR Appendix B) examined performance on the SR-60 as part of Appendix 7.8. The City of Moreno Valley requested that a basic freeway segment analysis be conducted between Box Springs Road/Fair Isle Drive and the I-215 Freeway along the SR-60 Freeway, and included in the TIA. As indicated in the Introduction to this Study (Page 7.8-3), "[i]t should be noted that this analysis was not requested due to potential impacts from the project itself, as these impacts would be nominal, but rather to analyze the current and future projected operations within the segment based on freeway lane geometrics."

The study concludes that "[a]s vehicular traffic increases on the freeway mainline under each of the future analysis scenarios, the densities on each basic freeway segment are anticipated to increase and peak hour level of service operations are anticipated to progressively worsen." It is in part on this basis that the Draft EIR acknowledges significant cumulative traffic impacts affecting freeway segments in the Project area. As noted in the summary of mitigation on Draft EIR Page 1-51, "[u]nder Opening Year Cumulative Conditions and General Plan Buildout Conditions, cumulative LOS impacts of traffic generated by the project in combination with traffic generated by ambient growth and other development projects will result in potentially significant cumulative traffic impacts affecting SR-60 freeway segments within the Study Area." Because freeway mainline improvements such as widening are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency, no mitigation was identified that could be feasibly implemented. As such, the Draft EIR found that the Project would have a significant and unavoidable impact in regard to exceedance of LOS thresholds on certain study area freeway segments.

4.0 Mitigation Monitoring Plan

4.0 MITIGATION MONITORING PLAN

4.1 INTRODUCTION

To ensure that the mitigation measures contained in this EIR are properly implemented, a monitoring program has been developed pursuant to State law. This Mitigation Monitoring Plan (MMP) identifies measures incorporated in the Project which reduce its potential environmental effects; the entities responsible for implementation and monitoring of mitigation measures; and the appropriate timing for implementation of mitigation measures. As described in *CEQA* § 15097, this MMP employs both reporting on, and monitoring of, Project mitigation measures.

The objectives of the MMP are to:

- Assign responsibility for, and ensure proper implementation of, mitigation measures;
- Assign responsibility for, and provide for monitoring and reporting of, compliance with mitigation measures;
- Provide the mechanism to identify areas of noncompliance and need for enforcement action before irreversible environmental damage occurs.

Mitigation monitoring and reporting procedures incorporated in the Project are presented in the following Section 4.2. Specific mitigation measures incorporated in the Project, mitigation timing, and implementation and reporting/monitoring responsibilities are presented at Table 4.2-1.

4.2 MITIGATION MONITORING AND REPORTING

Mitigation Monitoring and Responsibilities

As the Lead Agency, the City of Moreno Valley is responsible for ensuring full compliance with the mitigation measures adopted for the proposed Project. The City will monitor and report on all mitigation activities. Mitigation measures will be implemented at different stages of development throughout the Project area. In this regard, the responsibilities for implementation have been assigned to the Applicant, Contractor, or a combination thereof.

If during the course of Project implementation, any of the mitigation measures identified herein cannot be successfully implemented, the City shall be immediately informed, and the City will then inform any affected responsible agencies. The City, in conjunction with any affected responsible agencies, will then determine if modification to the Project is required and/or whether alternative mitigation is appropriate.

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
Traffic and Circulation				
4.2.1 Redlands Boulevard at SR-60 Westbound Ramps Improvements: • *Install a traffic signal.* *This improvement is currently approved, programmed, and permitted by Caltrans. If not otherwise completed prior to Project opening, the required traffic signal shall be constructed by the Applicant prior to issuance of the first Certificate of Occupancy.*	Prior to issuance of first Certificate of Occupancy	Applicant	City of Moreno Valley Development Department, California Department of Transportation	Before issuance of first Certificate of Occupancy
4.2.2 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements: *Prior to issuance of the first Certificate of Occupancy, the Applicant shall construct the following improvements:* • *Install a traffic signal;* • *Construct a southbound right turn auxiliary lane which extends the full length of the segment of Redlands Boulevard between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue for a southbound lane configuration of one shared left-through lane and one right turn lane; and* • *Construct an eastbound left-turn lane with 300 feet of storage for an eastbound lane configuration of one left-turn lane and one shared through-or-right-turn-lane.*	Prior to issuance of first Certificate of Occupancy	Applicant	City of Moreno Valley Development Department	Before issuance of first Certificate of Occupancy
4.2.3 Moreno Beach Drive at SR-60 Eastbound Ramps Improvements: • *Construct an eastbound right-turn lane and re-stripe the shared left-or-right-turn lane as an exclusive left-turn lane,*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.3 (cont'd) *for an eastbound lane configuration of one left-turn lane and one right-turn lane. These improvements would require the dedication of right-of-way from the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps.*				
4.2.4 Moreno Beach Drive at SR-60 Westbound Ramps Improvements: • *Coordinate traffic signal timing with the signal at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps. These improvements would be funded through Project participation in the TUMF Program. Although the intersection of Moreno Beach Drive at SR-60 Westbound Ramps is anticipated to operate at an acceptable LOS, the coordination of traffic signal timing with the signal at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps would ensure continued satisfactory operations.* *The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Moreno Beach Drive at SR-60 Westbound Ramps.*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.5 Redlands Boulevard at SR-60 Westbound Ramps Improvements: • *Install a traffic signal (a TUMF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.1);* • *Construct a second northbound through lane and a right-turn lane with overlap phasing, for a northbound lane configuration of one left-turn lane, two through lanes and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way on the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection; and* • *Construct a second southbound through lane, for a southbound lane configuration of one left-turn lane and two through lanes. These improvements would require the dedication of right-of-way on the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection.* *The traffic signal noted above will be constructed by the Project pursuant to Mitigation Measure 4.2.1. The remaining improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Redlands Boulevard at SR-60 Westbound Ramps.*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.6 Redlands Boulevard at SR-60 Eastbound Ramps Improvements: • *Construct a second northbound through lane for a northbound lane configuration of one left turn lane and two through lanes. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and restriping of all lanes on the south leg of the intersection;* • *Construct a second southbound through lane, for a southbound lane configuration of one left-turn lane and two through lanes. These improvements would require the dedication of right-of-way on the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and* • *Construct an eastbound right-turn lane and re-stripe the shared left-or-right turn lane as an exclusive left-turn lane, for an eastbound lane configuration of one left-turn lane and one right-turn lane. These improvements would require the dedication of right-of-way on the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts at the intersection of Redlands Boulevard at SR-60 Eastbound Ramps.*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.7 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements: • *Install a traffic signal (a DIF[1] improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.2);* • *Construct a northbound left-turn lane with 200 feet of storage and a second through lane, for a northbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and restriping of all lanes on the south leg of the intersection. Construction of the northbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF Program.* • *Construct a southbound left-turn lane with 250 feet of storage, a second left-turn lane that extends back to the SR-60 Eastbound Ramps, a second through lane, and a right-turn lane with overlap phasing and a pocket length that is the full length of the segment, for a southbound lane configuration of two left-turn lanes, two through lanes, and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

[1] With specific regard to Project payment of Development Impact Fees (DIF), it is recognized that the City, as an interim and temporary measure, has reduced required DIF payments by 50%. Notwithstanding, the reduced DIF payment program is considered to have sufficient funds to construct prioritized improvements necessary to alleviate traffic impacts. That is, over time, the City's DIF structure, allocation of fees, and prioritization of improvements is able to flexibly respond to traffic demands within the City such that funding for all necessary improvements is available in a timely manner. It is further noted that should supplemental funds be required, the City is able to secure these funds through other sources including but not limited to: state and federal grants, redevelopment funds and Measure A gas tax funds.

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.7 (cont'd)				

participation in the TUMF program. Construction of one southbound left-turn lane would be funded through participation in the DIF program. The noted right-turn southbound lane would be constructed by the Project pursuant to Mitigation Measure 4.2.2. Overlap phasing to this right-turn lane will be added when determined appropriate by the City Traffic Engineer, and will be funded through fair share fee participation. Remaining improvements would also be funded through fair share fee contributions.

- *Construct dual eastbound left-turn lanes with 300 feet of storage and a second through lane, for an eastbound lane configuration of two left-turn lanes, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the west leg of the intersection. A single eastbound turn with 300 feet of storage will be constructed by the Project under Opening Year Ambient Conditions pursuant to Mitigation Measure 4.2.2. The remaining improvements would be funded through participation in the DIF Program.*
- *Construct a westbound left-turn lane, a second through lane, and a right-turn lane with overlap phasing, providing 200 feet of storage for both the left-turn and right-turn lanes, for a westbound lane configuration of one left-turn lane, two through lanes, and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the north side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the east*

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.7 (cont'd) *leg of the intersection. Construction of the westbound left and through lanes would be funded through participation in the DIF Program; remaining improvements would be funded through fair share fee participation.*				
4.2.8 Quincy Street at Fir (future Eucalyptus) Avenue Improvements: • *Install a stop-control on the south leg of the intersection;* • *Construct a northbound shared left-or-right-turn lane. Quincy Street should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction;* • *Construct an eastbound shared through-or-right-turn lane. The Fir (future Eucalyptus) Avenue extension should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction; and* • *Construct a westbound left-turn lane and through lane. The Fir (future Eucalyptus) Avenue extension should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction.* *These improvements would be funded through participation in the DIF Program. The Project will pay required DIF, facilitating construction of new intersection improvements at Quincy Street at Fir (future Eucalyptus) Avenue.*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.9 Moreno Beach Drive at SR-60 Eastbound Ramps Improvements: • *Construct the SR-60 eastbound on- and off-ramps, designed as a standard diamond and consistent with the proposed SR-60 Freeway/Moreno Beach Drive interchange design, and install a traffic signal at the new intersection;* • *Construct a third northbound through lane, for a northbound lane configuration of three through lanes and a right-turn lane. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection;* • *Construct the SR-60 eastbound off-ramp with an eastbound lane configuration of one left-turn lane and dual right-turn lanes; and* • *Construct the SR-60 eastbound on-ramp on Moreno Beach Drive with a minimum of two travel lanes.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps.*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit
4.2.10 Moreno Beach Drive at SR-60 Westbound Ramps Improvements: • *Construct a second northbound through lane, for a northbound lane configuration of two through lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection;*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.10 (cont'd) • *In addition to the planned on-ramp for southbound vehicles which is part of the future SR-60/Moreno Beach Drive interchange design, a second southbound through lane and a right-turn lane, for a southbound lane configuration of two through lanes and a right-turn lane. These improvements would require dedication on the west side of Moreno Beach Drive and re-striping of all lanes on the north leg of the intersection;* • *Construct the SR-60 westbound on-ramp for vehicles traveling southbound on Moreno Beach Drive with a minimum of one travel lane; and* • *Construct a second westbound left-turn lane, for a westbound lane configuration of two left-turn lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the north side of the SR-60 Westbound Ramps and re-striping of all lanes on the east leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at SR-60 Westbound Ramps.*				
4.2.11 Moreno Beach Drive at Fir (future Eucalyptus) Avenue Improvements: • *Construct dual northbound left-turn lanes and re-stripe the northbound right-turn lane as a shared through-or-right turn lane for a northbound lane configuration of two left-turn lanes, two through lanes and a shared through-or-right turn lane. These improvements would require the dedication of*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.11 (cont'd) *right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection. Restriping of the northbound right-turn lane as a shared through-or-right turn lane would be funded through participation in the DIF Program. Remaining improvements would be funded through fair share fee participation;* • *Construct a southbound left-turn lane and a right-turn lane with overlap phasing, for a southbound lane configuration of two left-turn lanes, three through lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the west side of Moreno Beach Drive and re-striping of all lanes on the north leg of the intersection, and would be funded through fair share fee participation;* • *Construct the new eastbound leg of this intersection with dual left-turn lanes, a through lane, and a shared through-or-right-turn lane. Construction of one eastbound left-turn lane, the eastbound through lane, and the eastbound shared through-or-right-turn lane would be funded through participation in the DIF Program. Remaining improvements would be funded through fair share fee participation; and* • *Construct a westbound through lane and implement overlap phasing on the right-turn movement, for a westbound lane configuration of one left-turn lane, two through lanes, and a right-turn lane with overlap phasing. This improvement would be funded through fair share fee participation.* *The Project will pay required DIF and fair share fees, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at Fir (future Eucalyptus) Avenue.*				

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.12 Quincy Street at Fir (future Eucalyptus) Avenue Improvements: • *Install a stop-control on the south leg of the intersection;* • *Construct a northbound shared left-or-right-turn lane;* • *Construct the eastbound approach of the Fir (future Eucalyptus) Avenue extension with a through lane and a shared through-or-right-turn lane; and* • *Construct the westbound approach of the Fir (future Eucalyptus) Avenue extension with a left-turn lane, a through lane, and a shared through-or-right-turn lane.* *These improvements would be funded through participation in the DIF Program. The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Quincy Street at Fir (future Eucalyptus) Avenue.*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit
4.2.13 Redlands Boulevard at SR-60 Westbound Ramps Improvements: • *Install a traffic signal (a TUMF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.1);* • *Construct a northbound through lane and a right-turn lane with overlap phasing, for a northbound lane configuration of one left-turn lane, two through lanes and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection;* • *Construct a southbound left-turn lane and a through lane, for a southbound lane configuration of two left-turn lanes and a through lane, and a shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the west side of*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.13 (cont'd) *Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and* • *Construct a westbound left-turn lane and a right-turn lane, for a westbound lane configuration of one left-turn lane, one shared left-through lane and a right-turn lane. These improvements would require the dedication of right-of-way from the north side of the SR-60 Westbound Ramps and re-striping of all lanes on the east leg of the intersection.* *The traffic signal noted above will be constructed by the Project pursuant to Mitigation Measure 4.2.1. The remaining improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at Redlands Boulevard at SR-60 Westbound Ramps.*				
4.2.14 Redlands Boulevard at SR-60 Eastbound Ramps Improvements: • *Construct two northbound through lanes, for a northbound lane configuration of one left-turn lane and three through lanes, with the pocket length for the northbound left-turn lane at the full length of the segment. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and restriping of all lanes on the south leg of the intersection;* • *Construct two southbound through lanes, for a southbound lane configuration of two through lanes and a shared through-or-right-turn lane. These improvements would*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.14 (cont'd) *require the dedication of right-of-way from the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and* • *Re-stripe the shared eastbound left-or-right-turn lane as an exclusive left-turn lane, for an eastbound lane configuration of two left-turn lanes and one right-turn lane. These improvements would require the dedication of right-of-way on the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at SR-60 Eastbound Ramps.*				
4.2.15 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements: • *Install a traffic signal (a DIF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.2);* • *Construct a left-turn lane with 200 feet of storage and a second through lane for a northbound lane configuration of one left-turn lane, one through lane and one shared through right-turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard. Restriping of all lanes on the south leg of the intersection, and construction of the northbound through lane would be funded through participation in the TUMF Program. Remaining improvements would be funded through participation in the DIF Program;*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.15 (cont'd) • *Construct a southbound left turn lane with 250 feet of storage, a second left-turn lane that extends back to the SR-60 Eastbound ramps, a second through lane and a right turn lane with overlap phasing for a southbound lane configuration of two left turn lanes, two through lanes and one right turn lane with overlap phasing, with a right turn pocket length that extends the full length of the segment. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program. Construction of one southbound left-turn lane would be funded through participation in the DIF program. The noted right-turn southbound lane would be constructed by the Project pursuant to Mitigation Measure 4.2.2. Overlap phasing for this right-turn lane will be added when determined appropriate by the City Traffic Engineer, and will be funded through fair share fee participation. Remaining improvements would also be funded through fair share fees;* • *Construct dual eastbound left-turn lanes with 300 feet of storage and a second through lane, for an eastbound lane configuration of two left-turn lanes, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the west leg of the intersection. A single eastbound turn lane with 300 feet of storage will be constructed by the Project under Opening Year Ambient Conditions pursuant to Mitigation*				

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.15 (cont'd) *Measure 4.2.2. The remaining improvements would be funded through participation in the DIF Program; and* • *Construct a westbound left-turn lane, one through lane, and a right-turn lane with overlap phasing, for a westbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane with overlap phasing [these improvements would require the dedication of right-of-way from the north side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the east leg of the intersection]. Construction of the westbound left and through lanes would be funded through participation in the DIF Program; remaining improvements would be funded through participation in the fair share fee assessments.* *The Project will pay required TUMF, DIF and fair share fees, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Fir (future Eucalyptus) Avenue.*				
4.2.16 Redlands Boulevard at Eucalyptus (future Encilia) Avenue Improvements: • *Install a traffic signal. This improvement would be funded through participation in the DIF Program;* • *Construct a northbound left-turn lane and a shared through-or-right-turn lane, for a northbound lane configuration of one left-turn lane, one through lane and one shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection. Construction of the northbound left-turn lane*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.16 (cont'd) *would be funded through participation in the DIF Program; remaining improvements would be funded through participation in the TUMF Program;* • *Construct a southbound left-turn lane, a through lane, and a right-turn lane, for a southbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF program;* • *Re-stripe the eastbound right-turn lane as a through lane and construct an additional shared through-or-right-turn lane, for an eastbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Eucalyptus (future Encilia) Avenue and the re-striping of all lanes on the west leg of the intersection, and would be funded through participation in the DIF Program; and* • *Construct the westbound approach with one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the north side of Eucalyptus (future Encilia) Avenue, and the re-striping of all lanes on the east leg of the intersection, and would be funded through participation in the DIF Program.*				

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.16 (cont'd) *The Project will pay required TUMF and DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Eucalyptus (future Encilia) Avenue.*				
4.2.17 Redlands Boulevard at Cottonwood Avenue Improvements: • *Construct a northbound through lane, for a northbound lane configuration of one left-turn lane, one through lane and one shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and the re-striping of all lanes on the south leg of the intersection, and would be funded through participation in the TUMF Program;* • *Construct a southbound left-turn lane and a through lane, for a southbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and the restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF Program;* • *Re-stripe the eastbound right-turn lane as a through lane, and construct an additional through-or-right-turn lane, for an eastbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.17 (cont'd) *way from the south side of Cottonwood Avenue, and the re-striping of all lanes on the west leg of the intersection, and would be funded through participation in the DIF Program; and* • *Construct the westbound approach with one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the north side of Cottonwood Avenue, and the re-striping of all lanes on the east leg of the intersection, and would be funded through participation in the DIF Program.* *The Project will pay required TUMF and DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Cottonwood Avenue.*				
4.2.18 Quincy Street south of Fir (future Eucalyptus) Avenue Improvements: • *Construct Quincy Street south of Eucalyptus Avenue as a two-lane undivided roadway with a minimum of one travel lane in each direction.* *The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts at the segment of Quincy Street south of Fir (future Eucalyptus) Avenue.*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit
4.2.19 Fir (future Eucalyptus) Avenue west of Quincy Street to the westerly Project boundary and Fir (future Eucalyptus) east of Redlands Boulevard Improvements:	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.2.19 (cont'd) • *Construct the Fir (future Eucalyptus) Avenue extension from the current terminus near the Auto Mall to Quincy Street, and connecting to Fir (future Eucalyptus) Avenue at the westerly project boundary. Continue Fir (future Eucalyptus) Avenue east of Redlands Boulevard. Fir (future Eucalyptus) Avenue is to be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction.* *The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts affecting the segment of Fir (future Eucalyptus) Avenue between the Auto Mall and the westerly Project Boundary, and Fir (future Eucalyptus) Avenue east of Redlands Boulevard.*			Department	
Air Quality *To facilitate monitoring and compliance, applicable SCAQMD and CARB regulatory requirements are restated as Mitigation Measures 4.3.1 through 4.3.3 below, and shall be incorporated in all Project plans, specifications and contract documents.*				
4.3.1 Consistent with URBEMIS modeling inputs and to effect implementation of SCAQMD Rule 403, the following measures shall be incorporated : • *All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.* • *The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least*	Ongoing throughout construction	Contractor	City Building Official, SCAQMD	Ongoing throughout construction

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.3.1 (cont'd) *three times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.* • *The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less to reduce PM10 and PM2.5 fugitive dust haul road emissions.* • *Site disturbance during mass grading and fine grading activities shall not exceed 13.66 acres per day.* • *Ground cover shall be replaced, and/or non-toxic soil stabilizers shall be applied (according to manufacturers' specifications) to any inactive construction areas (previously graded areas inactive for ten days or more).* • *In support of Project plan specifications and contract document language; and as means of controlling on-site construction vehicle speeds, for the duration of Project construction activities, speed limit signs (15 mph maximum) shall be posted at entry points to the Project site, and along any unpaved roads providing access to or within the Project site and/or any unpaved designated on-site travel routes.*				
4.3.2 The contractor shall minimize pollutant emissions by maintaining equipment engines in good condition and in proper tune according to manufacturer's specifications and during smog season (May through October) by not allowing construction equipment to be left idling for more than five minutes (per California law).	Ongoing throughout construction	Contractor	City of Moreno Valley Building Official, SCAQMD	Ongoing throughout construction

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.3.3 The contractor shall ensure use of low-sulfur diesel fuel in construction equipment as required by the California Air Resources Board (CARB) (diesel fuel with sulfur content of 15 ppm by weight or less). *Additional mitigation required of the Project is identified below, and shall be shall be incorporated in all Project plans, specifications and contract documents.*	Ongoing throughout construction	Contractor	City of Moreno Valley Building Official, SCAQMD	Ongoing throughout construction
4.3.4 Contractor(s) shall ensure that all off-road heavy-duty construction equipment utilized during construction activity shall be CARB Tier 2 Certified or better.	Ongoing throughout construction	Contractor	City of Moreno Valley Building Official, SCAQMD	Ongoing throughout construction
4.3.5 In order to reduce localized Project impacts to sensitive receptors in the Project vicinity during construction, construction equipment staging areas shall be located at least 300 feet away from sensitive receptors.	Ongoing throughout construction	Contractor	City of Moreno Valley Building Official, SCAQMD	Ongoing throughout construction
4.3.6 During Project construction, existing electrical power sources (e.g., power poles) shall be utilized to power electric construction tools including saws, drills and compressors, to minimize the need for diesel or gasoline powered electric generators.	Ongoing throughout construction	Contractor	City of Moreno Valley Building Official, SCAQMD	Ongoing throughout construction
4.3.7 The Applicant shall use "Zero-Volatile Organic Compounds" paints, coatings, and solvents with a VOC content lower than required under Rule 1113 (not to exceed 150 grams/liter; 1.25 pounds/gallon). High Pressure Low Volume	Ongoing throughout construction	Contractor	City of Moreno Valley Building Official, SCAQMD	Ongoing throughout construction

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.3.7 (cont'd) *(HPLV) applications of paints, coatings, and solvents shall be consistent with South Coast Air Quality Management District Rule 1113. Alternatively, the Applicant shall use materials that do not require painting or are pre-painted.*				
4.3.8 Grading plans, construction specifications and bid documents shall also include the following notations: • *Off-road construction equipment shall utilize alternative fuels e.g., biodiesel fuel (a minimum of B20), natural gas (CNG), liquefied natural gas (LNG), propane, except for equipment where use of such fuels would void the equipment warranty;* • *Gravel pads shall be provided at all access points to prevent tracking of mud onto public roads;* • *Install and maintain trackout control devices at all access points where paved and unpaved access or travel routes intersect;* • *The contractor or builder shall designate a person or person(s) to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite;* • *The contractor or builder shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The contact person shall take corrective action within 24 hours;* • *High pressure injectors shall be provided on diesel construction equipment where feasible;*	Ongoing throughout construction	Contractor	City of Moreno Valley Building Official, SCAQMD	Ongoing throughout construction

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.3.8 (cont'd) • *Engine size of construction equipment shall be limited to the minimum practical size;* • *Substitute gasoline-powered for diesel powered construction equipment where feasible;* • *Use electric construction equipment where feasible;* • *Install catalytic converters on gasoline-powered equipment where feasible;* • *Ride-sharing program for the construction crew shall be encouraged and shall be supported by contractor(s) via incentives or other inducement;* • *Documentation shall be provided to the City of Moreno Valley indicating that construction workers have been encouraged to carpool or otherwise reduce VMT to the greatest extent practical, including providing information on available park and ride programs;* • *Lunch services shall be provided onsite during construction to minimize the need for offsite vehicle trips;* • *All forklifts used during construction and in subsequent operation of the Project shall be electric or natural gas powered.*				
4.3.9 Throughout Project construction, a construction relations officer/community liaison, appointed by the Applicant, shall be retained on-site. In coordination and cooperation with the City, the construction relations officer/community liaison shall respond to any concerns related to PM10 (fugitive dust) generation or other construction-related air quality issues.	Throughout Project construction	Applicant	City of Moreno Valley Development Department	Throughout Project construction

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.3.10 All Project entrances shall be posted with signs which state: • *Truck drivers shall turn off engines when not in use;* • *Diesel delivery trucks servicing the Project shall not idle for more than three (3) minutes; and* • *Telephone numbers of the building facilities manager and CARB, to report violations.* *These measures shall be enforced by the on-site facilities manager (or equivalent).* *Although potential Project-related Global Climate Change (GCC) impacts would be less-than-significant, the following Mitigation Measures 4.3.11 through 4.3.14 are provided to reduce Project related operational source air pollutants and greenhouse gas emissions to the extent feasible, and to promote sustainability through conservation of energy and other natural resources.*	Prior to issuance of first Certificate of Occupancy	Contractor	City of Moreno Valley Development Department	Before issuance of first Certificate of Occupancy
4.3.11 Buildings shall surpass incumbent California Title 24 Energy Efficiency performance standards by a minimum of 20 percent for water heating and space heating and cooling. Verification of increased energy efficiencies shall be documented in Title 24 Compliance Reports provided by the Applicant, and reviewed and approved by the City prior to the issuance of the first building permit. Any combination of the following design features may be used to fulfill this mitigation measure provided that the total increase in efficiency meets or exceeds 20 percent. • *Increase in insulation such that heat transfer and thermal bridging is minimized;* • *Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption;*	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.3.11 (cont'd) • *Incorporate dual-paned or other energy efficient windows;* • *Incorporate energy efficient space heating and cooling equipment;* • *Interior and exterior energy efficient lighting which exceeds the California Title 24 Energy Efficiency performance standards shall be installed, as deemed acceptable by the City of Moreno Valley. Automatic devices to turn off lights when they are not needed shall be implemented;* • *To the extent that they are compatible with landscaping guidelines established by the City of Moreno Valley, shade producing trees, particularly those that shade buildings and paved surfaces such as streets and parking lots and buildings shall be planted at the Project site.* • *Paint and surface color palette for the Project shall emphasize light and off-white colors which will reflect heat away from the buildings.* • *All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design.*				
4.3.12 The Project shall be designed to facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills by providing easily accessible areas that are dedicated to the collection and storage of recyclable materials including: paper, cardboard, glass, plastics, and metals. Locations of proposed recyclable materials collection areas are subject to review and approval by the City. Prior to Final Site Plan approval, locations of proposed recyclable materials collection areas shall be delineated on the Project Site Plan.	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.3.13 GHG emissions reductions measures shall also include the following: • *The Project shall provide secure, weather-protected on-site bicycle storage/parking consistent with City of Moreno Valley requirements;* • *The Project shall provide pedestrian and bicycle connections to surrounding areas, consistent with provisions of the City of Moreno Valley General Plan. Location and configurations of proposed pedestrian and bicycle connections are subject to review and approval by the City. Prior to Final Site Plan approval, pedestrian and bicycle connections shall be indicated on the Project Site Plan;* • *The Project shall provide onsite showers (one for males and one for females). Lockers for employees shall be provided.* • *Any traffic signals installed as part of the Project will utilize light emitting diodes (LEDs);* • *The Project will establish a Transportation Management Association (TMA). The TMA will coordinate with other TMAs within the City to encourage and coordinate carpooling among building occupants. The TMA will advertise its services to building occupants, and offer transit and/or other incentives to reduce GHG emissions. Additionally, a shuttle will be provided during any one hour period where more than 20 employees or construction workers utilize public transit. A plan will be submitted by the TMA to the City within two months of Project completion that outlines the measures implemented by the TMA, as well as contact information; The Project shall*	Prior to issuance of first Certificate of Occupancy	Contractor	City of Moreno Valley Development Department	Before issuance of first Certificate of Occupancy

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.3.13 (cont'd)				

provide preferential parking for carpools and vanpool. Locations and configurations of proposed preferential parking for carpools and vanpools are subject to review and approval by the City. Prior to Final Site Plan approval, preferential parking for carpools and vanpools shall be delineated on the Project Site Plan;

- *The Project shall provide at least two electric vehicle charging stations. Locations and configurations of proposed charging stations are subject to review and approval by the City. Prior to issuance of the first building permit, stub outs for charging stations shall be indicated on the Project building plans.*
- *Lease/purchase documents shall identify that tenants are encouraged to provide incentives to realize the following:*
  - *Implementation of compressed workweek schedules;*
  - *SmartWay partnership;*
  - *Achievement of at least 20% per year (as a percentage of previous percentage, not total trips) increase in percentage of consolidated trips carried by SmartWay carriers until it reaches a minimum of 90% of all long haul trips carried by SmartWay 1.0 or greater carriers.*
  - *Achievement of at least 15% per year (as a percentage of previous percentage, not total trips) increase in percentage of long haul trips carried by SmartWay carriers until it reaches a minimum of 85% of all consolidator trips carried by SmartWay 1.0 or greater carriers.*
  - *Use of fleet vehicles conforming to 2010 air quality standards or better.*

Table 4.2-1
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Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.3.13 (cont'd) o *Installation of catalytic converters on gasoline-powered equipment.* o *Inclusion of electric powered and/or compressed natural gas fueled trucks and/or vehicles in fleets;* o *Establishment and use of carpool/vanpool programs, complemented by parking fees for single-occupancy vehicles;* o *Provision of preferential parking for EV and CNG vehicles;* o *Use of electrical equipment (instead of gasoline-powered equipment) for landscape maintenance;* o *Use of electric (instead of diesel or gasoline-powered) yard trucks;* o *Use of SmartWay 1.25 rated trucks.*				
4.4 Noise				
4.4.1 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that during all Project site construction, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. And further that the construction contractor shall place all stationary construction equipment so that emitted noise is directed away from off-site receptors nearest the Project site. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.	Prior to issuance of first grading or building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading or building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.4.2 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that the construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and off-site receptors nearest the Project site during all Project construction. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.	Prior to issuance of first grading or building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading or building permit
4.4.3 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that construction activities, including haul truck operations, shall be limited to the hours between 7:00 a.m. and 8:00 p.m. Monday through Friday. No Project-related construction activities shall occur on weekends or Federal holidays. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.	Prior to issuance of first grading or building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading or building permit
4.4.4 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that for the duration of grading and site preparation activities, temporary construction noise curtains or similar line-of-sight noise reduction measures shall be installed along the Project's southerly boundary. Noise curtains shall be installed so as to provide maximum reduction for noise sensitive uses (at present a single residence located southerly of the Project site) and shown on the grading plans prepared for the Project.	Prior to issuance of first grading or building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading or building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.5 Water Supply				
To further minimize the Project's overall water use, ensure on-going availability and reliability of water supplies within the EMWD service area, and provide for timely, monitored compliance with requirements stipulated in the Project WSA, the following EMWD Conditions of Approval are incorporated as EIR Mitigation Measures. Prior to building permit issuance, the developer shall provide a will-serve letter from EMWD demonstrating compliance with the following Conditions of Approval.				
4.5.1 Prior to the issuance of building permits, the Project Applicant shall contribute funding toward the acquisition of new water supplies, new treatment or recycled water facilities, and water efficiency measures for existing customers to develop new water supplies. The extent of additional funding shall be determined by the EMWD and may take the form of a new component of connection fees or a separate charge.	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit
4.5.2 The Applicant shall install water efficient devices and landscaping according to the requirements of EMWD's water use efficiency ordinance(s) effective at the time of Project construction.	Prior to issuance of first Certificate of Occupancy	Applicant	City of Moreno Valley Development Department	Before issuance of first Certificate of Occupancy
4.5.3 The Applicant shall meet with EMWD staff at the earliest feasible date to develop a Plan of Service (POS) for the Project. The POS shall detail water, wastewater and recycled water facilities requirements to serve the Project, to be constructed by the Applicant.	Prior to issuance of first grading or building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading or building permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.5.4 Until the Project begins construction, the Project Water Supply Assessment shall be reviewed for its continued accuracy and adequacy every three (3) years, commencing on the WSA approval date of June 4, 2008. The Project Applicant shall maintain communication with EMWD on the status of the Project, and the lead agency shall request the referenced three-year periodic review and update of the WSA. If neither the Project applicant nor the lead agency contacts EMWD within three (3) years of approval of this WSA, it shall be assumed that the Project no longer requires the estimated water demand as calculated in the WSA. The demand for the Project will not be considered in assessments for future projects, and the assessment provided within the Project WSA shall be considered invalid.				
Cultural Resources				
4.7.1 A professional cultural resources monitor (Project Paleontological Monitor) shall conduct full-time monitoring throughout site excavation and grading activities. The monitor shall be equipped to salvage and/or record the location of historic and/or archaeological resources as they may be unearthed to avoid construction delays, consistent with the requirements of California Public Resources Code Section 21083.2. The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens or finds and to allow the preparation of recovered resources to a point of identification. One monitor for both archaeological and paleontological resources is sufficient if the monitor is qualified in both disciplines to the satisfaction of the City of Moreno Valley.	Ongoing throughout site excavation and grading activities	Applicant	City of Moreno Valley Development Department	Ongoing throughout site excavation and grading activities

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.7.2 Should historic or prehistoric resources of potential significance be identified, a qualified archaeologist shall be contacted to assess the find(s) and make recommendations in regard to further monitoring. Resources shall be left in an undisturbed state where feasible. Where preservation in place is infeasible, all recovered resources shall then be curated in an established, accredited museum repository with permanent retrievable archaeological/historic resource storage. A report of findings shall also be prepared by a qualified archaeologist, and shall include an itemized inventory of any specimens recovered. The report and confirmation of curation of any recovered resources from an accredited museum repository shall signify completion of the program to mitigate impacts to archaeological/ historic resources. If disturbed resources are required to be collected and preserved, the applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2.	Prior to issuance of first Certificate of Occupancy	Applicant	City of Moreno Valley Development Department	Before issuance of first Certificate of Occupancy
4.7.3 Prior to the issuance of a grading permit, a City-approved Project Paleontologist shall be retained to initiate and supervise paleontological mitigation-monitoring in all areas of the Project site, subject to the following certain constraints: • *Once excavations reach ten (10) feet in depth, monitoring of excavation in areas identified as likely to contain paleontological resources by a qualified paleontological monitor or his/her representative must take place;* • *A paleontological mitigation-monitoring plan shall be developed before grading begins;* • *Paleontological monitors shall be equipped to salvage and/or record the location of fossils as they are unearthed to avoid*	Prior to issuance of first grading permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading permit

Table 4.2-1
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Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.7.3 (cont'd) *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; and* • *Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.*				
4.8 Biological Resources				
4.8.1 Prior to the issuance of a grading permit, a "no touch" area shall be staked along the westerly limit of Project development as defined by the alignment of the scour wall proposed along the Quincy Channel. Importantly, the westerly limits of development shall be established so as to preclude potential permanent impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Prior to the issuance of a grading permit, a City-approved Project biologist shall be retained to initiate and supervise monitoring of construction activities to ensure protection and preservation of adjacent Channel areas.	Prior to issuance of first grading permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading permit
4.8.2 Prior to issuance of a grading permit, the proposed scour wall to be located between the developed Project site and the Quincy Channel shall be shown on the grading plans. Alignment	Prior to issuance of first grading permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading permit

Table 4.2-1
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Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.8.2 (cont'd) *of the scour wall shall be field-determined and physically delineated by the Project biologist in consultation with the City. Importantly, the scour wall alignment shall be established so as to preclude potential impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Ongoing monitoring of construction activities shall be maintained throughout implementation of the scour wall to ensure protection and preservation of adjacent Channel areas.*				
4.8.3 Prior to issuance of a building permit, landscape and irrigation plans shall be approved which demonstrate that no invasive, non-native plants will be planted or seeded within 150 feet of the avoided riparian habitat along the Quincy Channel.	Prior to issuance of first building permit	Applicant	City of Moreno Valley Development Department	Before issuance of first building permit
4.8.4 Prior to the issuance of <u>any</u> grading permits and prior to any physical disturbance of any jurisdictional areas, 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 the Community Development Department - Planning Division and the Public Works Department - Land Development Division.	Prior to issuance of first grading permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading permit
4.8.5 Prior to issuance of a grading permit, the Applicant shall develop and implement a Habitat Mitigation and Monitoring Plan (HMMP) to restore impacted riparian (mulefat) habitat. Prior to implementation, the HMMP shall be reviewed and approved by the	Prior to issuance of first grading permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.8.5 (cont'd) *CDFG. If in its final design, the CDFG-approved HMMP involves use or restoration of USACE or RWQCB jurisdictional areas, USACE and/or RWQCB approval shall also be obtained. The HMMP shall, at a minimum, meet the following requirements:* • *A habitat replacement and/or enhancement ratio of at least 1:1 for temporary impact;* • *A success criterion of at least 80 percent cover of native riparian vegetation for replaced habitat; and* • *Additional requirements, including a 3-year establishment period for the replacement habitat, regular trash removal, native plant re-vegetation for areas temporarily disturbed by construction and regular maintenance and monitoring activities to ensure the success of the mitigation plan; and* • *Prior to the issuance of a grading permit, as part of the Project HMMP, appropriate maintenance and monitoring protocols will be developed in concert with CDFG based on final Project designs, and the ultimate scope, location, and type of mitigation reflected in the HMMP as approved by CDFG.*				
4.8.6 If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season (February 15 – July 31), all suitable habitat will be thoroughly surveyed for the presence of nesting birds within 72 hours prior to clearing. All surveys shall be performed by a qualified Project biologist to be	Prior to issuance of first grading permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading permit

Table 4.2-1
Westridge Commerce Center Project
Mitigation Monitoring Plan

Mitigation Measures	Mitigation Timing	Implementation Entity	Monitoring/ Reporting Entity	Monitoring/Reporting Frequency
4.8.6 (cont'd) *retained by the Applicant and vetted by the City. The survey results shall be submitted by the Project Applicant to the Planning Division. If any active nests are detected, the nest(s) shall be flagged in the field and mapped on the construction plans along with a minimum 50-foot buffer and up to 300 feet for raptors, with the final buffer distance to be determined by the Project biologist. The buffer area shall be avoided until the nesting cycle is complete or it is determined that the nest has failed. In addition, the Project biologist will be present on the site to monitor vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.*				
4.8.7 Within 30 days of site clearing activities, a pre-construction burrowing owl survey shall be conducted to document the presence/absence of any occupied owl burrows. Any owls present shall be passively or actively relocated following CDFG approved protocols, and with CDFG permission, prior to commencement of clearing. The survey shall be submitted to the Planning Division prior to issuance of a grading permit.	Prior to issuance of first grading permit	Applicant	City of Moreno Valley Development Department	Before issuance of first grading permit

APPENDICES

Please refer to accompanying CD-ROM

Westridge Commerce Center
Draft Environmental Impact Report

Prepared for:
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92552
City Case # P08-133

Prepared by:

applied planning inc

October 2010

ATTACHMENT 10

DRAFT ENVIRONMENTAL IMPACT REPORT

for the

Westridge Commerce Center Project

State Clearinghouse Number:
2009101008

Prepared for:

The City of Moreno Valley
14177 Frederick Street
Moreno Valley, California 92552
City Case # P08-133

Prepared by:

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October 2010

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1.0 SUMMARY

1.0 SUMMARY

1.1 INTRODUCTION

Pursuant to the requirements of the California Environmental Quality Act (CEQA) and the *Guidelines for Implementation of the California Environmental Quality Act* (*CEQA Guidelines*), this Draft Environmental Impact Report (DEIR or EIR) has been prepared to analyze and disclose the potential environmental effects of development and operation of the proposed Westridge Commerce Center (the Project). In summary, the Project will provide for the establishment of approximately 937,260 square feet of new light industrial warehouse/distribution uses within an approximately 55-acre site located in the easterly portion of the City of Moreno Valley.

This Section of the EIR provides a brief description of the Project and its objectives, and summarizes potential environmental impacts of the proposal. The "Impacts and Mitigation Summary Table," presented at the conclusion of this Section, identifies these impacts and lists the mitigation measures recommended to eliminate or reduce the effects of potentially significant impacts. Alternatives to the Project which could reduce the extent or severity of potential environmental impacts are also briefly described within this Section. For a full description of the Project, its impacts, recommended mitigation measures, and considered Alternatives, please refer to EIR Sections 3.0, 4.0, and 5.0, respectively.

1.2 PROJECT SITE LOCATION AND CHARACTERISTICS

The Project site is situated within western Riverside County, within the easterly portion of the City of Moreno Valley. More specifically, the Project site is located southwesterly of the State Route 60/Redlands Boulevard interchange. The Project's regional and local

settings are presented in EIR Section 3.0, "Project Description," Figures 3.2-1 and 3.2-2, respectively.

The Project site is bounded to the north by State Route 60 (SR-60), to the west by the Quincy Channel, to the south by Fir Avenue (future Eucalyptus Avenue), and by a vacant parcel to the east. The Project's easterly boundary parallels Redlands Boulevard, which is located approximately 700 feet to the east. Regional access to the Project site is provided by the Redlands Boulevard/SR-60 interchange. The site is essentially level, and is currently undeveloped. Current and historic agricultural uses of the property have resulted in a heavily disturbed site, largely devoid of mature trees and native habitat, and exhibiting minimal natural vegetation. With the exception of the Quincy Channel, which is located beyond the scope of development at the Project's western edge, there are no notable or distinctive natural or topographic site features, nor does the Project site exhibit other visually unique or significant qualities.

1.3 PROJECT SUMMARY

The subject of this EIR is the proposed development of the Westridge Commerce Center, which has been initiated by the Project proponent, Ridge Property Trust. Together with supporting improvements, the Project will provide for approximately 937,260 square feet of new light industrial warehouse/distribution uses. Please refer also to the expanded identification and characterization of Project facilities presented in EIR Section 3.0, "Project Description."

1.3.1 Discretionary Actions and Permits

As also noted at EIR Section 3.0, "Project Description," necessary discretionary actions, permits, and consultations allowing for implementation and operation of the Project will include, but are not limited to:

1.3.1.1 Lead Agency Discretionary Actions and Permits

- **Certification of the EIR.** The proposed development is a Project under CEQA, and may result in significant environmental impacts. Lead Agency certification of the Project EIR is required

- **A zone change from Business Park to Light Industrial.** The proposed zone change will allow for construction and operation of the Project's distribution warehouse uses as configured;

- **Amendment to Municipal Code Section 9.05.020 B [Light Industrial Districts],** to provide objective standards for the development of Light Industrial uses adjacent to residentially-zoned property to ensure the protection of the health, safety and welfare of future residents;

- **Parcel Map Approval** to consolidate and reconfigure existing parcels defining the Project site, and to provide necessary easements and dedications;

- **Development Plan Review** as required under the City of Moreno Valley Municipal Code Section 9.02.030 [Development Review Process], et al.

- **Construction, grading, and encroachment permits** allowing implementation of the Project facilities within City of Moreno Valley jurisdictional areas;

- **Vacation and/or dedication of public rights-of-way and easements** as elements of the proposed parcel map, or independent of the map. Rights-of-way and easements will provide public access, and ensure appropriate alignment of and access to infrastructure and utilities;

- **Approval of the Final Water Quality Management Plan (WQMP).** The Draft EIR presents the Project's proposed preliminary WQMP, indicating design measures and programs acting treat stormwater runoff, anfd reduce potential

stormwater pollutant discharges. The Final WQMP will reflect specific measures and programs approved by the City.

1.3.1.2 Responsible and Trustee Agency Discretionary Actions, Permits, and Consultation

- **Permitting through the California Department of Fish and Game (CDFG**), to include:

  - Lake and Streambed Alteration Agreement (LSA) addressing potential CDFG jurisdictional area impacts resulting from the Project; and

  - Consultation regarding the possible relocation of resident burrowing owls (if burrowing owls are determined to be present on the subject site during required pre-construction surveys);

- **CWA Section 404 and Army Corps of Engineers (ACOE) permitting** may also be required should the Project riparian habitat mitigation plan involve or require use of off-site federal jurisdictional areas.

- **Permitting required by/through CWA Section 401 and the Santa Ana Regional Water Quality Control Board (SARWQCB)** pursuant to requirements of the National Pollutant Discharge Elimination System (NPDES) Permit;

- **Permitting required by/through the South Coast Air Quality Management District (SCAQMD)** for certain equipment to be temporarily employed within the Project during construction, and/or permanently installed and used over the life of the Project; and

- **Permitting by/through the California Department of Transportation (Caltrans**) for improvements within Caltrans rights-of-way.

1.4 INITIAL STUDY AND NOTICE OF PREPARATION (NOP)

The City of Moreno Valley, through the Initial Study process, has determined that the Project may cause or result in potentially significant environmental impacts, and warrants further analysis and public review through the preparation of an EIR.

The Initial Study and associated EIR Notice of Preparation (NOP), dated September 2009, have been provided to the California Office of Planning and Research, State Clearinghouse (SCH), and circulated for public review and comment. The State Clearinghouse established the comment period for the NOP/Initial Study as October 1 through October 30, 2009. The assigned State Clearinghouse reference for the Project is SCH No. 2009101008. The Initial Study, NOP, and NOP responses are presented in EIR Appendix A.

The Initial Study summarizes and substantiates the Lead Agency's preliminary assessment of the Project's potential environmental impacts. Through the Initial Study process, it was determined that some issues need not be addressed in the EIR because previous studies or other documentation provided information to conclude that there was no potential for significant impacts. For example, it was determined that this EIR did not need to examine potential impacts to recreational facilities since the Project proposes light industrial uses, which typically do not generate substantial increased demands for neighborhood or regional parks or other recreational facilities.

During the public review period for the Westridge IS/NOP (September/October 2009), a number of amendments to the *CEQA Guidelines* were under review. These amendments, which were developed in response to Senate Bill 97 to address the issue of global climate change, were subsequently adopted on December 30, 2009, and became effective on March 18, 2010.[1] As such, this Draft EIR reflects the adopted revisions to the *CEQA Guidelines*, including changes to the checklist categories and questions provided in Appendix G, "Environmental Checklist Form." Although this form is provided as a "sample," many jurisdictions, including the City of Moreno Valley, rely on the

[1] A copy of the complete *CEQA Guidelines* is available at the California Natural Resources Agency website: http://ceres.ca.gov/ceqa/guidelines/.

questions included in this checklist form in order to ensure a thorough and adequate CEQA review.

The primary changes to the checklist evaluation questions and categories resulting from the recent *CEQA Guidelines* Amendments are summarized below. The effects of these revisions on the analysis contained within the Westridge Initial Study are indicated in *italic* text. No new or substantially different areas of potential impact have been identified as a result of the adoption of the March 18, 2010 *CEQA Guidelines* amendments.

- The Checklist Category "Agricultural Resources" was amended to incorporate the evaluation of "Agriculture and Forest Resources." In addition to questions designed to assess a project's potential impacts on agricultural lands, the checklist now includes questions evaluating potential impacts on forest land, timberland, or land zoned for timberland production. *Public Resources Code Section 12220(g) defines "forest land" as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." The Westridge site currently consists of disked agricultural land and ruderal fields that are devoid of native trees. The Project area is not within a designated forest or timber production area. As such, the Project's potential to result in a loss of forest land, or otherwise affect forest or timber lands is considered less-than-significant, and is not considered further within this Draft EIR.*

- A new category, entitled "Greenhouse Gases," was added to the Environmental Checklist Form. Questions within this category include, "(a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?" and "(b) Would the project conflict with an applicable plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases?" *EIRs prepared in California over the last several years have customarily included an assessment of a project's potential greenhouse gas*

emissions generation, often as part of a larger air quality evaluation. The Westridge Initial Study [page 6] states that "Air quality impacts of the Project, including the Project's potential impacts on global climate change, along with any necessary mitigation measures addressing these impacts, will be discussed in the EIR." Please refer to Section 4.3 within this Draft EIR for a complete assessment of the Project's potential impacts in regard to air quality and greenhouse gases, which incorporates the Checklist's newly adopted standards of significance.

- Several questions under the Checklist's "Transportation/Traffic" category were re-worded to more specifically address public transit and non-motorized modes of travel. The question "Would the project result in inadequate parking capacity?" has been removed from the checklist. *Standards of significance reflecting these revisions have been incorporated in the EIR's evaluation of potential traffic impacts. Please refer to Section 4.2.5 within this Draft EIR.*

1.5 IMPACTS CONSIDERED PREVIOUSLY BUT NOT FOUND TO BE POTENTIALLY SIGNIFICANT

The Initial Study (IS), as prepared and circulated, preliminarily assessed the Project to identify potentially significant impacts under various environmental topics. Pursuant to comments received during the NOP/IS review period, certain topics initially considered to be less-than-significant within the IS were nonetheless determined to warrant further evaluation in the EIR, and are discussed herein.

The following summary discussions identify those environmental issues that have been determined pursuant to the IS/NOP preparation and public review processes to pose no potentially significant impacts. These specific issues are not substantively further discussed within the body of this EIR. Please refer also to related discussions and analyses presented within the Initial Study, EIR Appendix A.

Agricultural Resources. Although the Project site has a history of agricultural use, it is not currently under cultivation, and it is not designated as Prime Farmland, Unique Farmland or Farmland of Statewide importance. The California Department of

Conservation's Farmland Mapping and Monitoring Program (FMMP) does however indicate that the site is considered Farmland of Local Importance. Notwithstanding, the City of Moreno Valley acknowledges the planned transition of the site to light industrial/business park uses through its General Plan and Zoning designations. In this regard, the Moreno Valley General Plan Final Program EIR acknowledged that adoption of the 2006 General Plan Update would result in a significant and unavoidable impact associated with the general conversion of existing agricultural land to non-agricultural uses. No feasible mitigation measures were identified that would minimize this significant impact. The General Plan Final Program EIR also examined an alternative designed to result in increased preservation of agricultural land;[2] however, this alternative was not adopted. The Project would not result in potential impacts to agricultural lands not previously addressed through the City's General Plan processes. Based on these facts, the Initial Study identified no potentially significant impacts in regard to agricultural resources.

Geology and Soils. A Geotechnical Investigation has been prepared for the Project site, and the findings of this study conclude that, with implementation of recommended design, engineering, and construction practices, the Project is considered feasible from the standpoints of geotechnical engineering and soils suitability.

The Project Geotechnical Investigation included a visual site reconnaissance, subsurface exploration, field and laboratory testing, and geotechnical engineering analysis. As noted in the Investigation, although the Project is located in an area which is subject to strong ground motions due to earthquakes, published geologic maps of the Project area indicate no potentially active faults on, or in the immediate vicinity of, the Project area. The site is not located within an Alquist-Priolo Earthquake Fault Zone. As such, the potential for fault rupture within the Project area is considered low. However, consistent with regional seismic conditions, strong seismic ground shaking may occur at the site due to earthquakes along proximate regional faults. In this regard, building officials and engineers have recognized the impacts of earthquakes and ground shaking

[2] Section 6.2, pp 6-3 to 6-7, *City of Moreno Valley General Plan Final Program EIR,* State Clearinghouse No. 2000091075, July 2006.

on structures; and structures are required by Code (California Building Code, and the City of Moreno Valley Building Code) to incorporate appropriate seismic design measures No potential liquefaction hazards have been identified, given the depth to groundwater in the Project vicinity (more than 50 feet based on borings performed as part of the Geotechnical Investigation). No landslide or mudflow hazards have been identified, given the site's location within an area of relatively flat topography. Soils within the Project site will be overexcavated and replaced with engineered fill pursuant to the Geotechnical Investigation's recommendations.

Appropriate measures to reduce the potential effects of earthquakes and potentially unsuitable soils at the Project site are identified in the California Building Code (CBC) as implemented by the City of Moreno Valley. Short of a catastrophic event, design of structures in accordance with the Project Geotechnical Investigation, the CBC, and current professional engineering practices is sufficient to reduce potential seismic hazards and soils impacts at the Project site below the level of significance. Please refer to the complete Project Geotechnical Investigation included as Draft EIR Appendix H.

Hazards and Hazardous Materials. Potential impacts in regard to hazards or hazardous materials were found to be less-than-significant within the Initial Study. More specifically, the Project does not propose the handling of acutely hazardous materials; and the Project site is not located within one-quarter mile of any existing or proposed school.

The handling of hazardous materials as part of Project development is expected to be limited to the transport and storage of pesticides, fertilizers, paint products and the like, that are pre-packaged for commercial or home use. As identified in the Phase I Environmental Site Assessment (included as Draft EIR Appendix I), the Project site is not included on list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

The Initial Study also found impacts in regard to wildland fire hazards to be less-than-significant. The Project is not identified within or adjacent to an area of high fire risk on

the City of Moreno Valley General Plan Final EIR (2006) Figure 5.5-2, "Floodplains and High Fire Hazard Areas." The Project area consists mainly of disturbed land, some of which has historically been used for dry farming and no heavy natural vegetation is evident within the area surrounding the site.

Further, because the Project does not propose permanent alteration to vehicle circulation routes, nor will this be required based on current Project development concepts, potential impacts in regard to emergency circulation routes were also found to be less-than-significant. However, in response to comments from the Moreno Valley Fire Department regarding interim roadway configurations that are anticipated at Project opening, Draft EIR Section 4.2, "Traffic and Circulation" includes an evaluation of Fire Department access to the Project site and vicinity. No significant Project-related emergency circulation impacts have been identified.

Mineral Resources. No mineral resources are known to exist on the Project site that would be of value to the region or the residents of the State. As such, the Project would not have any impact upon mineral resources.

Population and Housing. Because the Project proposes the development of light industrial uses, no direct contribution to population growth, such as that which occurs through creation of additional housing, would result. Employment generated from Project development may incidentally contribute to population growth. However, given the existing levels of unemployment in the region, opportunities arising from the Project are not likely to result in substantial population migration. As such, this incidental growth is not anticipated to be significant.

Further, the Project does not involve the displacement of any existing residents or housing stocks. On this basis, potential impacts in regard to population and housing would be less-than-significant.

Public Services. The Initial Study addressed the Project's potential to result in impacts in regard to fire protection, police protection, schools, parks, and other public facilities.

The CEQA threshold for significance in terms of public services is defined as whether the Project would result in "substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; or the 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." In all cases, the Initial Study found that the anticipated service needs of the Project would not meet this threshold. The Project's potential to impact public services was thus determined to be less-than-significant. In response to a request from the Moreno Valley Fire Protection District, emergency access routes to the Project have been addressed in Draft EIR Section 4.2, "Traffic and Circulation."

Recreation. The Project is not expected to result in any identifiable increase in new residents and therefore would not result in increased demands for neighborhood or regional parks or other recreational facilities. As such, no potentially significant impacts to existing recreational assets and opportunities would occur as a result of Project implementation. Further, pursuant to the requirements of the City's Master Plan of Trails, the Project will dedicate and construct an 11-foot wide community trail segment within the Project boundaries, on the north side of Fir (future Eucalyptus Avenue).

Utilities and Service Systems. The Project's potential to impact utilities and service systems was determined to be less-than-significant. All necessary utility services exist proximate to the Project site. Modification of, and connection to existing services will be realized consistent with City and purveyor requirements. Incremental demands of the Project are addressed through connection and use fees, providing for ongoing upgrade, expansion and maintenance of serving utilities. Water supply issues are addressed consistent with State Water Code requirements at EIR Section 4.5, "Water Supply."

The Project's potential to exceed landfill capacities or otherwise violate existing solid waste disposal regulations was also determined to be less-than-significant, based on factors provided by the California Integrated Waste Management Board.

1.6 AREAS OF CONCERN OR CONTROVERSY AND ISSUES TO BE RESOLVED

Section 15123 of the *CEQA Guidelines* requires that the EIR summary identify areas of potential concern or controversy known to the lead agency, including issues raised by other agencies and the public. The *CEQA Guidelines* (Section 15204(a)) includes the following guidance in regard to the review of EIRs.

> In reviewing draft EIRs, persons and public agencies should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a lead agency to conducts every test or perform all research, study, and experimentation recommended or demanded by commentors. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.

Issues of concern were identified by the Lead Agency, through the Project scoping meeting, and through responses to the Project Initial Study/NOP. The Project Scoping Meeting was held at the Moreno Valley City Hall from 6:00 p.m. to 8:00 p.m. on October 28, 2009, and ten (10) Moreno Valley residents signed in as being present. A total of four (4) sets of written comments were submitted at the Project scoping meeting. In addition, a total of 26 responses were received in response to the distribution of the NOP. Copies of all correspondence, along with the Scoping Meeting sign in sheet, are provided in Draft EIR Appendix A. Comments pertaining to the Project's potentially significant impacts, as identified in the comments and correspondence described above, are

summarized in the following Table 1.6-1. Issues to be resolved include the areas of controversy summarized above and at Table 1.6-1, along with the choice among Alternatives described at Section 1.9. Alternatives to the Project are evaluated in detail at EIR Section 5.0, Other CEQA Topics."

Table 1.6-1
Summary of Comments on the Project Notice of Preparation

EIR Section, Topic	Respondent(s)
Section 1.0, Introduction	
The following topics are addressed under Section 1.5, Impacts Considered Previously But Not Found To Be Potentially Significant:	
• Agricultural Resources (local and cumulative)	Friends of the Northern San Jacinto Valley; Sierra Club (San Gorgonio Chapter); Deanna Reeder
• Geology and Soils (Seismic risks)	Friends of the Northern San Jacinto Valley, Sierra Club (San Gorgonio Chapter); Deanna Reeder
• Hazardous Materials	Sierra Club (San Gorgonio Chapter); Deanna Reeder
• Solid Waste Generation (within Utilities and Service Systems)	Donni Borchard
Section 3.0, Project Description	
Use of green building standards	Friends of the Northern San Jacinto Valley, Sierra Club (San Gorgonio Chapter); Margie Breitkreuz; Melody Lardner; Deanna Reeder
Use of solar energy	Friends of the Northern San Jacinto Valley, Sierra Club (San Gorgonio Chapter); Melody Lardner; Deanna Reeder
Section 4.1, Land Use	
Consistency with regional goals	Southern California Association of Governments
Land use compatibility; General Plan/Zoning consistency	Friends of the Northern San Jacinto Valley; Sierra Club (San Gorgonio Chapter); Donni Borchard; Margie Breitkreuz; Donna Casteloes; Susan Gilchrist; Randy Henderson; Melody Lardner; Deanna Reeder; David Terry; Resident (no name provided)
Implementation of Trails Master Plan	Friends of the Northern San Jacinto Valley, Sierra Club (San Gorgonio Chapter); Margie Breitkreuz; Susan Gilchrist; Deanna Reeder
Jobs/Housing balance; socioeconomic considerations	Sierra Club (San Gorgonio Chapter); Margie Breitkreuz; Susan Gilchrist; Barbara Kezar; Melody Lardner; Deanna Reeder; Resident (no name provided)

Table 1.6-1
Summary of Comments on the Project Notice of Preparation

EIR Section, Topic	Respondent(s)
Section 4.2, Traffic and Circulation	
Project-generated traffic; mitigation funding sources; implementation of improvements	California Department of Transportation; Friends of the Northern San Jacinto Valley, Sierra Club (San Gorgonio Chapter); Donni Borchard; Margie Breitkreuz; Donna Casteloes; Randy Henderson; Randy Henderson; Melody Lardner; Steve Petersen; Deanna Reeder; David Terry
Ongoing roadway maintenance	Sierra Club (San Gorgonio Chapter)
Regional/cumulative traffic impacts	California Department of Transportation, Sierra Club (San Gorgonio Chapter); Margie Breitkreuz; Deanna Reeder
Adequacy of streets to handle increased truck traffic; roadway design considerations; off-site truck parking	Sierra Club (San Gorgonio Chapter); Donni Borchard. Margie Breitkreuz; Melody Lardner
Transit facility planning	Riverside Transit Agency; Sierra Club (San Gorgonio Chapter)
Alternative transportation (bicycle, equestrian)	Sierra Club (San Gorgonio Chapter); Deanna Reeder
Section 4.3, Air Quality	
Potential local and regional air quality impacts due to Project construction and operation, including traffic-related emissions	South Coast Air Quality Management District; Friends of the Northern San Jacinto Valley, Sierra Club (San Gorgonio Chapter); Margie Breitkreuz; Susan Gilchrist; Randy Henderson; Melody Lardner; Deanna Reeder; Gordon Tucker
Global Climate Change; Greenhouse Gas Emissions	Friends of the Northern San Jacinto Valley, Sierra Club (San Gorgonio Chapter); Sierra Club (San Gorgonio Chapter); Margie Breitkreuz; Susan Gilchrist; Deanna Reeder
Toxic air contaminants; health risks	South Coast Air Quality Management District; Sierra Club (San Gorgonio Chapter); Donni Borchard; Margie Breitkreuz; Susan Gilchrist; Melody Lardner; Deanna Reeder; Gordon Tucker
Section 4.4, Noise	
Potential off-site noise impacts during construction and operation, including traffic-related noise	Friends of the Northern San Jacinto Valley; Sierra Club (San Gorgonio Chapter); Randy Henderson; Melody Lardner; Deanna Reeder
Section 4.5, Water Supply	
Potential impacts due to groundwater use/overdraft	Sierra Club (San Gorgonio Chapter); Donni Borchard; Melody Lardner; Deanna Reeder

Table 1.6-1
Summary of Comments on the Project Notice of Preparation

EIR Section, Topic	Respondent(s)
Use of recycled water	Sierra Club (San Gorgonio Chapter); Deanna Reeder
Effects of State-wide drought on water provision	Friends of the Northern San Jacinto Valley; Sierra Club (San Gorgonio Chapter)
Section 4.6, Hydrology/Water Quality	
Potentially adverse effects related to flooding and drainage	California Department of Transportation; Friends of the Northern San Jacinto Valley; Sierra Club (San Gorgonio Chapter); Melody Lardner
Drainage facility permitting and compliance	Riverside County Flood Control and Water Conservation District
Groundwater recharge; use of permeable paving	Friends of the Northern San Jacinto Valley; Sierra Club (San Gorgonio Chapter); Margie Breitkreuz; Deanna Reeder
Generation of polluted runoff; effects of Project runoff on groundwater and/or downstream waters	Friends of the Northern San Jacinto Valley, Sierra Club (San Gorgonio Chapter); Susan Gilchrist; Melody Lardner; Deanna Reeder
Section 4.7, Biological Resources	
Consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)	Riverside County Flood Control and Water Conservation District; Friends of the Northern San Jacinto Valley
Effects on plants and wildlife; sensitive habitat	Friends of the Northern San Jacinto Valley; Sierra Club (San Gorgonio Chapter); Donni Borchard; Susan Gilchrist; Randy Henderson; Melody Lardner
Potential impacts related to Quincy Channel improvements; protection of riparian areas and Waters of the United States	Friends of the Northern San Jacinto Valley; Sierra Club (San Gorgonio Chapter); Sierra Club (San Gorgonio Chapter); Susan Gilchrist; Deanna Reeder
Wildlife corridors	Friends of the Northern San Jacinto Valley
Section 4.9, Aesthetics	
Selection of landscaping materials; use of drought-tolerant and non-invasive plants for landscaping	California Department of Transportation, Friends of the Northern San Jacinto Valley; Sierra Club (San Gorgonio Chapter); Donni Borchard; Margie Breitkreuz; Melody Lardner; Deanna Reeder
Lighting; prevention of light pollution	Friends of the Northern San Jacinto Valley; Sierra Club (San Gorgonio Chapter); Margie Breitkreuz; Melody Lardner; Deanna Reeder

Table 1.6-1
Summary of Comments on the Project Notice of Preparation

EIR Section, Topic	Respondent(s)
Screening of Project from view	Sierra Club (San Gorgonio Chapter); Deanna Reeder; Resident (no name provided)
View preservation	Friends of the Northern San Jacinto Valley; Margie Breitkreuz; Susan Gilchrist; Randy Henderson; Deanna Reeder
Section 5.0, Other Mandatory CEQA Topics	
Potential cumulative Project impacts	Southern California Association of Governments; California Department of Transportation; Friends of the Northern San Jacinto Valley, Sierra Club (San Gorgonio Chapter); Donna Casteloes; Melody Lardner; Deanna Reeder; Gordon Tucker
Selection of appropriate alternatives	Sierra Club (San Gorgonio Chapter); Susan Gilchrist; Deanna Reeder
Growth inducement	Sierra Club (San Gorgonio Chapter)

Consideration of "Other Mandatory CEQA Topics" is presented in EIR Section 5.0. Discussions within EIR Section 5.0 address: Cumulative Impacts, Alternatives to the Project, Growth Inducement, Significant and Unavoidable Environmental Effects of the Project, Significant and Irreversible Environmental Changes that may occur as a result of the Project, and Energy Conservation.

1.7 EIR TOPICAL ISSUES

Based on the Initial Study analysis, comments received pursuant to the NOP, and other public agency input, the analysis of the EIR has been focused on the following topics:

- Land Use and Planning;
- Traffic and Circulation;
- Air Quality;
- Noise;
- Water Supply;
- Hydrology and Water Quality;
- Biological Resources;
- Cultural Resources; and
- Aesthetics.

1.8 SUMMARY OF SIGNIFICANT AND UNAVOIDABLE PROJECT IMPACTS

Implementation of the Project will result in certain impacts which are determined to be significant, adverse and unavoidable. These impacts are discussed in detail in the body of the EIR under their associated topic headings, and are summarized at Table 1.8-1.

All other potential environmental impacts of the Project are considered to be less-than-significant as substantiated within the Initial Study, and/or within this EIR, or can be mitigated to levels that are less-than-significant through application of mitigation measures identified herein. A summary of all Project impacts and proposed mitigation measures is presented in EIR Section 1.10, "Summary of Impacts and Mitigation Measures."

Table 1.8-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
TRAFFIC	The Project will construct, or pay required fees toward, completion of all necessary Study Area circulation system improvements. At the significantly-impacted locations noted below, the Project cannot feasibly construct the required improvements, and/or payment of fees will not assure their timely completion. **Project-Specific Significant Impacts** All Project-specific traffic impacts are less-than-significant, or are mitigated to levels that are less-than significant through application of the EIR Mitigation Measures. **Cumulatively Significant Impacts** **Opening Year Conditions:** Pending completion of required improvements the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting the following intersections are considered cumulatively significant and unavoidable: • Moreno Beach Drive at SR-60 Eastbound Ramps; • Redlands Boulevard at SR-60 Westbound Ramps; • Redlands Boulevard at SR-60 Eastbound Ramps • Redlands Boulevard at Fir (future Eucalyptus) Avenue; and • Quincy Street at Fir (future Eucalyptus) Avenue (new intersection).

Table 1.8-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
TRAFFIC (cont'd)	Pending completion of required improvements, the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting the following roadway segments are considered cumulatively significant and unavoidable: • Redlands Boulevard from north of the SR-60 Westbound ramps to south of Eucalyptus (future Encilia) Avenue; • Quincy Street south of Fir (future Eucalyptus) Avenue (future street); and • Fir (future Eucalyptus) Avenue from west of Quincy Street and east of Redlands Boulevard (future street). **General Plan Buildout Conditions:** Pending completion of required improvements, the Project's incremental contributions to General Plan Buildout traffic impacts at or affecting the following intersections are therefore considered cumulatively significant and unavoidable: • Moreno Beach Drive at SR-60 Eastbound Ramps; • Redlands Boulevard at SR-60 Westbound Ramps; • Redlands Boulevard at SR-60 Eastbound Ramps; • Redlands Boulevard at Fir (future Eucalyptus) Avenue; • Quincy Street at Fir (future Eucalyptus) Avenue (new intersection); • Moreno Beach Drive at Fir (future Eucalyptus) Avenue (new intersection); • Redlands Boulevard at Eucalyptus (future Encilia) Avenue (new intersection); and • Redlands Boulevard at Cottonwood Avenue (new intersection). The Project will also contribute additional traffic to Study Area freeway mainline segments that under General Plan Buildout conditions (with or without the Project) are projected to operate under deficient (LOS "F") conditions. While it is foreseeable that improvements to SR-60 in the Project vicinity will be completed prior to General Plan Buildout, because timely completion of these improvements cannot be definitively assured, the contribution of additional Project traffic to existing freeway mainline segment deficiencies is recognized as cumulatively significant and unavoidable impact.
AIR QUALITY	**Project-Specific Significant Impacts** **Construction-Related Pollutant Emissions Exceedances** Even after compliance with South Coast Air Quality Management District (SCAQMD) rules and regulations, and the application of EIR mitigation measures, construction-related pollutant emissions would exceed applicable SCAQMD regional emission thresholds for VOC and NOx. These impacts are individually significant. Construction-source emissions will also exceed applicable localized significance thresholds (LSTs) for PM_{10} and $PM_{2.5}$ concentrations, and as such would expose sensitive receptor land uses to substantial pollutant concentrations on a temporary basis. LST exceedances would be limited to the immediate Project vicinity (extending no further than 71 meters, or 233 feet, from the Project site boundaries) and at present would affect only the residence located at 28855 Fir Avenue. Nonetheless, LST exceedances impacts are individually significant.

Table 1.8-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
AIR QUALITY (cont'd)	**Operational Pollutant Emissions Exceedances** Even after compliance with South Coast Air Quality Management District (SCAQMD) rules and regulations, and the application of EIR mitigation measures, operational pollutant emissions would exceed applicable SCAQMD regional emission thresholds for VOC and NOx. These impacts are therefore considered to be individually significant. It is noted however, that the Project land use and proposed development are consistent with development and associated air pollutant emissions impacts reflected in and anticipated by the applicable Air Quality Management Plan (AQMP). **<u>Cumulatively Significant Impacts</u>** **Construction-Related Pollutant Emissions Exceedances** Above-noted Project-specific construction-related pollutant emissions exceedances are also considered cumulatively significant. **Operational Pollutant Emissions Exceedances** Above-noted Project-specific operational pollutant emissions exceedances are also considered cumulatively significant. **Non-Attainment Area Impacts** Project exceedances of regional emissions thresholds for VOC, and NOx (ozone precursors), in combination with VOC, and NOx emissions generated by other sources affecting regional non-attainment areas, will result in a cumulatively considerable net increase in VOC, and NOx emissions within the non-attainment areas. This is considered a cumulatively significant impact. As above, it is noted that the Project land use and proposed development are consistent with development and associated air pollutant emissions impacts reflected in and anticipated by the applicable Air Quality Management Plan (AQMP).
NOISE	**<u>Project-Specific Significant Impacts</u>** **Temporary Construction Impacts** The EIR's noise analysis indicates that construction-related noise may temporarily and intermittently exceed the City's thresholds of significance at residential receptors in the Project vicinity. This is considered a significant Project-specific temporary noise impact. **<u>Cumulatively Significant Impacts</u>** Construction noise impacts when considered with ambient noise conditions would be cumulatively considerable and significant for the duration of Project construction.
AESTHETICS	**<u>Project-Specific Significant Impacts</u>** **Change to Scenic Vistas** Construction of the proposed Project would result in interrupted or obstructed views of off-site scenic areas. This is recognized as a significant and unavoidable aesthetic impact.

Table 1.8-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
AESTHETICS (cont'd)	**Cumulatively Significant Impacts** The Project will restrict or interrupt both near and distant views in the Project area, and in combination with other vicinity development, will cumulatively result in a substantial adverse effect on scenic views in the Project area. The cumulative effects of the Project in regard to scenic vistas are determined to be significant.

1.9 ALTERNATIVES TO THE PROJECT

Consistent with provisions of the *CEQA Guidelines*, the EIR Alternatives Analysis (EIR Section 5.2) examines alternatives to the Project that would lessen the Project's environmental effects while allowing for attainment of the basic Project Objectives. The rationale underlying the selection of alternatives is presented together with a summary description of each alternative. The merits of the selected alternatives compared with the Project are described and evaluated. Additionally, Section 5.2.2 presents the rationale underlying the rejection of certain alternatives, including an extended construction alternative, a multiple building design alternative, and various possible alternative sites.

Evaluated alternatives were selected based on their ability to fulfill the basic Project objectives, and capability to reduce the Project's potential environmental effects. The alternatives assessed in this EIR are summarized in the following paragraphs.

1.9.1 No Project Alternatives

The *CEQA Guidelines* specifically require that the Draft EIR include in its evaluation a "No Project" Alternative. At the direction of the City of Moreno Valley, two (2) different "No Project" scenarios have been evaluated. The first, referred to as the No Project/No Build Alternative, assumes the site would remain in its current undeveloped state. The second, referred to as the No Project/Existing Zoning Alternative, makes a reasoned assessment as to the future development of the subject site should the Project under consideration not be developed. Both "No Project" Alternatives are discussed below.

No Project/No Build Alternative

The Project site is currently a vacant property, which has historically accommodated a variety of dryland farming activities. Under the No Project/No Build Alternative (referred to hereafter as simply the No Build Alternative), the site would not be developed consistent with its "Business Park" General Plan land use designation and would remain in its current undeveloped state. Few, if any, environmental conditions would be affected.

No Project/Existing Zoning Alternative

Land use decisions in the vicinity of the subject site have made possible the transition of nearby, previously undeveloped/agricultural properties into substantial light industrial land uses, e.g., the recently approved Highland Fairview Corporate Park to the east. Continuing long-term vacancy of the subject property is considered unlikely in the context of the site's Business Park/Light Industrial General Plan Land Use designation and Business Park Zoning designation; buildout of the subject property with Business Park/Light Industrial uses anticipated under the General Plan; and continuing proximate development of light industrial/distribution warehouse facilities. If not replaced by development pursuant to the Project, the site would likely transition to some other higher-order use considered desirable to the City.

Based on the preceding, the No Project/Existing Zoning Alternative (referred to hereafter as simply the No Project Alternative) describes the environmental conditions that will occur if the subject site is developed consistent with Business Park/Light Industrial uses envisioned under the City's General Plan Buildout scenario. Further, to allow for quantified comparison of potential traffic impacts and related vehicular-source air quality and noise impacts, the No Project Alternative assumes the site is developed consistent with assumptions employed in the City's General Plan Buildout traffic modeling. In this regard, for Traffic Analysis Zone (TAZ) 209 encompassing the Project site, the General Plan Buildout traffic model reflects development of the subject site with Business Park/Light Industrial uses, and projects approximately 4.18 times the trip generation for TAZ 209 than would otherwise be generated by logistics/distribution

warehouse uses such as those proposed under the Project.[3] The No Project Alternative considered herein approximates trip generation for the subject site under the General Plan Buildout Scenario at four (4) times that of the Project.

The City Municipal Code Section 9.05.040, "Industrial site development standards," does not specify a maximum development intensity for the Business Park zoning designation, provided that other site design guidelines (e.g., setbacks, building heights, parking provisions, landscaping) are met. The City General Plan at Page 9-7 states that for the Business Park/Industrial land use, ". . . [t]he zoning regulations shall identify the particular uses permitted on each parcel of land. Development intensity should not exceed a Floor Area Ratio of 1.00 and the average floor area ratio should be significantly less." The City Municipal Code at "Permitted Uses Table 9.02.020-1" identifies that single buildings of greater than 50,000 square feet are not permitted in the Business Park zone district.

For the purposes of this analysis, no specific development intensity is assumed for business park uses implemented under the No Project Alternative. However, it is assumed that the site is developed consistent with design and performance standards applicable to the City's Business Park zoning district.

1.9.2 Reduced Intensity Alternative

The Reduced Intensity Alternative considered here assumes the same general land use type as the Project, but at a development intensity scoped to reduce or eliminate one or more of the Project's otherwise significant impacts. More specifically, the Reduced Intensity Alternative has been designed to reduce the extent of regional threshold exceedances based on operational emissions that would otherwise result from the Project. In that the same type of development is proposed, most if not all the Project Objectives would be achieved to a certain extent.

[3] Urban Crossroads, Feb 2010. This is confirmed by proportional trip generation rates specifically reflected in the Project TIA (2,930 daily trips PCE, 3.12 trips/thousand square feet) vis-à-vis trip generation rates reflected in *Trip Generation, 7th Edition (ITE)* for Business Park uses. That is, for ITE Land Use Code 770, "Business Park" the trip generation rate is estimated at 12.76 trips daily per thousand square feet, or approximately 4.09 times that generated by the Project.

In this regard, the Air Quality Analysis prepared for the Project identified regionally significant operational air quality exceedances for VOC and NOx. More specifically, even with application of mitigation, the Project operational VOC exceedance is approximately 1.27 times greater than the applicable SCAQMD regional threshold. And even with application of mitigation, the Project's operational NOx exceedance is approximately 15 times greater than the applicable SCAQMD regional threshold. Operational emissions for both VOC and NOx are predominantly mobile source-generated, and are proportional to trip generation. Within a given land use type, trip generation is largely a function of development scope. As such, a reduction in Project VOC and NOx emissions could be achieved through a reduction in Project scope and resultant reduction in trip generation.

While it is not considered feasible to reduce the Project to 1/15th (0.06) its original scope and thereby achieve the applicable SCAQMD regional threshold for NOx, it is reasonable to evaluate a reduced development intensity that is approximately 73 percent of the Project intensity, that would allow for achievement of the applicable SCAQMD regional threshold for VOC. An Alternative developed to achieve the previously-cited SCAQMD VOC emissions threshold would therefore require a minimum 27 percent reduction in development intensity when compared to the Project. This reduction in development intensity would provide decision-makers with a recognizably differentiated alternative to the Project which would result in comparative reductions in environmental impacts.

As a practical application, and to provide for ready visualization of the Reduced Intensity Alternative, this Alternative is assumed to provide for construction of a warehouse approximately 73 percent the size of the proposed Project, with an increased landscape buffer between the Quincy Channel to the west and residential parcels to the south. On this basis, the Reduced Intensity Alternative would result in an approximate 27 percent reduction in development intensity when compared to the Project, and would therefore achieve the target VOC emissions threshold. It is also noted that in achieving the threshold for VOC emissions, the Reduced Intensity Alternative would

also provide for reductions in operational NOx emissions. Operational-source NOx emissions threshold exceedances would, however, remain significant.

Based on its overall reduced trip generation characteristics, the Reduced Intensity Alternative would also reduce the Project's incremental contributions to significant traffic impacts projected to occur within the Study Area. In this regard, the Reduced Intensity Alternative would diminish, but not completely avoid Project-specific impacts anticipated at SR-60/Redlands Boulevard under Opening Year conditions. That is, like the Project, the Reduced Intensity Alternative would contribute greater than 50 peak hour trips to the already deficient conditions projected at SR-60/Redlands Boulevard. Further, with or without the Project, cumulative impacts within the Study Area would remain significant pending completion of required improvements. The Reduced Intensity Alternative would also tend to ameliorate impacts to scenic resources, however impacts would remain significant. Other long-term environmental effects considered in this EIR (i.e., Land Use, Noise, Hydrology and Water Quality, Water Supply, Biological Resources, and Cultural Resources) though found to be less-than-significant, would be further diminished under the Reduced Intensity Alternative.

1.9.3 Environmentally Superior Alternative

The *CEQA Guidelines* require that the environmentally superior alternative (other than the No Project Alternative) be identified among the Project and other Alternatives considered in an EIR. Based on comparative reductions in traffic generation, associated reductions in noise and air emissions, and its generally reduced scale, the Reduced Intensity Alternative is considered the environmentally superior alternative.

1.10 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1.10-1 summarizes the Project's potential environmental impacts, lists measures proposed to mitigate the Project's potentially significant environmental impacts, and indicates the level of significance after application of proposed mitigation measures. The impacts identified in this Table correspond with environmental topics and impacts discussed at EIR Section 4.0, "Environmental Impact Analysis."

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.1 Land Use			
The Project will not conflict with any applicable environmental plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not conflict with any applicable habitat conservation plan or natural community conservation plan.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not physically divide an established community.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
Cumulative Land Use Impacts			
The Project will not result in cumulatively considerable land use impacts.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.2 Traffic and Circulation			
An increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** Under Opening Year Ambient Conditions, Project-Specific traffic impacts at or affecting the following intersections are potentially significant: • *Redlands Boulevard at SR-60 Westbound Ramps*	*4.2.1 Redlands Boulevard at SR-60 Westbound Ramps Improvements:* • *Install a traffic signal.* *This improvement is currently approved, programmed, and permitted by Caltrans. If not otherwise completed prior to Project opening, the required traffic signal shall be constructed by the Applicant prior to issuance of the first Certificate of Occupancy.*	*Less-Than-Significant at Redlands Boulevard at SR-60 Westbound Ramps*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.2 Traffic and Circulation (cont'd)			
An increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections (cont'd)*** • *Redlands Boulevard at Fir (future Eucalyptus) Avenue*	4.2.2 *Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements:* *Prior to issuance of the first Certificate of Occupancy, the Applicant shall construct the following improvements:* • *Install a traffic signal;* • *Construct a southbound right turn auxiliary lane which extends the full length of the segment of Redlands Boulevard between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue for a southbound lane configuration of one shared left-through lane and one right turn lane; and* • *Construct an eastbound left-turn lane with 300 feet of storage for an eastbound lane configuration of one left-turn lane and one shared through-or-right-turn-lane.*	*Less-Than-Significant at Redlands Boulevard at Fir (future Eucalyptus) Avenue*
The Project will not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or compatible uses (e.g., farm equipment).	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not result in inadequate emergency access.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.2 Traffic and Circulation (cont'd)			
The Project will not conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
Cumulative Traffic Impacts			
Under Opening Year Cumulative Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** Under Opening Year Cumulative Conditions, cumulative traffic impacts at or affecting the following intersections are potentially significant: • *Moreno Beach Drive at SR-60 Eastbound Ramps*	4.2.3 *Moreno Beach Drive at SR-60 Eastbound Ramps Improvements:* • *Construct an eastbound right-turn lane and re-stripe the shared left-or-right-turn lane as an exclusive left-turn lane, for an eastbound lane configuration of one left-turn lane and one right-turn lane. These improvements would require the dedication of right-of-way from the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps.*	***Pending completion of required improvements identified at Mitigation Measure 4.2.3, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Moreno Beach Drive at SR-60 Eastbound Ramps*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<u>Cumulative Traffic Impacts</u> (cont'd)			
Under Opening Year Cumulative Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Moreno Beach Drive at SR-60 Westbound Ramps*	*4.2.4 Moreno Beach Drive at SR-60 Westbound Ramps Improvements:* • *Coordinate traffic signal timing with the signal at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps. These improvements would be funded through Project participation in the TUMF Program. Although the intersection of Moreno Beach Drive at SR-60 Westbound Ramps is anticipated to operate at an acceptable LOS, the coordination of traffic signal timing with the signal at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps would ensure continued satisfactory operations.* *The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Moreno Beach Drive at SR-60 Westbound Ramps.*	***Pending completion of required improvements identified at Mitigation Measure 4.2.4, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Moreno Beach Drive at SR-60 Westbound Ramps*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under Opening Year Cumulative Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at SR-60 Westbound Ramps*	*4.2.5 Redlands Boulevard at SR-60 Westbound Ramps Improvements:* • *Install a traffic signal (a TUMF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.1);* • *Construct a second northbound through lane and a right-turn lane with overlap phasing, for a northbound lane configuration of one left-turn lane, two through lanes and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way on the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection; and* • *Construct a second southbound through lane, for a southbound lane configuration of one left-turn lane and two through lanes These improvements would require the dedication of right-of-way on the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection.* *The traffic signal noted above will be constructed by the Project pursuant to Mitigation Measure 4.2.1. The remaining improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Redlands Boulevard at SR-60 Westbound Ramps.*	***Pending completion of required improvements identified at Mitigation Measure 4.2.5, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at SR-60 Westbound Ramps*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<u>Cumulative Traffic Impacts</u> (cont'd)			
Under Opening Year Cumulative Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at SR-60 Eastbound Ramps*	*4.2.6 Redlands Boulevard at SR-60 Eastbound Ramps Improvements:* • *Construct a second northbound through lane for a northbound lane configuration of one left turn lane and two through lanes. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and restriping of all lanes on the south leg of the intersection;* • *Construct a second southbound through lane, for a southbound lane configuration of one left-turn lane and two through lanes. These improvements would require the dedication of right-of-way on the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and* • *Construct an eastbound right-turn lane and re-stripe the shared left-or-right turn lane as an exclusive left-turn lane, for an eastbound lane configuration of one left-turn lane and one right-turn lane. These improvements would require the dedication of right-of-way on the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts at the intersection of Redlands Boulevard at SR-60 Eastbound Ramps.*	***Pending completion of required improvements identified at Mitigation Measure 4.2.6, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at SR-60 Eastbound Ramps*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under Opening Year Cumulative Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at Fir (future Eucalyptus) Avenue*	*4.2.7 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements:* • *Install a traffic signal (a DIF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.2);* • *Construct a northbound left-turn lane with 200 feet of storage and a second through lane, for a northbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and restriping of all lanes on the south leg of the intersection. Construction of the northbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF Program.*	***Pending completion of required improvements identified at Mitigation Measure 4.2.7, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at Fir (future Eucalyptus) Avenue*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under Opening Year Cumulative Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at Fir (future Eucalyptus) Avenue*	*4.2.7 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements: (cont'd)* • *Construct a southbound left-turn lane with 250 feet of storage, a second left-turn lane that extends back to the SR-60 Eastbound Ramps, a second through lane, and a right-turn lane with overlap phasing and a pocket length that is the full length of the segment, for a southbound lane configuration of two left-turn lanes, two through lanes, and one right-turn-lane with overlap phasing. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF program. Construction of one southbound left-turn lane would be funded through participation in the DIF program. The noted right-turn southbound lane would be constructed by the Project pursuant to Mitigation Measure 4.2.2. Overlap phasing to this right-turn lane will be added when determined appropriate by the City Traffic Engineer, and will be funded through fair share fee participation. Remaining improvements would also be funded through fair share fee contributions.*	***Pending completion of required improvements identified at Mitigation Measure 4.2.7, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at Fir (future Eucalyptus) Avenue*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under Opening Year Cumulative Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at Fir (future Eucalyptus) Avenue*	*4.2.7 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements: (cont'd)* • *Construct dual eastbound left-turn lanes with 300 feet of storage and a second through lane, for an eastbound lane configuration of two left-turn lanes, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the south side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the west leg of the intersection. A single eastbound turn with 300 feet of storage will be constructed by the Project under Opening Year Ambient Conditions pursuant to Mitigation Measure 4.2.2. The remaining improvements would be funded through participation in the DIF Program.* • *Construct a westbound left-turn lane, a second through lane, and a right-turn lane with overlap phasing, providing 200 feet of storage for both the left-turn and right-turn lanes, for a westbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane with overlap phasing. These improvements would require the dedication of right-of-way from the north side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the east leg of the intersection. Construction of the westbound left and through lanes would be funded through participation in the DIF Program; remaining improvements would be funded through fair share fee participation.*	***Pending completion of required improvements identified at Mitigation Measure 4.2.7, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at Fir (future Eucalyptus) Avenue*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under Opening Year Cumulative Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Quincy Street at Fir (future Eucalyptus) Avenue.*	*4.2.8 Quincy Street at Fir (future Eucalyptus) Avenue Improvements:* • *Install a stop-control on the south leg of the intersection;* • *Construct a northbound shared left-or-right-turn lane. Quincy Street should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction;* • *Construct an eastbound shared through-or-right-turn lane. The Fir (future Eucalyptus) Avenue extension should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction; and* • *Construct a westbound left-turn lane and through lane. The Fir (future Eucalyptus) Avenue extension should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction.* *These improvements would be funded through participation in the DIF Program. The Project will pay required DIF, facilitating construction of new intersection improvements at Quincy Street at Fir (future Eucalyptus) Avenue.*	***Pending completion of required improvements identified at Mitigation Measure 4.2.8, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Quincy Street at Fir (future Eucalyptus) Avenue.*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Moreno Beach Drive at SR-60 Eastbound Ramps*	*4.2.9 Moreno Beach Drive at SR-60 Eastbound Ramps Improvements:* • *Construct the SR-60 eastbound on- and off-ramps, designed as a standard diamond and consistent with the proposed SR-60 Freeway/Moreno Beach Drive interchange design, and install a traffic signal at the new intersection;* • *Construct a third northbound through lane, for a northbound lane configuration of three through lanes and a right-turn lane. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection;* • *Construct the SR-60 eastbound off-ramp with an eastbound lane configuration of one left-turn lane and dual right-turn lanes; and* • *Construct the SR-60 eastbound on-ramp on Moreno Beach Drive with a minimum of two travel lanes.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps.*	***Pending completion of required improvements identified at Mitigation Measures 4.2.9, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Moreno Beach Drive at SR-60 Eastbound Ramps*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** Under General Plan Buildout Conditions, cumulative traffic impacts at or affecting the following intersections are potentially significant: • *Moreno Beach Drive at SR-60 Westbound Ramps*	*4.2.10 Moreno Beach Drive at SR-60 Westbound Ramps Improvements:* • *Construct a second northbound through lane, for a northbound lane configuration of two through lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection;* • *In addition to the planned on-ramp for southbound vehicles which is part of the future SR-60/Moreno Beach Drive interchange design, a second southbound through lane and a right-turn lane, for a southbound lane configuration of two through lanes and a right-turn lane. These improvements would require dedication on the west side of Moreno Beach Drive and re-striping of all lanes on the north leg of the intersection;* • *Construct the SR-60 westbound on-ramp for vehicles traveling southbound on Moreno Beach Drive with a minimum of one travel lane; and* • *Construct a second westbound left-turn lane, for a westbound lane configuration of two left-turn lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the north side of the SR-60 Westbound Ramps and re-striping of all lanes on the east leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at SR-60 Westbound Ramps.*	***Pending completion of required improvements identified at Mitigation Measures 4.2.10, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Moreno Beach Drive at SR-60 Westbound Ramps*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Moreno Beach Drive at Fir (future Eucalyptus) Avenue*	4.2.11 *Moreno Beach Drive at Fir (future Eucalyptus) Avenue Improvements:* • *Construct dual northbound left-turn lanes and re-stripe the northbound right-turn lane as a shared through-or-right turn lane for a northbound lane configuration of two left-turn lanes, two through lanes and a shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection. Restriping of the northbound right-turn lane as a shared through-or-right turn lane would be funded through participation in the DIF Program. Remaining improvements would be funded through fair share fee participation;* • *Construct a southbound left-turn lane and a right-turn lane with overlap phasing, for a southbound lane configuration of two left-turn lanes, three through lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the west side of Moreno Beach Drive and re-striping of all lanes on the north leg of the intersection, and would be funded through fair share fee participation;*	***Pending completion of required improvements identified at Mitigation Measures 4.2.11, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Moreno Beach Drive at Fir (future Eucalyptus) Avenue*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Moreno Beach Drive at Fir (future Eucalyptus) Avenue*	*4.2.11 Moreno Beach Drive at Fir (future Eucalyptus) Avenue Improvements: (cont'd)* • *Construct the new eastbound leg of this intersection with dual left-turn lanes, a through lane, and a shared through-or-right-turn lane. Construction of one eastbound left-turn lane, the eastbound through lane, and the eastbound shared through-or-right-turn lane would be funded through participation in the DIF Program. Remaining improvements would be funded through fair share fee participation; and* • *Construct a westbound through lane and implement overlap phasing on the right-turn movement, for a westbound lane configuration of one left-turn lane, two through lanes, and a right-turn lane with overlap phasing. This improvement would be funded through fair share fee participation.* *The Project will pay required DIF and fair share fees, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at Fir (future Eucalyptus) Avenue.*	***Pending completion of required improvements identified at Mitigation Measures 4.2.11, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Moreno Beach Drive at Fir (future Eucalyptus) Avenue*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Quincy Street at Fir (future Eucalyptus) Avenue*	*4.2.12 Quincy Street at Fir (future Eucalyptus) Avenue Improvements:* • *Install a stop-control on the south leg of the intersection;* • *Construct a northbound shared left-or-right-turn lane;* • *Construct the eastbound approach of the Fir (future Eucalyptus) Avenue extension with a through lane and a shared through-or-right-turn lane; and* • *Construct the westbound approach of the Fir (future Eucalyptus) Avenue extension with a left-turn lane, a through lane, and a shared through-or-right-turn lane.* *These improvements would be funded through participation in the DIF Program. The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Quincy Street at Fir (future Eucalyptus) Avenue.*	***Pending completion of required improvements identified at Mitigation Measures 4.2.12, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Quincy Street at Fir (future Eucalyptus) Avenue*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at SR-60 Westbound Ramps*	*4.2.13 Redlands Boulevard at SR-60 Westbound Ramps Improvements:* • *Install a traffic signal (a TUMF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.1);* • *Construct a northbound through lane and a right-turn lane with overlap phasing, for a northbound lane configuration of one left-turn lane, two through lanes and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection;* • *Construct a southbound left-turn lane and a through lane, for a southbound lane configuration of two left-turn lanes and a through lane, and a shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and* • *Construct a westbound left-turn lane and a right-turn lane, for a westbound lane configuration of one left-turn lane, one shared left-through lane and a right-turn lane. These improvements would require the dedication of right-of-way from the north side of the SR-60 Westbound Ramps and re-striping of all lanes on the east leg of the intersection.* *The traffic signal noted above will be constructed by the Project pursuant to Mitigation Measure 4.2.1. The remaining improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at Redlands Boulevard at SR-60 Westbound Ramps.*	***Pending completion of required improvements identified at Mitigation Measures 4.2.13, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at SR-60 Westbound Ramps*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at SR-60 Eastbound Ramps*	*4.2.14 Redlands Boulevard at SR-60 Eastbound Ramps Improvements:* • *Construct two northbound through lanes, for a northbound lane configuration of one left-turn lane and three through lanes, with the pocket length for the northbound left-turn lane at the full length of the segment. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and restriping of all lanes on the south leg of the intersection;* • *Construct two southbound through lanes, for a southbound lane configuration of two through lanes and a shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and* • *Re-stripe the shared eastbound left-or-right-turn lane as an exclusive left-turn lane, for an eastbound lane configuration of two left-turn lanes and one right-turn lane. These improvements would require the dedication of right-of-way on the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.* *These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at SR-60 Eastbound Ramps.*	***Pending completion of required improvements identified at Mitigation Measures 4.2.14, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at SR-60 Eastbound Ramps*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at Fir (future Eucalyptus) Avenue*	*4.2.15 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements:* • *Install a traffic signal (a DIF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.2);* • *Construct a left turn lane with 200 feet of storage and a second through lane for a northbound lane configuration of one left turn lane, one through lane and one shared though right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard. Restriping of all lanes on the south leg of the intersection, and construction of the northbound through lane would be funded through participation in the TUMF Program. Remaining improvements would be funded through participation in the DIF Program;* • *Construct a southbound left turn lane with 250 feet of storage, a second left turn lane that extends back to the SR-60 Eastbound ramps, a second through lane and a right turn lane with overlap phasing for a southbound lane configuration of two left turn lanes, two though lanes and one right turn lane with overlap phasing, with a right turn pocket length that extends the full length of the segment. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program. Construction of one southbound left-turn lane would be funded through participation in the DIF program. The noted right-turn southbound lane would be constructed by the Project pursuant to Mitigation Measure 4.2.2. Overlap phasing for this right-turn lane will be added when determined appropriate by the City Traffic Engineer, and will be funded through fair share fee participation. Remaining improvements would also be funded through Fair Share Fees;*	***Pending completion of required improvements identified at Mitigation Measures 4.2.15, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at Fir (future Eucalyptus) Avenue*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at Fir (future Eucalyptus) Avenue*	*4.2.15 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements: (cont'd)* • *Construct dual eastbound left-turn lanes with 300 feet of storage and a second through lane, for an eastbound lane configuration of two left-turn lanes, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the south side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the west leg of the intersection. A single eastbound turn with 300 feet of storage will be constructed by the Project under Opening Year Ambient Conditions pursuant to Mitigation Measure 4.2.2. The remaining improvements would be funded through participation in the DIF Program; and* • *Construct a westbound left-turn lane, one through lane, and a right-turn lane with overlap phasing, for a westbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane with overlap phasing [these improvements would require the dedication of right-of-way from the north side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the east leg of the intersection]. Construction of the westbound left and through lanes would be funded through participation in the DIF Program; remaining improvements would be funded through participation in the fair share fee assessments.* *The Project will pay required TUMF, DIF and fair share fees, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Fir (future Eucalyptus) Avenue.*	***Pending completion of required improvements identified at Mitigation Measures 4.2.15, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at Fir (future Eucalyptus) Avenue*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at Eucalyptus (future Encilia) Avenue; and*	*4.2.16 Redlands Boulevard at Eucalyptus (future Encilia) Avenue Improvements:* • *Install a traffic signal. This improvement would be funded through participation in the DIF Program;* • *Construct a northbound left-turn lane and a shared through-or-right-turn lane, for a northbound lane configuration of one left-turn lane, one through lane and one shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection. Construction of the northbound left-turn lane would be funded through participation in the DIF Program; remaining improvements would be funded through participation in the TUMF Program;* • *Construct a southbound left-turn lane, a through lane, and a right-turn lane, for a southbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF program;*	***Pending completion of required improvements identified at Mitigation Measures 4.2.16, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at Eucalyptus (future Encilia) Avenue; and*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at Eucalyptus (future Encilia) Avenue; and*	*4.2.16 Redlands Boulevard at Eucalyptus (future Encilia) Avenue Improvements: (cont'd)* • *Re-stripe the eastbound right-turn lane as a through lane and construct an additional shared through-or-right-turn lane, for an eastbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way with from the south side of Eucalyptus (future Encilia) Avenue and the re-striping of all lanes on the west leg of the intersection, and would be funded through participation in the DIF Program; and* • *Construct the westbound approach with one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the north side of Eucalyptus (future Encilia) Avenue, and the re-striping of all lanes on the east leg of the intersection, and would be funded through participation in the DIF Program.* *The Project will pay required TUMF and DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Eucalyptus (future Encilia) Avenue.*	***Pending completion of required improvements identified at Mitigation Measures 4.2.16, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at Eucalyptus (future Encilia) Avenue; and*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at Cottonwood Avenue.*	*4.2.17 Redlands Boulevard at Cottonwood Avenue Improvements:* • *Construct a northbound through lane, for a northbound lane configuration of one left-turn lane, one through lane and one shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and the re-striping of all lanes on the south leg of the intersection, and would be funded through participation in the TUMF Program;* • *Construct a southbound left-turn lane and a through lane, for a southbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and the restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF Program;*	***Pending completion of required improvements identified at Mitigation Measures 4.2.17, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at Cottonwood Avenue.*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under General Plan Buildout Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Intersections*** • *Redlands Boulevard at Cottonwood Avenue.*	*4.2.17 Redlands Boulevard at Cottonwood Avenue Improvements: (cont'd)* • *Re-stripe the eastbound right-turn lane as a through lane, and construct an additional through-or-right-turn lane, for an eastbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Cottonwood Avenue, and the re-striping of all lanes on the west leg of the intersection, and would be funded through participation in the DIF Program; and* • *Construct the westbound approach with one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the north side of Cottonwood Avenue, and the re-striping of all lanes on the east leg of the intersection, and would be funded through participation in the DIF Program.* *The Project will pay required TUMF and DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Cottonwood Avenue.*	***Pending completion of required improvements identified at Mitigation Measures 4.2.17, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at Cottonwood Avenue.*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under Opening Year Cumulative Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Roadway Segments*** Under Opening year Cumulative Conditions, cumulative traffic impacts at or affecting the following roadway segments are potentially significant: • *Quincy Street south of Fir (future Eucalyptus) Avenue*	*4.2.18 Quincy Street south of Fir (future Eucalyptus) Avenue Improvements:* • *Construct Quincy Street south of Eucalyptus Avenue as a two-lane undivided roadway with a minimum of one travel lane in each direction.* *The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts at the segment of Quincy Street south of Fir (future Eucalyptus) Avenue.*	***Pending completion of required improvements identified at Mitigation Measures 4.2.18, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Quincy Street south of Fir (future Eucalyptus) Avenue*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Under Opening Year Cumulative Conditions, result in a cumulatively considerable increase in traffic under which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).	***Potentially Significant for Certain Study Area Roadway Segments*** • *Fir (future Eucalyptus) Avenue west of Quincy Street to the westerly Project boundary and Fir (future Eucalyptus) east of Redlands Boulevard*	*4.2.19 Fir (future Eucalyptus) Avenue west of Quincy Street to the westerly Project boundary and Fir (future Eucalyptus) east of Redlands Boulevard Improvements:* • *Construct the Fir (future Eucalyptus) Avenue extension from the current terminus near the Auto Mall to Quincy Street, and connecting to Fir (future Eucalyptus) Avenue at the westerly project boundary. Continue Fir (future Eucalyptus) Avenue east of Redlands Boulevard. Fir (future Eucalyptus) Avenue is to be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction.* *The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts affecting the segment of Fir (future Eucalyptus) Avenue between the Auto Mall and the westerly Project Boundary, and Fir (future Eucalyptus) Avenue east of Redlands Boulevard.*	***Pending completion of required improvements identified at Mitigation Measures 4.2.18, the Project's incremental contributions to Opening Year cumulative traffic impacts at the following intersection are cumulatively considerable, significant and unavoidable:*** • *Redlands Boulevard at Cottonwood Avenue.*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Traffic Impacts (cont'd)			
Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.	***Potentially Significant for Certain Study Area Freeway Segments*** Under Opening Year Cumulative Conditions and General Plan Buildout Conditions, cumulative LOS impacts of traffic generated by the project in combination with traffic generated by ambient growth and other development projects will result in potentially significant cumulative traffic impacts affecting SR-60 freeway segments within the Study Area.	No feasible mitigation exists.	***Cumulatively Significant and Unavoidable*** *for SR-60 freeway segments within the Study Area*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.3 Air Quality			
The Project will not conflict with or obstruct implementation of the applicable air quality plan.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	***Potentially Significant for Certain Construction Source Emissions*** Construction source emissions of VOC, NOx, PM_{10} and $PM_{2.5}$ would potentially temporarily exceed applicable SCAQMD regional thresholds. Construction source PM_{10} and $PM_{2.5}$ emissions will temporarily exceed applicable SCAQMD localized significance thresholds (LSTs).	*To facilitate monitoring and compliance, applicable SCAQMD and CARB regulatory requirements are restated as Mitigation Measures 4.3.1 through 4.3.4 below, and shall be incorporated in all Project plans, specifications and contract documents.* *4.3.1 The following measures shall be incorporated as implementation of Rule 403:* • *All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.* • *The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.* • *The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less to reduce PM10 and PM2.5 fugitive dust haul road emissions.*	***Significant and Unavoidable*** *for temporary exceedances of VOC and NOx regional thresholds ; and temporary exceedances of PM_{10} and $PM_{2.5}$ LSTs.*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.3 Air Quality (cont'd)			
Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	***Potentially Significant for Certain Construction Source Emissions***	*(Cont'd)* *4.3.2 The contractor shall minimize pollutant emissions by maintaining equipment engines in good condition and in proper tune according to manufacturer's specifications and during smog season (May through October) by not allowing construction equipment to be left idling for more than five minutes (per California law).* *4.3.3 The contractor shall ensure use of low-sulfur diesel fuel in construction equipment as required by the California Air Resources Board (CARB) (diesel fuel with sulfur content of 15 ppm by weight or less).* *4.3.4 Construction contractors shall use only low-polluting paints and coatings as defined in SCAQMD Rule 1113.* *Additional mitigation required of the Project is identified below, and shall be shall be incorporated in all Project plans, specifications and contract documents.* *4.3.5 Contractor(s) shall ensure that all off-road heavy-duty construction equipment utilized during construction activity shall be CARB Tier 2 Certified or better.* *4.3.6 In order to reduce localized Project impacts to sensitive receptors in the Project vicinity during construction, construction equipment staging areas shall be located at least 300 feet away from sensitive receptors.*	***Significant and Unavoidable** for temporary exceedances of VOC and NOx regional thresholds ; and temporary exceedances of PM_{10} and $PM_{2.5}$ LSTs.*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.3 Air Quality (cont'd)			
Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	***Potentially Significant for Certain Construction Source Emissions***	*(Cont'd)* *4.3.7 During Project construction, existing electrical power sources (e.g., power poles) shall be provided for electric construction tools including saws, drills and compressors, to minimize the need for diesel or gasoline powered electric generators.* *4.3.8 The Applicant shall use Zero Volatile Organic Compounds paints (no more than 150 grams/liter of VOC) and/or High Pressure Low Volume (HPLV) applications consistent with South Coast Air Quality Management District Rule 1113. Alternatively, the Applicant shall use materials that do not require painting or are pre painted.* *4.3.9 Grading plans, construction specifications and bid documents shall include notation that off-road construction equipment shall utilize biodiesel fuel (a minimum of B20), except for equipment where use of biodiesel fuel would void the equipment warranty.*	***Significant and Unavoidable*** *for temporary exceedances of VOC and NOx regional thresholds ; and temporary exceedances of PM_{10} and $PM_{2.5}$ LSTs.*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.3 Air Quality (cont'd)			
Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	***Potentially Significant for Certain Operational Source Emissions*** Long-term operations of the project will generate VOC and NOx emissions that would potentially exceed applicable SCAQMD regional thresholds.	*4.3.10 All Project entrances shall be posted with signs which state:* • *Truck drivers shall turn off engines when not in use;* • *Diesel delivery trucks servicing the Project shall not idle for more than three (3) minutes; and* • *Telephone numbers of the building facilities manager and CARB, to report violations.* *These measures shall be enforced by the on-site facilities manager (or equivalent).*	***Significant and Unavoidable** for temporary exceedances of VOC and NOx regional thresholds ; and temporary exceedances of PM_{10} and $PM_{2.5}$ LSTs.*
Expose sensitive receptors to substantial pollutant concentrations.	***Potentially Significant for Certain Construction Source Emissions*** Construction source PM_{10} and $PM_{2.5}$ emissions would potentially temporarily exceed applicable SCAQMD localized significance thresholds (LSTs).	Please refer to Mitigation Measures 4.3.1 through 4.3.9.	***Significant and Unavoidable for temporary PM_{10} and $PM_{2.5}$ LST exceedances.***

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.3 Air Quality (cont'd)			
The Project will not create objectionable odors affecting a substantial number of people.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not generate greenhouse gas emissions either directly or indirectly, that may have a significant impact on the environment.	Less-Than-Significant	*Although potential Project-related Global Climate Change (GCC) impacts would be less-than-significant, the following Mitigation Measures 4.3.11 through 4.3.13 are provided to reduce Project related operational source air pollutants and greenhouse gas emissions to the extent feasible, and to promote sustainability through conservation of energy and other natural resources.*	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.3 Air Quality (cont'd)			
The Project will not generate greenhouse gas emissions either directly or indirectly, that may have a significant impact on the environment.	Less-Than-Significant	*(Cont'd)* *4.3.11 Buildings shall surpass incumbent California Title 24 Energy Efficiency performance standards by a minimum of 20 percent for water heating and space heating and cooling. Verification of increased energy efficiencies shall be documented in Title 24 Compliance Reports provided by the Applicant, and reviewed and approved by the City prior to the issuance of the first building permit. Any combination of the following design features may be used to fulfill this mitigation measure provided that the total increase in efficiency meets or exceeds 20 percent.* • *Increase in insulation such that heat transfer and thermal bridging is minimized;* • *Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption;* • *Incorporate dual-paned or other energy efficient windows;* • *Incorporate energy efficient space heating and cooling equipment;* • *Interior and exterior energy efficient lighting which exceeds the California Title 24 Energy Efficiency performance standards shall be installed, as deemed acceptable by the City of Moreno Valley. Automatic devices to turn off lights when they are not needed shall be implemented;*	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.3 Air Quality (cont'd)			
The Project will not generate greenhouse gas emissions either directly or indirectly, that may have a significant impact on the environment.	Less-Than-Significant	*(Cont'd)* • *To the extent that they are compatible with landscaping guidelines established by the City of Moreno Valley, shade producing trees, particularly those that shade buildings and paved surfaces such as streets and parking lots and buildings shall be planted at the Project site.* • *Paint and surface color palette for the Project shall emphasize light and off-white colors which will reflect heat away from the buildings.* • *All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design.* *4.3.12 The Project shall be designed to facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills by providing easily accessible areas that are dedicated to the collection and storage of recyclable materials including: paper, cardboard, glass, plastics, and metals. Locations of proposed recyclable materials collection areas are subject to review and approval by the City. Prior to Final Site Plan approval, locations of proposed recyclable materials collection areas shall be delineated on the Project Site Plan.*	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.3 Air Quality (cont'd)			
The Project will not generate greenhouse gas emissions either directly or indirectly, that may have a significant impact on the environment.	Less-Than-Significant	*(Cont'd)* *4.3.13 GHG emissions reductions measures shall also include the following:* • *The Project shall provide on-site bicycle storage/parking consistent with City of Moreno Valley requirements;* • *The Project shall provide pedestrian and bicycle connections to surrounding areas, consistent with provisions of the City of Moreno Valley General Plan. Location and configurations of proposed pedestrian and bicycle connections are subject to review and approval by the City. Prior to Final Site Plan approval, pedestrian and bicycle connections shall be indicated on the Project Site Plan;* • *Any traffic signals installed as part of the Project will utilize light emitting diodes (LEDs);* • *The Project will establish a Transportation Management Association (TMA). The TMA will coordinate with other TMAs within the City to encourage and coordinate carpooling among building occupants. The TMA will advertise its services to building occupants, and offer transit and/or other incentives to reduce GHG emissions. Additionally, a shuttle will be provided during any one hour period where more than 20 employees utilize public transit. A plan will be submitted by the TMA to the City within two months of Project completion that outlines the measures implemented by the TMA, as well as contact information;*	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
The Project will not generate greenhouse gas emissions either directly or indirectly, that may have a significant impact on the environment.	Less-Than-Significant	*4.3.13 (Cont'd)* • *The Project shall provide preferential parking for carpools and vanpool. Locations and configurations of proposed preferential parking for carpools and vanpools are subject to review and approval by the City. Prior to Final Site Plan approval, preferential parking for carpools and vanpools shall be delineated on the Project Site Plan;* • *The Project shall provide at least two electric vehicle charging stations. Locations and configurations of proposed charging stations are subject to review and approval by the City. Prior to issuance of the first building permit, stub outs for charging stations shall be indicated on the Project building plans.*	Less-Than-Significant
The Project will not conflict with an applicable plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Air Quality Impacts			
Result in a cumulatively considerable violation of any air quality standard or contribute substantially to an existing or projected air quality violation. *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, including releasing emissions which exceed quantitative thresholds for ozone precursors.*	***Potentially Significant for Certain Construction Source Emissions*** The Project lies within non-attainment areas for PM_{10}, $PM_{2.5}$, and ozone (VOC and NOx are ozone precursors). Even after application of mitigation construction source emissions of VOC and NOx will temporarily exceed applicable SCAQMD regional thresholds. Even after application of mitigation construction source PM_{10} and $PM_{2.5}$ emissions will temporarily exceed applicable SCAQMD localized significance thresholds (LSTs). Project exceedances noted above are potentially cumulatively considerable.	Refer to Mitigation Measures 4.3.1 through 4.3.13.	***Cumulatively Significant and Unavoidable for temporary PM10, PM2.5, VOC and NOx exceedances; and long-term VOC and NOx exceedances***

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<u>Cumulative Air Quality Impacts</u> (cont'd)			
Result in a cumulatively considerable violation of any air quality standard or contribute substantially to an existing or projected air quality violation. *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, including releasing emissions which exceed quantitative thresholds for ozone precursors.*	***Potentially Significant for Certain* Operational Source Emissions** Even after application of mitigation, long-term operations of the project will generate VOC and NOx emissions that would exceed applicable SCAQMD regional thresholds. Project exceedances noted above are potentially cumulatively considerable.	Refer to Mitigation Measures 4.3.1 through 4.3.13.	***Cumulatively Significant and Unavoidable for temporary PM10, PM2.5, VOC and NOx exceedances; and long-term VOC and NOx exceedances***

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.4 Noise			
Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan, noise ordinance, or other applicable standards; result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project; or result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	**Potentially Significant for Construction Source Noise** Noise generated by Project construction activities will result in temporary/periodic noise levels that would potentially exceed applicable City of Moreno Valley Noise standards	4.4.1 *Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that during all Project site construction, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. And further that the construction contractor shall place all stationary construction equipment so that emitted noise is directed away from off-site receptors nearest the Project site. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.* 4.4.2 *Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that the construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and off-site receptors nearest the Project site during all Project construction. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.*	***Significant and Unavoidable***

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.4 Noise (cont'd)			
Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan, noise ordinance, or other applicable standards; result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project; or result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	**Potentially Significant for Construction Source Noise**	*(Cont'd)* *4.4.3 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that construction activities, including haul truck operations, shall be limited to the hours between 7:00 a.m. and 8:00 p.m. Monday through Friday. No Project-related construction activities shall occur on weekends or Federal holidays. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.* *4.4.4 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that for the duration of grading and site preparation activities, temporary construction noise curtains or similar line-of-sight noise reduction measures shall be installed along the Project's southerly boundary. Noise curtains shall be installed so as to provide maximum reduction for noise sensitive uses (at present a single residence located southerly of the Project site) and shown on the grading plans prepared for the Project.*	***Significant and Unavoidable***
The Project will not result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.4 Noise (cont'd)			
The Project will not result in or cause exposure of people or facilities to excessive noise levels generated by a public airport, public use airport, or private airstrip.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
Cumulative Noise Impacts			
Result in a cumulatively considerable noise levels resulting in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan, noise ordinance, or other applicable standards; result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project; or result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	***Potentially Significant for Construction Source Noise*** *Noise from Project-related construction activities would result in a substantial temporary increase in ambient noise levels in the Project vicinity. This is considered a potentially significant cumulative impact for the duration of Project construction activities.*	Refer to Mitigation Measures 4.4.1 through 4.4.4.	***Cumulatively Significant and Unavoidable*** *for the duration of Project construction activities.*

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.5 Water Supply			
The Project will not substantially deplete groundwater supplies or 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.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not require new or expanded water supplies.	Less-Than-Significant	*To further minimize the Project's overall water use, ensure on-going availability and reliability of water supplies within the EMWD service area, and provide for timely, monitored compliance with requirements stipulated in the Project WSA, the following EMWD Conditions of Approval are incorporated as EIR Mitigation Measures. Prior to building permit issuance, the developer shall provide a will-serve letter from EMWD demonstrating compliance with the following Conditions of Approval.* *4.5.1 Prior to the issuance of building permits, the Project Applicant shall contribute funding toward the acquisition of new water supplies, new treatment or recycled water facilities, and water efficiency measures for existing customers to develop new water supplies. The extent of additional funding shall be determined by the EMWD and may take the form of a new component of connection fees or a separate charge.*	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.5 Water Supply (cont'd)			
The Project will not require new or expanded water supplies.	Less-Than-Significant	*(Cont'd)* *4.5.2 The Applicant shall install water efficient devices and landscaping according to the requirements of EMWD's water use efficiency ordinance(s) effective at the time of Project construction.* *4.5.3 The Applicant shall meet with EMWD staff to develop a Plan of Service (POS) for the Project. The POS shall detail water, wastewater and recycled water requirements to serve the Project.* *4.5.4 Until the Project begins construction, the Project Water Supply Assessment shall be reviewed for its continued accuracy and adequacy every three (3) years, commencing on the WSA approval date of June 4, 2008. The Project Applicant shall maintain communication with EMWD on the status of the Project, and the lead agency shall request the referenced three-year periodic review and update of the WSA. If neither the Project applicant nor the lead agency contacts EMWD within three (3) years of approval of this WSA, it shall be assumed that the Project no longer requires the estimated water demand as calculated in the WSA. The demand for the Project will not be considered in assessments for future projects, and the assessment provided within the Project WSA shall be considered invalid.*	Less-Than-Significant
Cumulative Water Supply Impacts			
The Project will not result in cumulatively considerable impacts to water supplies.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.6 Hydrology and Water Quality			
The Project will not violate any water quality standards or waste discharge requirements; substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation on- or off-site; or otherwise substantially degrade water quality.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional sources of polluted runoff.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.6 Hydrology and Water Quality (cont'd)			
The Project will not place structures within a 100-year flood hazard area which would impede or redirect flood flows.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or inundation by seiche, tsunami, or mudflow.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
Cumulative Hydrology/ Water Quality Impacts			
The Project will not result in cumulatively considerable impacts to hydrology/water quality.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.7 Cultural Resources			
Cause a substantial adverse change in the significance of an archaeological or historical resource as defined in §15064.5.	***Potentially Significant*** Project construction activities may disturb unknown/unrecorded archaeological or historical resources which exist in a buried context.	*4.7.1 A professional cultural resources monitor (Project Paleontological Monitor) shall conduct full-time monitoring throughout site excavation and grading activities. The monitor shall be equipped to salvage and record the location of historic and/or archaeological resources as they may be unearthed to avoid construction delays. The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens or finds and to allow the preparation of recovered resources to a point of identification. One monitor for both archaeological and paleontological resources is sufficient if the monitor is qualified in both disciplines to the satisfaction of the City of Moreno Valley.* *4.7.2 Should historic or prehistoric resources of potential significance be identified, a qualified archaeologist shall be contacted to assess the find(s) and make recommendations in regard to further monitoring. All recovered resources shall then be curated in an established, accredited museum repository with permanent retrievable archaeological/historic resource storage. A report of findings shall also be prepared by a qualified archaeologist, and shall include an itemized inventory of any specimens recovered. The report and confirmation of curation of any recovered resources from an accredited museum repository shall signify completion of the program to mitigate impacts to archaeological/ historic resources. If disturbed resources are required to be collected and preserved, the applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2.*	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.7 Cultural Resources (cont'd)			
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	***Potentially Significant*** Project construction activities may disturb unknown/unrecorded paleontological resources which exist in a buried context.	*4.7.3 Prior to the issuance of a grading permit, a City-approved Project Paleontologist shall be retained to initiate and supervise paleontological mitigation-monitoring in all areas of the Project site, subject to the following certain constraints:* • *Once excavations reach ten (10) feet in depth, monitoring of excavation in areas identified as likely to contain paleontological resources by a qualified paleontological monitor or his/her representative must take place;* • *A paleontological mitigation-monitoring plan shall be developed before grading begins;* • *Paleontological monitors shall 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; and* • *Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.*	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.7 Cultural Resources (cont'd)			
The Project will not disturb any human remains, including those interred outside of formal cemeteries human remains.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
Cumulative Cultural Resources Impacts			
The Project will not result in cumulatively considerable impacts to cultural resources.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.8 Biological Resources			
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.	***Potentially Significant for disturbance of riparian habitat, disturbance/alteration of CDFG/Corps jurisdictional areas; introduction of invasive plant species, impacts to nesting birds, and impacts burrowing owls*** Project construction activities will result in the following potentially significant impacts: Potential direct temporary impacts to 0.003 acres, (22 lineal feet) of mulefat vegetated riparian habitat; Potential direct permanent impact to 0.08 acres of un-vegetated riparian habitat; Indirect impacts through potential introduction of invasive plant species; Potential impacts to nesting birds and burrowing owls.	*4.8.1 Prior to the issuance of a grading permit, a "no touch" area shall be staked along the westerly limit of Project development as defined by the alignment of the scour wall proposed along the Quincy Channel. Importantly, the westerly limits of development shall be established so as to preclude potential permanent impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Prior to the issuance of a grading permit, a City-approved Project biologist shall be retained to initiate and supervise monitoring of construction activities to ensure protection and preservation of adjacent Channel areas.*	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.8 Biological Resources (cont'd)			
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.	***Potentially Significant for disturbance of riparian habitat, disturbance/alteration of CDFG/Corps jurisdictional areas; introduction of invasive plant species, impacts to nesting birds, and impacts burrowing owls***	*4.8.2 Prior to issuance of a grading permit, the proposed scour wall to be located between the developed Project site and the Quincy Channel shall be shown on the grading plans. Alignment of the scour wall shall be field-determined and physically delineated by the Project biologist in consultation with the City. Importantly, the scour wall alignment shall be established so as to preclude potential impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Ongoing monitoring of construction activities shall be maintained throughout implementation of the scour wall to ensure protection and preservation of adjacent Channel areas.* *4.8.3 Prior to issuance of a building permit, landscape and irrigation plans shall be approved which demonstrate that no invasive, non-native plants will be planted or seeded within 150 feet of the avoided riparian habitat along the Quincy Channel.* *4.8.4 Prior to the issuance of <u>any</u> grading permits and prior to any physical disturbance of any jurisdictional areas, 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 the Community Development Department - Planning Division and the Public Works Department - Land Development Division.*	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.8 Biological Resources (cont'd)			
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.	***Potentially Significant for disturbance of riparian habitat, disturbance/alteration of CDFG/Corps jurisdictional areas; introduction of invasive plant species, impacts to nesting birds, and impacts burrowing owls***	*4.8.5 Prior to issuance of a grading permit, the Applicant shall develop and implement a Habitat Mitigation and Monitoring Plan (HMMP) to restore impacted riparian (mulefat) habitat. Prior to implementation, the HMMP shall be reviewed and approved by the CDFG. If in its final design, the CDFG-approved HMMP involves use or restoration of USACE or RWQCB jurisdictional areas, USACE and/or RWQCB approval shall also be obtained. The HMMP shall, at a minimum, meet the following requirements:* • *A habitat replacement and/or enhancement ratio of at least 1:1 for temporary impact;* • *A success criterion of at least 80 percent cover of native riparian vegetation for replaced habitat; and* • *Additional requirements, including a 3-year establishment period for the replacement habitat, regular trash removal, and regular maintenance and monitoring activities to ensure the success of the mitigation plan.*	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.8 Biological Resources (cont'd)			
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.	***Potentially Significant for disturbance of riparian habitat, disturbance/alteration of CDFG/Corps jurisdictional areas; introduction of invasive plant species, impacts to nesting birds, and impacts burrowing owls***	*4.8.6 If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season (February 15 – July 31), all suitable habitat will be thoroughly surveyed for the presence of nesting birds within 72 hours prior to clearing. All surveys shall be performed by a qualified Project biologist to be retained by the Applicant and vetted by the City. The survey results shall be submitted by the Project Applicant to the Planning Division. If any active nests are detected, the nest(s) shall be flagged in the field and mapped on the construction plans along with a minimum 50-foot buffer and up to 300 feet for raptors, with the final buffer distance to be determined by the Project biologist. The buffer area shall be avoided until the nesting cycle is complete or it is determined that the nest has failed. In addition, the Project biologist will be present on the site to monitor vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.* *4.8.7 Within 30 days of site clearing activities, a pre-construction burrowing owl survey shall be conducted to document the presence/absence of any occupied owl burrows. Any owls present shall be passively or actively relocated following CDFG approved protocols, and with CDFG permission, prior to commencement of clearing. The survey shall be submitted to the Planning Division prior to issuance of a grading permit.*	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.8 Biological Resources (cont'd)			
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.	***Potentially Significant for impacts to riparian habitat.*** Project construction activities will result in the following potentially significant impacts: Potential direct temporary impacts to 0.003 acres, (22 lineal feet) of mulefat vegetated riparian habitat; and Potential direct permanent impact to 0.08 acres of un-vegetated riparian habitat.	Please refer to Mitigation Measures 4.8.1 through 4.8.5	Less-Than-Significant

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.8 Biological Resources (cont'd)			
The Project will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Cumulative Biological Resources Impacts			
The Project will not result in cumulatively considerable impacts to biological resources.	Not Applicable	Not Applicable	Not Applicable
4.9 Aesthetics			
Have a substantial adverse effect on a scenic vista.	***Potentially Significant*** The Project proposes construction of a single distribution warehouse structure totaling approximately 937,260 square feet. Implementation of the Project would potentially result in the restriction or interruption of near and distant scenic vistas.	No feasible mitigation exists that reduce the Project's impact below a level of significance.	***Significant and Unavoidable for restriction/interruption of near and distant scenic vistas.***
The project will not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable

Table 1.10-1
Summary of Environmental Impacts and Mitigation Measures

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.9 Aesthetics (cont'd)			
The Project will not substantially degrade the existing visual character or quality of the site and its surroundings.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
The Project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less-Than-Significant	No mitigation measures are necessary.	Not Applicable
Cumulative Aesthetic Impacts			
Implementation of the Project would contribute considerably to cumulative substantial adverse effects on a scenic vista.	***Potentially Significant*** The project in combination with other known or probable development projects would potentially result in the cumulatively considerable restriction or interruption of near and distant scenic vistas.	No mitigation has been identified that would reduce this cumulative impact below a level of significance.	***Cumulatively Significant and Unavoidable.***

2.0 INTRODUCTION

2.0 INTRODUCTION

2.1 OVERVIEW

This EIR has been prepared to analyze and disclose potential environmental effects of the proposed Westridge Commerce Center Project (the Project). Together with necessary supporting improvements, the Project provides for construction of a 937,260-square-foot distribution warehouse on an approximately 55-acre site, located to the southwest of the SR-60/Redlands Boulevard interchange. Elements of the Project are further described in EIR Section 3.0, "Project Description."

An EIR is an informational document intended to inform decision-makers and the general public of potentially significant environmental impacts of a project. An EIR also identifies possible ways to minimize these potentially significant impacts (referred to as mitigation) and describes reasonable alternatives to a project that may also reduce its significant impacts. Having the authority to take action on the Project, the City of Moreno Valley will consider the information in this EIR in their evaluations of the proposal. The findings and conclusions of the EIR regarding environmental impacts do not affect the Lead Agency's discretion to approve, deny, or modify the Project, but instead are presented as information to aid in the decision-making process.

2.2 AUTHORIZATION

This EIR has been prepared for the City of Moreno Valley in accordance with the *CEQA Guidelines*, (Sections 15000-15387 of the California Code of Regulations), and the City's CEQA Guidelines. The Westridge Commerce Center considered in this EIR is a "Project," as defined under Section 15378 of the *CEQA Guidelines*. The *CEQA Guidelines*

stipulate that an EIR must be prepared for any project that may have a significant impact on the environment. Upon initial environmental review of the Project, the City determined that the Project may have a significant adverse impact on the environment and, therefore, the preparation of an EIR was required.

2.3 LEAD AND RESPONSIBLE AGENCIES

CEQA defines a "lead agency" as the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment. Other agencies, e.g., the South Coast Air Quality Management District (SCAQMD) or the Santa Ana Regional Water Quality Control Board (RWQCB), which also have some authority or responsibility to issue permits for project implementation, are designated as "responsible agencies." Both the lead agency and responsible agencies must consider the information contained in the EIR prior to acting upon or approving a project. The City of Moreno Valley is the Lead Agency for the Westridge Commerce Center Project.

The City's address is:

City of Moreno Valley
Development Department
14177 Frederick Street
Moreno Valley, California 92553
Contact: Jeff Bradshaw, Associate Planner

2.4 PROJECT PROPONENT

The Project proponent is:

Ridge Property Trust
201 Covina Avenue, Suite 8
Long Beach, California 90803
Attention: Dennis S. Rice, President

2.5 THE EIR PROCESS

When a public agency determines that there is substantial evidence that a project may have a significant effect on the environment, the agency must prepare an EIR before a decision is made to approve or deny the project under consideration. The purpose of the EIR is to disclose a project's potential environmental impacts and recommend measures to reduce or avoid significant impacts. The basic content of an EIR includes a description of a project and its objectives, a description of existing conditions, a discussion of the potentially significant environmental effects of a project, recommended measures for reducing these effects, and identification and evaluation of alternatives to a project which may also reduce its potentially significant impacts.

An EIR typically consists of two documents: a Draft EIR, distributed by the lead agency for review and comment by the general public and any interested governmental agencies; and a Final EIR, which consists of responses to comments received on, together with any necessary modifications to, the Draft EIR. After the Draft EIR has been circulated for review and the Final EIR has been prepared, the EIR must be certified by the lead agency as having complied with CEQA and considered by the agency's decision-making body before any action can be taken on the project.

When a public agency receives a complete project application or decides to undertake a project of its own, it first determines if the project is subject to environmental review under CEQA and, if it is, the agency then typically prepares an Initial Study to determine if the project has the potential to cause significant adverse environmental effects. The Initial Study serves as a tool to help the agency determine if an EIR is needed and, if so, also helps determine what issues should be examined in the EIR. An agency may skip the Initial Study process if it is evident in the preliminary assessment of a project that an EIR will be required.

The EIR process is initiated by the distribution of a Notice of Preparation (NOP). Together with the Initial Study, the NOP is sent to agencies and interested individuals to solicit their suggestions for appropriate issues and types of analysis to be included in

the Draft EIR. When preparation of the Draft EIR has been completed, it is circulated to responsible agencies, other affected or interested agencies, and interested members of the public for review and comment. The review period for a Draft EIR is typically 45 days. To provide for appropriate consideration in the Final EIR, all comments and concerns regarding the Draft EIR should be received by the lead agency during this 45-day period.

Responses to comments received on the Draft EIR are prepared by the lead agency and included in the Final EIR. The Final EIR may also contain some additional information about, or clarification of, a project's potential impacts as well as minor corrections or modifications to the Draft EIR. The Final EIR must be certified by the lead agency's decision-making body before, or in conjunction with, any action to approve or deny the Project.

CEQA requires that an EIR specifically address only those impacts determined to be potentially significant. To this end, the *CEQA Guidelines* suggest thresholds or standards which define the significance of various types of impacts. The *CEQA Guidelines* also state that the significance of impacts should be considered in relation to their severity and probability of occurrence. Ultimately however, the determination of the significance of impacts is determined by the lead agency. The identification of significant impacts in the EIR does not prevent an agency from approving the project. The project may be approved if the lead agency determines that impacts cannot be feasibly mitigated below a level of significance and if the agency determines that there are important overriding considerations, such as social and economic benefits, which are sufficient to justify approval of the project.

2.6 EIR CONTENT AND FORMAT

This Draft EIR is organized into seven (7) sections, each dealing with a separate aspect of the required content of an EIR as described in the *CEQA Guidelines*. A summary of the Project's impacts and recommended mitigation measures is included in Section 1.0. An introduction and general overview of the environmental process and the format of

this EIR can be found within Section 2.0. Section 3.0 presents a complete description of the Project, including its location, objectives, and characteristics. The complete and detailed environmental impact analysis is presented in Section 4.0.

EIR Section 5.0, "Other Mandatory CEQA Topics," addresses other environmental considerations and topics mandated under the California Environmental Quality Act. These topics include Cumulative Impacts, Alternatives to the Project, Growth Inducement, Significant and Unavoidable Environmental Impacts, and Significant and Irreversible Environmental Changes. Section 6.0 defines the acronyms and abbreviations contained in this document. Section 7.0 lists the information sources and persons consulted during the environmental analysis process, and presents a list of the persons who prepared the Draft EIR. The Initial Study and responses to the NOP, and supporting technical analyses are appended to this document.

EIR Section 4.0, "Environmental Impact Analysis," is the focal component of this document. The environmental impact analysis has been organized into a series of sections addressing each environmental topic of relevance; e.g., "Traffic, Circulation, and Parking," "Air Quality," and "Noise." The sections covering each individual environmental topic are typically divided into the following subsections to assist the reader in understanding the organization and basis of the analysis:

- **Reader's Abstract:** An introductory reader's abstract, summarizing content and findings, is provided at the beginning of each topical section;

- **Introduction:** The introduction summarizes the content of the section and references other important studies and reports, such as technical studies appended to the EIR;

- **Setting:** This subsection describes environmental conditions at the Project site and in its vicinity which may be subject to change as a result of implementation

of the proposal. Separate descriptions of existing environmental conditions are provided for each environmental topic;

- **Existing Policies and Regulations:** Various relevant policies, regulations, and programs are briefly described. Often, these existing policies and regulations serve to reduce or avoid potential environmental impacts;

- **Standards of Significance:** Before potential impacts are evaluated, the standards which will serve as the basis for judging significance are presented;

- **Impacts and Mitigation Measures:** This subsection states and explains potential impacts caused by the Project. Based on the standards of significance, impacts are categorized as either potentially significant or less-than-significant. If the impacts are potentially significant, mitigation measures are proposed to reduce the extent or severity of impacts. At the conclusion of each discussion for a significant impact, a determination is made as to whether the impact can be reduced to a less-than-significant level with the application of proposed mitigation measures.

The Executive Summary presented in EIR Section 1.0 provides a comprehensive overview of the Project and its potential environmental impacts. For a more detailed description of the Project and associated potential environmental effects, it is recommended that the reader review EIR Section 3.0, "Project Description," and then review the topics of interest presented in EIR Section 4.0, "Environmental Analysis."

2.7 INTENDED USE OF THIS EIR

This EIR addresses the potential environmental effects of the implementation and operation of the proposed Westridge Commerce Center Project. The City of Moreno Valley (City) is the Lead Agency for the purposes of CEQA because it has the principal responsibility and authority for deciding whether or not to approve the Project, and how it will be implemented. As the Lead Agency, the City is also responsible for

preparing the environmental documentation for the Project in compliance with CEQA. The Lead Agency will employ this EIR in its evaluation of potential environmental impacts resulting from, or associated with, approval and implementation of the Project, to include potential effects of the Project's component elements. It is anticipated that this EIR may also be employed by other responsible agencies, e.g., the South Coast Air Quality Management District, Regional Water Quality Control Board, et al., for their related or dependent permit approvals.

2.8 DOCUMENTS INCORPORATED BY REFERENCE

Section 15150 of the State *CEQA Guidelines* permits and encourages an environmental document to incorporate, by reference, other documents that provide relevant data. The documents summarized below are incorporated by reference, and the pertinent material is summarized throughout this EIR, where that information is relevant to the analysis of potential impacts of the Project. All documents incorporated by reference are available for review at, or can be obtained through, the City of Moreno Valley Community Development Department, Planning Division.

2.8.1 City of Moreno Valley General Plan

The current City of Moreno Valley General Plan, initially adopted in 1988 and updated in 2006, acts as the "constitution" for the physical development of the City, and forms the basis of decisions concerning the development of property. To this end, the General Plan establishes City land use and development policies, identifies planned land uses, and supporting infrastructure systems.

State-mandated Elements addressed in the General Plan include the Community Development Element; the Parks, Recreation and Open Space Element; the Circulation Element; Safety Element; Conservation Element; and Housing Element. Development within the General Plan Area will be shaped by the General Plan's Goals, Objectives, Policies and Programs, which are integral to each of the General Plan Elements.

2.8.2 City of Moreno Valley Zoning Ordinance

The City of Moreno Valley Zoning Ordinance codifies and complements the City's General Plan. The Zoning Ordinance (Ordinance 389, adopted in 1992) provides the mechanism to implement and enforce the goals, objectives, policies, and programs articulated in the General Plan. Many of the potential environmental concerns considered in this EIR are adequately addressed through application of existing guidelines and regulations contained in the Zoning Ordinance. Current zoning regulations are included as Section 9.0 of the City's Municipal Code.

2.8.3 Project Technical Studies and Supporting Analyses

2.8.3.1 Initial Study, NOP, and NOP Responses - EIR Appendix A

The EIR Initial Study (IS) and Notice of Preparation (NOP) and responses received pursuant to distribution of the IS/NOP are presented in EIR Appendix A. Based on the Initial Study and responses to the NOP, the EIR has been focused on the topics of: Land Use and Planning; Traffic and Circulation; Air Quality; Noise; Water Supply; Hydrology and Water Quality; Cultural Resources; Biological Resources; and Aesthetics.

2.8.3.2 Traffic Impact Analysis - EIR Appendix B

Potential traffic and circulation system impacts of the Project are assessed within:

Westridge Commerce Center Traffic Impact Analysis, City of Moreno Valley, California (Urban Crossroads, Inc.) May 20, 2010; and *Westridge Fire Route and Emergency Response Time Assessment* (Urban Crossroads, Inc.) January 20, 2010.

2.8.3.3 Air Quality Analysis Report - EIR Appendix C

Potential air quality impacts of the Project, including potential short-term construction emissions impacts and potential long-term operational emissions impacts are assessed within *Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley, California* (Urban Crossroads, Inc.), February 3, 2010. Two additional studies

supplement the findings of the Air Quality Impact Analysis. These include *Westridge Commerce Center Health Risk Assessment, City of Moreno Valley, California* (Urban Crossroads, Inc.), February 3, 2010; and *Westridge Commerce Center Climate Change Analysis, City of Moreno Valley, California* (Urban Crossroads, Inc.), February 3, 2010.

2.8.3.4 Noise Impact Analysis - EIR Appendix D

Potential noise impacts of the Project, including potential short-term construction noise impacts and potential long-term operational noise impacts are assessed within the *Westridge Commerce Center Noise Analysis, City of Moreno Valley, California* (Urban Crossroads, Inc.) May 17, 2010.

2.8.3.5 Water Supply Assessment - EIR Appendix E

The Project Water Supply Assessment, prepared by Eastern Municipal Water District (June 4, 2008) documents the District's ability to serve the Project with a reliable supply of potable water.

2.8.3.6 Preliminary Hydrology Study and Preliminary Water Quality Management Plan - Appendix F

Details regarding pre-and post-development hydrology conditions at the Project site are presented within the *Preliminary Hydrology Study for Ridge Property Trust* (Huitt-Zollars, Inc.) June 9, 2010; and *Project Specific Preliminary Water Quality Management Plan for Westridge Commerce Center - Moreno Valley* (Huitt-Zollars, Inc.) June 10, 2010.

2.8.3.7 Biologic Resource Surveys - EIR Appendix G

A general reconnaissance survey to assess the site's potential in regard to biological resources *Report on Habitat Assessments and Biological Surveys for the Westridge Project Site* (Harmsworth Associates, Inc.), was prepared in October 2008. Three follow-up reports have also been prepared, the *Report on Burrowing Owl Surveys for the Westridge Project Site* (Harmsworth Associates, Inc.), July 2009; the *Ridge Moreno Valley Off-site Area Biological Surveys* (Harmsworth Associates, Inc.), May 11, 2010, and a *Jurisdictional*

Delineation Report for the Westridge Commerce Center Project (ICF Jones and Stokes), February 2010.

2.8.3.8 Geotechnical Investigation - EIR Appendix H

A geotechnical investigation, *Geotechnical Investigation, Proposed West Ridge Business Center* (Southern California Geotechnical) January 10, 2007, has been conducted for the subject site. The analysis and findings of the Geotechnical Investigation, based in part on data collected from 17 subsurface borings, indicate that with implementation of recommended design, engineering, and construction practices, the subject site is suitable for construction of the Project. To the satisfaction of the City, findings and recommendations of the Investigation will be incorporated in final site and building designs for the Project. The Geotechnical Investigation is provided as EIR Appendix H.

2.8.3.9 Phase I Environmental Site Assessment - EIR Appendix I

Documentation of hazardous or potentially hazardous materials concerns and contamination issues affecting the subject site are presented in *Phase I Environmental Site Assessment, Undeveloped Land West of Redlands Boulevard and South of Highway 60, Moreno Valley, Riverside County, California 92555* (Professional Service Industries, Inc.), January 5, 2007. Technical information presented in the Phase I Site Assessment indicates that the subject site and vicinity properties are not adversely affected by any hazardous or potentially hazardous materials concerns. Findings and analysis of the Phase I Site Assessment are provided in EIR Appendix I.

2.8.3.10 Cultural Resource Investigation-EIR Appendix J

The Project's potential to impact archaeological, paleontological, or historic cultural resources has been assessed in *Phase I Cultural Resources Investigation of the Proposed Westridge Commerce Center at Redlands Blvd. and the Moreno Valley Freeway and in the City of Moreno Valley, Riverside County, California*, prepared by McKenna et al., September 18, 2008 (Project Cultural Resources Investigation). The Cultural Resource Investigation is provided as EIR Appendix J.

2.9 PROJECTS OF STATEWIDE, REGIONAL, OR AREAWIDE SIGNIFICANCE

CEQA Guidelines Section 15206 defines a project to be of statewide, regional, or areawide significance if the project meets any of the following criteria:

(1) A proposed local general plan, element, or amendment thereof for which an EIR was prepared.

(2) A project has the potential for causing significant effects on the environment extending beyond the city or county in which the project would be located. Applicable to the Westridge Commerce Center Project, proposals subject to this criterion include industrial uses employing more than 1,000 persons, or which occupy more than 40 acres, or which encompass more than 650,000 square feet of floor area.

(3) A project which would result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 (Williamson Act) for any parcel of 100 or more acres.

(4) A project for which an EIR . . . was prepared which would be located in and would substantially impact areas of critical environmental sensitivity . . .

(5) A project which would substantially affect sensitive wildlife habitats including but not limited to riparian lands, wetlands, bays, estuaries, marshes, and habitats for endangered, rare and threatened species as defined by Section 15380 of this Chapter [of the *CEQA Guidelines*].

(6) A project which would interfere with attainment of regional water quality standards as stated in the approved areawide waste treatment management plan.

(7) A project which would provide housing, jobs, or occupancy for 500 or more people within 10 miles of a nuclear power plant.

The proposed Westridge Commerce Center Project qualifies under *Guidelines* Section 15206 item (2) above, and is therefore considered a project of "statewide, regional, or areawide significance." Projects of statewide, regional, or areawide significance require that a scoping meeting be conducted. A scoping meeting for the Westridge Commerce Center Project was held on October 28, 2009. Further, Draft EIRs prepared for projects of statewide, regional, or areawide significance must be submitted to the State Clearinghouse (SCH) together with the requisite SCH Notice of Completion (NOC). The Draft EIR for the proposed Westridge Commerce Center Project and accompanying NOC have been transmitted to the SCH.

3.0 PROJECT DESCRIPTION

3.0 PROJECT DESCRIPTION

3.1 OVERVIEW

The proposed Westridge Commerce Center, including all facilities proposed within the Project site, on- and off-site supporting improvements, and associated discretionary actions, is the Project considered in this EIR. Unless otherwise differentiated, the terms "Westridge Commerce Center" and "Project" are used interchangeably throughout this document. In summary, the Project proposes approximately 937,260 square feet of light industrial/distribution warehouse uses within a site of approximately 55 acres in size.

3.2 PROJECT LOCATION AND BOUNDARIES

The Project site is located in the eastern portion of the City of Moreno Valley, in western Riverside County. Please refer to Figure 3.2-1, "Regional Location." The Project will be developed within a 54.66-acre site, which is located near the SR-60/Redlands Boulevard interchange. The site is bounded by SR-60 to the north, Fir Avenue (future Eucalyptus Avenue) to the south, the Quincy Channel to the west, and vacant land designated for commercial use between the Project's east boundary and Redlands Boulevard, approximately 700 feet to the east. Please refer also to the Project site aerial, Figure 3.2-2, "Project Vicinity."

N

NOT TO SCALE

Source: Applied Planning, Inc.

applied planning inc

Figure 3.2-1
Regional Location

N

NOT TO SCALE

Source: Google Earth, Applied Planning, Inc.

applied planning inc

Figure 3.2-2
Project Vicinity

3.3 BACKGROUND

The Project site is currently vacant, consisting of predominantly flat, disced land. The Riverside County Agricultural Commissioner's office indicates the Project site, along with other vicinity properties, has been in agricultural use, producing a variety of dryland crops, for at least the last 20 years. Although the Project site has a history of agricultural use, it is not currently under cultivation, and it is not designated as Prime Farmland, Unique Farmland or Farmland of Statewide importance. The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) indicates that the site is considered Farmland of Local Importance, due to the high-quality, prime soils present at the site. Nonetheless, the City of Moreno Valley acknowledges the planned transition of the site to light industrial/business park uses through its General Plan and Zoning designations.

3.4 PROJECT OBJECTIVES

Primary objectives of the Project as identified by the Project Applicant are as follows:

- Transition the existing site into a productive use;
- Develop a project that is sensitive to the surrounding land uses;
- Provide jobs-producing, light industrial uses to the City of Moreno Valley and local community;
- Capitalize on the site's regional freeway access; and
- Increase economic benefits to the City of Moreno Valley through increased tax generation and job creation.

3.5 PROJECT CHARACTERISTICS

Project construction is proposed to occur in one phase, with infrastructure and building construction following site preparation operations, as described in the following paragraphs. For the purposes of the EIR analysis, the Project is assumed to be operational 24 hours per day, seven (7) days per week, except as may be otherwise limited by applicable codes or regulations.

3.5.1 Site Preparation

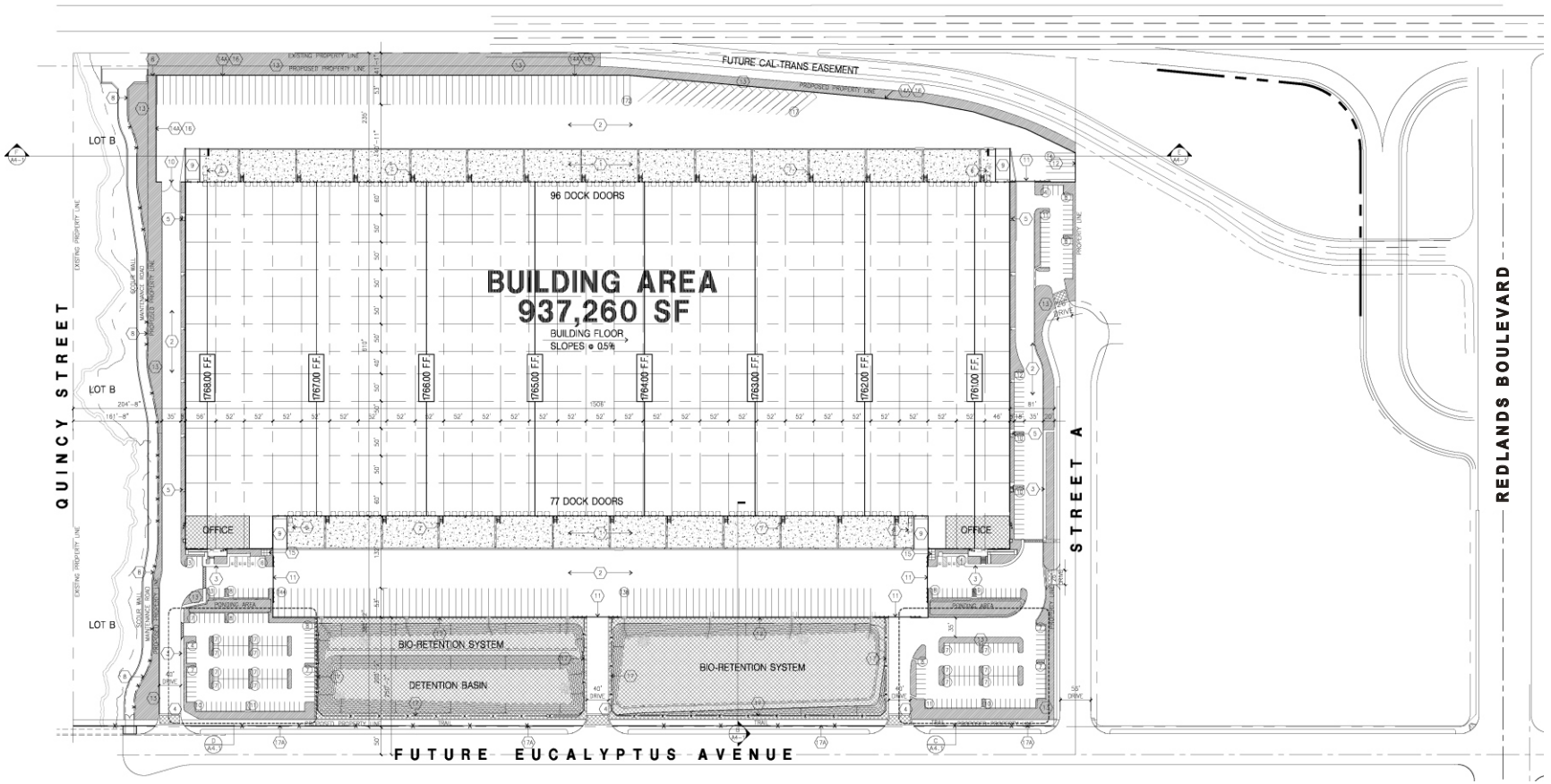
The existing Project site will require soil removal, fill, and re-compaction to establish building pads and suitable sub-base for parking areas as well as to ensure proper foundation support. This work will be realized consistent with recommendations and requirements of the *Geotechnical Investigation, Proposed West Ridge Business Center* (Southern California Geotechnical) January 10, 2007, presented as Appendix H to this EIR. It is anticipated approximately 80,000 cubic yards of soil will be removed from the Project site. Any residual materials resulting from site preparation processes will be appropriately disposed of and/or recycled in accordance with the City's Source Reduction and Recycling Element (SRRE).

3.5.2 Site Development Concept

The approximately 55-acre site is anticipated to accommodate approximately 937,260 square feet of light industrial uses. Specifically, one building will be constructed on-site, containing approximately 96 loading dock doors to the north and 77 loading dock doors to the south. Approximately 14,000 square feet of office space is divided between the southeast and southwest corners of the building. The Project Site Plan Concept, Figure 3.5-1,[1] reflects independently functional access, internal circulation and parking for the eastern and western portion of the Project's proposed building, to allow for the possibility of dividing the completed building between two operators.

Final designs of the Project building will be realized consistent with industrial design requirements and standards identified under Municipal Code Section 9.05.040, "Industrial Site Development Standards."

[1] Figure 3.5.-1 presents the latest available Site Plan Concept information. Other EIR graphic portrayals of the Site Plan (including those presented in supporting technical studies), may exhibit certain content discrepancies with the information presented at Figure 3.5-1, but are nonetheless adequate for their intended purposes.



KEYNOTES - SITE PLAN

1. HEAVY BROOM FINISH CONC. PAVEMENT, SEE "C" & "S" DWGS..
2. ASPHALT CONCRETE (AC) PAVING, SEE "C" DWGS.
3. CONCRETE WALKWAY, SEE "L" DRAWINGS.
4. DRIVEWAY APRONS TO BE CONSTRUCTED PER CITY STANDARD 118C. NO DECORATIVE PAVING WITHIN RIGHT-OF-WAY. SEE "L" DWGS.
5. 5'-6"X5'-6"X4" MIN. THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH. SLOPE TO BE 1/4" : 12" MAX. PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY W/ 1:20 MAX. AS REQ. BY CITY INSPECTOR.
6. 7' SIDE X 15' LONG TRASH COMPACTOR W/ 8' WIDE X 22' LONG REFUSE CONTAINER.
7. EXTERIOR CONC. STAIR.
8. 8' H. COATED CHAIN-LINK FENCE OR OTHER AS APPROVED BY THE COMMUNITY DEVELOPMENT DIRECTOR.
9. CONCRETE RAMP.
10. 8' H. METAL SWING GATE.
11. 8' H. METAL SLIDING GATE.
12. 14' H. CONCRETE SCREENWALL, PAINTED.
13. LANDSCAPE. SEE "L" DWGS. LANDSCAPE AREAS INDICATED BY SHADED PATTERN.
14. 8' H. WROUGHT IRON FENCE.
14A. 14' H. WROUGHT IRON FENCE.
15. COURTYARD PATIO AREA.
16. RETAINING WALL, SEE "C" DWGS.
17. 4' H. THREE RAIL FENCE.
17A. 4' H. THREE RAIL FENCE AS PER COMMUNITY DEVELOPMENT DIRECTOR.

N

NOT TO SCALE

Source: HPA, Inc.

Reflects latest available information. Other site plan representations within this EIR & technical studies are amended accordingly by reference. EIR analyses and conclusions are not affected.

applied planning inc

Figure 3.5-1
Project Site Plan Concept

3.5.3 Access/Circulation

Regional access to the Project is provided via the SR-60/Redlands Boulevard interchange. The Project has been designed to accommodate future interchange improvements planned by Caltrans. Interchange improvements will be constructed by Caltrans, and are not a part of the proposed Project.

Circulation system improvements to be implemented by the Project prior to issuance of the first Certificate of Occupancy are summarized below:

- Fir Avenue (future Eucalyptus Avenue) will be constructed to its ultimate half-section width (one-half of 104-foot right-of-way section improvements pursuant to City Standard No. 104B) as an arterial roadway from the westerly Project boundary, extending to Redlands Boulevard to the east. Signalization and turn lane improvements will be provided at the intersection of Fir Avenue (future Eucalyptus Avenue) at Redlands Boulevard consistent with City standards and requirements. At the westerly terminus of Fir Avenue (future Eucalyptus Avenue), full cul-de-sac improvements will be provided to allow for vehicle turnaround.

- An auxiliary lane along the westerly side of Redlands Boulevard will be constructed between Fir Avenue (future Eucalyptus Avenue) and the SR-60 eastbound off-ramps.

- The proposed public street (Street "A") at the Project's easterly boundary will be constructed to its ultimate half-section width (one-half of 78-foot right-of-way section improvements pursuant to City Standard No. 106) as an industrial collector roadway from the proposed northern terminus of the road to Fir Avenue (future Eucalyptus Avenue) in conjunction with development. Full improvements will be provided at the cul-de-sac "bulb" to allow for vehicle turnaround.

- Driveway access will be provided consistent with City of Moreno Valley design standards. All driveway access points will remain open and accessible during business hours.

- Consistent with the City of Moreno Valley Master Plan of Trails, a proposed trail is shown along the Project frontage on the north side of Fir (future Eucalyptus) Avenue which will join with the proposed future trail on Redlands Boulevard. Pursuant to the City of Moreno Valley Bikeway Plan, a Class I bikeway is planned on the east side of Redlands Boulevard within the vicinity of the Project.

3.5.4 On-Site Parking Requirements

The City of Moreno Valley Municipal Code specifies a parking ratio of one parking space for each 1,000 square feet of gross floor area in a warehouse/distribution building for the first 20,000 square feet, one additional space for each 2,000 square feet of floor area within the second 20,000 square feet, and one additional space for each 4,000 square feet of floor area for areas in excess of the initial 40,000 square feet. Additionally, for office uses, one parking space is required for every 250 square feet. Pursuant to City parking requirements, the Project would be required to provide an estimated 307 parking spaces. The Preliminary Site Plan Concept provides 317 standard spaces, as well as 182 additional trailer spaces. No off-site parking is proposed, nor would it be required. Final design of parking areas will be as reviewed and approved by the City through the City's site plan and building permit review processes.

3.5.5 Building Design Concepts

Design concepts for the Project are presented at Figure 3.5-2, Project Architectural Concept, and Figure 3.5-3, Conceptual Elevations and Architectural Details, which details colors and materials to be included in the Project. As presented in these figures, the architectural concept for the Project building incorporates large-scale, industrial design, accented building entrances and openings, rear elevations incorporating surface relief, varied textures, and façade accents. Faux windows are used to break up large wall surfaces, as well as provide a transition between the office and industrial uses. The single-story building will have a maximum height of approximately 41 feet.

3.5.6 Landscaping

Landscape and hardscape improvements will be provided for the Project as required under Zoning Code Section 9.17, "Landscape Requirements." To minimize risk of invasive non-native plants entering into the riparian habitat along the Quincy Channel, the Project includes mitigation (Measure 4.8.3) that prohibits the use of invasive non-native plant species within 150 feet of the Channel. The Preliminary Landscape Plan is presented as Figure 3.5-4. Figure 3.5-5 provides additional detail regarding Project landscaping, and Table 3.5-1 presents the proposed plant palette for the Project.

Landscaping plans and water-conserving irrigation systems for the Project, as required under Municipal Zoning Code Section 9.17.090, will be designed and implemented to the satisfaction of the City.

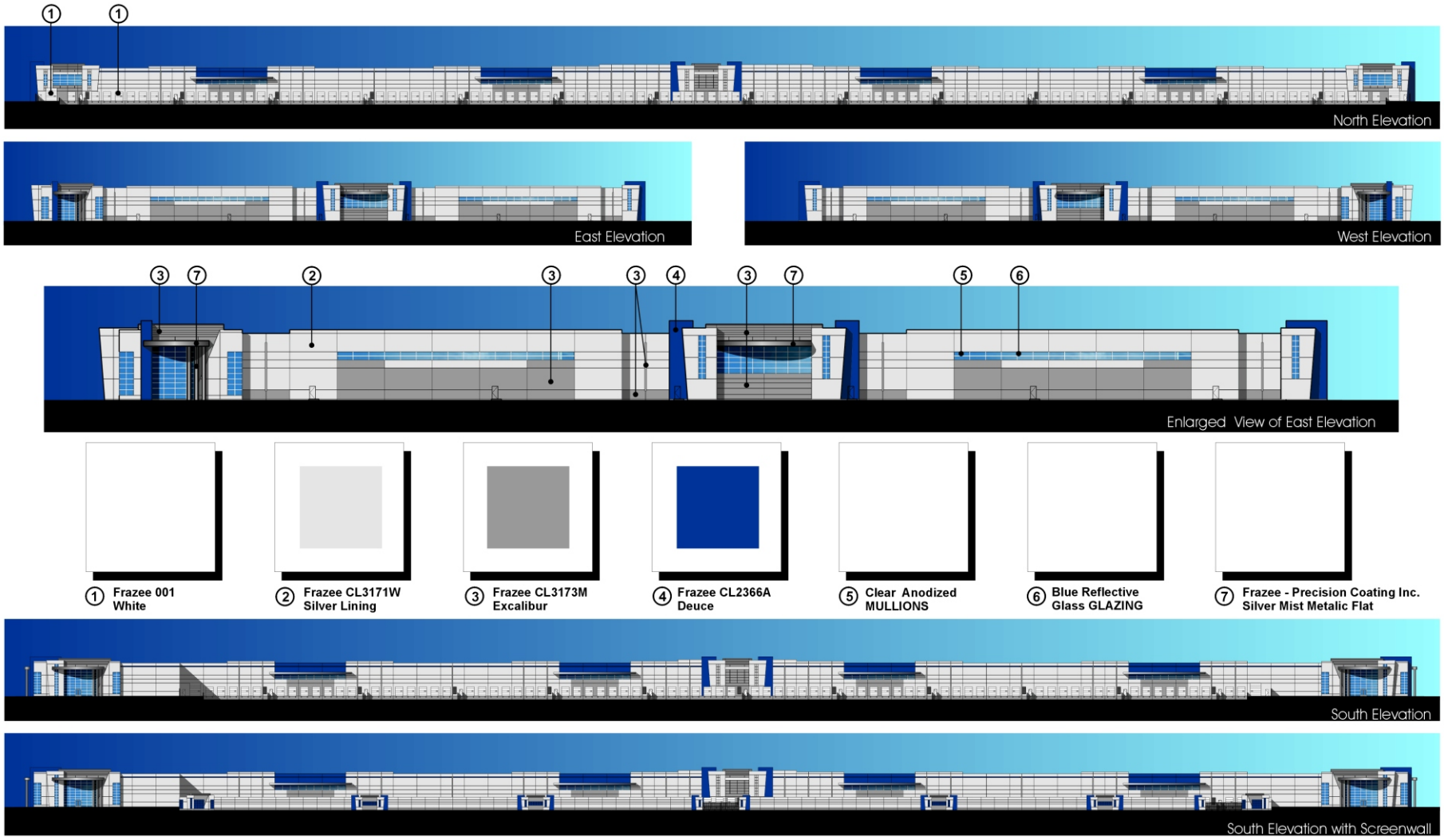
3.5.7 Walls and Fencing

Project loading areas will be screened from view on the north and the northernmost portion of the east side by 8-foot high masonry screenwalls; and on the south by a 14-foot high masonry screenwall. Walls will be painted to match the building, with adjacent planted vines that will ultimately cover the walls and provide a landscaped screen. Eight-foot high wrought iron fencing is proposed to secure the remainder of the site, including the Project's proposed stormwater detention areas. Vines will be planted adjacent to Project fencing, creating a landscaped screen at maturity.

Source: HPA, Inc.

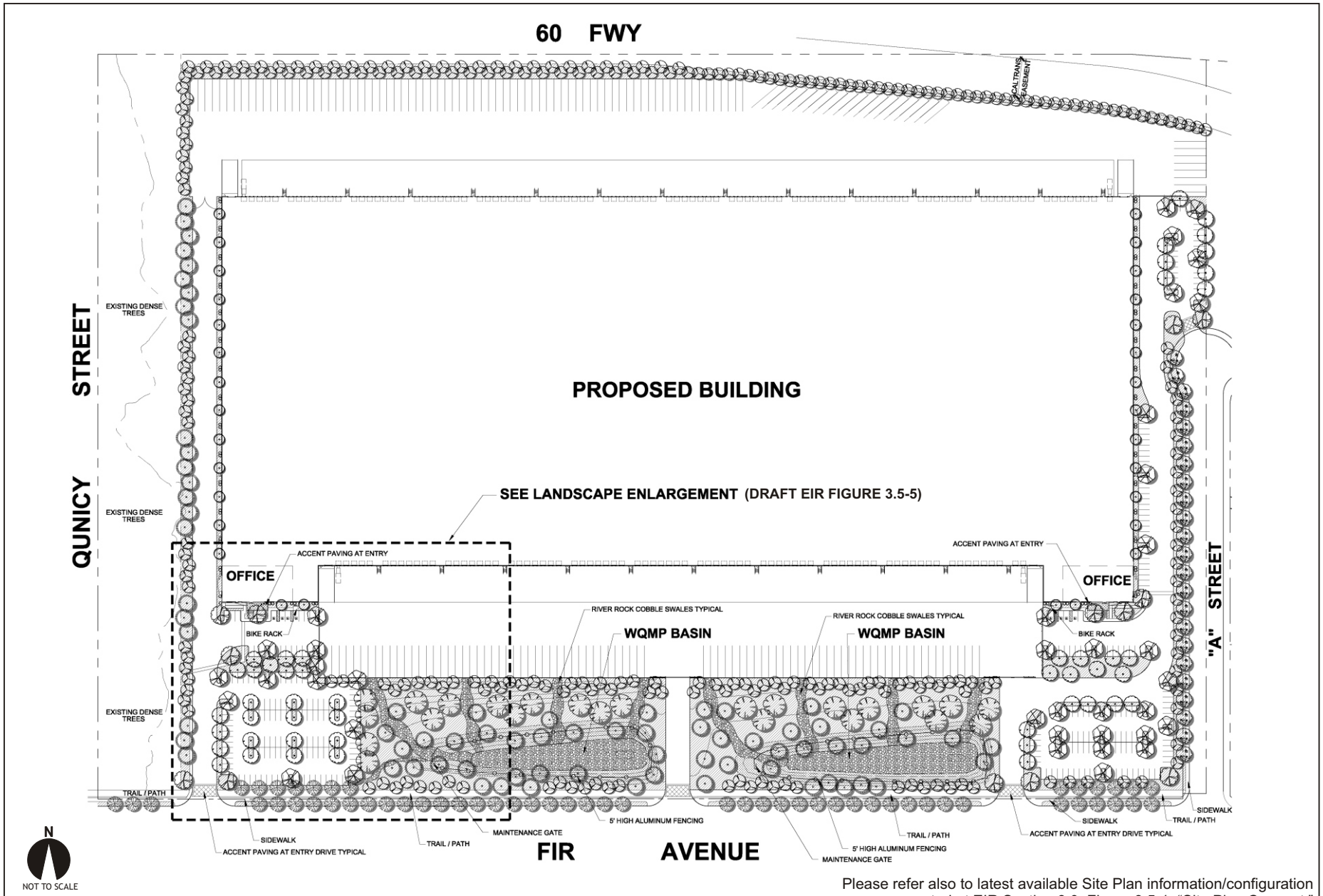
applied planning inc

Figure 3.5-2
Project Architectural Concept



Source: HPA, Inc.

Figure 3.5-3
Project Elevations and Architectural Details

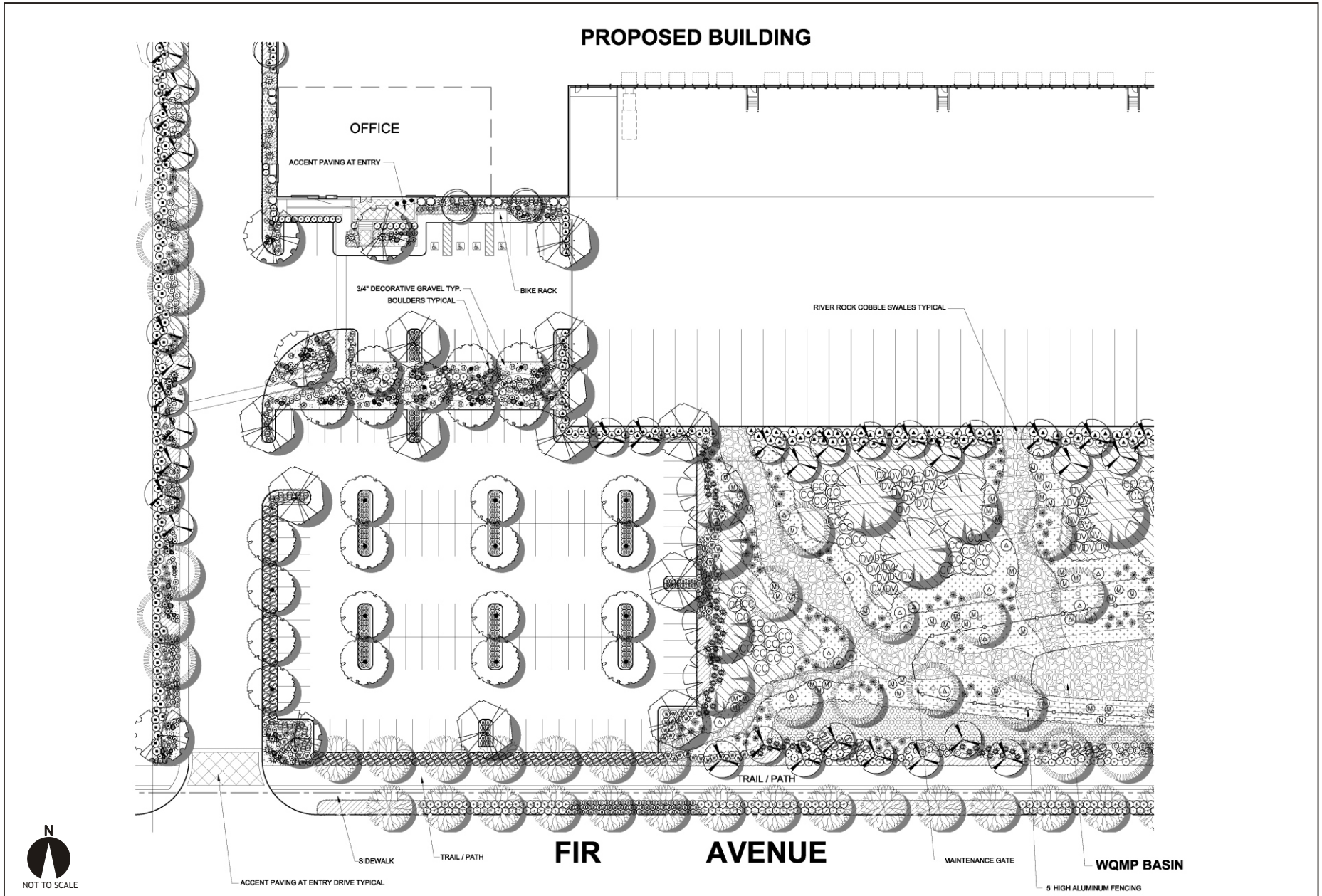


Source: Environs Landscape Architecture, Inc., April 2009.

Please refer also to latest available Site Plan information/configuration presented at EIR Section 3.0, Figure 3.5-1, "Site Plan Concept."

applied planning inc

Figure 3.5-4
Preliminary Landscape Plan



Source: Environs Landscape Architecture, Inc., April 2009.

Figure 3.5-5
Preliminary Landscape Plan Detail

Table 3.5-1
Plant Palette Concept

Scientific Name	Common Name	Size
Trees		
Brachychiton populneus	Bottle Tree	24" box
Podocarpus graciloir	Fern Pine	24" box
Cupressus sempervirens	Italian Cypress	15 gallon/24" box
Olea europaea	European Olive, Multi-trunk	48" box
Pinus canariensis	Canary Island Pine	15 gallon/24" box
Pinus eldarica	Eldarica Pine	15 gallon/24" box
Platanus acerifolia 'Bloodgood'	London Plane Sycamore	24" box
Platanus racemosa	California Sycamore	15 gallon
Pistachia chinensis	Chinese Pistache	24" box
Quercus virginiana	Southern Live Oak	24" box
Rhus lancea	African Sumac	15 gallon
Schinus Molle	California Pepper, Std.	24" box
Shrubs		
Agave Americana	Century Plant	15 gallon
Anigozanthos flavidus	Kangaroo Paw (red and yellow)	5 gallon
Baccharis pilularis	Coyote Brush	1 gallon
Chamaerops humilis	Mediterranean Fan Palm	5 gallon
Callistemon citrinus	Lemon Bottlebrush	5 gallon
Cassia artemisioides	Feathery Cassia	5 gallon
Cistus purpureus	Rockrose	5 gallon
Cotoneaster lacteus	Cotoneaster Parneyi	5 gallon
Dodonaea viscose	Hopseed Bush	5 gallon
Eleagnus pungens	Silverberry	5 gallon
Grevillea noelii 'Ruby Clusters'	Grevillea	5 gallon
Hesperaloe parviflora	Red Yucca	5 gallon
Leucophyllum frutescens 'Green Cloud'	Texas Silverleaf	5 gallon
Ligustrum texanum	Texas Privet	5 gallon
Miscanthus 'Transmonisonensis'	Evergreen Maiden Grass	5 gallon
Miscanthus variegates	No common name	5 gallon
Pittosporum Tobira sp.	No common name	5 gallon
Pennisetum setaceum 'Rubrum'	Purple Fountain Grass	5 gallon
Raphiolepis indica sp.	Indian Hawthorn	5 gallon

Table 3.5-1

Plant Palette Concept

Scientific Name	Common Name	Size
Shrubs (cont'd)		
Rhamnus californica	California Coffeeberry	5 gallon
Rosa floribunda 'Iceberg'	'Iceberg' Rose	5 gallon
Salvia greggii	Autumn Sage	5 gallon
Westringia fruiticosa	Coast Rosemary	5 gallon
Ground Cover/Accent Planting		
Acacia 'Desert Carpet	No common name	1 gallon
Festuca ovina glauca	Blue Fescue	1 gallon
Hemeroccallis hybrid	Daylily	1 gallon
Rosmarinus o. 'Prostratus'	Rosemary	1 gallon
Vines for Screenwalls and Basin Fencing		
Distictis buccinatoria	Bloodred Trumpet Vine	5 gallon
Ficus repens	Creeping Fig	1 gallon
Macfadyena unguis-cati	Catsclaw	1 gallon

Source: Environs Landscape Architecture, Inc., April 2009.

3.5.8 Trail Segment

Pursuant to the requirements of the City's Master Plan of Trails, the Project will dedicate and construct an 11-foot wide community trail segment along the southerly Project boundary, on the north side of Fir Avenue (future Eucalyptus Avenue). Upon development of the adjacent parcel(s), the trail is planned to continue off-site to the east and to the west, as part of the future Quincy Channel overcrossing.

3.5.9 Channel Improvements

The Quincy Channel, which runs in a north-south direction along the western boundary of the Project site, is currently an unimproved, ephemeral drainage area which enters the site through three five-foot diameter culverts located under SR-60. This drainage is subject to the jurisdiction of the Army Corps of Engineers (Corps) and the California Department of Fish and Game (CDFG).

The Project Hydrology Study indicates that the site's westerly boundary currently shows signs of severe scouring and erosion from drainage in the Quincy Channel. The Project will be required to improve the Quincy Channel pursuant to the requirements of the City and the Riverside County Flood Control and Water Conservation District recommendations and design requirements. A scour wall will be constructed to prevent further erosion, and a maintenance road will be provided on the easterly (Project side) of retaining wall/scour wall. The scour wall will be aligned so as not to permanently alter Corps/CDFG jurisdictional areas. Limited temporary disturbance (approximately 0.003 acres/22 lineal feet) within CDFG jurisdictional areas is anticipated during construction, and will be mitigated consistent with CDFG requirements as discussed at EIR Section 4.8, "Biological Resources."

3.5.10 Signs

Signs for the Project will be designed and implemented consistent with Zoning Code Section 9.12, "Sign Regulations." The Project Sign Program will provide detailed guidelines and requirements for facility and informational signs and other graphic displays within the Project area. The Sign Program will afford prospective tenants with the maximum possible exposure in a manner that is consistent with the encompassing Project design concept, and responsive to community visual and aesthetic sensibilities.

3.5.11 Lighting

Zoning Code Section 9.16.280, "Applications for Lighting, General Requirements," subsection A. states:

> Lighting serves both safety and aesthetic purposes, illuminating dark areas and providing for highlights and accents. Effective lighting will highlight building features, add emphasis to important spaces and create an ambience of vitality and security. The intent of these guidelines is to encourage effective and innovative lighting to be incorporated as an integral component of a project.

Detailed lighting plans will be prepared in conjunction with building plan submittals, and the City will review and approve lighting plans prior to issuance of building permits. Potential light overspill, as addressed through Municipal Code Section 9.10.110, "Performance Standards, Light and Glare," may be minimized through limited use of freestanding lighting and use of fixed and shielded directional wall-mounted fixtures where feasible. The Project lies within 45 miles of the Mt. Palomar Observatory, and would comply with applicable provisions of County of Riverside Ordinance 655 which addresses protection of the night sky from light pollution that would interfere with astronomical observations.

3.5.12 Screening

Screening within the Project site will be provided for under Zoning Code Section 9.08.150, "Screening Requirements," and Section 9.10.160, "Outdoor Storage, Trash Areas, and Service Areas." As required under these portions of the Code, the Project final site plan and building designs shall incorporate screening of mechanical equipment and trash areas. Southerly facing loading docks and adjacent truckyard areas will be screened from off-site views by an approximately 14-foot high screenwall spanning approximately 1,200 feet, across the length of southerly-facing truckyard areas. Screen walls will employ details, articulation, building materials, and architectural designs that are compatible with, and reflect materials and designs evidenced elsewhere within the Project site. No outdoor storage of materials or inventory is proposed.

3.5.13 Conservation Attributes

The Westridge Commerce Center Project reflects design and operational criteria established under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, a program developed by the United States Green Building Council. This program includes a rating system that can be applied to new construction as well as tenant improvement projects with performance goals in multiple environmental categories.

LEED certification is contingent, among other requirements, on demonstrated and documented conservation and efficient use of available resources. It is recognized that not all LEED performance standards are applicable or appropriate for the Project, and that different standards may be utilized by the Project's end user(s). However, the Project, as a whole, will be developed as a LEED-certified facility.

In support of LEED-certification, resources conservation, reduction in energy consumption and associated reductions in air pollutant emissions and greenhouse gases (GHGs), the Project will achieve a minimum of 20 percent in energy efficiencies beyond incumbent Title 24 Energy Efficiency standards, as well as compliance with other applicable state and federal energy standards.

- To achieve 20 percent efficiency beyond incumbent Title 24 energy efficiency standards, any combination of the following design features may be implemented by the Project:

  - Increase in insulation such that heat transfer and thermal bridging is minimized;
  - Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption;
  - Incorporate dual-paned or other energy efficient windows;
  - Incorporate energy-efficient space heating and cooling equipment;
  - Interior and exterior energy efficient lighting which exceeds the California Title 24 Energy Efficiency performance standards will be installed, as deemed acceptable by the City of Moreno Valley. Automatic devices to turn off lights when they are not needed will be implemented;
  - To the extent that they are compatible with landscaping guidelines established by the City of Moreno Valley, shade-producing trees, particularly those that shade buildings and paved surfaces such as streets and parking lots and buildings will be planted at the Project site;

- Paint and surface color palette for the Project will emphasize light and off-white colors which will reflect heat away from the buildings;
- All buildings will be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design.

- To reduce energy demand associated with potable water conveyance, the Project will implement the following:

  - Landscaping palette emphasizing drought tolerant plants;
  - Use of water-efficient irrigation techniques;
  - U.S. EPA Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads.

- During Project construction, on-site off-road construction equipment will utilize biodiesel fuel (a minimum of B20), except for equipment where use of biodiesel fuel would void the equipment warranty. The Applicant will provide documentation to the City that verifies that certain pieces of equipment are exempt, a supply of biodiesel has been secured, and that the construction contractor is aware that the use of biodiesel is required.

- Prior to issuance of a grading permit, the Project will have in place a City-approved Solid Waste Diversion and Recycling Plan that demonstrates the diversion and recycling of all salvageable and re-useable wood, metal, plastic and paper products used during Project construction. A similar plan will be in place prior to occupancy that demonstrates the diversion and recycling of all wood, metal, plastic and paper products during on-going operation of the warehouse and office portions of the Project. The plans will include the name of the waste hauler, their assumed destination for all waste and recycled materials, and the procedures that will be followed to ensure implementation of this measure.

- The Project will be designed to facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills by providing easily accessible areas that serve each building and are dedicated to the collection and storage of recyclable materials including: paper, cardboard, glass, plastics, and metals.

- GHG emissions reductions measures will also include the following:

  - The Project will provide on-site bicycle storage/parking consistent with City of Moreno Valley requirements;
  - Any traffic signals installed as part of the Project will utilize light emitting diodes (LEDs);
  - The Project will provide pedestrian and bicycle connections to surrounding areas, consistent with provisions of the City of Moreno Valley General Plan;
  - The Project will establish a Transportation Management Association (TMA). The TMA will coordinate with other TMAs within the City to encourage and coordinate carpooling among building occupants. The TMA will advertise its services to building occupants, and offer transit and/or other incentives to reduce GHG emissions. Additionally, a shuttle will be provided during any one hour period where more than 20 employees utilize public transit. A plan will be submitted by the TMA to the City within two months of Project completion that outlines the measures implemented by the TMA, as well as contact information;
  - The Project will provide preferential parking for carpools and vanpools;
  - The Project will provide at least two electric vehicle charging stations.

To ensure their implementation, the Project design features and operational programs listed above are restated as Mitigation Measures presented at Section 4.3 of this EIR.

3.5.14 Infrastructure/Utilities

The Project site is served by existing mainline utilities services that will be extended to the individual Project uses. Primary utilities services are described below.

Water/Sewer Services

Water and sewer services will be provided to the Project by the Eastern Municipal Water District (EMWD). Water service extensions to the Project site from existing facilities located in the Redlands Boulevard right-of-way will be realized during improvement of the surrounding street system. Sanitary sewer services to the Project will similarly be provided by connection to the existing sewer main located within Redlands Boulevard. Alignment of service lines, and connection to existing services will be as required by EMWD. Wastewater will be conveyed from the Project for treatment at the 300-acre Perris Valley Regional Water Reclamation Facility (PVRWRF).

Storm Water Management Systems

The Project stormwater management systems comprehensively include proposed drainage improvements, and facilities and programs which act to control and treat stormwater pollutants. Storm water runoff from the developed Project site will be detained in on-site detention basins and directed in a controlled manner to improved storm drain systems currently under design at the intersection of Redlands Boulevard and Fir Avenue (future Eucalyptus Avenue). As discussed in greater detail at EIR Section 4.6, Hydrology and Water Quality, along the south side of the Project, within the Eucalyptus Street right-of-way, the developer will install the drainage facilities consistent with the Area Drainage Plan (ADP), line D-3. The drainage facility in Eucalyptus Street will be limited to outlet the runoff quantities specified in the ADP into the existing drainage ditch along the west side of Redlands Boulevard. The Line D-3 storm drain facility will connect to a new storm drain culvert along Redlands Boulevard at Eucalyptus Street. The outlet of the new storm drain culvert will be lined with energy dissipating rip-rap before allowing the runoff to enter the existing earthen drainage ditch.

Consistent with Riverside County Flood Control & Water Conservation District (RCFC&WCD) requirements, site runoff will be routed through on-site detention basins to mitigate the Project WQMP runoff reduction requirements.

The Project will implement a City and State-approved Storm Water Pollution Prevention Plan (SWPPP), and will comply with requirements of the City's National Pollutant Discharge Elimination System (NPDES) Permit and other water quality requirements or storm water management programs specified by the Regional Water Quality Control Board (RWQCB). In combination, implementation of the Project SWPPP and compliance with NPDES Permit and RWQCB requirements acts to protect City and regional water quality by preventing or minimizing potential pollutant discharges to the watershed.

Solid Waste Management

It is anticipated that Project-generated solid waste will be conveyed by Waste Management of the Inland Empire, to one of three nearby landfills. As discussed in the Initial Study Checklist (Draft EIR Appendix A, Item 16.f), the Project is anticipated to generate up to 28 tons of solid waste per day before any recycling takes place. This estimate is within the limits of the existing General Plan land use designation. Therefore, the proposed Project would fall within the projected landfill capacity considered within the General Plan.

Further reducing the amount of solid waste generated by the Project, and related potential effects on landfill capacities, the Project will be implemented and operated consistent with requirements of the City's Source Reduction and Recycling Element (SRRE). City SRRE programs and policies provide for a 50 percent target diversion rate for solid waste, thereby reducing solid waste conveyance and disposal demands.

Electricity

Electrical service within the City is provided by Southern California Edison (SCE) and the Moreno Valley Electric Utility. The Moreno Valley Electric Utility will provide

service to the Project site. Existing overhead lines and poles along the Project boundaries will be converted to underground facilities and installed within public rights-of-way adjacent to the Project. New lines installed by the Project will be placed underground. Alignment of service lines and connection to existing services will be as required by the Moreno Valley Electric Utility. Any necessary surface-mounted equipment, such as transformers, meters, service cabinets, and the like, will be screened and located behind any required building setbacks.

Natural Gas

Natural gas service will be provided by the Gas Company. Existing service lines will be extended to the Project uses. Alignment of service lines and connection to existing services will be as required by the Gas Company. All facilities implemented by the Project are required to incorporate energy conservation technologies and construction methods consistent with California Title 24 Energy Efficiency requirements, thereby reducing total energy consumption with related reductions in areawide pollutant emissions.

Communications Services

Communications services, including wired and wireless telephone and internet services, are available through numerous private providers and will be provided on an as-needed basis. As with electrical service lines, all existing and proposed wires, conductors, conduits, raceways, and similar communications improvements within the Project area will be installed underground. Any necessary surface-mounted equipment, e.g., terminal boxes, transformers, meters, service cabinets, etc., will be screened and located behind any required front setbacks.

3.6 DISCRETIONARY ACTIONS, CONSULTATION, AND PERMITS

CEQA Guidelines Section 15124 states in pertinent part that if . . . "a public agency must make more than one decision on a project, all its decisions subject to CEQA should be listed . . ." Discretionary actions, permits and related consultation(s) necessary to approve and implement the Project are summarized below.

3.6.1 Discretionary Actions

Necessary discretionary actions, permits, and consultations allowing for implementation and operation of the Project will include, but are not limited to:

3.6.1.1 Lead Agency Discretionary Actions and Permits

- **Certification of the EIR (City Case # P08-133).** The proposed development is a Project under CEQA, and may result in significant environmental impacts. Lead Agency certification of the Project EIR is required;

- **A zone change from Business Park to Light Industrial (City Case # PA08-0098).** The proposed zone change will allow for construction and operation of the Project's distribution warehouse uses as configured;

- **Amendment to Municipal Code Section 9.05.020 B (City Case # PA10-0017) [Light Industrial Districts],** to provide objective standards for the development of Light Industrial uses adjacent to residentially-zoned property to ensure the protection of the health, safety and welfare of future residents;

- **Parcel Map Approval (City Case # PA09-023)** to consolidate and reconfigure existing parcels defining the Project site, and to provide necessary easements and dedications;

- **Development Plan Review** as required under the City of Moreno Valley Municipal Code Section 9.02.030 [Development Review Process], et al.;

- **Construction, grading, and encroachment permits** allowing implementation of the Project facilities within City of Moreno Valley jurisdictional areas; and

- **Vacation and/or dedication of public rights-of-way and easements** as elements of the proposed parcel map, or independent of the map. Rights-of-way and

easements will provide public access, and ensure appropriate alignment of and access to infrastructure and utilities.

3.6.1.2 Responsible and Trustee Agency Discretionary Actions, Permits, and Consultation

- **Permitting and Consultation through the California Department of Fish and Game (CDFG)**, to include:

  - **Lake and Streambed Alteration Agreement (LSA)** addressing potential CDFG jurisdictional area impacts resulting from the Project; and
  - **Consultation** regarding the possible relocation of resident burrowing owls (if burrowing owls are determined to be present on the subject site during required pre-construction surveys).

- **CWA Section 404 and Army Corps of Engineers (ACOE) permitting** will be required for Project activities affecting off-site ACOE jurisdictional areas. CWA Section 404 may also be required should the Project riparian habitat mitigation plan involve or require use of off-site federal jurisdictional areas;

- **Permitting required by/through the CWA Section 401 and Santa Ana Regional Water Quality Control Board (SARWQCB)** pursuant to requirements of the National Pollutant Discharge Elimination System (NPDES) Permit;

- **Permitting required by/through the South Coast Air Quality Management District (SCAQMD)** for certain equipment to be temporarily employed within the Project during construction, and/or permanently installed and used over the life of the Project; and

- **Permitting by/through the California Department of Transportation (Caltrans**) for improvements within or that may affect Caltrans rights-of-way.

3.6.1.3 City Development Applications

In support of requested discretionary approvals and permits noted above, development applications submitted by the Project Applicant include:

- **Plot Plan** for a 937,260 square foot warehouse distribution facility;

- **Zone Change** from Business Park to Light Industrial;

- **Tentative Parcel Map** No. 36207 to combine the Project's five parcels into a single parcel; and

- **Application to Amend the City Municipal Code.** The Project Applicant is requesting a Municipal Code text Amendment to Section 9.05.020 B. The requested Amendment would provide objective standards for the development of Light Industrial uses adjacent to residentially-zoned property in order to ensure the protection of the health, safety and welfare of future residents.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.0 ENVIRONMENTAL IMPACT ANALYSIS

This Section of the EIR analyzes and describes the potential environmental impacts associated with the adoption and implementation of the proposed Westridge Commerce Center Project. The environmental impact analysis has been organized into a series of sections, each addressing a separate environmental topic. Environmental topics addressed in this EIR are presented in the following sections:

Section	Topic
4.1	Land Use and Planning
4.2	Traffic and Circulation
4.3	Air Quality
4.4	Noise
4.5	Water Supply
4.6	Hydrology and Water Quality
4.7	Cultural Resources
4.8	Biological Resources
4.9	Aesthetics

Within each of the above topical Sections, the discussion is typically divided into subsections which describe the "setting" or existing environmental conditions; identify regulations and policies, which through their observance typically resolve many potential environmental concerns; identify thresholds of significance applicable to potential environmental effects of the Project; describe the significance of Project-related environmental effects in the context of applicable significance thresholds; and for impacts which are potentially significant or significant, recommend mitigation measures to eliminate or reduce their effects. In this latter regard, it is recognized that

the intent of CEQA is to focus on significant, or potentially significant adverse effects of the Project, and therefore, mitigation is proposed only for potential impacts of this magnitude.

As noted above, before potential impacts are evaluated, the standards or thresholds which will serve as the basis for judging the relative significance of impacts are presented. Often thresholds serve as a general guide or gauge for determining an impact's potential significance, rather than defining absolutely its relative effects. Subsequent to identification of relevant significance thresholds, potential Project-related effects and impacts are identified and explained. If an impact is considered to be potentially significant, to the extent feasible, mitigation measures are proposed to reduce or avoid the impact. In determining the potential significance of impacts, the adequacy of existing policies and regulations in addressing each impact is taken into consideration. At the conclusion of each discussion for a potentially significant impact, a determination is made as to whether the impact can be reduced to a less-than-significant level with the application of mitigation measures.

In the environmental analysis, the following terms are used to describe the potential effects of the proposed Project:

- **Less-Than-Significant Impacts:** Minor changes or effects on the environment caused by the proposed Project which do not meet or exceed the criteria, standards, or thresholds established to gauge significance are considered to be less-than-significant impacts. Less-than-significant impacts do not require mitigation. In some cases, these impacts may appear to be potentially significant. However, existing public policies, regulations, and procedures adequately address these potential effects, thereby reducing them to a less-than-significant level, without the need for additional mitigation.

- **Potentially Significant or Significant Impacts:** A significant or potentially significant impact is defined by CEQA as "a substantial, or potentially substantial, adverse change in the environment." The *CEQA Guidelines* and

various responsible agencies provide guidance for determining the significance of impacts. However, the determination of impact significance is ultimately based on the judgment of the lead agency. Similarly, the establishment of any criteria to be used in evaluating the significance of impacts is the responsibility of the lead agency. Wherever possible, mitigation is proposed in the EIR to reduce or avoid significant or potentially significant impacts.

- **Significant and Unavoidable Impacts:** Impacts identified in the EIR which cannot be mitigated below thresholds of significance through the application of feasible mitigation measures are categorized as "significant and unavoidable."

- **Cumulative Impacts:** A discussion of cumulative impacts is provided in Section 5.0 of this EIR. Cumulative impacts refer to the impacts of the proposed Project combined with anticipated impacts of other vicinity projects and ambient regional growth.

4.1 LAND USE AND PLANNING

4.1 LAND USE AND PLANNING

Abstract

This Section identifies and addresses potential impacts that may result from land use and planning decisions necessary to implement the proposed development. Specifically, the land use and planning analysis presented here examines whether the Project would:

- *Conflict with any applicable environmental plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;*

- *Conflict with any applicable habitat conservation plan or natural community conservation plan; or*

- *Physically divide an established community.*

As supported by the analysis presented in this Section, potential land use and planning impacts of the Project are considered to be less-than-significant.

4.1.1 INTRODUCTION

Land use refers to occupation and employment of properties for various purposes such as commerce, industry, open space, community services, infrastructure, and residential uses. Local land use plans, policies, and development regulations control the types, configurations, and intensities of land uses within the community. Changes in land use patterns resulting from new development can affect overall characteristics of an area, and may result in physical impacts to the environment. The Land Use and Planning Section of the EIR focuses on the Project's consistency with applicable land use plans, policies and regulations, and its potential incompatibilities with land use districts and existing and proposed vicinity development. Other potential impacts such as noise, traffic, and air quality impacts, which may occur due to changes in land use and development proposed by the Project, are addressed in their respective sections of this EIR.

4.1.2 SETTING

The physical setting and regulatory land use context of the Project are presented below.

4.1.2.1 Location

The approximately rectangular, 54.66-acre Project site is located in western Riverside County in the City of Moreno Valley. More specifically, the subject site is located in the easterly portion of the City of Moreno Valley, along the southerly State Route-60 (SR-60, Moreno Valley Freeway) frontage. From SR-60, the site extends approximately 1,230 feet (approximately one-quarter mile) southerly, and is bounded on the south by Fir (future Eucalyptus) Avenue. From west to east, the Project site extends approximately 1,710 feet (approximately one-third mile), and is bounded by the Quincy Channel to the west, and by vacant land designated for commercial uses to the east. Redlands Boulevard exists in a north-south alignment approximately 700 feet east of the Project's easterly boundary. Please refer also to Section 3.0, Figure 3.2-1, "Regional Location," and Figure 3.2-2, "Project Vicinity."

4.1.2.2 Existing Land Uses

Following are descriptions of existing uses and physical characteristics of the subject site and vicinity properties. Existing land uses are depicted at Figure 4.1-1.

Project Site Land Use

The Project site is currently a vacant property, which has historically accommodated a variety of dryland farming activities. The Project site is, however, designated as "Business Park" under the City's General Plan Community Development Element Land Use Map (Moreno Valley General Plan, Page 2-4), and is anticipated to develop with business park, light industrial or similar uses. The existing designation limits buildings to no more than 50,000 square feet. As such, the Project will require a zone change to Light Industrial, which would allow for the proposed 937,260-square-foot building.

Vegetation within the Project site consists primarily of disturbed nonnative and ruderal varieties. At its northerly boundary, adjacent to SR-60, the site elevation is approximately 1,780 feet above mean sea level (MSL). The elevation difference between the northerly and southerly Project boundaries is approximately 30 feet, translating to an approximately two percent (2.0%) north-to-south trending downward slope. The Project site evidences no notable topographical variation or other distinctive topographical features.

Vicinity Land Uses

As noted previously, the Project site is bounded to the north by SR-60 (Moreno Valley Freeway), to the south by Fir (future Eucalyptus) Avenue, to the east by vacant property, and to the west by the Quincy Channel, beyond which is a citrus grove. In the northeasterly portion of the Project site, approximately two (2) acres of the subject property has been reserved for future SR-60/Redlands Boulevard interchange improvements. These improvements will be constructed by Caltrans, and are not a part of the proposed Project, but nonetheless require consideration in the Project design and coordination with the City and Caltrans.

N

NOT TO SCALE

Source: Google Earth, Applied Planning, Inc.

applied planning inc

Figure 4.1-1
Existing Land Uses

Properties to the west of the Westridge Commerce Center Project site, across the Quincy Channel, are currently employed for dryland farming. However, this adjacent site is proposed for development of six (6) distribution warehouse facilities totaling approximately 2.25 million square feet on 117 acres, and an EIR is currently being prepared for this project. This adjacent proposal (sponsored by ProLogis) would require a General Plan Community Development Element (Land Use) amendment re-designating portions of the subject site from residential (R15, R5, and R2) to Business Park uses. A correlating zone change is also requested, re-designating the subject site from Business Park (BP), Business Park Mixed-use (BPX), Residential Agriculture 2 (RA2), Residential 5 (R5), and Residential 15 (R15) to Light Industrial (LI). The ProLogis project also includes a Municipal Code Amendment to establish a minimum clearance of 250 feet between adjacent residential zoning districts and any truck court or primary truck circulation driveway in lieu of the buffer established by the Business Park zone. A further General Plan Amendment would be required by the ProLogis project to accommodate this project's proposed changes to the City's Circulation Element.

To the south, across the Fir (future Eucalyptus) Avenue alignment, properties are currently vacant with the exception of one residence located near the southeasterly corner of the Project site. No active development proposals exist for southerly adjacent properties, and the "R2" General Plan Land Use designation for properties located southerly of Fir Avenue reflects a potential for residential development at a relatively low density [two dwelling units (DU) per acre].

Properties immediately to the east of the Project site are designated for commercial use, though no development proposal is currently on file. Further to the east, across Redlands Boulevard, the Highland Fairview Corporate Park project was recently approved, allowing for the construction of approximately 2.6 million square feet of warehouse distribution uses, to be developed in phases, on approximately 158 acres located south of SR-60, between Redlands Boulevard and Theodore Street.

As discussed below, and notwithstanding the current undeveloped and rural character of vicinity properties, the City of Moreno Valley General Plan Community Development Element (Land Use) envisions urbanization of the Project site and surrounding areas to include a mix of business park, commercial, and residential development, as shown in Figure 4.1-2, Moreno Valley General Plan Land Use Designations.

4.1.2.3 General Plan Land Use

Overview

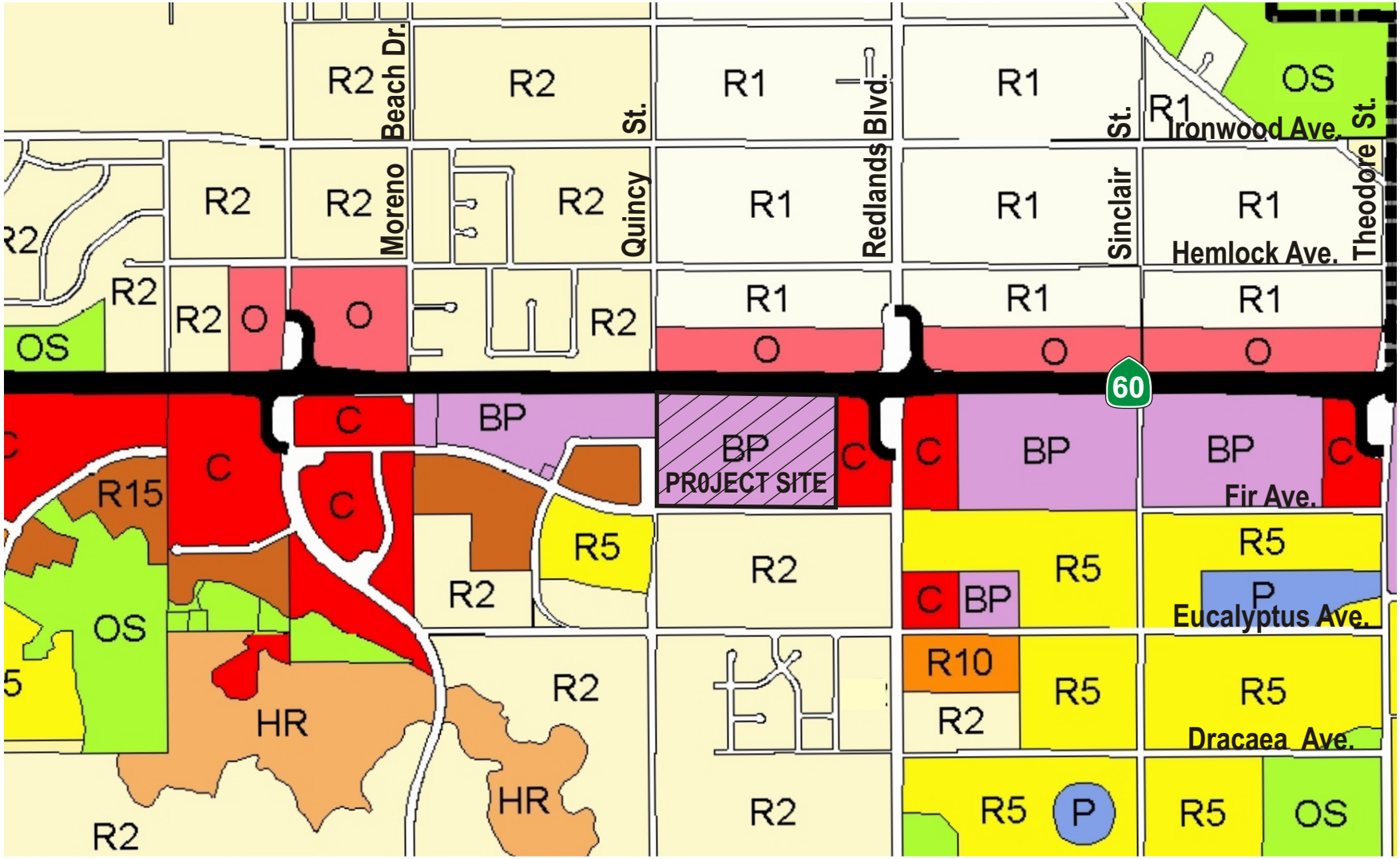
The current City of Moreno Valley General Plan was adopted in July 2006. The General Plan's Community Development Element addresses land use throughout the City, and sets the City's context in relation to adjacent areas of influence, such as the Badlands and Norton Younglove Reserve to the northeast; the San Jacinto Wildlife Area to the southeast; the Lake Perris State Recreation area to the south, March Air Reserve Base to the southwest, and the Box Springs Mountain Regional Park to the northwest.

General Plan Land Use Designations

The Land Use Map included in the Community Development Element (General Plan Figure 2-2) identifies land use designations for parcels within the City and its adopted sphere of influence. The General Plan Land Use Map area encompassing the Project site is shown in Figure 4.1-2, "Moreno Valley General Plan Land Use Designations."

Project Site - Business Park General Plan Land Use

The General Plan Land Use Map legend highlighted in Figure 4.1-2 indicates a land use designation of "Business Park/Light Industrial" for the Project site and other properties along the SR-60 corridor. However, as clarified by the following excerpted General Plan Policy 2.5.1, the site's current zoning designation (Business Park) determines its land use designation.



LEGEND:

BP	Business Park/Light Industrial	P	Public Facilities	R2	Residential: Max 2 du/acre
C	Commercial	O	Office	R5	Residenital: Max 5 du/acre
HR	Hillside Residential	OS	Open Space	R10	Residential: Max 10 du/acre
		R1	Residential: Max 1 du/acre	R15	Residential: Max 15 du/acre

N

NOT TO SCALE

Source: Google Earth, Applied Planning, Inc.

applied planning inc

Figure 4.1-2
Moreno Valley General Plan Land Use Designations

Policy 2.5.1

The primary purpose of areas designated Business Park/Industrial is to provide for manufacturing, research and development, warehousing and distribution, as well as office and support commercial activities. The zoning regulations shall identify the particular uses permitted on each parcel of land. Development intensity should not exceed a Floor Area Ratio of 1.00 and the average floor area ratio should be significantly less. [1]

Adjacent General Plan Land Uses - Commercial, Residential, Business Park, and Office

As also indicated at Figure 4.1-2, surrounding properties are designated for a variety of uses, including: Commercial (C); Residential (R2, R5, R15); Business Park (BP); and Office (O). The locations of these land uses relative to the Project site, and stated purposes of these land uses, as presented at General Plan Chapter 9, Goals and Objectives, are as follows.

- **Business Park (BP).** Properties located westerly adjacent to the Project site, across Quincy Channel/Quincy Avenue alignment are designated under the General Plan for Business Park uses. Please refer to the previously discussed Business Park land use primary purpose established by General Plan Policy 2.5.1.

- **Commercial (C).** Properties located easterly adjacent to the Project site are designated for Commercial uses. General Plan Policy 2.4.1 states that, "[t]he 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. Commercial development intensity should not exceed a Floor Area Ratio of 1.00 and the average floor area ratio should be significantly less."[2]

[1] City of Moreno Valley General Plan, Chapter 9, Goals and Objectives, Page 9-7.
[2] Policy 2.4.1, General Plan Goals and Objectives, Page 9-5.

- **Residential Land Use Designations**

  R2. Properties located southerly adjacent to the Project site, across Fir Avenue; and northwesterly of the Project site, across SR-60, are designated under the General Plan for Residential, "R2" uses. General Plan Policy 2.2.5 states that, "[t]he primary purpose of areas designated Residential 2 is to provide for suburban lifestyles on residential lots larger than commonly available in suburban subdivisions and to provide a rural atmosphere. The maximum allowable density shall be 2.0 dwelling units per acre."[3]

  R5. Properties located southeasterly of the Project site, across Fir Avenue and the Quincy Channel/Quincy Avenue alignment, are designated under the General Plan for Residential, "R5" uses. General Plan Policy 2.2.7 states that, "[t]he primary purpose of areas designated Residential 5 is to provide for single-family detached housing on standard sized suburban lots. The maximum allowable density shall be 5.0 dwelling units per acre."[4]

  R15. Properties located westerly adjacent to the Project site, across the Quincy Channel/Quincy Avenue alignment, are designated under the General Plan for Residential, "R15" uses. General Plan Policy 2.2.9 states that, "[t]he primary purpose of areas designated Residential 15 is to provide a range of multi-family housing types for those not desiring dwellings on individual lots that include amenities such as common open space and recreational facilities. The maximum allowable density shall be 15.0 dwelling units per acre."[5]

- **Office (O).** Properties located northerly of the project site, across SR-60, are designated under the General Plan for Office uses. General Plan Policy 2.4.7 states

[3] General Plan Goals and Objectives, Page 9-3.

[4] General Plan Goals and Objectives, Page 9-4.

[5] *Ibid.*

> that, "[t]he primary purpose of areas designated Office is to provide for office uses, including, administrative, professional, legal, medical and financial offices. The zoning regulations shall identify the particular uses permitted on each parcel of land, which could include limited non-office uses that support and are compatible with office uses. Development intensity should not exceed a Floor Area Ratio of 2.00 and the average intensity should be significantly less."[6]

4.1.2.4 Zoning Designations

Zoning designations of the Project site and vicinity properties are presented at Figure 4.1-3, and are described below.

Project Site - Business Park Zoning Designation

As presented at Figure 4.1-3, the existing Zoning designation of the Project site is "BP," or "Business Park." The site's Business Park Zoning designation is consistent with the underlying General Plan Land Use designation of Business Park/Light Industrial. The City's Municipal Zoning Code (Title 9) describes the BP Zone as follows:

> The primary purpose of the business park (BP) district is to provide for light industrial, research and development, office-based firms and limited supportive commercial in an attractive and pleasant working environment and a prestigious location. This district is intended to provide a transition between residential and other sensitive uses and more intense industrial and warehousing uses.[7]

Adjacent Zoning Designations

As also indicated at Figure 4.1-3, surrounding properties are zoned for a variety of uses, and reflect correlating underlying General Plan Land Use designations. Adjacent zoning designations are: Business Park-Mixed Use (BPX); Community Commercial (CC); Residential (RA2, R5, R15); and Office (O).

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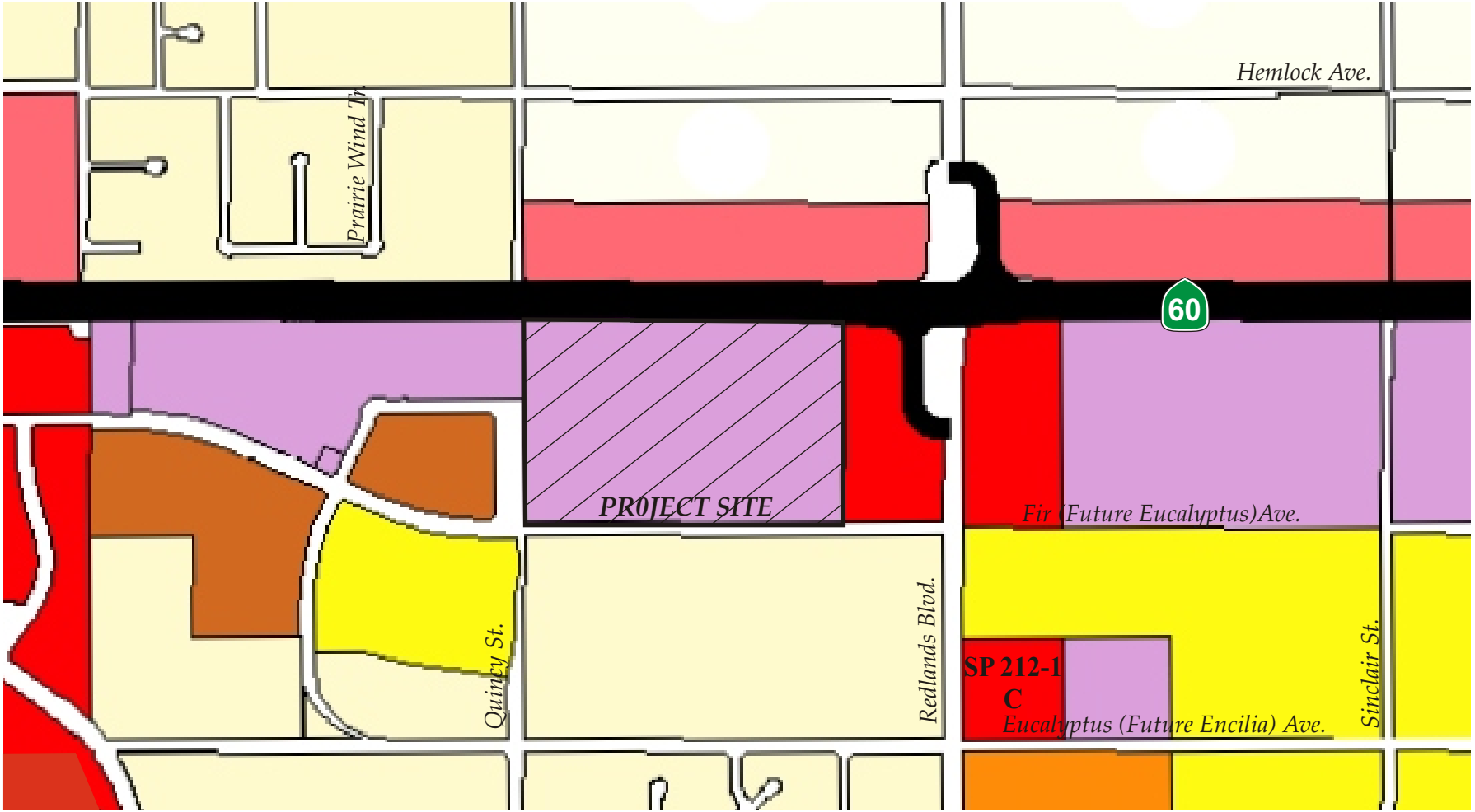
[6] General Plan Goals and Objectives, Page 9-6.

[7] Moreno Valley Municipal Code, Title 9, Planning and Zoning, Section 9.05.020 Industrial districts.



BP	Business Park	O	Office	RA2	Agricultural Residential: Max 2 du/acre
BPX	Business Park-Mixed Use	OC	Office Commercial	R3	Residential: Max 3 du/acre
CC	Community Commercial	R1	Residential: Max 1 du/acre	R5	Residential: Max 5 du/acre
LI	Light Industrial	R2	Residential: Max 2 du/acre	R15	Residential: Max 15 du/acre
				SP	Specific Plan

N
NOT TO SCALE

Source: Google Earth, Applied Planning, Inc.

applied planning inc

Figure 4.1-3
Moreno Valley Zoning Designations

Location relative to the project site, and stated purposes of these land uses as presented at Moreno Valley Municipal Code, Title 9, Planning and Zoning, are as follows.

- **Business Park-Mixed Use (BPX)**. Properties located westerly adjacent to the Project site, across Quincy Channel/Quincy Avenue alignment are zoned Business Park-Mixed Use. "The purpose of the Business Park-Mixed Use (BPX) district is to provide locations for limited convenience commercial and business support services within close proximity to industrial and business park uses." [8]

- **Community Commercial (CC).** Properties located easterly adjacent to the Project site are zoned Community Commercial. "The primary purpose of the Community Commercial (CC) district 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."[9]

- **Residential Zones**

  RA2. Properties located southerly adjacent to the Project site, across Fir Avenue; and northeasterly of the Project site, across SR-60 are zoned Residential Agriculture 2, RA2. "The primary purpose of the RA2 district is to provide for suburban life-styles on residential lots larger than are commonly available in suburban subdivisions and to provide for and protect the rural and agricultural atmosphere, including the keeping of animals, that have historically characterized these areas. This district is intended as an area for development of large lot, single-family residential development at a maximum allowable density of two dwelling units (DU) per net acre."[10]

[8] *Ibid*.

[9] Municipal Code, Section 9.04.020 Commercial development districts.

[10] Municipal Code, Section 9.03.020 Residential development districts.

R5. Properties located southwesterly of the Project site, across Fir Avenue are zoned Residential, R5. "The primary purpose of the R5 district is to provide for residential development on common sized suburban lots. This district is intended as an area for development of single-family residential and mobile home subdivisions at a maximum allowable density of five DU's per net acre in accordance with the provisions outlined herein.[11]

R15. Properties located westerly adjacent to the Project site, across Quincy Channel/Quincy Avenue alignment are zoned R15. "The primary purpose of the R15 district is to provide a broadened range of housing types for those not desiring detached dwellings on individual parcels, and with open space and recreational amenities not generally associated with typical suburban subdivisions. This district is intended as an area for development of attached residential dwelling units, as well as mobile home parks, at a maximum allowable density of fifteen (15) DU's per net acre in accordance with the provisions outlined herein." [12]

- **Office (O)**. Properties located northerly of the Project site, across SR-60 are zoned Office. The primary purpose of the Office (O) district is to provide areas for the establishment of park-like, office-based working environments for general business, corporate, professional and administrative offices. It is the further intent of this district to provide setbacks, landscaping and architectural treatments that ensure the location of such uses is relatively compatible with residential development in the vicinity."[13]

[11] *Ibid*.

[12] *Ibid*.

[13] Municipal Code, Section 9.04.020 Commercial development districts.

4.1.3 EXISTING POLICIES AND REGULATIONS

4.1.3.1 City of Moreno Valley General Plan

The City's General Plan provides direction and vision for long-term development of the City, as expressed in its seven elements: Community Development; Economic Development; Parks, Recreation and Open Space; Circulation; Safety; Conservation; and Housing. It is recognized that, to a certain extent, all Elements of the City's General Plan are interrelated, and all General Plan Elements (along with their associated goals and policies) are tied to land use considerations within the City. The following discussions focus on General Plan goals and policies directly applicable to the Project within the context of the potential environmental impacts addressed by this Draft EIR. Please refer also to the City General Plan for additional goals and policies related to land use decisions and development within the City. The Project does not propose nor require an amendment to the City General Plan. Project consistency with applicable provisions of the General Plan Community Development Element is summarized subsequently within this Section.

4.1.3.2 City of Moreno Valley Municipal Zoning Code

Zoning is generally considered the primary tool for implementing a general plan. In contrast to the long-term, broad-based outlook of the general plan, zoning is a site-specific device designed to control the locations, densities, and intensities of various land uses. To prevent incompatible land use relationships, the City's Municipal Zoning Code (Zoning Code) and associated Zoning Map designate different areas or zones for different types of land uses, and establish development standards for each zone. These development standards may specify requirements for lot sizes, lot coverages, building heights, setbacks, parking, landscaping, and other development parameters. State law (AB 283) requires zoning to be consistent with the general plan.

As discussed previously within this Section, the City's Zoning Map indicates that the Project site is currently located within the Business Park (BP) zone. To allow for the proposed light industrial/distribution warehouse uses configured in a single structure greater than 50,000 square feet, a zone change is requested by the Project, re-designating

the subject site Light Industrial (LI). This transition is discussed within the following analysis of the Project's potential land use impacts.

4.1.3.3 Southern California Association of Governments (SCAG)

Pursuant to Public Resource Code Section 21063(d), SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans per the *CEQA Guidelines*, Sections 15125(d) and 15206(a)(1). SCAG is also the designated Regional Transportation Planning Agency and as such is responsible for preparation of the Regional Transportation Plan (RTP) and correlating Regional Transportation Improvement Program (RTIP) under California Government Code Sections 65080 and 65082.

Further, as the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by SCAG is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

Project consistency with applicable policies and programs articulated under SCAG's Regional Transportation Plan (RTP) and Compass Growth Visioning programs is demonstrated in Table 4.1-2, presented subsequently within this Section.

4.1.3.4 Western Riverside Council of Governments (WRCOG)

The Western Riverside Council of Governments is a voluntary association representing member local governments of Western Riverside County, whose aim is to provide and facilitate cooperative planning, coordination, and technical assistance on issues of mutual concern that cross jurisdictional lines. In this manner, WRCOG assists in developing consensus on sub-regional and regional issues. The City of Moreno Valley is a member of WRCOG.

As one of its primary efforts, WRCOG has developed and administers Western Riverside County's Transportation Uniform Mitigation Fee or TUMF. The TUMF program ensures that new development pays its fair share for the increased transportation demand that it creates. Further, WRCOG sub-regional plans support and facilitate implementation of correlating SCAG regional plans and programs.

4.1.4 SIGNIFICANCE THRESHOLDS

Appendix G of the *CEQA Guidelines*, as applied by the City of Moreno Valley, indicates a project will normally have a potentially significant effect related to land use if it would:

- Conflict with any applicable environmental plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;

- Conflict with any applicable habitat conservation plan or natural community conservation plan; or

- Physically divide an established community.

4.1.5 POTENTIAL IMPACTS

Based on the preceding threshold considerations, the following discussions address the Project's potential land use and planning impacts. Potential cumulative land use impacts of the Project are presented at EIR Section 5.1, "Cumulative Impact Analysis."

Potential Impact: ***Conflict with any applicable environmental plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.***

Impact Analysis: The following discussions address the Project's consistency with local and regional land use plans and policies, including the City General Plan, City Zoning Ordinance, and applicable SCAG and WRCOG goals and policies.

General Plan Consistency

The City of Moreno Valley General Plan Land Use Plan establishes land use designations for all properties within the City boundaries. General Plan Land Use designations control the character and intensities of City land uses. All proposed development projects are required to comply with applicable goals, policies, and standards articulated for each of the General Plan Land Use designations, or must provide for amendment of the General Plan to accommodate proposed uses differing from the adopted Land Use designation. The Project site is designated by the City's General Plan as Business Park/Light Industrial, which allows for the warehouse distribution uses proposed by the Westridge Commerce Center Project. As such, no revision or amendment to the Project site's General Plan Land Use designation is requested or required. Project consistency with applicable provisions of the City General Plan, Community Development Element, Land Use, is summarized at Table 4.1-1.

Table 4.1-1

City of Moreno Valley General Plan Consistency

Goal 2.1: A pattern of land uses, which organizes future growth, minimizes conflicts between land uses, and which promotes the rational utilization of presently underdeveloped and undeveloped parcels.	***Consistent.*** *The Project proposes development and improvement of vacant, underutilized property. The proposed uses are consistent with the existing General Plan land use designation for the Project site, and have been designed to minimize potential conflicts between land uses. In order to allow development of the warehouse distribution uses proposed by the Project and establish consistency with the City Zoning Ordinance, a change of zone (from Business Park to Light Industrial) is requested.*
Objective 2.5: Promote a mix of industrial uses which provide a sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley with the establishment of industrial activities that have good access to the regional transportation system, accommodate the personal needs of workers and business visitors; and which meets the service needs of local businesses.	***Consistent.*** *The Project proposes new industrial development within the City, and will create additional job opportunities (temporary construction jobs and as well as permanent warehouse staff and management positions) anticipated to be filled from local employment pools. At buildout, the Project is anticipated to generate up to approximately 900 permanent jobs.[14] Regional access to the Project site is provided by the adjacent SR-60 freeway.* *The Project incorporates an approximately 250-foot wide landscape area along its Fir (future Eucalyptus) Avenue frontage. The Project also incorporates planned regional trail facilities along its southerly Fir (future Eucalyptus) Avenue frontage. Distribution warehouse services provided by the Project will support and serve local and regional businesses.*
Policy 2.5.1: The primary purpose of areas designated Business Park/Industrial is to provide for manufacturing, research and development, warehousing and distribution, as well as office and support commercial activities. The zoning regulations shall identify the particular uses permitted on each parcel of land. Development intensity should not exceed a Floor Area Ratio of 1.00 and the average floor area ratio should be significantly less.	***Consistent.*** *The Project's proposed uses are consistent with those noted in this Policy. To allow for the Project's proposed light industrial/distribution warehouse uses, a zone change from "Business Park" to "Light Industrial" is requested. The Project proposes a single-story building of approximately 937,260 square feet, on a site of 52.09 net acres (approximately 2.269 million square feet). This results in an average floor Area Ratio (FAR) of approximately 0.42, significantly less than the City's maximum permissible FAR of 1.00.*

[14] Based on approximately one (1) job per 1,030 square feet of development, per Riverside County General Plan Appendix E, Buildout Assumptions and Methodology, Page 6, Light Industrial employment multiplier.

Table 4.1-1

City of Moreno Valley General Plan Consistency

Policy 2.5.2: Locate manufacturing and industrial uses to avoid adverse impacts on surrounding land uses.	***Consistent.*** *As demonstrated in this Draft EIR, potentially adverse impacts to surrounding land uses are reduced through Project design and operational programs, application of EIR mitigation measures, compliance with Project Conditions of Approval, and regulatory compliance. Further, the Project is separated from residential neighborhoods to the south by an approximately 250-foot, landscaped setback area that will accommodate passenger car parking and onsite drainage areas. The Project will be designed, implemented and operated consistent with the applicable provisions of the General Plan, Zoning Ordinance, and City Municipal Code. As one of the Project's requested discretionary approvals, the Municipal Code would be amended to include specific regulatory language recognizing the potential for adjacency of light industrial and residential uses to result in potentially adverse impacts at proximate residential properties. The proposed Code Amendment would mandate minimum separation/buffer requirements (250 feet) between proposed light industrial use and residentially-zoned properties. As further required under the proposed Code Amendment, this setback/buffer area shall be increased should the minimum 250-foot separation/buffer prove insufficient to eliminate significant health risks or project operational noise impacts as reflected in project-specific air quality and noise analysis.* *To the west, the project is defined by, and separated from adjacent land uses by the Quincy Channel, the centerline of which is over 150 feet from the Project's limits of development. Office and residential uses to the north/northwest are separated from Project uses by intervening SR-60. The easterly boundary of the Project site is defined by proposed "Street A" and an approximately 25-foot wide landscaped edge treatment, acting to separate the Project site from easterly adjacent vacant commercial property.*

Table 4.1-1

City of Moreno Valley General Plan Consistency

Policy 2.5.3: Screen manufacturing and industrial uses where necessary to reduce glare, noise, dust, vibrations and unsightly views.	***Consistent.*** *The Project proposes contemporary industrial design and reflects high performance standards required of uses proposed within the City's Light Industrial zoning district. Further, the Project will be designed and implemented consistent with City design standards presented at Municipal Code Section 9.05.040, "Industrial site development standards."* *More specifically, the Project's loading doors would be screened from view with masonry walls to the north and south, pursuant to City standards. Additionally, an approximately 250-foot landscaped setback is provided at the Project's southerly boundary. This setback area will serve as a transitional area and buffer between the Project and residential land uses located southerly of the Project site. The proposed setback provides physical separation between Project-related air pollution and noise sources, acting to reduce any perceived impacts at southerly adjacent residential land uses. To the east of the Project site are undeveloped commercial properties. As noted above, these commercial properties are separated from the Project site by proposed "Street A" as well as landscape edge treatments proposed by the Project.*
Policy 2.5.4: Design industrial developments to discourage access through residential areas.	***Consistent.*** *Access to the Project site through residential neighborhoods is not required, nor is it proposed. As noted previously the Project is provided regional access via SR-60, a major freeway. Connecting access to the area circulation system is provided via Redlands Boulevard, a designated collector roadway and truck route. Direct access to the Project is provided by either of three driveways on the north side of Fir (future Eucalyptus) Avenue, or via a new cul-de-sac ("A" Street) to be constructed as part of Project development.*

Source: City of Moreno Valley General Plan, Community Development Element.

Zoning Consistency

Existing and Proposed Zoning Designations: General Plan Consistency

The Project site's existing zoning designation of Business Park does not allow for development of distribution warehouse uses proposed by the Project. Distribution warehouse uses are however allowed within the Light Industrial district of the City. As such, a zone change from Business Park to Light Industrial is requested in order to

accommodate the Project. The proposed Light Industrial zoning designation is consistent with the site's underlying General Plan Land Use designation of Business Park/Light Industrial. As such, although a change of zone is required, an amendment to the City General Plan Community Development Element (Land Use) is not required.

Industrial Zone District Intent and Purpose: Project Consistency

The Moreno Valley Municipal Code, Section 9.05.010, states: "The primary purpose of industrial [zone] districts is to provide a sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley. It is the further intent of this chapter to accomplish this through the establishment of a specific, well-defined pattern of industrial activities which is compatible with residential, commercial, institutional, and open space uses located elsewhere in the community; has good access to the regional transportation system; accommodates the personal needs of workers and business visitors; and which meets the service needs of local businesses." Project consistency with the intent and purpose of the City's industrial zoning district is summarized below.

- **Sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley**

As noted previously in this Section, the Project will create additional local employment opportunities. At buildout, the Project is estimated to provide approximately 900 additional full-time jobs. Warehouse/logistics jobs such as those created by the Project tend to provide defined skill ladders with relatively high base pay scales, are increasingly technologically dependent, allowing for on-the-job training, and upward mobility within the warehouse logistics economic sector. On this basis, the Project is considered consistent with the intent of the industrial district to provide a sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley.

- **Specific, well-defined pattern of industrial activities which is compatible with residential, commercial, institutional, and open space uses located elsewhere in the community**

Although the majority of the Project vicinity is currently undeveloped and/or agricultural in character, the City's General Plan has established a pattern of planned business park/light industrial uses along the southerly SR-60 frontage. More specifically, Business Park/Light Industrial Land Uses have been designated on the Moreno Valley General Plan Land Use Map along the south side of SR-60 extending from Petit Street, approximately one-half mile to the west of the Project site, continuing to Gilman Springs Road, approximately 1.7 miles to the east. General Plan Business Park/Light Industrial Land Uses then continue approximately 1.7 miles southerly along Gilman Springs Road to just past Alessandro Boulevard, along the City's easterly corporate boundary. The Project site's frontage along SR-60 represents an approximately one-third mile component of the almost continuous 4.4 mile "edge" of parcels bordering SR-60 that are designated for Business Park/Light Industrial uses in the Moreno Valley General Plan.

The Project proposes a change of zone from Business Park to Light Industrial, and the City General Plan envisions and allows for extensive implementation of either or both types of land uses along the southerly edge of SR-60 as it traverses the City. While both types of uses (business park and/or light industrial, including distribution warehouse uses) are provided for under the General Plan, the site's current Business Park zoning designation does not permit these uses within single structures of more than 50,000 square feet. The Light Industrial zone designation requested by the Applicant does permit single structures of more than 50,000 square feet. The impetus of the zone change requested by the Project Applicant is to therefore to allow for construction of a single warehouse use greater than 50,000 square feet in size.

Key to compatibility of the Project's proposed Light Industrial zoning with adjacent residentially zoned land uses is design, implementation, and operation of the Project in a manner consistent with the high performance standards required of uses proposed

within the City's Light Industrial zone district. Supporting the proposed zone change, and codifying design solutions proposed the Project, a Municipal Code Amendment is also proposed. The proposed Municipal Code Amendment requires a minimum separation of 250 feet between light industrial uses and residentially-zoned properties. This 250-foot minimum separation shall be increased as required to fully mitigate any potentially significant health risks and/or potentially significant operational noise impacts at adjacent residential properties.

Design of the Project, operational limitations imposed by the EIR mitigation measures, City and Responsible Agency regulatory requirements, and City Conditions of Approval act to ensure compliance with applicable performance standards and thereby reduce potential adverse impacts to off-site land uses.

The Project is not proximate to, and would not discernibly affect, designated Open Space areas. The Project does, however, incorporate General Plan regional trail design elements along its southerly Fir (future Eucalyptus) Avenue frontage.

Please refer also to specific environmental topical discussions presented in this EIR, and EIR Section 1.0, Table 1.10-1, Summary of Impacts and Mitigation Measures.

- **Good access to the regional transportation system**

The Project site is provided proximate access to SR-60 via the SR-60/Redlands Boulevard interchange, facilitating regional east-west access to and from the Project site. Within the City, Redlands Boulevard is a designated north-south truck route. In combination, these two major access routes will provide for the regional transportation needs of Project employees and visitors, and will support the Project's proposed warehouse distribution facility.

- **Accommodates the personal needs of workers and business visitors; meets the service needs of local businesses**

As noted previously at Table 4.1-1, the Project incorporates planned regional trail facilities along its southerly Fir (future Eucalyptus) Avenue frontage, which will be readily accessible to workers and business visitors. Distribution warehouse services provided by the Project will support and serve local and regional businesses.

Consistency with Southern California Association of Governments (SCAG) Plans and Policies

Table 4.1-2 cites applicable SCAG plans and policies, and summarizes Project consistency with each. As indicated at Table 4.1-2, the Project is considered to be substantively consistent with applicable SCAG plans, programs, and policies. Related to the summary discussions presented at Table 4.1-2, Table 4.1-3 presents City, WRCOG, and regional growth forecasts adopted by SCAG as part of the 2008 RTP.

Table 4.1-2
SCAG Plan/Policy Consistency

Growth Management Policies		
3.01	The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies shall be used by SCAG in all phases of implementation and review.	**Consistent:** Current SCAG population, housing, and jobs forecasts are employed in analyses presented in this EIR. Please refer to Table 4.1-3.
3.03	The timing, financing and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.	**Consistent:** The Project proposes development of a large-scale warehouse/distribution facility supported by existing and planned public facilities, utility systems, and transportation systems. The Project will implement and/or contribute to financing of planned and programmed infrastructure and services improvements.

Table 4.1-2
SCAG Plan/Policy Consistency

3.04	Encourage local jurisdictions' efforts to achieve a balance between the types of jobs they seek to attract and housing prices.	**Consistent:** This policy largely addresses City and regional functions as well as market forces, which the Project cannot implement or affect. Notwithstanding, as noted previously in this Section, warehouse/logistics jobs such as those created by the Project tend to provide defined skill ladders with relatively high base pay scales, are increasingly technologically dependent, allowing for on-the-job training, and upward mobility within the warehouse logistics economic sector. These types of jobs tend to support a range of housing products.
3.05	Encourage patterns of urban development and land use which reduce costs of infrastructure construction and make better use of existing facilities.	**Consistent:** The Project proposes development of a large-scale warehouse/distribution facility supported by existing and planned public facilities, utility systems, and transportation systems. The Project will implement and/or contribute to the financing of planned and programmed infrastructure and services improvements.
3.09	Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.	**Consistent:** The Project proposes development of a large-scale warehouse/distribution facility supported by existing and planned public facilities, utility systems, and transportation systems. The Project will implement and/or contribute to the financing of planned and programmed infrastructure and services improvements.
3.11	Support provisions and incentives created by local jurisdictions to attract housing growth in job-rich subregions and job growth in housing-rich subregions.	**Consistent:** As indicated at Table 4.1-3, the City of Moreno Valley is projected to be "jobs poor and housing rich" through at least 2015. That is, the ratio of employment to households is projected at less than 1.0, indicating a number of persons not actively employed and or/commuting beyond the City limits to their place(s) of employment. It is noted here that a jobs/household ratio of 1.0 is not considered ideal or even acceptable in an economy where households often rely on multiple sources of income. Table 4.1-3 also indicates anticipated incremental job creation within the City from 2010 through 2035. Employment opportunities arising from the Project represent a portion of this anticipated increase in local jobs, tending to bring the City closer to a balanced jobs/housing condition.

Table 4.1-2
SCAG Plan/Policy Consistency

3.18	Encourage planned development in locations least likely to cause adverse environmental impact.	**Consistent:** The Project site is designated for industrial use, and is located adjacent to approved and proposed warehouse/ distribution and light industrial land uses. Further, use and development of the Project site is not substantively constrained by hazards or the presence of valuable natural resources. Mitigation is proposed to reduce environmental impacts to the extent feasible.
3.19	Support policies and actions that preserve open space areas identified in local, State and federal plans.	**Consistent:** The Project is not located proximate to, and would not substantively affect designated Open Space areas. The Project has been designed to accommodate a segment of the City's planned regional trail connector, to be located along the Project's Fir (future Eucalyptus) Avenue frontage.
3.2	Vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals should be protected.	**Consistent:** The Project provides mitigation for all potential biological resources impacts as discussed at EIR Section 4.8, "Biological Resources." With application of proposed mitigation, all potential biological resources impacts are reduced to levels that are less-than-significant. Please refer also to *Report on Habitat Assessments and Biological Surveys* (EIR Appendix G). Overcovering of the site with paved surfaces and building pads will reduce the total area of permeable land available within the City. However, the Project site is not designated as a groundwater recharge area. The Project site is no longer in use for agricultural production.
3.21	Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.	**Consistent:** As concluded in the Project Cultural Resources Investigation (EIR Appendix J), no known cultural resources of significance exist within the Project site. The Draft EIR includes mitigation measures requiring archaeological and paleontological monitoring during earthmoving activities performed as part of Project construction. Please refer also to EIR Section 4.7, "Cultural Resources."

Table 4.1-2
SCAG Plan/Policy Consistency

3.22	Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood and seismic hazards.	**Consistent:** The Project is not located within an area of steep slopes, or high fire hazards. Seismic hazards are no greater within the Project site than other areas of the City or the region. The subject site is not subject to flooding, and is not located within a designated flood hazard area. As discussed at EIR Section 4.6, "Hydrology and Water Quality," the Project will implement stormwater management systems that meet or exceed the requirements of the City's Master Plan of Drainage and the Riverside County Flood Control and Water Conservation District.
3.23	Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.	**Consistent:** Please refer to previous discussions.
Air Quality Policies		
5.11	Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional, and local) consider air quality, land use, transportation, and economic relationships to ensure consistency and minimize conflicts.	**Consistent:** Through this EIR process, potential direct, indirect and cumulative impacts relative to Land Use, Transportation and Air Quality have been addressed and mitigated, where applicable. As a component of regional, air basin, county, subregional, and local development, the Project is consistent with, and avoids or minimizes potential conflicts with applicable regional, air basin, county, subregional, and local plans.
Open Space and Conservation Policies		
9.4	Maintain open space for adequate protection to lives and properties against natural and manmade hazards.	**Consistent:** While not designated as "Open Space," a regional pedestrian and equestrian trail segment, as proposed by the City's Master Plan of Parks and Trails, is planned along the Project site's southerly Fir Avenue frontage. The Project site plan accommodates and incorporates this proposed trail segment.

Table 4.1-2
SCAG Plan/Policy Consistency

9.5	Minimize potentially hazardous developments in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipment.	**Consistent:** The Project site is not located in an area susceptible to known hazards, including flooding or wildfires. Nor is the Project exposed to potential seismic ground shaking to any degree greater than other areas of the City and region. Potential emergency access impacts are addressed in DEIR Section 4.2, "Traffic and Circulation," and found to be less-than-significant.
9.6	Minimize public expenditure for infrastructure and facilities to support urban type uses in areas when public health and safety could not be guaranteed.	**Consistent:** No potentially significant impacts relative to public health have been identified through the Project's EIR process. Criteria pollutant emissions in excess of SCAQMD's thresholds have been projected to result from Project construction and operation. Notwithstanding, analysis performed as part of the Project's Air Quality Analysis indicate potential exposure to Project-related carbon monoxide or diesel particulate matter emissions will not result in significant health risks.
9.8	Develop well-managed viable ecosystems or known habitats of rare, threatened and endangered species, including wetlands.	**Consistent:** Mitigation is proposed to address potential impacts to biological resources within the Project site. With application of proposed mitigation, potential impacts to biological resources are reduced to levels that are less-than-significant. Please refer also to EIR Section 4.8, "Biological Resources," and EIR Appendix G, *Report on Habitat Assessments and Biological Surveys.*
Water Quality Policies		
11.07	Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.	**Consistent:** As it becomes available, the Project will employ recycled water for non-potable uses.
Regional Transportation Plan Policies		
RTP G1	Maximize mobility and accessibility for all people and goods in the region.	**Consistent:** The Project Traffic Impact Analysis (TIA) identifies specific improvements (e.g., traffic signals, roadway widening) that, upon construction, would successfully mitigate the Project's contribution to areawide traffic impacts affecting the Study Area under Opening Year conditions. Under General Plan
RTP G2	Ensure travel safety and reliability for all people and goods in the region.	
RTP G3	Preserve and ensure a sustainable regional transportation system.	

Table 4.1-2
SCAG Plan/Policy Consistency

RTP G4	Maximize the productivity of our transportation system.	buildout conditions, the Project will contribute mandated fees toward the construction of all necessary future traffic improvements through participation in the regional Transportation Uniform Mitigation Fee (TUMF) program and the City's Development Impact Fee (DIF) program. The Project is therefore consistent with goals to: maximize mobility and accessibility; ensure travel safety and reliability; preserve and ensure a sustainable regional transportation system; and maximize transportation system productivity. The Project design, operational programs, EIR mitigation measures, regulatory requirements, and City Conditions of Approval act collectively to avoid or minimize the Project's potential environmental impacts and thereby protect the environment. Air quality impacts will result from the project, but are avoided and minimized to the extent feasible. Please refer to EIR Section 4.3, "Air Quality." The Project will surpass California Title 24 Energy Efficiency Requirements, and in this manner promotes energy efficiency. Please refer to also EIR Section 5.6, "Energy Conservation."
RTP G5	Protect the environment, improve air quality and promote energy efficiency.	
RTP G6	Encourage land use and growth patterns that complement our transportation investments.	
Compass Growth Visioning (CGV) Principles		
Principle 1: Improve mobility for all residents. **GV P1.1:** Encourage transportation investments and land use decisions that are mutually supportive. **GV P1.2:** Locate new housing near existing jobs and new jobs near existing housing.		**Consistent:** The Project is provided proximate access to major arterials, including SR-60 and Redlands Boulevard via the SR-60/Redlands Boulevard interchange located approximately 700 feet easterly, facilitating mobility for Project employees and goods. The Project does not propose additional residential uses, but will create an estimated 900 new jobs within a "jobs poor/housing rich area." In this manner, the Project locates new jobs near existing housing.
Principle 2: Foster livability in all communities. **GV P2.1:** Promote infill development and redevelopment to revitalize existing communities.		**Consistent:** The Project proposes development of vacant underutilized properties consistent with land uses and development patterns established under the City General Plan. Implementation of the Project will realize light industrial/warehouse distribution uses that are compatible with, and similar to, existing and anticipated development in the Project vicinity.

Table 4.1-2
SCAG Plan/Policy Consistency

Principle 3: Enable prosperity for all people. **GV P3.3:** Ensure environmental justice regardless of race, ethnicity or income class. **GV P3.5:** Encourage civic engagement.	**Consistent:** The Project does not propose elements or aspects that would disproportionately and adversely affect low-income or minority populations. Civic engagement is encouraged through the EIR review process and City noticing and public hearing processes.

Source: Southern California Association of Governments

Table 4.1-3
City of Moreno Valley, WRCOG, and County of Riverside
Population, Household, and Employment Projections

Year	Population	Households	Employment	Employment/ Household Ratio
City of Moreno Valley				
2010	189,700	50,432	39,225	0.78
2015	206,657	55,407	49,414	0.89
2020	220,390	60,025	61,974	1.03
2025	234,410	64,699	71,359	1.10
2030	246,804	69,353	80,667	1.16
2035	258,350	72,977	91,642	1.26
WRCOG				
2010	1,735,426	546,046	588,523	1.08
2015	1,918,962	609,218	691,260	1.14
2020	2,096,539	671,932	797,626	1.19
2025	2,262,989	727,620	901,163	1.24
2030	2,414,254	780,741	1,005,923	1.29
2035	2,550,865	828,545	1,098,233	1.33
SCAG Region				
2010	19,418,344	6,086,986	8,349,453	1.37
2015	20,465,830	6,474,074	8,811,406	1.36
2020	21,468,948	6,840,328	9,183,029	1.34
2025	22,395,121	7,156,645	9,546,773	1.33
2030	23,255,377	7,449,484	9,913,376	1.33
2035	24,057,286	7,710,722	10,287,125	1.33

Source: SCAG Adopted 2008 RTP Growth Forecasts, provided by SCAG, November 11, 2009.

As supported by the preceding discussions, and with approval of the Project's requested zone change and requested Municipal Code Amendment to establish objective standards for the development of Light Industrial uses adjacent to

residentially-zoned property, the Project's potential to conflict with any applicable environmental plan, policy, or regulation of an agency with jurisdiction over the Project, adopted for the purpose of avoiding or mitigating an environmental effect is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: ***Conflict with any applicable habitat conservation plan or natural community conservation plan.***

Impact Analysis: The Biological Resources Assessment prepared for the Project indicates that the Project site is within the jurisdiction of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The Project is not subject to requirements of any other applicable conservation plan or natural community conservation plan.

A discussion of the Project's context within and consistency with the MSHCP is presented at EIR Section 4.8, "Biological Resources." As discussed therein, the Project complies with all applicable provisions of the MSHCP. The Project site is not within an MSHCP Criteria Cell, nor is the site within 1,000 feet of an identified Criteria Cell. No MSHCP conservation areas or habitat linkages occur onsite. Please refer also to *Report on Habitat Assessments and Biological Surveys* (EIR Appendix G). The potential for the Project to conflict with any applicable habitat conservation plan or natural community conservation plan is therefore considered less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: ***Physically divide an established community.***

Impact Analysis: As noted previously, the Project site is located within, and continues the business park/light industrial land uses that exist or are proposed along the southerly SR-60 frontage, consistent with land use and development patterns reflected in the Moreno Valley General Plan Land Use Map (please refer to previous Figure 4.1-2). More specifically, Business Park/Light Industrial Land Uses have been designated on the Moreno Valley General Plan Land Use Map along the south side of SR-60 extending from Petit Street, approximately one-half mile to the west of the Project site, continuing to Gilman Springs Road, approximately 1.7 miles to the east. General Plan Business Park/Light Industrial Land Uses then continue approximately 1.7 miles southerly along Gilman Springs Road to just past Alessandro Boulevard, along the City's easterly corporate boundary. The Project site's frontage along SR-60 represents an approximately one-third mile component of the almost continuous 4.4 mile "edge" of parcels bordering SR-60 that are designated for future Business Park/Light Industrial uses in the Moreno Valley General Plan.

Implementation of the Project will realize light industrial/warehouse distribution uses that are compatible with, and similar to, anticipated development in the Project vicinity. More specifically, distribution warehouse land uses have been approved as part of the Highland Fairview Corporate Park Project, located east of Redlands Boulevard and south of SR-60. Similar uses are also proposed to the west, south of SR-60 and west of Quincy Channel, by ProLogis. The Project does not propose nor require elements that would physically divide an established community.

Adjacent parcels to the east and south are currently vacant, with the exception of a single family residence to the south of Fir (future Eucalyptus) Avenue near the Project site's southeasterly corner. Parcels adjacent to this residence are designated for Rural Residential (RA-2) uses. However, with the exception of the single existing residence south of Fir (future Eucalyptus) Avenue, this adjacent, residentially designated area is not yet developed, and as such, does not constitute an "established community."

Once developed, the Project will provide an additional buffer from adjacent uses. The Project has incorporated a landscaped setback of approximately 250 feet on its Fir (future Eucalyptus) Avenue frontage. A minimum 14-foot masonry screenwall, designed to emulate the building exterior, will also be provided along the Project's southerly frontage, to shield future adjacent uses from views of Project operations.

As discussed above, the Project will establish land uses that are contextually compatible based on the City's General Plan land use designations. The Project's potential to adversely affect vicinity properties is further reduced by site plan design(s) and required perimeter landscape/hardscape features. Abutting roadways physically separate the Project site from adjacent land uses. The Project site will be further defined and separated from adjacent land uses by landscaping and edge treatment concepts that will be implemented consistent with Municipal Zoning Code Chapter 9.05 requirements and standards. Please refer also to edge treatment concepts and property line transitional elements presented at EIR Figure 3.5-4, Preliminary Landscape Plan.

As supported by the preceding discussion, the Project's potential to physically divide an established community is determined to be less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

4.2 TRAFFIC AND CIRCULATION

4.2 TRAFFIC AND CIRCULATION

Abstract

This Section addresses the Project's potential to increase traffic and congestion on roadways within the traffic impact study area (Study Area). Site access and circulation, are also evaluated. More specifically, this Section evaluates traffic and conditions under Opening Year (2013) and General Plan Buildout conditions, and determines whether the Project will result in or cause:

- *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.*

- *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.*

- *A substantial increase in hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*

- *Inadequate emergency access.*

- *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.*

- *A change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.*

In consideration of the potential impacts summarized above, the Project Traffic Impact Analysis (TIA) identifies specific improvements (e.g., traffic signals, roadway widening) that, upon construction, would successfully mitigate traffic impacts affecting the Study Area. Consistent with the methodology established by the Lead Agency, the Project TIA evaluates potential traffic impacts under Opening Year (2013) and General Plan Buildout Conditions. Project-specific cumulative impacts affecting the Study Area are summarized below.

Project-Specific Roadway and Intersection Impacts and Mitigation

The Project will, construct all circulation system improvements necessary to mitigate its specific impacts, and ensure efficient and safe access within the Study Area. At all Study Area locations and facilities, potential Project-specific circulation system impacts are thereby reduced to levels that are less-than-significant.

Cumulative, Areawide Intersection and Roadway Segment Impacts and Mitigation

As discussed herein, area-serving traffic improvements are funded by fees collected and allocated under established programs [the Traffic Uniform Mitigation Fee (TUMF) Program; City of Moreno Valley Development Impact Fee (DIF) Program; and Project-related fair-share participation] which collectively provide for construction of necessary traffic improvements within the Study Area. To mitigate incremental contributions to cumulative traffic impacts affecting off-site roadways and intersections within the Study Area, the Project Applicant will pay requisite fees toward the construction of necessary improvements. Notwithstanding, payment of traffic impact fees does not ensure timely completion of those traffic improvements necessary to mitigate potentially significant cumulative traffic impacts affecting the Study Area. In these instances, while Project-specific traffic impacts would not be individually significant, they would be cumulatively significant. ***On this basis, pending completion of required improvements, the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting the following intersections are therefore considered cumulatively significant and unavoidable:***

- ***Moreno Beach Drive at SR-60 Eastbound Ramps;***
- ***Redlands Boulevard at SR-60 Westbound Ramps;***
- ***Redlands Boulevard at SR-60 Eastbound Ramps;***
- ***Redlands Boulevard at Fir (future Eucalyptus) Avenue; and***
- ***Quincy Street at Fir (future Eucalyptus) Avenue (new intersection).***

The Project's incremental contributions to Opening Year Cumulative Traffic Impacts at, or affecting, the following roadway segments are similarly considered cumulatively significant and unavoidable:

- ***Redlands Boulevard from north of the SR-60 Westbound Ramps to south of Eucalyptus (future Encilia) Avenue;***
- ***Quincy Street south of Fir (future Eucalyptus) Avenue (future street); and***
- ***Fir (future Eucalyptus) Avenue from west of Quincy Street to the Project site (future street).***

Further, pending completion of required improvements, the Project's incremental contributions to General Plan Buildout traffic impacts at or affecting the following intersections are also considered cumulatively significant and unavoidable:

- ***Moreno Beach Drive at SR-60 Eastbound Ramps;***
- ***Redlands Boulevard at SR-60 Westbound Ramps;***
- ***Redlands Boulevard at SR-60 Eastbound Ramps;***
- ***Redlands Boulevard at Fir (future Eucalyptus) Avenue;***
- ***Quincy Street at Fir (future Eucalyptus) Avenue (new intersection);***
- ***Moreno Beach Drive at Fir (future Eucalyptus) Avenue (new intersection);***
- ***Redlands Boulevard at Eucalyptus (future Encilia) Avenue (new intersection); and***
- ***Redlands Boulevard at Cottonwood Avenue (new intersection).***

Freeway Segment/CMP Impacts and Mitigation

As also discussed in this Section, under General Plan Buildout Conditions, freeway segments (which are also Congestion Management Program facilities) within the Study Area are projected to operate under deficient conditions, with or without the Project. The Project would contribute additional traffic to these already deficient conditions. Mitigation of freeway mainline impacts is a regional/state responsibility beyond the control and scope of the Project, and there are no feasible means for the Project to mitigate these impacts. ***Under General Plan Buildout Conditions, the addition of Project traffic to the following freeway segments is nonetheless recognized as cumulatively significant:***

- ***SR-60 Westbound, west of Moreno Beach Drive;***
- ***SR-60 Westbound, between Moreno Beach Drive and Redlands Boulevard;***
- ***SR-60 Westbound, east of Redlands Boulevard;***
- ***SR-60 Eastbound, west of Moreno Beach Drive;***
- ***SR-60 Eastbound, between Moreno Beach Drive and Redlands Boulevard; and***
- ***SR-60 Eastbound, east of Redlands Boulevard.***

All other potential traffic/circulation impacts of the Project were found to be less-than-significant. Please refer also to the Project Traffic Impact Analysis (Project TIA) presented at EIR Appendix B.

4.2.1 INTRODUCTION

The information and analysis presented in this Section is summarized from the *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads, Inc.) May 20, 2010, Revised (TIA). The TIA compares existing conditions within the Project area to conditions anticipated to occur with the addition of Project traffic as well as new traffic attributable to regional growth and other development in the Project vicinity.

The City of Moreno Valley requires the TIA to analyze a horizon year that is a minimum of five (5) years from baseline existing (2008) conditions, based on the guidelines of the *City of Moreno Valley Transportation Engineering Division Traffic Impact Analysis Preparation Guide* (August 2007). Accordingly, the potential traffic impacts of the Project are determined for 2013 conditions, and for the purposes of the TIA, 2013 has been defined as the Project "Opening Year." The EIR and TIA also analyze and address the Project's potential traffic impacts within the context of the City's General Plan Buildout scenario.

4.2.2 SETTING

In coordination and consultation with the City of Moreno Valley, the Traffic Impact Study Area (Study Area) was defined. The Study Area encompasses all component of the circulation system that would likely be affected by the Project, under Opening Year and/or General Plan Buildout conditions. Following are summarized descriptions of primary elements and operational characteristics of the circulation system as it currently exists within the Study Area.

4.2.2.1 Study Area and Key Intersections

The Study Area scope includes any intersection of Collector roadway or higher classification street with another Collector roadway or higher classification street, at which the proposed Project would add 50 or more peak hour trips. The Study Area key intersections (Figure 4.2-1) were identified in consultation and coordination with the City of Moreno Valley, and include the following:

Moreno Beach Drive at:

- SR-60 Westbound Ramps; and
- SR-60 Eastbound Ramps.

Quincy Street at:

- Fir (future Eucalyptus) Avenue (future intersection).

Fir (future Eucalyptus) Avenue at:

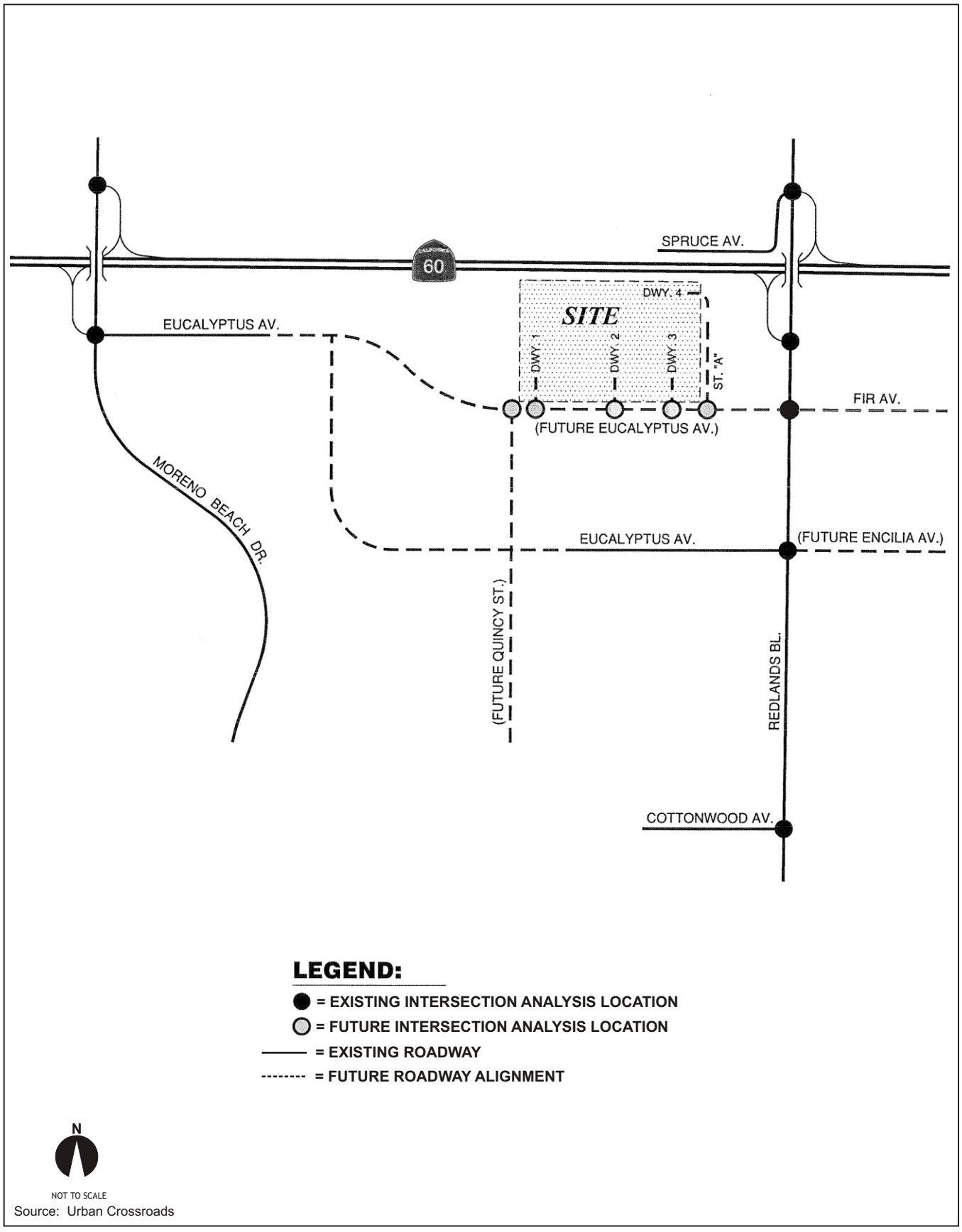
- Project Driveway 1 (future intersection);
- Project Driveway 2 (future intersection);
- Project Driveway 3 (future intersection); and
- Street "A" (future intersection).

Redlands Boulevard at:

- SR-60 Westbound Ramps;
- SR-60 Eastbound Ramps;
- Fir (future Eucalyptus) Avenue;
- Eucalyptus (future Encilia) Avenue; and
- Cottonwood Avenue

Each of the Study Area intersection locations was analyzed to assess weekday morning and evening peak hour performance (7:00 a.m. to 9:00 a.m., and 4:00 p.m. to 6:00 p.m., respectively).

It may be noted that the existing Fir Avenue, south of the Project site, will be re-named Eucalyptus Avenue upon improvement. Further, the existing Eucalyptus Avenue, located approximately one-quarter mile south of the Project site, will be re-named Encilia Avenue upon the improvement of Fir Avenue.



Source: Urban Crossroads

Figure 4.2-1
Study Area Intersections

4.2.2.2 Study Area Roadway Network

Regional Access

State Route 60 (SR-60), adjacent to the Project site's northerly boundary, provides regional access to the subject property and vicinity. Connection to SR-60 is provided via Redlands Boulevard, located less than one-quarter mile east of the Project site. The Project has been designed to accommodate future interchange improvements planned by Caltrans at Redlands Boulevard and the SR-60, which would upgrade the existing rural configuration to a standard diamond interchange. These interchange improvements would be constructed by Caltrans, and are not a part of the proposed Project. As demonstrated in the analysis presented in this Section, with implementation of the improvements identified subsequently (and in the Project TIA, EIR Appendix B), the existing rural interchange at Redlands Boulevard and the SR-60 will accommodate existing and anticipated future traffic, including Project-related traffic, at Opening Year and beyond. The upgrade of this interchange is included as part of the regional Western Riverside County TUMF improvement program.

Local Access

The principal local roadway network of streets in the vicinity of the Project site includes Redlands Boulevard, Fir (future Eucalyptus) Avenue, and Moreno Beach Drive. Each of these three roadways has been designated in the City's General Plan Circulation Element to carry a substantially higher capacity than they currently exhibit. Under Opening Year (2013) conditions, and pending future circulation system improvements in the Study Area, access to the Project site will be limited to Fir (future Eucalyptus) Avenue connecting easterly to Redlands Boulevard. As noted in the EIR Project Description, and discussed subsequently in this Section, the Project will provide all necessary local improvements (including improvements to Fir (future Eucalyptus) Avenue and Redlands Boulevard) to ensure efficient and safe access under Opening Year conditions. Existing and ultimate configuration of these roadways are below. Typical street sections for roadways in the Study Area are illustrated in the Project TIA (EIR Appendix B).

Redlands Boulevard is currently a two-lane, undivided roadway from north of SR-60 to just north of Cottonwood Avenue, a span of more than a mile. No curb or gutter improvements are currently in place adjacent to the Project site, and the roadway is generally bounded by vacant parcels or agricultural uses. Ultimate configuration of this roadway under its current General Plan designation is a four-lane, divided arterial roadway (City Std. 103 A).

Fir (future Eucalyptus) Avenue is currently a four-lane, divided roadway east of Moreno Beach Drive, with curb and gutter improvements in place. Adjacent to the Project site, west to east from Quincy Channel to beyond Redlands Boulevard, Fir Avenue is currently a dirt road. This roadway, which will be re-named Eucalyptus Avenue upon improvement, is designated as an arterial roadway with a 104-foot right-of-way from west of Moreno Beach Drive to east of Redlands Boulevard. Future Eucalyptus Avenue will provide direct access to the Project site (City Std. 104 B)

Moreno Beach Drive is currently a two-lane undivided roadway north of SR-60, with a narrow two-lane bridge over the freeway ultimately widening to a six-lane divided roadway with a raised median just north of the SR-60 Eastbound Ramps. The roadway narrows to a two-lane undivided roadway toward the southern portion of the study area. Moreno Beach Drive is designated as an arterial roadway with a 100-foot right-of-way north of SR-60 (City Std. 104 A), and as a divided major arterial roadway with a 134-foot right-of-way south of SR-60 (City Std. 101 A).

4.2.2.3 Existing Roadway System Capacity

Roadway operations and the relationship between capacity and traffic volumes are generally expressed in terms of levels of service (which are defined using the letter grades A through F). Level of Service (LOS) is a measure of "quality of flow." These levels recognize that, while an absolute limit exists as to the amount of traffic traveling through a given intersection (the absolute capacity), the conditions that motorists experience rapidly deteriorate as traffic approaches the absolute capacity. Under such conditions, congestion is experienced. Definitions of the six levels of service for

uninterrupted flow (i.e., freeway traffic, or flow that is unrestrained by traffic control devices) are summarized below.

LOS A: Completely free-flow conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations are constrained only by the geometric features of the highway and by driver preferences. Maneuverability within the traffic stream is good. Minor disruptions to flow are easily absorbed without a change in travel speed.

LOS B: Free-flow conditions, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver. Minor disruptions are still easily absorbed, although local deterioration in LOS will be more obvious.

LOS C: The influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles. Minor disruptions can cause serious local deterioration in service, and queues will form behind any significant traffic disruption.

LOS D: The ability to maneuver is restricted due to traffic congestion. Travel speed is reduced by the increasing volume. Only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.

LOS E: Operations at or near capacity, an unstable level. Vehicles are operating with the minimum spacing for maintaining uniform flow.

LOS F: Forced or breakdown flow, occurring either when vehicles arrive at a rate greater than the rate at which they are discharged, or when the forecast demand exceeds the computed capacity of a planned facility. Although operations at these points and on sections immediately downstream appear to be at capacity, queues form behind these breakdowns. Operations within

form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.

For intersections, average total delay per vehicle (usually expressed in seconds) is used to define levels of service. As abstracted from the *Highway Capacity Manual 2000 (HCM),* Chapter 16 (Signalized Intersections) LOS definitions for signalized intersections are provided in Table 4.2-1. Corresponding LOS definitions for unsignalized (i.e., stop-sign controlled) intersections as presented in the HCM, Chapter 17 (Unsignalized Intersections) are summarized in Table 4.2-2.

Table 4.2-1
Level of Service Definitions for Signalized Intersections

Level of Service (LOS)	Control Delay Per Vehicle (seconds/vehicle)
A	0 to 10.00
B	10.01 to 20.00
C	20.01 to 35.00
D	35.01 to 55.00
E	55.01 to 80.00
F	≥ 80.01

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).

Table 4.2-2
Level of Service Definitions for Unsignalized Intersections

Level of Service (LOS)	Highway Capacity Manual Delay Value (seconds/vehicle)
A	0 to 10.00
B	10.01 to 15.00
C	15.01 to 25.00
D	25.01 to 35.00
E	35.01 to 50.00
F	≥ 50.01

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).

4.2.2.4 Existing Traffic Volumes

Traffic volumes at existing Study Area roadway segments and intersections are based on traffic counts conducted by Urban Crossroads, as identified in the Project TIA, EIR Appendix B.

Existing Intersection Levels of Service

Consistent with City of Moreno Valley and Riverside County requirements, existing AM and PM peak hour operating conditions for signalized and unsignalized intersections within the Study Area were evaluated using the *Highway Capacity Manual 2000* (HCM) methodology.

The HCM intersection analysis establishes existing circulation system performance within the Study Area, and establishes the baseline condition for evaluation of the Project potential traffic/circulation system impacts. Existing levels of service for the Study Area intersections are summarized in Table 4.2-3. Please refer also to detailed level of service calculation worksheets, included as part of the Project TIA, EIR Appendix B.

Table 4.2-3
Existing Peak Hour LOS Conditions at Study Area Intersections

Intersection	Traffic Control[1]	Delay[2] (seconds)		LOS		LOS Std[3]
		AM	PM	AM	PM	
Moreno Beach Drive at SR-60 Westbound Ramps	TS	17.1	14.8	B	B	D
Moreno Beach Drive at SR-60 Eastbound Ramps	TS	38.4	43.7	D	D	D
Redlands Boulevard at SR-60 Westbound Ramps	CSS	29.8	48.4	D	***E***	D
Redlands Boulevard at SR-60 Eastbound Ramps	TS[4]	19.9[4]	20.5[4]	C[4]	C[4]	D
Redlands Boulevard at Fir (future Eucalyptus) Avenue	CSS	8.4	8.3	A	A	D
Redlands Boulevard at Eucalyptus (future Encilia) Avenue	CSS	14.9	14.4	B	B	D
Redlands Boulevard at Cottonwood Avenue	TS	9.5	5.0	A	A	D

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).

1 TS = traffic signal; CSS = cross-street stop; and AWS = all-way stop.

2 Additional detail regarding delay and level of service calculations is available in the Project TIA (EIR Appendix B). Overall average intersection delay and LOS are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown.

3. LOS Standards per City of Moreno Valley General Plan Circulation Element.

4. Since completion of the TIA traffic modeling, a traffic signal and supporting lane improvements have been installed at Redlands Boulevard at SR-60 Eastbound Ramps. The Lead Agency indicates maintenance of operating conditions equal or superior to those identified in the TIA.

Table 4.2-3 indicates that one (1) existing Study Area key intersection, Redlands Boulevard at SR-60 Westbound Ramps, currently operates at an unacceptable LOS "E" condition in the evening peak hour period. The remaining Study Area key intersections were found to currently operate at, or more efficiently than, the applicable LOS "D" standard in both the AM and PM peak hour periods.

Existing Roadway Segment Levels of Service

Existing roadway segment daily traffic volumes were assessed using 2008 conditions and volume to capacity ratios (V/C) were calculated based on the existing capacity of roadways in the Study Area. These V/C ratios are presented at Table 4.2-4, along with the corresponding LOS for each existing Study Area roadway segment.

As seen in Table 4.2-4, two segments of Redlands Boulevard (north of the SR-60 Westbound Ramps, and between the SR-60 Westbound and Eastbound Ramps) currently operate below their acceptable LOS threshold. Peak hour analysis of these two segments indicates that the eastbound and Westbound Ramps to the SR-60 at Redlands Boulevard are currently operating at or near capacity.

Table 4.2-4
Existing (2008) Roadway Segment Volume/Capacity Analysis

Roadway, Segment Limits	Roadway Section[1]	LOS Capacity[2]	Existing (2008)	V/C	Existing LOS	LOS Std[4]
Moreno Beach Drive						
North of SR-60 Westbound Ramps	2U	12,500	6,000	0.48	A	D
SR-60 Westbound Ramps to Bridge over SR-60	2U	12,500	10,900	0.87	D	D
Bridge over SR-60 to SR-60 Eastbound Ramps	6D	56,300	10,900	0.19	A	D
South of SR-60 Eastbound Ramps	6D	56,300	15,900	0.28	A	D
Redlands Boulevard						
North of SR-60 Westbound Ramps	2U	12,500	14,300	1.14	***F***	D
SR-60 Westbound Ramps to Eastbound Ramps	2U	12,500	11,800	0.94	***E***	D
SR-60 Eastbound Ramps to Fir (future Eucalyptus) Avenue	2U	12,500	8,300	0.66	B	D
Fir (future Eucalyptus) Avenue to Eucalyptus (future Encilia) Avenue	2U	12,500	8,200	0.66	B	D

Table 4.2-4
Existing (2008) Roadway Segment Volume/Capacity Analysis

Roadway, Segment Limits	Roadway Section[1]	LOS Capacity[2]	Existing (2008)	V/C	Existing LOS	LOS Std[4]
Redlands Boulevard (cont'd)						
South of Eucalyptus (future Encilia) Avenue	2U	12,500	82,00	0.66	B	C
North of Cottonwood Avenue	3D	25,000	8,200	0.33	A	C
South of Cottonwood Avenue	2D	12,500	8,000	0.64	B	C
Spruce Street						
West of Redlands Boulevard	2U	12,500	400	0.03	A	C
Fir (future Eucalyptus) Avenue						
East of Moreno Beach Drive	4D	37,500	2,400	0.06	A	D
West of Redlands Boulevard[3]	2U	12,500	0	0.00	A	D
East of Redlands Boulevard[3]	2U	12,500	0	0.00	A	D
Eucalyptus (future Encilia) Avenue						
West of Redlands Boulevard	3U	18,750	500	0.03	A	C
Cottonwood Avenue						
West of Redlands Boulevard	4D	37,500	1,100	0.03	A	C

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).
1 Numerals indicate the number of lanes; U indicates undivided roadways; D indicates divided roadways (e.g., 2U = two-lane, undivided roadway; 6D = six-lane, divided roadway).
2 These maximum roadway capacities have been extracted from the City of Moreno Valley's *Traffic Impact Analysis Preparation Guidelines* (August 2007). These roadway capacities are 'rule of thumb' estimates for planning purposes. Capacity is affected by such factors as intersection spacing, roadway grades, design geometrics, and vehicle mix. Additional detail regarding roadway capacity is available in the Project TIA (EIR Appendix B).
3 This roadway is currently a dirt road.
4 LOS Standards per City of Moreno Valley General Plan Circulation Element.

4.2.2.5 Public Transportation Services

Riverside Transit Agency (RTA) provides regional fixed bus route service to Western Riverside County. Within the City of Moreno Valley, RTA buses operate along five (5) fixed-routes, linking the City with Riverside County destinations including: the Cities of Riverside, Woodcrest, Mead Valley, Perris, Hemet and Sun City. Within the Study Area, the stop nearest the Project site is at the Super Walmart on Moreno Beach Drive, approximately 1.5 miles to the west. This stop is part of RTA's Route 35, which currently operates on weekdays between Beaumont/Banning and Moreno Valley, stopping hourly between 6:37 a.m. and 6:37 p.m.

Other public transportation services generally available within the area include common carriers: Greyhound Bus Lines, AMTRAK rail service, and Metrolink commuter rail service. At present, these transportation providers do not have service routes or facilities located proximate to the Project, nor will the Project discernibly affect operations of these service providers.

4.2.3 OPENING YEAR TRAFFIC CONDITIONS

The City requires development TIAs to analyze a horizon year that is a minimum of five (5) years from baseline existing (2008) conditions reflected in the TIA. Accordingly, the potential traffic impacts of the Project are determined for 2013 ("Opening Year") conditions. This includes the application of an assumed background growth factor, to which traffic generated by known or probable "related projects" was added.

4.2.3.1 Ambient Traffic Growth and Opening Year Ambient Conditions

Opening Year background traffic estimates have been calculated employing an ambient growth factor. The ambient growth factor accounts for non-specific development within the Study Area, as well as anticipated growth in traffic volumes generated by projects outside the Study Area. Based on direction of City of Moreno Valley staff, the standard annual growth factor used within the City is two percent (2%).

The ambient growth factor of two percent per year was applied to existing Year 2008 traffic volumes, yielding a ten percent (10%) growth in existing volumes over the five intervening years until the Project Opening Year, 2013. Collectively, Opening Year traffic conditions resulting from ambient growth only is termed herein as the "Opening Year Ambient Condition."

4.2.3.2 Related Projects Traffic Contributions and Opening Year Cumulative Condition

In addition to assumed ambient traffic growth described above, future traffic conditions within the Study Area will be affected by traffic generated by other known or probable projects. In this regard, a list of approved and pending related projects was employed in

developing the Opening Year cumulative traffic conditions, and assessment of the Project's potential contribution to projected Opening Year traffic impacts.

The Project TIA and Draft EIR Section 5.1 (Cumulative Impacts Analysis) consider eleven (11) related projects located in the City of Moreno Valley. In summary, these projects include the following:

- Two industrial projects (Highland Fairview and ProLogis), with a combined total of more than 4.5 million square feet of warehouse/distribution or logistics uses, and 210,000 square feet of commercial uses;

- Six retail centers, totaling nearly 800,000 square feet of commercial uses; and

- Three residential projects, including 1,765 single-family detached residences, 216 apartment units, and an 18-hole golf course.

These related projects have been included as part of the cumulative background setting, and, for the purposes of this analysis, are assumed to be occupied and operational by Project opening in 2013. In total, these projects are expected to generate 74,354 daily trips on a typical weekday, with 4,178 trips forecast during the AM peak hour, and 6,378 trips during the PM peak hour. A map of the approved and pending projects is included in EIR Section 5.1 (Cumulative Impacts Analysis). Additional detail regarding the trip generation of these related projects is also presented in the Project TIA (EIR Appendix B). Collectively, Opening Year traffic conditions resulting from ambient growth and including traffic generated by other known or probable related projects is termed herein as the "Opening Year Cumulative Condition."

4.2.4 GENERAL PLAN BUILDOUT TRAFFIC CONTRIBUTIONS AND GENERAL PLAN BUILDOUT CONDITION

The analysis presented herein also considers traffic generated under the City's ultimate General Plan Buildout scenario. By definition, the General Plan Buildout scenario includes traffic generated by area-wide ambient growth as well as traffic generated by assumed buildout of the City consistent with the General Plan. Collectively, General Plan Buildout traffic conditions resulting from ambient growth and including traffic generated under the General Plan Buildout scenario is termed herein as the "General Plan Buildout Condition."

4.2.5 PROJECT TRIP GENERATION AND DISTRIBUTION

The following discussions present anticipated Project trip generation and distribution characteristics. Traffic volumes and assignments attributable to the Project have been employed in the evaluation of potential Project-related traffic impacts, as presented in Section 4.2.7, "Potential Impacts and Mitigation Measures."

4.2.5.1 Trip Generation Forecast

Trip generation characteristics of the Project were derived from studies which reflect the trip generation rates of warehouse facilities storing and transporting international goods imported into the country from the Ports of Los Angeles and Long Beach. These include the *City of Fontana Truck Trip Generation Study* commissioned in 2003 (Fontana Study), and the updated 2007 *National Association of Industrial and Office Properties (NAIOP) Trip Generation Study*. The NAIOP Study included data collected from 13 locations within Riverside County, and provides trip generation rates that are use-specific to warehouse distribution projects such as that proposed by the Project. The recent date and geographic orientation of the Study contribute further to its utility and applicability in estimating the likely trip generation characteristics of the Westridge Commerce Center Project.

Using data from the NAIOP Study, the City's Transportation Department approved the use of "hybrid" trip generation rates for the Project's trip generation forecast, as shown

in Table 4.2-5. A summary of the Project's Trip Generation Forecast, using the rates from Table 4.2-5, is presented subsequently in Table 4.2-6. As seen in Table 4.2-5, "passenger car equivalent" (PCE) factors, ranging from 1.5 to 3.0, have been applied to ensure that truck volumes are accurately accounted for in terms of their proportional contributions to traffic impacts. More specifically, the Project Trip Generation Forecast equates two-axle trucks to 1.5 passenger cars. Three-axle trucks are considered the equivalent of two (2) passenger cars; and trucks with four (4) or more axles are counted as the equivalent of three passenger cars. Employing these PCE factors, the Project is anticipated to generate 2,930 Passenger Car Equivalent (PCE) trips per day, with 191 PCE trips occurring during the AM peak hour, and 225 PCE trips occurring during the PM peak hour.

4.2.5.2 Project Trip Distribution and Assignment

Trip distribution identifies the directional orientation of Project-related traffic on the transportation network, and is influenced by nearby land uses, network features, and existing travel patterns. The Project trip generation, as described above, was applied to projected distribution patterns in order to develop circulation assignments for new Project-related trips. Please refer to the Project TIA, EIR Appendix B, for further details regarding distribution and assignment of Project traffic to the local roadway network.

Table 4.2-5
Project Trip Generation Rates

Land Use	AM Peak Hour			PM Peak Hour			Daily
	Enter	Exit	Total	Enter	Exit	Total	
High-Cube Warehouse[1] (per thousand square feet)							
Total Vehicles (100%)	0.06	0.05	0.11	0.05	0.08	0.13	1.69
Passenger Cars (46.0%)	0.028	0.023	0.051	0.023	0.037	0.060	0.777
2-axle Trucks (PCE 1.5, 6.1%)	0.005	0.005	0.010	0.005	0.007	0.012	0.155
3-axle Trucks (PCE 2.0, 13.9%)	0.017	0.014	0.031	0.014	0.022	0.036	0.470
4+axle Trucks (PCE 3.0, 34.0%)	0.061	0.051	0.112	0.051	0.082	0.133	1.724

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).

[1] High-Cube Warehouse Trip Generation Source: NAIOP-City of Moreno Valley Hybrid Rates, September 14, 2007; vehicle mix consistent with City of Fontana Truck Trip Generation Study for LU030, August 2003; PCE rates per SANBAG.

Table 4.2-6
Westridge Commerce Center Trip Generation

Project Description	AM Peak Hour			PM Peak Hour			Daily
	Enter	Exit	Total	Enter	Exit	Total	
High Cube Warehouse (937.260 thousand square feet)							
Passenger Cars	26	22	47	22	34	56	729
Truck Trips (PCE):							
2-axle	5	4	9	4	7	11	145
3-axle	16	13	29	13	21	34	440
4+axle	57	48	105	48	76	124	1,616
Net Truck Trips (PCE)	78	65	143	65	104	169	2,201
Total Trips (PCE)	**104**	**87**	**191**	**87**	**139**	**225**	**2,930[1]**

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).

[1] 2,930 PCE trips = 1,585 net vehicle trips (the raw arithmetic number of truck and passenger vehicle trips) generated by the Project. It should be noted that because different classes of vehicles (e.g., passenger cars, light trucks, heavy duty trucks) exhibit differing emissions characteristics that for the purposes of quantifying and evaluating air quality impacts, vehicle trips are quantified and segregated by vehicle type. In comparison, the Project's traffic study evaluates the effects of traffic at intersections and roadways, and therefore presents the total vehicle trips in terms of Passenger Car Equivalents (PCEs), thereby recognizing and acknowledging physical size differences in vehicles and related effects on roadways and at intersections.

4.2.6 TRAFFIC AND CIRCULATION REGULATIONS, POLICIES, AND IMPACT MITIGATION FEE/TRFFIC IMPROVEMENTS PROGRAMS

4.2.6.1 Overview

The following discussions summarize regulations and policies that direct and provide the basis for determining necessary roadway and intersection improvements within the Study Area. Also described are traffic impact fee mitigation/traffic improvement programs which provide the mechanism for prioritizing and funding necessary circulation system improvements.

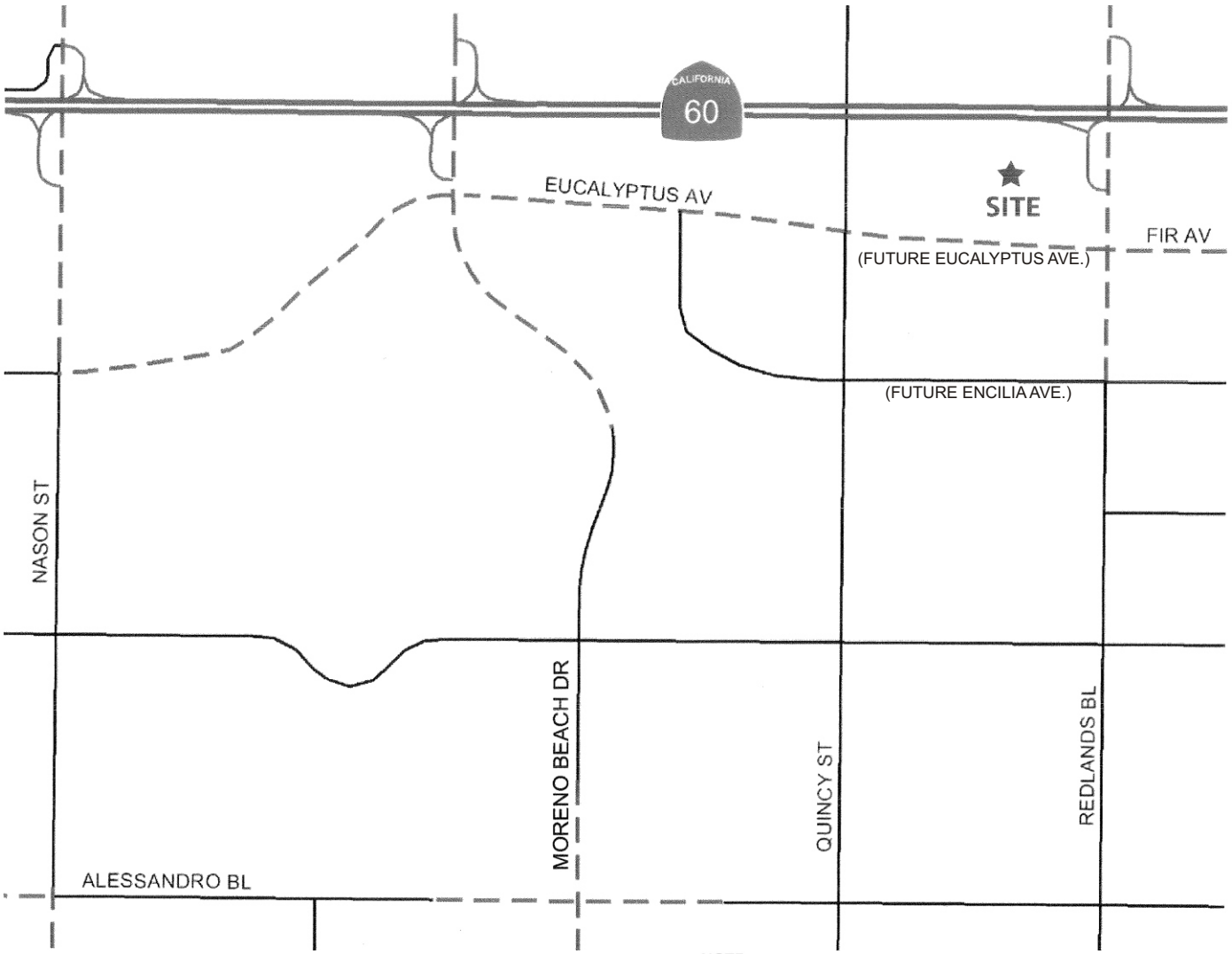
4.2.6.2 Riverside County Transportation Commission (RCTC), County of Riverside Congestion Management Plan (CMP)

To more directly link land use, transportation and air quality and promote reasonable growth, the County of Riverside adopted a Congestion Management Plan (CMP) (December 2007). The Riverside County Transportation Commission (RCTC) monitors the CMP roadway network system to minimize LOS deficiencies.

Within the Project Study Area the SR-60 Freeway is recognized as key transportation facility within the CMP system. RCTC has adopted LOS "E" as the minimum standard along the CMP System of Highways and Roadways. For the purposes of this traffic impact analysis, LOS "E" is considered to be the limit of acceptable traffic operations for the SR-60 Freeway mainline.

4.2.6.3 City of Moreno Valley Level of Service (LOS) Standards

The City of Moreno Valley uses a two-tier system to evaluate the performance of local roadways. The Moreno Valley General Plan states that target LOS "C" should be maintained along City roads (including intersections) wherever possible, but acknowledges that LOS "D" is the appropriate threshold in the vicinity of SR-60 and high employment centers. The following Figure 4.2-2 provides an illustration of the City's LOS standards for roadways within the Project area. Please refer also to General Plan Circulation Element Objective 5.3, presented below.



Source: Urban Crossroads; Moreno Valley General Plan (Figure 9-2)

Figure 4.2-2
City of Moreno Valley LOS Standards

The City of Moreno Valley General Plan Circulation Element recognizes that roadway segment operations at LOS "D" may occur during both peak hours along certain roadway segments and intersections. In particular, several of the roadways running in the north-south direction in the vicinity of SR-60 currently have constraints that will prevent LOS "C" from being achieved. Applicable LOS standards for all Study Area intersections and roadway segments are summarized in Table 4.2-7.

Table 4.2-7
Level of Service Standards
for Study Area Intersections and Roadway Segments

Location	LOS Standard
Intersections	
Moreno Beach Drive at SR-60 Westbound Ramps	D
Moreno Beach Drive at SR-60 Eastbound Ramps	D
Quincy Street at Fir (future Eucalyptus) Avenue	D
Driveway 1 at Fir (future Eucalyptus) Avenue	D
Driveway 2 at Fir (future Eucalyptus) Avenue	D
Driveway 3 at Fir (future Eucalyptus) Avenue	D
Street "A" at Fir (future Eucalyptus) Avenue	D
Redlands Boulevard at SR-60 Westbound Ramps	D
Redlands Boulevard at SR-60 Eastbound Ramps	D
Redlands Boulevard at Fir (future Eucalyptus) Avenue	D
Redlands Boulevard at Eucalyptus (future Encilia) Avenue	D
Redlands Boulevard at Cottonwood Avenue	C
Roadway Segments	
Moreno Beach Drive	
North of SR-60 Westbound Ramps	D
SR-60 Westbound Ramps to Bridge over SR-60	D
Bridge over SR-60 to SR-60 Eastbound Ramps	D
South of SR-60 Eastbound Ramps	D
Redlands Boulevard	
North of SR-60 Westbound Ramps	D
SR-60 Westbound Ramps to Eastbound Ramps	D
SR-60 Eastbound Ramps to Fir (future Eucalyptus) Avenue	D
Fir (future Eucalyptus) Avenue to Eucalyptus (future Encilia) Avenue	D
South of Eucalyptus (future Encilia) Avenue	C

Table 4.2-7
Level of Service Standards
for Study Area Intersections and Roadway Segments

Roadway Segments (cont'd)	
North of Cottonwood Avenue	C
South of Cottonwood Avenue	C
Spruce Street	
West of Redlands Boulevard	C
Fir (future Eucalyptus) Avenue	
East of Moreno Beach Drive	D
West of Redlands Boulevard	D
East of Redlands Boulevard	D
Eucalyptus (future Encilia) Avenue	
West of Redlands Boulevard	**C**
Cottonwood Avenue	
West of Redlands Boulevard	**C**

Sources: LOS Standards per City of Moreno Valley General Plan Circulation Element.

4.2.6.4 City of Moreno Valley General Plan Circulation Element

The intent of City's General Plan Circulation Element is to provide for safe, convenient, and efficient transportation systems within the City. This Element reflects anticipated transportation patterns and demands based on the buildout of General Plan land uses, as well as localized effects resulting from anticipated development within the surrounding region. Applicable policies and objectives, as excerpted from the City of Moreno Valley General Plan, are presented at Table 4.2-8.

Table 4.2-8
City of Moreno Valley General Plan Consistency

Objective 2.5 Promote a mix of industrial uses which provide a sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley with the establishment of industrial activities that have good access to the regional transportation system, accommodate the personal needs of workers and business visitors, and which meets the service needs of local businesses.	***Consistent.*** *The proposed Project supports this policy through the introduction of new business uses and the provision of local employment opportunities at a location with ready access to SR-60.*

Table 4.2-8
City of Moreno Valley General Plan Consistency

Policy 5.1.2 Plan the circulation system to reduce conflicts between vehicular, pedestrian and bicycle traffic.	***Consistent.*** *As discussed subsequently within this Section, the final design of the Project site plan, including review of Project access improvements, will be subject to the review and approval of the City Engineer to ensure the safety of bicyclists and pedestrians in the Project vicinity.*
Objective 5.3 Maintain Level of Service "C" on roadway links, wherever possible, and LOS "D" in the vicinity of SR-60 and high employment centers.	***Consistent.*** *As discussed subsequently within this Section, the Project's evaluation of performance on roadway segments and intersections has used these standards to determine the significance of potential impacts.*
Policy 5.3.4 For planning purposes, utilize LOS standards shown on [General Plan] Table 5-1 to determine recommended roadway widths.	***Consistent.*** *The Project will be responsible for roadway improvements that are in compliance with the City of Moreno Valley's standards for width and configuration.*
Policy 5.3.5 Ensure that new development pays a fair share of costs to provide local and regional transportation improvements and to mitigate cumulative traffic impacts. For this purpose, require new developments to participate in the Transportation Uniform Mitigation Fee Program (TUMF), the Development Impact Fee Program (DIF), and any other applicable transportation fee programs and benefit assessment districts.	***Consistent.*** *As discussed subsequently within this Section, the Project will participate in the City's DIF and TUMF Programs, as well as and any other applicable transportation fee programs and benefit assessment districts that are in place prior to Project development.*
Policy 5.3.6 Where new developments would increase traffic flows beyond LOS C (or LOS D, where applicable), require appropriate and feasible mitigation measures as a condition of approval. Such measures may include extra right-of-way and improvements to accommodate left-turn and right-turn lanes at intersections, or other improvements.	***Consistent.*** *As discussed subsequently within this Section, Project mitigation measures identify all improvements required due to Project-related traffic impacts, including cumulative impacts, at Study Area roadway segments and intersections.*
Objective 5.4 Maximize efficiency of the regional circulation system through close coordination with state and regional agencies and implementation of regional transportation policies.	***Consistent.*** *Project-related improvements are subject to the City's coordination with Caltrans and the Riverside Transit Agency (RTA) at a minimum and will be implemented in a manner that maximizes transportation efficiencies wherever feasible.*
Policy 5.4.1 Coordinate with Caltrans and the Riverside County Transportation Commission (RCTC) to identify and protect ultimate rights-of-way, including those for freeways, regional arterial projects, transit, bikeways and interchange expansion.	***Consistent.*** *As noted subsequently within this Section, although plans for future interchange improvements at SR-60 and Redlands Boulevard have not yet been finalized, coordination with Caltrans in regard to interchange improvements is currently underway. Additionally, the Project will be developed consistent with the City's Master Plan of Trails through the construction of a trail segment along the site's southerly boundary.*

Source: City of Moreno Valley General Plan, Circulation Element.

4.2.6.5 Traffic Impact Mitigation Fee/Traffic Improvements Programs

The Project will pay all required traffic impact and development fees imposed by the Lead Agency; these fees will be applied toward completion of necessary traffic improvements within the Study Area. Correlation and application of fee programs to improvements identified herein are summarized subsequently in this Section (Table 4.2-15). Traffic impact fee programs applicable to the Project are summarized below.

The Traffic Uniform Mitigation Fee (TUMF) Program

The TUMF Program is administered by the Western Riverside Council of Governments (WRCOG) based upon a regional Nexus Study completed in early 2003, and updated in 2006, to address major changes in right-of-way acquisition and improvement cost factors. The TUMF Program identifies a network of backbone and local roadways that are needed to accommodate growth through the year 2030. This regional program was put into place to ensure that funding is in place for the construction of roadway facilities that are critical to mobility in the region. Through the application of TUMF fee ordinances, fees are imposed on new residential, commercial, service and industrial developments in every jurisdiction within Western Riverside County including the City of Moreno Valley.

Following collection, TUMF fees are placed in a segregated, interest-bearing account, pursuant to the requirements of Government Code section 66000 *et seq.* The TUMF Program funds both local area projects and projects required to improve the region's backbone arterial system. Currently, local area projects receive approximately 48 percent of all TUMF funds. The facilities planned through the TUMF Program are constructed prior to the time at which the identified facility is expected to deteriorate to an inadequate level of service. WRCOG has a successful track record of funding and overseeing the construction of TUMF-funded improvements.

City of Moreno Valley Development Impact Fee (DIF) Program

The City of Moreno Valley has created its own local DIF Program to collect fees from new development. The City's DIF program provides a source of funds to construct

public facilities and infrastructure improvements necessary to accommodate and support City growth. The Project will pay DIF as specified by the City, a portion of which may be allocated for traffic improvements serving the Project and other area development. The City's current DIF program became effective on January 13, 2010.

The City's DIF Program includes and provides for circulation system improvements that are not a part of, or which may exceed improvements identified and covered by the TUMF Program. As a result, the pairing of regional and local fee programs provides a more comprehensive funding and implementation plan, to ensure an adequate and interconnected transportation system. Similar to the TUMF Program, after the City's DIF is collected, it is placed in a separate interest-bearing account pursuant to the requirements of Government Code sections 66000 *et seq.* The timing of the use funds collected under the City DIF program 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 the City. This data is used to determine the timing for transportation improvements, acting to ensure that needed improvements are constructed before levels of service fall below the City's performance standards.

Other Fee-based Mitigation

For roadway segments and/or intersections not covered by the TUMF or DIF programs, the Applicant will pay Fair Share Fees to fund and implement those improvements necessary to address cumulative impacts within the Study Area. Fair Share Fees will be paid by the Applicant pursuant to contractual agreement with the City. Prior to the issuance of the first development permit, the Fair Share Fee contractual agreement shall be finalized, and all Fair Share Fees shall be paid by the Applicant.

4.2.7 STANDARDS OF SIGNIFICANCE

Significance thresholds presented below are based on *CEQA Guidelines* criteria, applicable City policies and regulations, and Impact Significance Criteria established by the City of Moreno Valley. Consistent with the standards of significance outlined in the *CEQA Guidelines*, Project impacts related to traffic and circulation would be considered significant if they cause or result in any of the following:

- *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.* Measures of effectiveness for the City's roadway system, based on level of service, have been established by the City of Moreno Valley General Plan, as summarized previously in Section 4.2.6.3 of this Draft EIR. The City of Moreno Valley uses a two-tier system to evaluate the performance of local roadways. The Moreno Valley General Plan states that target LOS "C" should be maintained along City roads and intersections wherever possible, but acknowledges that LOS "D" is the appropriate threshold in the vicinity of SR-60 and high employment centers. With the exception of the intersection of Redlands Boulevard at Cottonwood Avenue, and the roadway segments of Eucalyptus (future Encilia) west of Redlands Boulevard and Cottonwood Avenue west of Redlands Boulevard, LOS D is the minimum acceptable condition for all City jurisdictional Study Area roadways and intersections.

  As noted previously in this Section, RCTC has adopted LOS "E" as the minimum standard for intersections and segments along the CMP System of Highways and Roadways. Within the Study Area, SR-60 is a designated CMP facility. For the purposes of this traffic impact analysis, LOS "E" is considered to be the limit of acceptable traffic operations for the SR-60 Freeway mainline.

- *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways*. The City's General Plan EIR [page 5.2-15] notes that City LOS standard is more restrictive than the designated CMP standards for Riverside County. The City's LOS standards are applied as the primary threshold of significance for City streets and intersections.

- *A substantial increase in hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).* This impact would occur if the Project proposed improper site access or resulted in inadequate site circulation, or would otherwise conflict or be inconsistent with City engineering standards or design criteria.

- *Inadequate emergency access*. This impact would occur if the Project was not provided appropriate emergency access, or interfered with emergency access provided to others.

- *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.* This impact would occur if the Project did not provide for or accommodate alternative transportation modes established under adopted policies or programs, or interfered with the establishment of such alternative transportation modes.

- *A change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.* This impact would occur if the Project proposed facilities or activities that would either directly or indirectly affect air traffic patterns.

4.2.8 POTENTIAL IMPACTS AND MITIGATION MEASURES

Potential Project-related traffic impacts are evaluated in terms of the significance thresholds identified above. The analyses presented here evaluate potential impacts to the Study Area circulation system under projected Opening Year and General Plan Buildout (Buildout) conditions, without and with the Project.

Potential Opening Year impacts of the Project are initially evaluated in the context of ambient growth only (Opening Year Ambient Conditions). The assessment of Opening Year Ambient Conditions provides an indication of potential impacts of only the Project (Project-specific impacts), and the additional improvements necessary to mitigate only its impacts. Potentially significant Project-specific impacts could occur under the Opening Year Ambient Conditions, and are defined as follows:

- A Potentially Significant Project-specific Impact would occur if the Opening Year Ambient Condition with Project scenario shows degradation below applicable LOS standards and/or Project traffic further degrades a pre-existing Opening Year deficiency.

The analysis presented here also considers potential near-term cumulative impacts within the Study Area. In this regard, the evaluation of "Opening Year Cumulative Conditions" presented herein reflects the total scope of anticipated Opening Year traffic impacts and associated mitigation requirements within the Study Area. Under Opening Year Cumulative Conditions, proportional effects of the Project are indicated by its incremental contribution to new traffic.

General Plan Buildout Conditions, by definition, reflect all anticipated growth within the Buildout period (2030), and indicate long-range cumulative impacts within the Study area. Necessary traffic improvements to support Buildout Conditions are also identified herein. Proportional effects of the Project are indicated by its incremental contribution to new traffic under General Plan Buildout Conditions.

Potentially significant cumulative impacts (under Opening Year Cumulative Conditions and/or General Plan Buildout Conditions) are defined as follows:

- A Potentially Significant Cumulative Impact would occur if the Opening Year Cumulative Condition with Project scenario, and/or the General Plan Buildout Condition with Project scenario, show degradation below applicable LOS standards; and/or Project traffic further degrades a pre-existing deficiency occurring under the Opening Year Cumulative Condition and/or the General Plan Buildout Condition.

For the scenarios evaluated herein, proposed traffic mitigation reflects the full scope of improvements responding to each scenario's incumbent traffic demands.

Potential Impact*: Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.*

Overview

The potential for the Project to "***conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system . . .***" is based on the analysis of increased traffic volumes resulting from the Project, and related potential impacts to the operational efficiencies of intersection, roadway, and freeway segments. To these ends, operating conditions at the Study Area key intersections, roadway segments, and freeway segments were evaluated for Opening Year (2013) and General Plan Buildout (Buildout) traffic conditions, without and with the Project. The results of this analysis are summarized below. Please refer also to detailed discussions and supporting information presented in the Project TIA, EIR Appendix B.

INTERSECTION IMPACT ANALYSIS

In evaluation of the Project's potential impacts at Study Area intersections, analyses were conducted for Opening Year Ambient Conditions without and with the Project, Opening Year Cumulative Conditions without and with the Project, and General Plan Buildout Conditions without and with the Project. Summary tables presented subsequently in this discussion indicate LOS and delay conditions for each of the Study Area intersections under the noted scenarios, and mitigation is proposed in instances where either Project-specific traffic impacts and/or cumulative effects of traffic are projected to adversely affect intersection operational efficiencies. Please refer also to detailed intersection analyses presented in the Project TIA (EIR Appendix B).

Intersection Analysis - Opening Year Ambient Traffic Conditions (Project-specific Impacts)

Opening Year Ambient Condition Intersection Impacts, Without Project

Table 4.2-9 summarizes Existing (2008) intersection conditions, and provides a comparison of Opening Year Ambient intersection conditions, without and with the Project. As seen in Table 4.2-9, the analysis of Opening Year Ambient Conditions without the Project indicates that, with one exception, all Study Area intersections are forecast to continue to operate at an acceptable LOS during the AM and PM peak hours with ambient traffic growth. The intersection of Redlands Boulevard at the SR-60 Westbound Ramps [which also operates unacceptably (LOS E) during the PM peak hour in the existing condition] would be further degraded by increases in future background traffic and Project traffic, and absent improvements, would operate at LOS E in the AM condition and LOS F in the PM condition.

Table 4.2-9
Opening Year Ambient Condition Intersection Analysis Summary

Intersection	Peak	Existing (2008) Condition		Opening Year Ambient No Project, w/o Improvements		Opening Year Ambient No Project, With Improvements		Opening Year Ambient With Project, w/o Improvements		Opening Year Ambient With Project, With Improvements	
		Delay	LOS (Control)	Delay	LOS (Control)	Delay	LOS (Control)	Delay	LOS (Control)	Delay	LOS/ MM
Moreno Beach Drive at	AM	17.1	B (TS)	17.9	B (TS)	--	--	15.9	B (TS)	--	--
SR-60 Westbound Ramps	PM	14.8	B (TS)	14.8	B (TS)	--	--	18.7	B (TS)	--	--
Moreno Beach Drive at	AM	38.4	D (TS)	42.8	D (TS)	--	--	41.1	D (TS)	--	--
SR-60 Eastbound Ramps	PM	43.7	D (TS)	46.6	D (TS)	--	--	45.0	D (TS)	--	--
Driveway 1 at	AM	Future intersection by Project						9.4	A	--	--
Eucalyptus Ave.	PM							9.6	A	--	--
Driveway 2 at	AM	Future intersection by Project						10.3	B	--	--
Eucalyptus Ave.	PM							10.4	B	--	--
Driveway 3 at	AM	Future intersection by Project						10.5	B	--	--
Eucalyptus Ave.	PM							10.8	B	--	--
Street "A" at	AM	Future intersection by Project						9.5	A	--	--
Eucalyptus Ave.	PM							9.7	A	--	--
Redlands Boulevard at	AM	30.0	D (CSS)	39.3	E (CSS)	31.8	C (TS)[2]	**	F (TS)	35.1	D/4.2.1
SR-60 Westbound Ramps	PM	48.4	E (CSS)	75.1	F (CSS)	22.8	C (TS)[2]	**	F (TS)	51.1	D/4.2.1
Redlands Boulevard at	AM	20.1	C (TS)	29.4	D (TS)	--	--	29.6	C (TS)	--	--
SR-60 Eastbound Ramps [1]	PM	20.5	C (TS)	29.3	D(TS)	--	--	35.5	D (TS)	--	--
Redlands Boulevard at	AM	8.4	A (CSS)	8.6	A (CSS)	--	--	37.8	E (CSS)	9.9	A/4.2.2
Fir (future Eucalyptus) Ave.	PM	8.3	A (CSS)	8.4	A (CSS)	--	--	56.3	F (CSS)	14.0	B/4.2.2
Redlands Boulevard at	AM	14.9	B (CSS)	16.1	C (CSS)	--	--	16.2	C (CSS)	--	--
Eucalyptus (future Encilia) Ave.	PM	14.4	B (CSS)	15.5	C (CSS)	--	--	15.6	C (CSS)	--	--
Redlands Boulevard at	AM	9.5	A (TS)	9.5	A (TS)	--	--	9.5	A (TS)	--	--
Cottonwood Ave.	PM	5.0	A (TS)	5.6	A (TS)	--	--	5.6	A (TS)	--	--

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised). **Notes:** --No improvements are proposed; ** High delay (greater than 100 seconds); (Ctrl)-Traffic control: CSS-Cross-street Stop; AWS-All-way Stop; TS-Traffic Signal-improved LOS results from combined signalization and turn lane improvements. . MM=Improvements per cited Mitigation Measure. [1] Since completion of the TIA traffic modeling, a traffic signal and supporting lane improvements have been installed at Redlands Boulevard at SR-60 Eastbound Ramps. The Lead Agency indicates maintenance of operating conditions equal or superior to those identified in the TIA.. [2] Reflects assumed completion of TUMF-programmed signalization improvements.

Opening Year Intersection and Roadway Segment Improvements

As components of the Project reflected in the Project Description (EIR Section 3.0) and prior to issuance of the first Certificate of Occupancy, the Project Applicant will construct the following improvements:

- Fir (future Eucalyptus) Avenue will be constructed to its ultimate half-section width (one-half of 104-foot right-of-way section improvements pursuant to City Standard No. 104B) as an arterial roadway from the westerly Project boundary, extending to Redlands Boulevard to the east. At the westerly terminus of Fir (future Eucalyptus) Avenue full cul-de-sac improvements will be provided to allow for vehicle turnaround.

- The proposed public street (Street "A") at the Project's easterly boundary will be constructed to its ultimate half-section width (one-half of 78-foot right-of-way section improvements pursuant to City Standard No. 106) as an industrial collector roadway from the proposed northern terminus of the road to Fir (future Eucalyptus) Avenue in conjunction with development. Full improvements will be provided at the cul-de-sac "bulb" to allow for vehicle turnaround.

- Driveway access to Fir (future Eucalyptus) Avenue and future Street "A" will be provided consistent with City design standards.

- Consistent with the City of Moreno Valley Master Plan of Trails, a proposed trail is shown along the Project frontage on the north side of Fir (future Eucalyptus) Avenue which will join with the proposed future trail on Redlands Boulevard. Pursuant to the City of Moreno Valley Bikeway Plan, a Class I bikeway is planned on the east side of Redlands Boulevard within the vicinity of the Project.

Additionally, as provided for under Mitigation Measures 4.2.1 and 4.2.2 (presented subsequently), prior to issuance of the first Certificate of Occupancy (CO), necessary signalization improvements at Redlands Boulevard - SR-60 Westbound Ramps will be

provided; and signalization and turn lane improvements will be provided at the intersection of Fir (future Eucalyptus) Avenue at Redlands Boulevard consistent with City standards and requirements.

Opening Year Ambient Condition Intersection Impacts, With Project

As indicated at Table 4.2-9, the Project would contribute additional traffic to pre-existing Opening Year Ambient Condition deficiencies occurring at Redlands Boulevard - SR-60 Westbound Ramps.[1] Therefore, Project-specific Opening Year traffic impacts at Redlands Boulevard - SR-60 Westbound Ramps are considered potentially significant.

As also indicated at Table 4.2-9, with the addition of Project traffic, the intersection of Redlands Boulevard at Fir (future Eucalyptus) Avenue would perform unacceptably during AM and PM peak hour periods. This is also a potentially significant Project-specific impact. The remaining Study Area intersections, including all driveway intersections to be constructed as part of the Project, are forecast to operate at an acceptable level of service under Opening Year Ambient Conditions, With Project.

Level of Significance: Potentially Significant. Under Opening Year Ambient Conditions, Project-specific traffic impacts are potentially significant at the following locations:

- Redlands Boulevard at SR-60 Westbound Ramps; and
- Redlands Boulevard at Fir (future Eucalyptus) Avenue.

Improvements (Mitigation Measures) required to achieve acceptable intersection operating conditions under the Opening Year Ambient Traffic Condition With Project scenario are summarized below.

[1] Assumes programmed TUMF signalization of the SR-60 Westbound Ramps is not completed prior to the Project Opening Year.

Mitigation Measures:

4.2.1 Redlands Boulevard at SR-60 Westbound Ramps Improvements:

- *Install a traffic signal.*

This improvement is currently approved, programmed, and permitted by Caltrans. If not otherwise completed prior to Project opening, the required traffic signal shall be constructed by the Applicant prior to issuance of the first Certificate of Occupancy.

4.2.2 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements

Prior to issuance of the first Certificate of Occupancy, the Applicant shall construct the following improvements:

- *Install a traffic signal;*
- *Construct a southbound right turn auxiliary lane which extends the full length of the segment of Redlands Boulevard between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue for a southbound lane configuration of one shared left-through lane and one right turn lane; and*
- *Construct an eastbound left-turn lane with 300 feet of storage for an eastbound lane configuration of one left-turn lane and one shared through-or-right-turn-lane.*

Level of Significance After Mitigation: Less-Than-Significant. As indicated at Table 4.2-9, with implementation of Mitigation Measures 4.2.1 and 4.2.2, acceptable LOS and delay conditions would be realized at Redlands Boulevard at SR-60 Westbound Ramps, and at the intersection of Fir (future Eucalyptus) Avenue at Redlands Boulevard.

Intersection Analysis-Opening Year Cumulative Traffic Conditions (Cumulative Impacts)

Impact Analysis: Table 4.2-10 provides a comparison of Opening Year Cumulative Traffic Conditions, without and with the Project. The Opening Year Cumulative Traffic Condition includes ambient traffic growth plus traffic attributable to anticipated related projects contributing traffic to the Study Area circulation system. The related projects list was created in collaboration with City staff and the complete list of related projects is presented at TIA (EIR Appendix B) and is summarized at Draft EIR Section 5.1, "Cumulative Impact Analysis."

Opening Year Cumulative Condition Intersection Impacts, Without Project

As indicated at Table 4.2-10, four (4) Study Area intersections are forecast to perform at less than the applicable LOS "D" standard under Opening Year Cumulative conditions without or with the Project. These intersections include: Moreno Beach Drive at SR-60 Eastbound Ramps; Redlands Boulevard at SR-60 Westbound Ramps; Redlands Boulevard at SR-60 Eastbound Ramps; and Redlands Boulevard at Fir (future Eucalyptus) Avenue. The Project would contribute additional traffic to pre-existing deficient conditions.

Opening Year Cumulative Condition Intersection Impacts, With Project

As also indicated at Table 4.2-10, with the addition of Project Traffic, intersection delays at existing facilities would increase. Additionally, future planned improvements within the Study Area, such as Quincy Street at Fir (future Eucalyptus) Avenue, would be potentially impacted by Project traffic.

Table 4.2-10
Opening Year Cumulative Condition Intersection Analysis Summary

Intersection	Peak Period	Opening Year Cumulative Condition, Without Project, Without Improvements		Opening Year Cumulative Condition, With Project, Without Improvements		Opening Year Cumulative Condition, With Project, With Improvements		LOS Std.
		Delay	LOS (Control)	Delay	LOS (Control)	Delay	LOS/ MM	
Moreno Beach Drive at SR-60 Eastbound Ramps	AM	**	F (TS)	**	F (TS)	53.7	D/4.2.3	D
	PM	**	F (TS)	**	F (TS)	50.0	D/4.2.3	
Moreno Beach Drive at SR-60 Westbound Ramps	AM	18.4	B (TS)	20.6	C (TS)	20.7	C/4.2.4	D
	PM	22.4	C (TS)	23.4	C (TS)	21.1	C/4.2.4	
Driveway 1 at Fir (future Eucalyptus) Avenue	AM	Future Intersection-by Project		12.5	B (CSS)	--	--	D
	PM			14.6	B (CSS)	--	--	
Driveway 2 at Fir (future Eucalyptus) Avenue	AM	Future Intersection-by Project		12.9	B (CSS)	--	--	D
	PM			14.8	B (CSS)	--	--	
Driveway 3 at Fir (future Eucalyptus) Avenue	AM	Future Intersection-by Project		13.8	B (CSS)	--	--	D
	PM			16.5	C (CSS)	--	--	
Street "A" at Fir (future Eucalyptus) Avenue	AM	Future Intersection-by Project		12.2	B CSS)	--	--	D
	PM			17.6	C (CSS)	--	--	
Redlands Boulevard at SR-60 Westbound Ramps	AM	**	F (CSS)	**	F (CSS)	23.3	C/4.2.5	D
	PM	**	F (CSS)	**	F (CSS)	26.9	C/4.2.5	
Redlands Boulevard at SR-60 Eastbound Ramps	AM	**	F (TS)	**	F (TS)	24.3	C/4.2.6	D
	PM	**	F (TS))	**	F (TS)	29.2	C/4.2.6	
Redlands Boulevard at Fir (future Eucalyptus) Avenue	AM	**	F (CSS)	**	F (CSS)	27.5	C/4.2.7	D
	PM	**	F (CSS)	**	F (CSS)	36.6	D/4.2.7	
Redlands Boulevard at Eucalyptus (future Encilia) Avenue	AM	24.5	C	25.0	C	--	--	D
	PM	29.3	D	29.9	D	--	--	
Redlands Boulevard at Cottonwood Avenue	AM	8.5	A (TS)	8.5	A (TS)	--	--	C
	PM	8.5	A (TS)	8.6	A (TS)	--	--	
Quincy Street at Fir (future Eucalyptus) Avenue	AM	Future Intersection-GP Circulation Element		9.4	A (CSS)	9.6	A/4.2.8	D
	PM			10.9	B (CSS)	10.2	B/4.2.8	

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).
Notes: --No improvements are proposed; ** High delay (>100 seconds); (Ctrl)-Traffic control: CSS-Cross-street Stop; AWS-All-way Stop; TS-Traffic Signal; ◦ No physical improvements proposed-increased intersection efficiency realized through signal timing coordination between ramps. MM=Improvements per cited Mitigation Measure (4.2.#).

Notwithstanding, the Project would contribute additional traffic to intersection deficiencies projected to occur without the Project under the Opening Year Cumulative Condition, and the project would also contribute traffic to new planned improvements within the Study Area. In these instances, while Project-specific traffic impacts would not be individually significant, they would be cumulatively considerable and are potentially significant on this basis.

Level of Significance: Potentially Cumulatively Significant. Under Opening Year Cumulative Conditions, Project traffic impacts are cumulatively considerable and are potentially significant as cumulative impacts at or affecting the following intersections:

- Moreno Beach Drive at SR-60 Eastbound Ramps;
- Redlands Boulevard at SR-60 Westbound Ramps;
- Redlands Boulevard at SR-60 Eastbound Ramps;
- Redlands Boulevard at Fir (future Eucalyptus) Avenue; and
- Quincy Street at Fir (future Eucalyptus) Avenue (new intersection).

Total improvements (Mitigation Measures) required to achieve acceptable intersection operating conditions under the Opening Year Cumulative Traffic Condition With Project scenario are summarized below.

Mitigation Measures:

4.2.3 Moreno Beach Drive at SR-60 Eastbound Ramps Improvements:

- *Construct an eastbound right-turn lane and re-stripe the shared left-or-right-turn lane as an exclusive left-turn lane, for an eastbound lane configuration of one left-turn lane and one right-turn lane. These improvements would require the dedication of right-of-way from the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.*

These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for

improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps.

4.2.4Moreno Beach Drive at SR-60 Westbound Ramps Improvements:

- *Coordinate traffic signal timing with the signal at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps. These improvements would be funded through Project participation in the TUMF Program. Although the intersection of Moreno Beach Drive at SR-60 Westbound Ramps is anticipated to operate at an acceptable LOS, the coordination of traffic signal timing with the signal at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps would ensure continued satisfactory operations.*

The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Moreno Beach Drive at SR-60 Westbound Ramps.

4.2.5 Redlands Boulevard at SR-60 Westbound Ramps Improvements:

- *Install a traffic signal (a TUMF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.1);*
- *Construct a second northbound through lane and a right-turn lane with overlap phasing, for a northbound lane configuration of one left-turn lane, two through lanes and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way on the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection; and*
- *Construct a second southbound through lane, for a southbound lane configuration of one left-turn lane and two through lanes. These improvements would require the dedication of right-of-way on the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection.*

The traffic signal noted above will be constructed by the Project pursuant to Mitigation Measure 4.2.1. The remaining improvements would be funded through participation in the TUMF

Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year Cumulative traffic impacts at the intersection of Redlands Boulevard at SR-60 Westbound Ramps.

4.2.6 Redlands Boulevard at SR-60 Eastbound Ramps Improvements:

- *Construct a second northbound through lane for a northbound lane configuration of one left turn lane and two through lanes. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and restriping of all lanes on the south leg of the intersection;*
- *Construct a second southbound through lane, for a southbound lane configuration of one left-turn lane and two through lanes. These improvements would require the dedication of right-of-way on the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and*
- *Construct an eastbound right-turn lane and re-stripe the shared left-or-right turn lane as an exclusive left-turn lane, for an eastbound lane configuration of one left-turn lane and one right-turn lane. These improvements would require the dedication of right-of-way on the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.*

These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts at the intersection of Redlands Boulevard at SR-60 Eastbound Ramps.

4.2.7 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements:

- *Install a traffic signal (a DIF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.2).*
- *Construct a northbound left-turn lane with 200 feet of storage and a second through lane, for a northbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and restriping of*

all lanes on the south leg of the intersection. Construction of the northbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF Program.

- *Construct a southbound left-turn lane with 250 feet of storage, a second left-turn lane that extends back to the SR-60 Eastbound Ramps, a second through lane, and a right-turn lane with overlap phasing and a pocket length that is the full length of the segment, for a southbound lane configuration of two left-turn lanes, two through lanes, and one right-turn-lane with overlap phasing. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF program. Construction of one southbound left-turn lane would be funded through participation in the DIF program. The noted right-turn southbound lane would be constructed by the Project pursuant to Mitigation Measure 4.2.2. Overlap phasing to this right-turn lane will be added when determined appropriate by the City Traffic Engineer, and will be funded through fair share fee participation. Remaining improvements would also be funded through fair share fee contributions.*
- *Construct dual eastbound left-turn lanes with 300 feet of storage and a second through lane, for an eastbound lane configuration of two left-turn lanes, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the south side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the west leg of the intersection. A single eastbound turn with 300 feet of storage will be constructed by the Project under Opening Year Ambient Conditions pursuant to Mitigation Measure 4.2.2. The remaining improvements would be funded through participation in the DIF Program.*
- *Construct a westbound left-turn lane, a second through lane, and a right-turn lane with overlap phasing, providing 200 feet of storage for both the left-turn and right-turn lanes, for a westbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane with overlap phasing. These improvements would require the dedication of right-of-way from the north side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the east leg of the intersection. Construction of*

the westbound left and through lanes would be funded through participation in the DIF Program; remaining improvements would be funded through fair share fee participation.

Additionally, consistent with the City DIF network improvements program, a new intersection is reflected at Quincy Street at Fir (future Eucalyptus) Avenue as described below:[2]

4.2.8 Quincy Street at Fir (future Eucalyptus) Avenue Improvements:

- *Install a stop-control on the south leg of the intersection;*
- *Construct a northbound shared left-or-right-turn lane. Quincy Street should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction;*
- *Construct an eastbound shared through-or-right-turn lane. The Fir (future Eucalyptus) Avenue extension should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction; and*
- *Construct a westbound left-turn lane and through lane. The Fir (future Eucalyptus) Avenue extension should be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction.*

These improvements would be funded through participation in the DIF Program. The Project will pay required DIF, facilitating construction of new intersection improvements at Quincy Street at Fir (future Eucalyptus) Avenue.

Level of Significance After Mitigation: *Cumulatively Significant and Unavoidable*.

As indicated at Table 4.2-10, with completion of the improvements recommended under Mitigation Measures 4.2.3 through 4.2.8, acceptable LOS and delays would be realized

[2] The new intersection of Quincy Street at Fir (future Eucalyptus) Avenue are General Plan Circulation Element improvements that would be required irrespective of the Project. The Project will, however, contribute traffic to this new intersection and will be responsible for fee payments applied to its improvements.

at all Study Area intersections under Opening Year Cumulative Conditions with the Project. Improvements necessary to mitigate potentially significant Opening Year Cumulative Condition intersection impacts would be accomplished in part by the Project pursuant to Mitigation Measures 4.2.1 and 4.2.2, with the balance of required improvements realized under combined TUMF, DIF, and fair share fee traffic improvement programs. However, timely completion of the required improvements in total cannot be assured based on Project participation in mandated traffic impact fee programs (TUMF, DIF, and fair share). Further, the SR-60 at Redlands Boulevard interchange improvements are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency. ***The Project's incremental contributions to Opening Year Cumulative Traffic Impacts at or affecting the following intersections are therefore considered cumulatively significant and unavoidable:***

- Moreno Beach Drive at SR-60 Eastbound Ramps;
- Redlands Boulevard at SR-60 Westbound Ramps;
- Redlands Boulevard at SR-60 Eastbound Ramps;
- Redlands Boulevard at Fir (future Eucalyptus) Avenue; and
- Quincy Street at Fir (future Eucalyptus) Avenue (new intersection).

Intersection Analysis - General Plan Buildout Traffic Conditions (Cumulative Impacts)

Impact Analysis: Table 4.2-11 provides a comparison of traffic conditions under the General Plan Buildout scenario, without and with the Project. General Plan Buildout Without Project Conditions assume the development of Business Park/Light Industrial uses, consistent with the land use designation currently shown on the City's General Plan Land Use Map.[3] The General Plan Buildout With Project Condition assumes logistics uses on the Project site, which is consistent with the Project's proposed warehouse/distribution uses. Employing the City's traffic model, logistics uses generate fewer daily and peak-hour trips than would Business Park/Light Industrial uses.

[3] While the 2006 General Plan Update did result in a the BP/LI land use designation, the current Business Park zoning of the Project site does not permit large (greater than 50,000 SF buildings) logistic or warehouse facilities such as that proposed by the Project. In order to allow for the Project, a Zone Change from Business Park to Light Industrial is proposed; no change in the General Plan Land Use designation is proposed or required.

Table 4.2-11
General Plan Buildout Condition Intersection Analysis Summary

Intersection	Peak	General Plan Buildout Without Project, Without Improvements		General Plan Buildout Without Project, With Improvements		General Plan Buildout With Project, Without Improvements		General Plan Buildout With Project, With Improvements		LOS Std.
		Delay	LOS (Control)	Delay	LOS (Control)	Delay	LOS (Control)	Delay	LOS /MM	
Moreno Beach Drive at: SR-60 Eastbound Ramps	AM	**	F (TS)	26.9	C (TS)	**	F (TS)	27.4	C/4.2.9	D
	PM	**	F (TS)	25.6	C (TS)	**	F (TS)	27.1	C/4.2.9	
Moreno Beach Drive at: SR-60 Westbound Ramps	AM	46.4	F (TS)	14.2	B (TS)	42.5	F (TS)	14.3	B/4.2.10	D
	PM	**	F (TS)	13.7	B (TS)	**	F (TS)	13.8	B/4.2.10	
Moreno Beach Drive at: Fir (future Eucalyptus) Ave.	AM	Future Intersection- GP Circulation Element		29.8	C (TS)	Future Intersection- GP Circulation Element		33.4	C/4.2.11	D
	PM			44.5	D (TS)			54.1	D/4.2.11	
Quincy Street at: Fir (future Eucalyptus) Ave.	AM	Future Intersection- GP Circulation Element		10.7	B (CSS)	Future Intersection- GP Circulation Element		10.7	B/4.2.12	D
	PM			12.7	B (CSS)			12.2	B/4.2.12	
Driveway 1 at: Fir (future Eucalyptus) Ave.	AM	Future Intersection-by Project						14.9	B	D
	PM							25.6	C	
Driveway 2 at: Fir (future Eucalyptus) Ave.	AM	Future Intersection-by Project						17.0	C (	D
	PM							24.2	C	
Driveway 3 at: Fir (future Eucalyptus) Ave.	AM	Future Intersection-by Project						19.1	A	D
	PM							29.6	A	
Street "A" at: Fir (future Eucalyptus) Ave.	AM	Future Intersection- by Others		7.9	A (TS)	Future Intersection- by Others		8.2	A	D
	PM			12.1	B (TS)			12.2	B	
Redlands Boulevard at SR-60 Westbound Ramps	AM	**	F (CSS)	24.2	C (TS)	**	F (CSS)	24.3	C/4.2.13	D
	PM	**	F (CSS)	19.2	B (TS)	**	F (CSS)	19.3	B/4.2.13	
Redlands Boulevard at SR-60 Eastbound Ramps	AM	**	F (TS)	21.8	C (TS)	**	F (TS)	21.4	C/4,2,14	D
	PM	**	F (TS)	29.7	C (TS)	**	F (TS)	27.9	C/4.2.14	
Redlands Boulevard at Fir (future Eucalyptus) Ave.	AM	**	F (CSS)	27.5	C (TS)	**	F (CSS)	26.3	C/4.2.15	D
	PM	**	F (CSS)	32.8	C (TS)	**	F (CSS)	31.4	C/4.2.15	
Redlands Boulevard at Eucalyptus (future Encilia) Avenue	AM	Future Intersection- GP Circulation Element ‡		21.7	C (TS)	Future Intersection- GP Circulation Element		21.4	C/4.2.16	D
	PM			37.2	D (TS)			38.9	C/4.2.16	
Redlands Boulevard at Cottonwood Ave.	AM	Future Intersection- GP Circulation Element ‡		33.0	C (TS)	Future Intersection- GP Circulation Element		32.9	C/4.2.17	
	PM			34.8	D (TS)			34.6	C/4.2.17	

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).
Notes: -- No improvements are proposed; ** High delay (greater than 100 seconds); (Ctrl)-Traffic control: CSS-Cross-street Stop; AWS-All-way Stop; TS-Traffic Signal-improved LOS results from combined signalization and turn lane improvements. ‡ Intersection created by addition of fourth leg to existing three-leg configuration. Please refer also to specific improvements at each intersection described in the accompanying EIR discussions. MM=Improvements per cited Mitigation Measure (4.2.#).

General Plan Buildout Condition Intersection Impacts, Without Project

As indicated at Table 4.2-11, the following five (5) Study Area intersections are forecast to perform at less than the applicable LOS "D" under General Plan Buildout conditions.

- Moreno Beach Drive at SR-60 Eastbound Ramps;
- Moreno Beach Drive at SR-60 Westbound Ramps;
- Redlands Boulevard at SR-60 Westbound Ramps;
- Redlands Boulevard at SR-60 Eastbound Ramps; and
- Redlands Boulevard at Fir (future Eucalyptus) Avenue.

General Plan Buildout Condition Intersection Impacts, With Project

As also indicated at Table 4.2-11, when compared to the Without Project scenarios, the With Project condition would result in nominally improved intersection operating conditions at Moreno Beach Drive at SR-60 Westbound Ramps;[4] however, all other intersections absent improvements, LOS conditions with or without the Project would exceed LOS F, with delays exceeding 100 seconds.

Additionally, future planned improvements within the Study Area [Quincy Street at Fir (future Eucalyptus) Avenue; Moreno Beach Drive at Fir (future Eucalyptus) Avenue; Redlands Boulevard at Eucalyptus (future Encilia) Avenue; and Redlands Boulevard at Cottonwood Avenue] would be potentially impacted by Project traffic.

The Project would contribute additional traffic to intersection deficiencies projected to occur without the Project under the General Plan Buildout Condition. Project-related traffic would also contribute to demands at planned new intersections within the Study Area. Under the General Plan Buildout Condition, Project-specific traffic impacts would not be individually significant; however, they would be cumulatively considerable and are potentially significant on this basis.

[4] Accounting for improved LOS conditions under the With Project scenario, as noted previously, logistics proposed under the Project uses would generate fewer daily and peak-hour trips than would Business Park/Light Industrial uses. Further, improvements proposed under the Project would act to certain improve certain localized operational efficiencies.

Level of Significance: Potentially Cumulatively Significant. Under General Plan Buildout Conditions, Project traffic impacts are cumulatively considerable and are potentially significant as cumulative impacts at the following locations:

- Moreno Beach Drive at SR-60 Westbound Ramps;
- Moreno Beach Drive at SR-60 Eastbound Ramps;
- Redlands Boulevard at SR-60 Westbound Ramps;
- Redlands Boulevard at SR-60 Eastbound Ramps;
- Redlands Boulevard at Fir (future Eucalyptus) Avenue;
- Quincy Street at Fir (future Eucalyptus) Avenue (new intersection);
- Moreno Beach Drive at Fir (future Eucalyptus) Avenue (new intersection);
- Redlands Boulevard at Eucalyptus (future Encilia) Avenue (new intersection); and
- Redlands Boulevard at Cottonwood Avenue (new intersection).

Mitigation Measures:

Total improvements (Mitigation Measures) required to achieve acceptable intersection operating conditions under General Plan Buildout Conditions With Project scenario are summarized below.

4.2.9 Moreno Beach Drive at SR-60 Eastbound Ramps Improvements:

- *Construct the SR-60 eastbound on- and off-ramps, designed as a standard diamond and consistent with the proposed SR-60 Freeway/Moreno Beach Drive interchange design, and install a traffic signal at the new intersection;*
- *Construct a third northbound through lane, for a northbound lane configuration of three through lanes and a right-turn lane. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection;*
- *Construct the SR-60 eastbound off-ramp with an eastbound lane configuration of one left-turn lane and dual right-turn lanes; and*

- *Construct the SR-60 eastbound on-ramp on Moreno Beach Drive with a minimum of two travel lanes.*

These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at SR-60 Eastbound Ramps.

4.2.10 Moreno Beach Drive at SR-60 Westbound Ramps Improvements:

- *Construct a second northbound through lane, for a northbound lane configuration of two through lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection);*
- *In addition to the planned on-ramp for southbound vehicles which is part of the future SR-60/Moreno Beach Drive interchange design, a second southbound through lane and a right-turn lane, for a southbound lane configuration of two through lanes and a right-turn lane. These improvements would require dedication on the west side of Moreno Beach Drive and re-striping of all lanes on the north leg of the intersection;*
- *Construct the SR-60 westbound on-ramp for vehicles traveling southbound on Moreno Beach Drive with a minimum of one travel lane; and*
- *Construct a second westbound left-turn lane, for a westbound lane configuration of two left-turn lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the north side of the SR-60 Westbound Ramps and re-striping of all lanes on the east leg of the intersection.*

These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at SR-60 Westbound Ramps.

4.2.11 Moreno Beach Drive at Fir (future Eucalyptus) Avenue Improvements:

- *Construct dual northbound left-turn lanes and re-stripe the northbound right-turn lane as a shared through-or-right turn lane for a northbound lane configuration of two left-turn lanes, two through lanes and a shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Moreno Beach Drive and re-striping of all lanes on the south leg of the intersection. Restriping of the northbound right-turn lane as a shared through-or-right turn lane would be funded through participation in the DIF Program. Remaining improvements would be funded through fair share fee participation;*
- *Construct a southbound left-turn lane and a right-turn lane with overlap phasing, for a southbound lane configuration of two left-turn lanes, three through lanes and a right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the west side of Moreno Beach Drive and re-striping of all lanes on the north leg of the intersection, and would be funded through fair share fee participation;*
- *Construct the new eastbound leg of this intersection with dual left-turn lanes, a through lane, and a shared through-or-right-turn lane. Construction of one eastbound left-turn lane, the eastbound through lane, and the eastbound shared through-or-right-turn lane would be funded through participation in the DIF Program. Remaining improvements would be funded through fair share fee participation; and*
- *Construct a westbound through lane and implement overlap phasing on the right-turn movement, for a westbound lane configuration of one left-turn lane, two through lanes, and a right-turn lane with overlap phasing. This improvement would be funded through fair share fee participation.*

The Project will pay required DIF and fair share fees, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Moreno Beach Drive at Fir (future Eucalyptus) Avenue.

4.2.12 Quincy Street at Fir (future Eucalyptus) Avenue Improvements:

- *Install a stop-control on the south leg of the intersection;*
- *Construct a northbound shared left-or-right-turn lane;*
- *Construct the eastbound approach of the Fir (future Eucalyptus) Avenue extension with a through lane and a shared through-or-right-turn lane; and*
- *Construct the westbound approach of the Fir (future Eucalyptus) Avenue extension with a left-turn lane, a through lane, and a shared through-or-right-turn lane.*

These improvements would be funded through participation in the DIF Program. The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Quincy Street at Fir (future Eucalyptus) Avenue.

4.2.13 Redlands Boulevard at SR-60 Westbound Ramps Improvements:

- *Install a traffic signal (a TUMF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.1);*
- *Construct a northbound through lane and a right-turn lane with overlap phasing, for a northbound lane configuration of one left-turn lane, two through lanes and one right-turn lane with overlap phasing. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection;*
- *Construct a southbound left-turn lane and a through lane, for a southbound lane configuration of two left-turn lanes and a through lane, and a shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and*
- *Construct a westbound left-turn lane and a right-turn lane, for a westbound lane configuration of one left-turn lane, one shared left-through lane and a right-turn lane. These improvements would require the dedication of right-of-way from the north side of the SR-60 Westbound Ramps and re-striping of all lanes on the east leg of the intersection.*

The traffic signal noted above will be constructed by the Project pursuant to Mitigation Measure 4.2.1. The remaining improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at Redlands Boulevard at SR-60 Westbound Ramps.

4.2.14 Redlands Boulevard at SR-60 Eastbound Ramps Improvements:

- *Construct two northbound through lanes, for a northbound lane configuration of one left-turn lane and three through lanes, with the pocket length for the northbound left-turn lane at the full length of the segment. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and restriping of all lanes on the south leg of the intersection;*
- *Construct two southbound through lanes, for a southbound lane configuration of two through lanes and a shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard and re-striping of all lanes on the north leg of the intersection; and*
- *Re-stripe the shared eastbound left-or-right-turn lane as an exclusive left-turn lane, for an eastbound lane configuration of two left-turn lanes and one right-turn lane. These improvements would require the dedication of right-of-way on the south side of the SR-60 Eastbound Ramps and re-striping of all lanes on the west leg of the intersection.*

These improvements would be funded through participation in the TUMF Program. The Project will pay required TUMF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at SR-60 Eastbound Ramps.

4.2.15 Redlands Boulevard at Fir (future Eucalyptus) Avenue Improvements:

- *Install a traffic signal (a DIF improvement to be constructed by the Project pursuant to Mitigation Measure 4.2.2).*

- *Construct a northbound left turn lane with 200-feet of storage and a second through lane for a northbound lane configuration of one left turn lane, one through lane and one shared through right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard. Restriping of all lanes on the south leg of the intersection, and construction of the northbound through lane would be funded through participation in the TUMF Program. Remaining improvements would be funded through participation in the DIF Program;*
- *Construct a southbound left turn lane with 250-feet of storage, a second left turn lane that extends back to the SR-60 Eastbound ramps, a second through lane and a right turn lane with overlap phasing for a southbound lane configuration of two left turn lanes, two through lanes and one right turn lane with overlap phasing, with a right-turn pocket length that extends the full length of the segment. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program. Construction of one southbound left-turn lane would be funded through participation in the DIF program. The noted right-turn southbound lane would be constructed by the Project pursuant to Mitigation Measure 4.2.2. Overlap phasing for this right-turn lane will be added when determined appropriate by the City Traffic Engineer, and will be funded through fair share fee participation. Remaining improvements would also be funded through Fair Share Fees;*
- *Construct dual eastbound left-turn lanes with 300 feet of storage and a second through lane, for an eastbound lane configuration of two left-turn lanes, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the south side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the west leg of the intersection. A single eastbound turn with 300 feet of storage will be constructed by the Project under Opening Year Ambient Conditions pursuant to Mitigation Measure 4.2.2. The remaining improvements would be funded through participation in the DIF Program; and*
- *Construct a westbound left-turn lane, one through lane, and a right-turn lane with overlap phasing, for a westbound lane configuration of one left-turn lane, two*

through lanes, and one right-turn-lane with overlap phasing [these improvements would require the dedication of right-of-way from the north side of Fir (future Eucalyptus) Avenue, and restriping of all lanes on the east leg of the intersection]. Construction of the westbound left and through lanes would be funded through participation in the DIF Program; remaining improvements would be funded through participation in the fair share fee assessments.

The Project will pay required TUMF, DIF and fair share fees, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Fir (future Eucalyptus) Avenue.

4.2.16 Redlands Boulevard at Eucalyptus (future Encilia) Avenue Improvements:

- *Install a traffic signal. This improvement would be funded through participation in the DIF Program;*
- *Construct a northbound left-turn lane and a shared through-or-right-turn lane, for a northbound lane configuration of one left-turn lane, one through lane and one shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard and re-striping of all lanes on the south leg of the intersection. Construction of the northbound left-turn lane would be funded through participation in the DIF Program; remaining improvements would be funded through participation in the TUMF Program;*
- *Construct a southbound left-turn lane, a through lane, and a right-turn lane, for a southbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF program;*
- *Re-stripe the eastbound right-turn lane as a through lane and construct an additional shared through-or-right-turn lane, for an eastbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way with from the south side of Eucalyptus (future Encilia) Avenue and the re-striping of all lanes on the west leg*

of the intersection, and would be funded through participation in the DIF Program; and

- *Construct the westbound approach with one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the north side of Eucalyptus (future Encilia) Avenue, and the re-striping of all lanes on the east leg of the intersection, and would be funded through participation in the DIF Program.*

The Project will pay required TUMF and DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Eucalyptus (future Encilia) Avenue.

4.2.17 Redlands Boulevard at Cottonwood Avenue Improvements:

- *Construct a northbound through lane, for a northbound lane configuration of one left-turn lane, one through lane and one shared through-or-right turn lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and the re-striping of all lanes on the south leg of the intersection, and would be funded through participation in the TUMF Program;*
- *Construct a southbound left-turn lane and a through lane, for a southbound lane configuration of one left-turn lane, two through lanes, and one right-turn-lane. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and the restriping of all lanes on the north leg of the intersection. Construction of the southbound through lane would be funded through participation in the TUMF Program; remaining improvements would be funded through participation in the DIF Program;*
- *Re-stripe the eastbound right-turn lane as a through lane, and construct an additional through-or-right-turn lane, for an eastbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn lane. These improvements would require the dedication of right-of-way from the south side of Cottonwood Avenue, and the re-striping of all lanes on the west leg of the intersection, and would be funded through participation in the DIF Program; and*

- *Construct the westbound approach with one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the north side of Cottonwood Avenue, and the re-striping of all lanes on the east leg of the intersection, and would be funded through participation in the DIF Program.*

The Project will pay required TUMF and DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate General Plan Buildout traffic impacts at the intersection of Redlands Boulevard at Cottonwood Avenue.

Level of Significance After Mitigation: ***Cumulatively Significant and Unavoidable.***

As indicated at Table 4.2-11, with completion of the improvements recommended under Mitigation Measures 4.2.9 through 4.2.17, acceptable LOS and delays would be realized at all Study Area intersections under General Plan Buildout Conditions with the Project. Improvements necessary to mitigate potentially significant General Plan Buildout Conditions intersection impacts would be accomplished in part by the Project, with the balance of required improvements realized under combined TUMF, DIF, and fair share fee traffic improvement programs. However, timely completion of the required improvements in total cannot be assured based on Project participation in mandated traffic impact fee programs (TUMF, DIF, and fair share). Further, the SR-60 at Redlands Boulevard interchange improvements are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency. ***The Project's incremental contributions to General Plan Buildout Traffic Impacts at or affecting the following intersections are therefore considered cumulatively significant and unavoidable:***

- Moreno Beach Drive at SR-60 Westbound Ramps;
- Moreno Beach Drive at SR-60 Eastbound Ramps;
- Redlands Boulevard at SR-60 Westbound Ramps;
- Redlands Boulevard at SR-60 Eastbound Ramps;

- Redlands Boulevard at Fir (future Eucalyptus) Avenue;
- Quincy Street at Fir (future Eucalyptus) Avenue (new intersection);
- Moreno Beach Drive at Fir (future Eucalyptus) Avenue (new intersection);
- Redlands Boulevard at Eucalyptus (future Encilia) Avenue (new intersection); and
- Redlands Boulevard at Cottonwood Avenue (new intersection).

ROADWAY SEGMENT IMPACT ANALYSIS

In evaluation of the Project's potential impacts at Study Area roadway segments, analyses were conducted for Opening Year Ambient Conditions without and with the Project, Opening Year Cumulative Conditions without and with the Project, and General Plan Buildout Conditions without and with the Project. Summary Tables presented subsequently in this discussion indicate V/C and LOS conditions for each of the Study Area roadway segments for under the noted scenarios, and mitigation is proposed in instances where either Project-specific traffic impacts and/or cumulative effects of traffic are projected to adversely affect roadway segment operational efficiencies. In this latter regard, certain Study Area roadway segment improvements are accomplished through the addition of turn lanes or through lanes that will be constructed in conjunction with the intersection improvements noted previously in this Section. In these instances, the applicable intersection improvements are noted, and new mitigation is neither proposed nor required. Instead, the reader is referred to the applicable mitigation measure providing for improvement of the affected intersection. Please refer also to detailed roadway segment analyses presented in the Project TIA (EIR Appendix B).

Roadway Segment Analysis - Opening Year Ambient Traffic Conditions (Project-Specific Impacts)

Opening Year Ambient Condition Roadway Segment Impacts, Without Project

As indicated at Table 4.2-12, based on volume-to-capacity estimates, certain roadway segments adjacent to SR-60 are projected to exceed their design capacity and operate unacceptably under Opening Year Conditions without the Project due to anticipated

ambient traffic growth. These roadway segments include Moreno Beach Drive between the SR-60 Westbound Ramps and the bridge over SR-60; Redlands Boulevard north of the SR-60 Westbound Ramps; and Redlands Boulevard and between the SR-60 Westbound and Eastbound Ramps. However, roadway segment volume-to-capacity estimates are not the only factor considered in determining whether roadways operate under acceptable or deficient conditions, and if/when roadway widening is needed. That is, the average daily traffic (ADT) capacity values used for planning purposes are often affected by other determining factors such as intersection spacing; configuration and control features; degree of access control; sight distance; vehicle mix (truck and bus traffic); and, pedestrian or bicycle traffic. Further, roadway widening can be complicated by right-of-way acquisition requirements and physical constraints. As such, widening is typically only recommended if, in addition to identified segment capacity deficiencies, the peak hour intersection analysis also indicates the need for additional through lanes, and/or if other efficiency/safety factors predominate.

Table 4.2-12
Opening Year Ambient Conditions
Roadway Segment Volume/Capacity Comparison

Roadway, Segment Limits	Existing		Opening Year Ambient Without Project		Opening Year Ambient With Project		LOS Std.[3]
	V/C	LOS	V/C	LOS	V/C	LOS	
Moreno Beach Drive							
North of SR-60 Westbound Ramps	0.48	A	0.53	A	0.53	A	D
SR-60 Westbound Ramps to Bridge over SR-60	0.87	D	0.96	E	0.96	E	D
Bridge over SR-60 to SR-60 Eastbound Ramps	0.19	A	0.21	A	0.21	A	D
South of SR-60 Eastbound Ramps	0.28	A	0.31	A	0.31	A	D
Redlands Boulevard							
North of SR-60 Westbound Ramps	1.14	F	1.26	F	1.27	F	D
SR-60 Westbound Ramps to Eastbound Ramps	0.94	E	1.04	F	1.16	F	D
SR-60 Eastbound Ramps to Fir (future Eucalyptus) Avenue	0.66	B	0.73	C	0.96	E	D
Fir (future Eucalyptus) Avenue to Eucalyptus (future Encilia) Avenue	0.66	B	0.72	C	0.73	C	D
South of Eucalyptus (future Encilia) Avenue	0.66	B	0.72	C	0.73	C	C

Table 4.2-12
Opening Year Ambient Conditions
Roadway Segment Volume/Capacity Comparison

Roadway, Segment Limits	Existing		Opening Year Ambient Without Project		Opening Year Ambient With Project		LOS Std.[3]
	V/C	LOS	V/C	LOS	V/C	LOS	
North of Cottonwood Avenue	0.33	A	0.36	A	0.37	A	C
South of Cottonwood Avenue	0.64	B	0.71	C	0.71	C	C
Street "A"							
North of Fir (future Eucalyptus) Avenue	Future Street by Project				0.03	A	C
Spruce Street							
West of Redlands Boulevard	0.03	A	0.04	A	0.04	A	C
Fir (future Eucalyptus) Avenue[2]							
East of Moreno Beach Drive	0.06	A	0.07	A	0.07	A	D
Driveway 1 to Redlands Boulevard	Future Street by Project				0.12-0.23	A	D
East of Redlands Boulevard	Future Street-GP Circulation Element						D
Eucalyptus (future Encilia) Avenue							
West of Redlands Boulevard	0.03	A	0.03	A	0.03	A	C
Cottonwood Avenue							
West of Redlands Boulevard	0.03	A	0.03	A	0.03	A	C

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).
1 Numerals indicate the number of lanes; U indicates undivided roadways; D indicates divided roadways (e.g., 2U = two-lane, undivided roadway; 6D = six-lane, divided roadway).
2 Fir (future Eucalyptus) Ave. adjacent to the Project site is currently a dirt road, and will be improved concurrent with Project development.
3 LOS Standards per City of Moreno Valley General Plan Circulation Element.

In this context, although the roadway segment of Moreno Beach Drive between the SR-60 westbound ramp and the bridge over SR-60 exceeds the planning level roadway capacity of a two-lane undivided roadway, the related controlling intersections at the SR-60 Westbound and Eastbound Ramps on Moreno Beach Drive are anticipated to operate at acceptable levels of service without additional roadway widening.

Similarly, Redlands Boulevard north of the SR-60 westbound ramp, and Redlands Boulevard between the SR-60 Westbound and Eastbound Ramps exceed the planning level roadway capacity for two-lane undivided roadways. However, the intersections at the SR-60 Westbound and Eastbound Ramps on Redlands Boulevard are anticipated to operate at acceptable levels of service with the improvements identified in the

preceding discussions. Accordingly, no roadway widening is recommended nor required.

Opening Year Ambient Condition Roadway Segment Impacts, With Project

Modeled roadway segment deficiencies noted above (Moreno Beach Drive between the SR-60 westbound ramp and the bridge over SR-60; Redlands Boulevard north of the SR-60 westbound ramp; and Redlands Boulevard between the SR-60 Westbound and Eastbound Ramps) are also reflected under the Opening Year Ambient Traffic Conditions, With Project scenario. As also noted previously, controlling intersections along these roadway segments would operate at acceptable levels of service.

Under the Opening Year Ambient Traffic Conditions, With Project scenario, the Project will be responsible for the construction of Street "A" as a two-lane cul-de-sac, and the improvement of Fir (future Eucalyptus) Avenue from the western Project boundary to Redlands Boulevard. The Project is required to construct its half-section improvements and provide a minimum of one travel lane in the opposite direction along its frontage. In addition, the Project will provide a minimum of one lane in each direction from Street "A" to Redlands Boulevard, to provide access to Redlands Boulevard from the Project.

Additionally, as provided for under previous Mitigation Measure 4.2.3, an eastbound left-turn pocket with 300 feet of storage will be provided by the Project at the intersection of Redlands Boulevard and Fir (future Eucalyptus) Avenue; and this intersection will be signalized by the Project. Additionally, the Project will construct a southbound right turn auxiliary lane extending the full length of the segment of Redlands Boulevard between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue for a southbound lane configuration of one shared left-through lane and one right turn lane.

Additional capacity provided by the auxiliary lane specified under Mitigation Measure 4.2.2 would effectively segregate and separate slower Project truck traffic, allowing

generally for more efficient traffic movements, and specifically facilitating through and turning movements for non-Project traffic. Construction of this auxiliary lane would also facilitate westbound truck turning movements (toward the Project site) at the Redlands Boulevard at Fir (future Eucalyptus) Avenue intersection. Similarly, eastbound Fir (future Eucalyptus) Avenue at Redlands Boulevard will be required to convey Project truck traffic onto northbound Redlands Boulevard, and will require additional capacity to maintain adequate roadway/intersection LOS conditions at the Redlands Boulevard/Fir (future Eucalyptus) Avenue intersection. Absent additional capacity along the noted segments of Redlands Boulevard and Fir (future Eucalyptus) Avenue, there is considered to be the potential for Project truck traffic to congest traffic flows, and impair or conflict with other, non-Project related traffic movements. This is considered a potentially significant Project-related impact.

Level of Significance: Potentially Significant. Under Opening Year Ambient Conditions, Project traffic impacts are potentially significant at the following locations:

- Redlands Boulevard between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue;
- Fir (future Eucalyptus) Avenue west of Redlands Boulevard.

Mitigation Measure: ***Please refer to the preceding Mitigation Measure 4.2.2.*** Consistent with, and as components of the intersection improvements provided for under Mitigation Measure 4.2.2, the following turn/through lane improvements will be constructed*:*

- **Redlands Boulevard between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue:** Construct a southbound right turn auxiliary lane which extends the full length of the segment of Redlands Boulevard between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue for a southbound lane configuration of one shared left-through lane and one right turn lane.

- **Fir (future Eucalyptus) Avenue west of Redlands Boulevard:** Construct an eastbound left-turn lane with 300 feet of storage for an eastbound lane configuration of one left-turn lane and one shared through-or-right-turn-lane.

Level of Significance After Mitigation: Less-Than-Significant. As indicated at Table 4.2-12, with the implementation of roadway segment improvements incorporated as components of Mitigation Measure 4.2.2, acceptable LOS and V/C conditions would be realized.

Roadway Segment Analysis - Opening Year Cumulative Traffic Conditions (Cumulative Impacts)

Opening Year Cumulative Condition Roadway Segment Impacts, Without Project

Volume-to-capacity calculations were also conducted for Study Area roadways for Opening Year Cumulative traffic conditions. Table 4.2-13 provides a comparison of roadway segment capacity and levels of service for "Without Project" and "With Project" scenarios.

Table 4.2-13
Opening Year Cumulative Conditions
Roadway Segment Volume/Capacity Comparison

Roadway, Segment Limits	Opening Year Cumulative, Without Project		Opening Year Cumulative, With Project		Opening Year Cumulative, With Project, With Improvements		LOS Std.
	V/C	LOS	V/C	LOS	V/C	LOS	
Moreno Beach Drive							
North of SR-60 Westbound Ramps	0.73	C	0.74	C	-- [1]	--	D
SR-60 Westbound Ramps to Bridge over SR-60	1.71	F	1.66	F	--	--	D
Bridge over SR-60 to SR-60 Eastbound Ramps	0.38	A	0.37	A	--	--	D
South of SR-60 Eastbound Ramps	0.40	A	0.41	A	--	--	D
Redlands Boulevard							
North of SR-60 Westbound Ramps	1.46	F	1.47	F	0.49	A	D
SR-60 Westbound Ramps to Eastbound Ramps	1.99	F	1.87	F	0.66	B	D
SR-60 Eastbound Ramps to Fir (future Eucalyptus) Avenue	2.43	F	2.17	F	0.72	C	D
Fir (future Eucalyptus) Avenue to Eucalyptus (future Encilia) Avenue	1.20	F	1.22	F	0.41	A	D
South of Eucalyptus (future Encilia) Avenue	1.15	F	1.16	F	0.39	A	C
North of Cottonwood Avenue	0.57	A	0.58	A	--	--	C
South of Cottonwood Avenue	1.08	F	1.10	F	--	--	C
Street "A"							
Driveway 4 to Fir (future Eucalyptus) Avenue (Future Street-by Project) [2]	0.20	A	0.24	A	--	--	C
Quincy Street							
South of Fir (future Eucalyptus) Avenue (Future Street-GP Circulation Element) [3]	0.07	A	0.08	A	--	--	C
Spruce Street							
West of Redlands Boulevard	0.04	A	0.04	A	--	--	C
Fir (future Eucalyptus) Avenue							
East of Moreno Beach Drive	0.39	A	0.41	A	--	--	D
West of Quincy Street (Future Street-GP Circulation Element) [3]	0.43	A	0.48	A	--	--	D
Quincy Street to Street "A" (Future Street-by Project) [2]	0.48	A	0.53-0.64	A-B	--	--	D
Street "A" to Redlands Boulevard (Future Street-by Project) [2]	0.75	C	0.94	E	--	--	D
East of Redlands Boulevard (Future Street-GP Circulation Element)	1.15	F	1.16	F [4]	--	--	D
West of Redlands Boulevard	0.06	A	0.06	A	--	--	C

Table 4.2-13
Opening Year Cumulative Conditions
Roadway Segment Volume/Capacity Comparison

Roadway, Segment Limits	Opening Year Cumulative, Without Project		Opening Year Cumulative, With Project		Opening Year Cumulative, With Project, With Improvements		LOS Std.
	V/C	LOS	V/C	LOS	V/C	LOS	
Cottonwood Avenue							
West of Redlands Boulevard	0.08	A	0.08	A	--	--	C

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).

1 -- No improvements are proposed.

2 Street "A" as well as the segment of Fir (future Eucalyptus) Avenue from Quincy Street to Redlands Boulevard to be implemented by the Project, were also analyzed in an assumed Without Project condition.

3 Reflects completion of planned, programmed General Plan improvements.

4 Traffic modeling of the future roadway segment of Eucalyptus Avenue east of Redlands Boulevard indicates that the planning level roadway capacity of a two-lane undivided roadway would be exceeded. However, as discussed herein, the intersection of Redlands Boulevard at Eucalyptus Avenue is anticipated to operate at acceptable operations during the peak hours without additional roadway widening. No additional widening of Fir (future Eucalyptus) Avenue east of Redlands Boulevard is proposed.

As shown in Table 4.2-13, traffic generated by only ambient growth and related projects would indicate that the following Study Area roadway segments would operate unacceptably:

- Moreno Beach Drive from SR-60 Westbound Ramps to Bridge over SR-60;
- Redlands Boulevard from North of SR-60 Westbound Ramps to south of Eucalyptus (future Encilia) Avenue;
- Redlands Boulevard South of Cottonwood Avenue; and
- Fir (future Eucalyptus) Avenue east of Redlands Boulevard.

Notwithstanding the above-noted calculated segment deficiencies, as noted previously, other indicators act to more clearly define the requirement for roadway widening. More specifically, the roadway segment of Moreno Beach Drive between the SR-60 Westbound and Eastbound Ramps exceeds the planning level roadway capacity of a two-lane undivided roadway. However, as noted in the peak hour intersection analysis section, the controlling intersections of Moreno Beach Drive at the SR-60 Westbound

and Eastbound Ramps are anticipated to operate acceptably during the peak traffic hours. As such, under Opening Year Cumulative Conditions without the Project, additional widening is not recommended for the segment of Moreno Beach Drive between the SR-60 Westbound and Eastbound Ramps.

Similarly, several segments along Redlands Boulevard are projected to exceed the planning roadway capacity for two-lane undivided and divided roadways. However, the controlling intersections along Redlands Boulevard, as improved with extended turn lanes per the recommendations presented herein, are anticipated to operate at acceptable levels of service. An exception to this is the segment of Redlands Boulevard from north of the SR-60 Westbound Ramps to Fir (future Eucalyptus) Avenue. That is, as indicated in the TIA, additional traffic generated under Opening Year Cumulative Conditions, Without Project would exceed combined roadway segment and intersection capacities along Redlands Boulevard from north of the SR-60 Westbound Ramps to Fir (future Eucalyptus) Avenue. This deficiency would occur with or without the Project, and is a potentially significant cumulative traffic impact.

Additionally, the roadway segment of Fir (future Eucalyptus) Avenue, from Street A to east of Redlands Boulevard, exceeds the planning level roadway capacity of a two-lane undivided roadway. However, as noted in the previous section, the intersection of Redlands Boulevard at Fir (future Eucalyptus) Avenue is anticipated to operate at acceptable operations during the peak hours without additional roadway widening on Fir (future Eucalyptus) Avenue beyond that proposed herein.

Lastly, consistent with the City DIF network improvements program, construction of new segments of Quincy Street south of Fir (future Eucalyptus) Avenue; and Fir (future Eucalyptus) Avenue west of Quincy Street are planned improvements supporting cumulative traffic growth.

Opening Year Cumulative Condition Roadway Segment Impacts, With Project

As also indicated at Table 4.2-13, with the addition of Project Traffic, roadway segment V/C ratios along existing Study Area roadway segments would generally increase.

Additionally, future planned improvements within the Study Area at Quincy Street south of Fir (future Eucalyptus) Avenue; Fir (future Eucalyptus) Avenue west of Quincy Street; and Fir (future Eucalyptus) Avenue east of Redlands Boulevard, would be potentially impacted by Project traffic.[5] However, in no instance would Project traffic of itself result in or cause a significant decline in V/C or LOS operational efficiencies.[6]

Notwithstanding, the Project would contribute additional traffic to roadway deficiencies projected to occur without the Project under the Opening Year Cumulative Condition, and the Project would also contribute traffic to new planned improvements within the Study Area. In these instances, while Project-specific traffic impacts would not be individually significant, they would be cumulatively considerable and are potentially significant on this basis.

Level of Significance: Potentially Cumulatively Significant. Under Opening Year Cumulative Conditions, Project traffic impacts are cumulatively considerable and are potentially significant as cumulative impacts at or affecting the following roadway segments:

- Redlands Boulevard from north of the SR-60 Westbound Ramps to south of Eucalyptus (future Encilia) Avenue;
- Redlands Boulevard south of Cottonwood Avenue;
- Quincy Street south of Fir (future Eucalyptus) Avenue (future street);
- Fir (future Eucalyptus) Avenue west of Quincy Street; and

[5] As noted previously, the Project is responsible for improvement of the intervening segments of Fir (future Eucalyptus) Avenue, from the western Project boundary to Redlands Boulevard.

[6] Under the Opening Year Cumulative Condition "With Project" a decline from LOS "C" to LOS "E" is noted for the segment of Fir (future Eucalyptus Avenue from Street "A" to Redlands Boulevard. This decline in total is caused by cumulative traffic. That is, under the Opening Year Ambient Condition "With Project," LOS "A" conditions are maintained for the noted roadway segment. Cumulative traffic when added to the Project traffic result in LOS E conditions under the Opening Year Cumulative Condition.

- Fir (future Eucalyptus) Avenue east of Redlands Boulevard (future street).

Improvements (Mitigation Measures) required to achieve applicable roadway segment LOS and V/C standards under Opening Year Cumulative Traffic Conditions are summarized below.

Mitigation Measures:

Redlands Boulevard north of the SR-60 Westbound Ramps to Eucalyptus (future Encilia) Avenue improvements: Please refer to Mitigation Measure 4.2.7. Consistent with and as components of the intersection improvements provided for under Mitigation Measure 4.2.7, the following turn/through lane improvements will be constructed*:*

- Construct a northbound left-turn lane with 200 feet of storage and a second through lane, for a northbound lane configuration of one left-turn lane, one through lane, and one shared through-or-right-turn-lane. These improvements would require the dedication of right-of-way from the east side of Redlands Boulevard, and restriping of all lanes on the south leg of the intersection; and

- Construct a southbound left-turn lane with 250 feet of storage, a second left-turn lane that extends back to the SR-60 Eastbound Ramps, a second through lane, and a right-turn lane with overlap phasing and a pocket length that is the full length of the segment, for a southbound lane configuration of two left-turn lanes, two through lanes, and one right-turn-lane with overlap phasing. These improvements would require the dedication of right-of-way from the west side of Redlands Boulevard, and restriping of all lanes on the north leg of the intersection.

As provided for under Mitigation Measure 4.2.7, the above-noted turn/through lanes would be constructed as elements of the Redlands Boulevard-Fir (future Eucalyptus) Avenue intersection improvements. The resulting functional configuration as a four-

lane divided roadway segment between Redlands Boulevard from north of the SR-60 Westbound Ramps to Eucalyptus (future Encilia) Avenue would provide acceptable V/C and LOS standards. Improvements provided for under Mitigation Measure 4.2.8 (including signalization) also ensure that intersection of Redlands Boulevard at Fir (future Eucalyptus) Avenue would operate at acceptable operations during the peak hours without additional roadway widening on Fir (future Eucalyptus) Avenue.

Additionally, as noted previously, consistent with the City DIF network improvements program, new street segments would be constructed as described below:[7]

4.2.18 Quincy Street south of Fir (future Eucalyptus) Avenue Improvements:

- *Construct Quincy Street south of Eucalyptus Avenue as a two-lane undivided roadway with a minimum of one travel lane in each direction.*

The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts at the segment of Quincy Street south of Fir (future Eucalyptus) Avenue.

4.2.19 Fir (future Eucalyptus) Avenue west of Quincy Street to the westerly Project boundary and Fir (future Eucalyptus) Avenue east of Redlands Boulevard Improvements:

- *Construct the Fir (future Eucalyptus) Avenue extension from the current terminus near the Auto Mall to Quincy Street, and connecting to Fir (future Eucalyptus) Avenue at the westerly project boundary. Continue Fir (future Eucalyptus) Avenue east of Redlands Boulevard. Fir (future Eucalyptus) Avenue is to be constructed as a two-lane undivided roadway with a minimum of one travel lane in each direction.*

[7] The cited roadway segment improvements are General Plan Circulation Element improvements that would be required irrespective of the Project. The Project will however contribute traffic to these roadway segments and will be responsible for fee payments applied to its improvements.

The Project will pay required DIF, thereby satisfying its proportional fee responsibilities for improvements required to mitigate Opening Year cumulative traffic impacts affecting the segment of ***Fir (future Eucalyptus) Avenue between the Auto Mall and the westerly Project Boundary, and Fir (future Eucalyptus) Avenue east of Redlands Boulevard.***

Level of Significance After Mitigation: ***Cumulatively Significant and Unavoidable.***

As indicated at Table 4.2-13, with completion of the improvements recommended under Mitigation Measure 4.2.7, 4.2.18 and 4.2.19, acceptable V/C and LOS conditions would be realized at all Study Area roadway segments under Opening Year Cumulative Conditions with the Project. Improvements necessary to mitigate potentially significant Opening Year Cumulative Condition roadway segment impacts would be accomplished in part by the Project, with the balance of required improvements realized under combined TUMF, DIF, and fair share fee traffic improvement programs. However, timely completion of the required improvements in total cannot be assured based on Project participation in mandated traffic impact fee programs (TUMF, DIF, and fair share). Further, roadway segment improvements at or affecting the SR-60 at Redlands Boulevard interchange improvements are jurisdictionally controlled by Caltrans and cannot be autonomously initiated by the Applicant or the Lead Agency. ***The Project's incremental contributions to Opening Year Cumulative Traffic Impacts at, or affecting, the following roadway segments are therefore considered cumulatively significant and unavoidable:***

- Redlands Boulevard north of the SR-60 Westbound Ramps to Eucalyptus (future Encilia) Avenue;

- Quincy Street south of Fir (future Eucalyptus) Avenue (future street); and

- Fir (future Eucalyptus) Avenue west of Quincy Street to the westerly Project boundary (future street) and Fir (future Eucalyptus) Avenue east of Redlands Boulevard.

Roadway Segment Analysis - General Plan Buildout Traffic Conditions (Cumulative Impacts)

General Plan Buildout Traffic Condition Roadway Segment Impacts, Without and With Project

General Plan Buildout without Project conditions assume the development of Business Park/Light Industrial uses, which is consistent with the land use currently shown on the City's General Plan Land Use Map. The General Plan Buildout with Project analysis assumes logistics uses on the Project site, consistent with the Project's proposed warehouse/distribution uses. Using the City's traffic model, logistics uses generate fewer daily and peak-hour trips than Business Park/Light Industrial uses. As such, traffic forecasts for General Plan Buildout without Project conditions are slightly higher in some areas than the volumes for General Plan Buildout with Project. Table 4.2-14 provides a comparison of roadway segment capacity and levels of service under General Plan Buildout Conditions with and without the Project.

Table 4.2-14
General Plan Buildout Conditions
Roadway Segment Volume/Capacity Comparison

Roadway, Segment Limits	General Plan Buildout, Without Project		General Plan Buildout, With Project		LOS Std.
	V/C	LOS	V/C	LOS	
Moreno Beach Drive					
North of SR-60 Westbound Ramps	0.77	C	0.77	C	D
SR-60 Westbound to Eastbound Ramps	0.82	D	0.82	D	D
SR-60 Eastbound Ramps to Fir (future Eucalyptus) Avenue	0.96	E	0.94	E	D
South of Fir (future Eucalyptus) Avenue	0.64	B	0.64	B	D
Redlands Boulevard					
North of SR-60 Westbound Ramps	0.85	D	0.85	D	D
SR-60 Westbound Ramps to Eastbound Ramps	0.52	A	0.52	A	D
SR-60 Eastbound Ramps to Fir (future Eucalyptus) Avenue	0.49	A	0.47	A	D
Fir (future Eucalyptus) Avenue to Eucalyptus (future Encilia) Avenue	0.64	B	0.61	B	D
Eucalyptus (future Encilia) Avenue to Cottonwood Avenue	0.48	A	0.48	A	C

Table 4.2-14
General Plan Buildout Conditions
Roadway Segment Volume/Capacity Comparison

Roadway, Segment Limits	General Plan Buildout, Without Project		General Plan Buildout, With Project		LOS Std.
	V/C	LOS	V/C	LOS	
South of Cottonwood Avenue	0.51	A	0.51	A	C
Street "A"					
North of Fir (future Eucalyptus) Avenue	0.21	A	0.30	A	C
Quincy Street					
South of Fir (future Eucalyptus) Avenue	0.09	A	0.09	A	C
Spruce Street					
West of Redlands Boulevard	0.04	A	0.04	A	C
Fir (future Eucalyptus) Avenue					
West of Moreno Beach Drive	0.80	C	0.80	C	D
East of Moreno Beach Drive	0.52	A	0.49	A	D
West of Quincy Street	0.24	A	0.19	A	D
Quincy Street to Street "A"	0.30	A	0.28-0.32	A	D
Street "A" to Redlands Boulevard	0.40	A	0.41	A	D
East of Redlands Boulevard	0.43	A	0.43	A	D
Eucalyptus (future Encilia) Avenue					
West of Redlands Boulevard	0.28	A	0.28	A	C
East of Redlands Boulevard	0.29	A	0.27	A	C
Cottonwood Avenue					
West of Redlands Boulevard	0.43	A	0.43	A	C
East of Redlands Boulevard	0.37	A	0.37	A	C

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).
1 Though implemented by the Project, the segment of Fir (future Eucalyptus) Avenue from Quincy Street to Street "A" was also analyzed in the Without Project condition.

As shown in Table 4.2-14, roadway segments constructed to General Plan Buildout capacities would, with one exception, operate under acceptable City LOS standards both with and without the addition of Project-related traffic. More specifically, the roadway segment of Moreno Beach Drive between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue would exceed the planning level roadway capacity of a seven-lane divided roadway. However, as noted in the analysis of peak-hour intersection operations under General Plan Buildout conditions, the intersections of Moreno Beach Drive at SR-60 Eastbound Ramps and at Fir (future Eucalyptus) Avenue are anticipated to operate at acceptable levels of service without additional roadway

widening. As such, additional roadway widening between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue is not proposed.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

SUMMARY OF OPENING YEAR INTERSECTION AND ROADWAY SEGMENT IMPROVEMENTS

The Study Area intersection and roadway segment improvements identified at Table 4.2-15, when completed, will mitigate potential Project-related and cumulative traffic impacts within the Study Area roadways. The Project Applicant will construct all improvements necessary to mitigate Project-specific traffic impacts.

Further, the Project Applicant will pay all requisite traffic impact fees (TUMF, DIF and fair-share fees) toward the construction of improvements necessary to mitigate potentially significant cumulative impacts and ensure maintenance of adequate operational conditions of Study Area roadways and intersections. Non-residential TUMF and DIF collected by the City are established on pro-rata, dollar/square-foot basis. The basis of fair share fee calculations for improvements within the Study Area is summarized below.

Table 4.2-15
Summary of Traffic Improvements

Location	Total Improvements Required by 2013[1]	Total Improvements Required by GP Buildout	TUMF Improvements	DIF Improvements	Fair Share Improvements (Not covered by TUM, DIF)	Project % (for Fair Share Fees)
INTERSECTIONS						
Moreno Beach Dr. at SR-60 Westbound Ramps	• Coordinate signal timing	• Install 1 NB through • 1 SB through • 1 SB right • 1 WB left	Interchange Reconstruction	None	None	
Moreno Beach Dr. at SR-60 Eastbound Ramps	• Restripe EB shared left/right as EB left • 1 EB right	• Install 1 NB through • 1 EB left • 2 EB right	Interchange Reconstruction	None	None	
Moreno Beach Dr. at Fir (future Eucalyptus) Ave.	Future Intersection	• Install 2 NB left • Restripe NB right as shared NB through/right • 1 SB left • 1 SB right w/overlap phasing • 2 EB left • 1 EB through • 1 EB through/right • 1 WB through plus WB right w/overlap phasing	None	• Restripe NB right as shared NB through/right • 1 EB through/right • 1 EB left • 1 EB through	• 2 NB left • 1 SB right plus overlap • 1 EB left • 1 WB through plus WB right with overlap phasing	1.28%
Quincy St. at Fir (future Eucalyptus) Ave.	• Install stop on S leg • 1 NB shared left/right • 1 EB through/right • 1 WB left • 1 WB through	• Install stop on south leg • 1 NB shared left/right • 1 EB through • 1 EB through/right • 1 WB left • 1 WB through • 1 WB through/right	None	• Install stop on S leg • 1 NB shared left/right • 1 EB through • 1 EB through/right • 1 WB left • 2 WB through	None	
St. "A" at Fir (future Eucalyptus) Ave.	• Install Stop on N leg • 1 SB left • 1 SB right • 1 EB left • 1 EB through • 1 WB through	• Install signal • 1 SB left • 1 SB right • 1 EB left • 2 EB through • 2 WB through	None	• 2 EB through • 2 WB through	• Install signal	17.86%

Table 4.2-15
Summary of Traffic Improvements

Location	Total Improvements Required by 2013[1]	Total Improvements Required by GP Buildout	TUMF Improvements	DIF Improvements	Fair Share Improvements (Not covered by TUM, DIF)	Project % (for Fair Share Fees)
Redlands Blvd. at SR-60 Westbound Ramps	• Install signal • 1 NB through • 1 NB right plus overlap • 1 SB through	• Install signal • 1 NB through • 1 NB right w/overlap phasing • 1 SB left • 1 SB through • 1 WB left • 1 WB right	Interchange Reconstruction	None	None	
Redlands Blvd. at SR-60 Eastbound Ramps	• 1 NB through • 1 SB through • Restripe shared EB left/right as EB left • 1 EB right	• 2 NB through • 2 SB through • Re-stripe EB shared left/right as EB left • 1 EB right	Interchange Reconstruction	None	None	
Redlands Blvd. at Fir (future Eucalyptus) Ave.	• Install signal • 1 NB left • 1 NB through • 2 SB left • 1 SB through • 1 SB right w/overlap phasing • 2 EB left • 1 EB through • 1 WB left • 1 WB through • 1 WB right w/overlap phasing	• Install signal • 1 NB left • 1 NB through • 2 SB left • 1 SB through • 1 SB right w/overlap phasing • 2 EB left • 1 EB through • 1 WB left • 1 WB through • 1 WB right w/overlap phasing	• 1 NB through • 1 SB through	• Install signal • 1 NB left • 2 EB left • 1 EB through • 1 WB left • 1 WB through • 1 SB left	• 1 SB left • 1 SB right plus overlap • 1 WB right w/overlap phasing	7.08%

Table 4.2-15
Summary of Traffic Improvements

Location	Total Improvements Required by 2013[1]	Total Improvements Required by GP Buildout	TUMF Improvements	DIF Improvements	Fair Share Improvements (Not covered by TUM, DIF)	Project % (for Fair Share Fees)
Redlands Blvd. at Eucalyptus (future Encilia)Ave.	• None	• Install signal • 1 NB left • 1 NB through/right • 1 SB left • 1 SB through • 1 SB right • Re-stripe EB right as EB through • 1 EB through/right • 1 WB left • 1 WB through • 1 WB through/right	• 1 NB through/ right • 1 SB through	• Install Signal • 1 NB left • 1 SB left • 1 SB right (restriping) • Re-stripe EB right as EB through • 1 EB through/right • 1 WB left • 1 WB through • 1 WB through/right	None	
Redlands Blvd. at Cottonwood Ave.	• None	• 1 NB through • 1 SB left • 1 SB through • Re-stripe EB right as EB through • 1 EB through/right • 1 WB left • 1 WB through • 1 WB through/right	• 1 NB through • 1 SB through	• 1 SB left • Re-stripe EB right as EB through • 1 EB through/right • 1 WB left • 1 WB through • 1 WB through/right	None	

Table 4.2-15
Summary of Traffic Improvements

Location	Total Improvements Required by 2013[1]	Total Improvements Required by GP Buildout	TUMF Improvements	DIF Improvements	Fair Share Improvements (Not covered by TUM, DIF)	Project Fair Share
ROADWAY SEGMENTS						
Moreno Beach Dr.						
North of SR-60 WB Ramps	None	Add 2 lanes	Add 2 lanes	Duplicates TUMF	None	
SR-60 WB to EB Ramps	None	Add 4 lanes	Add 2 lanes	Duplicates TUMF	None	
SR-60 EB Ramps to Eucalyptus Ave.	None	None	None	None	None	
South of Eucalyptus Ave.	None	None	None	None	None	
Redlands Blvd.						
North of SR-60 WB Ramps	Add 2 lanes	Add 2 lanes	Add 2 lanes	Duplicates TUMF	None	
SR-60 WB to EB Ramps	Add 2 lanes	Add 2 lanes	Add 2 lanes	Duplicates TUMF	None	
SR-60 EB Ramps to Eucalyptus Ave.	Add 2 lanes	Add 2 lanes	Add 2 lanes	Duplicates TUMF	None	
Eucalyptus Ave. to Encilia Ave.	Add 2 lanes	Add 2 lanes	Add 2 lanes	Duplicates TUMF	None	
Encilia Ave. to north of Cottonwood	Add 2 lanes	Add 2 lanes	Add 2 lanes	Duplicates TUMF	None	
North of Cottonwood Ave.	None	Add 1 lane	Add 1 lane	Duplicates TUMF	None	
South of Cottonwood Ave.	None	Add 2 lanes	Add 2 lanes	Duplicates TUMF	None	
St. "A"						
North of Eucalyptus Ave.	Add 2 lanes	Add 2 lanes	None	None	Add 2 lanes	
Quincy St.						
South of Eucalyptus Ave.	Add 2 lanes	Add 2 lanes	None	Add 2 lanes	None	
Spruce St.						
West of Redlands Blvd.	None	None	None	None	None	
Fir (future Eucalyptus) Ave.						
West of Moreno Beach Dr.	Future St.	Add 4 lanes	None	Add 4 lanes	None	
East of Moreno Beach Dr.	None	None	None	None	None	
West of Quincy St.	Add 2 lanes	Add 4 lanes	None	Add 4 lanes	None	
Quincy St. to St. "A"	Add 2 lanes	Add 4 lanes	None	Add 4 lanes	None	
St. "A" to Redlands Blvd.	Add 2 lanes	Add 4 lanes	None	Add 4 lanes	None	
East of Redlands Blvd.	Add 2 lanes	Add 4 lanes	None	Add 4 lanes	None	

Table 4.2-15
Summary of Traffic Improvements

Location	Total Improvements Required by 2013[1]	Total Improvements Required by GP Buildout	TUMF Improvements	DIF Improvements	Fair Share Improvements (Not covered by TUM, DIF)	Project Fair Share
Encilia Ave.						
West of Redlands Blvd.	None	Add 1 lane	None	Add 1 lane	None	
East of Redlands Blvd.	Add 2 lanes	Add 4 lanes	None	Add 4 lanes	None	
Cottonwood Ave.						
West of Redlands Blvd.	None	None	None	None	None	
East of Redlands Blvd.	Does not exist	Add 4 lanes	None	Add 4 lanes	None	

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).

1 In identifying intersection improvements, turn and through lane directions are abbreviated as follows: EB = Eastbound; NB = Northbound; SB = Southbound; WB = Westbound.

Calculation of Fair Share Fee Contributions

Calculation of the Project's fair share fee contributions are based on its proportional traffic volumes at the affected facilities. A project's fair share contribution is determined based on the following equation, which is the ratio of project traffic to new traffic:

Project Fair Share % = Project Traffic / (Total Traffic – Existing Traffic)

Table 4.2-15 presents the percentage of net traffic impact at the Study Area key intersections that will be impacted by the Project. In instances where improvements are not covered by TUMF and/or DIF programs, the percentage of net traffic contributed by the Project would represent its fair share fee contribution toward required improvements.

FREEWAY SEGMENT IMPACT ANALYSIS

The freeway system in the Study Area was broken into segments defined by arterial interchange locations. The resulting SR-60 segments were evaluated for potential capacity limitations under Opening Year Ambient Conditions, without and with the Project; Opening Year Cumulative Conditions without and with the Project; and General Plan Buildout Conditions without and with the Project. Both passenger car and truck components were evaluated for the following freeway segments:

- Westbound, west of Moreno Beach Drive;
- Westbound, between Redlands Boulevard and Moreno Beach Drive;
- Westbound, east of Redlands Boulevard;
- Eastbound, west of Moreno Beach Drive;
- Eastbound, between Moreno Beach Drive and Redlands Boulevard; and
- Eastbound, east of Redlands Boulevard.

Additional detail regarding the methodologies used in the analysis of freeway mainline segments is provided in the Project TIA (EIR Appendix B).

Freeway Segment Analysis - Opening Year Ambient Conditions

Opening Year Ambient Condition Freeway Segment Impacts, Without and With the Project

Freeway segment densities under Opening Year Ambient Conditions, Without and With the Project, were evaluated and compared as one component of the Project TIA. Table 4.2-16 provides a summary of this comparison.

Table 4.2-16
Opening Year Ambient Condition
Freeway Segment Density Comparison

Segment	Lanes	Peak	Opening Year Without Project		Opening Year With Project	
			Density[1]	LOS	Density[1]	LOS
SR-60 Westbound						
West of Moreno Beach Drive	3	AM	14.1	B	14.6	B
		PM	14.7	B	15.3	B
Moreno Beach Drive to Redlands Blvd.	3	AM	11.4	B	11.9	B
		PM	12.9	B	13.7	B
East of Redlands Blvd.	2	AM	14.0	B	14.1	B
		PM	17.0	B	17.1	B
SR-60 Eastbound						
West of Moreno Beach Drive	3	AM	12.1	B	12.7	B
		PM	15.9	B	16.4	B
Moreno Beach Drive to Redlands Blvd.	3	AM	10.4	A	11.1	B
		PM	13.1	B	13.5	B
East of Redlands Blvd.	2	AM	13.5	B	13.6	B
		PM	16.2	B	16.4	B

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).
[1] Density is measured by passenger cars per mile per lane (pc/mi/ln).

As indicated at Table 4.2-16, the eastbound and westbound mainline freeway segments within the Study Area operate at acceptable levels of service under each scenario. More specifically, a minimum of LOS "B" operations are anticipated to be maintained even with the addition of Project-related traffic. No potentially significant impacts have been identified in regard to mainline freeway segment performance under Opening Year Ambient Conditions, Without or With the Project.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Freeway Segment Analysis - Opening Year Cumulative Conditions

Opening Year Cumulative Condition Freeway Segment Impacts, Without and With the Project

Table 4.2-17 provides a summary of freeway segment performance under Opening Year Cumulative traffic conditions, without and with the addition of Project traffic.

Table 4.2-17
Opening Year Cumulative Condition
Freeway Segment Density Comparison

Segment	Lanes	Peak	Opening Year Cumulative, Without Project		Opening Year Cumulative, With Project	
			Density[1]	LOS	Density[1]	LOS
SR-60 Westbound						
West of Moreno Beach Drive	3	AM	19.8	C	20.2	C
		PM	22.4	C	23.2	C
Moreno Beach Drive to Redlands Boulevard	3	AM	15.9	B	16.2	B
		PM	18.4	C	18.8	C
East of Redlands Boulevard	2	AM	19.4	C	19.7	C
		PM	21.8	C	22.1	C
SR-60 Eastbound						
West of Moreno Beach Drive	3	AM	17.1	B	17.5	B
		PM	23.4	C	23.8	C
Moreno Beach Drive to Redlands Boulevard	3	AM	13.8	B	14.1	B
		PM	18.9	C	19.2	C
East of Redlands Boulevard	2	AM	16.6	B	16.8	B
		PM	23.4	C	23.9	C

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).
[1] Density is measured by passenger cars per mile per lane (pc/mi/ln).

As indicated at Table 4.2-17, the eastbound and westbound mainline freeway segments within the Study Area operate at acceptable levels of service in each scenario. LOS "B" and "C" operations are anticipated to be maintained with the addition of Project-related

traffic. No potentially significant impacts have been identified in regard to mainline freeway segment performance in the Project's Opening Year Cumulative condition.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Freeway Segment Analysis - General Plan Conditions

General Plan Buildout Condition Freeway Segment Impacts, Without and With the Project

Table 4.2-18 provides a summary of freeway segment performance using General Plan Buildout traffic conditions, with and without the addition of Project traffic.

Table 4.2-18
General Plan Buildout
Freeway Segment Density Comparison

Segment	Lanes	Peak	General Plan Buildout Without Project		General Plan Buildout With Project	
			Density[1]	LOS	Density[1]	LOS
SR-60 Westbound						
West of Moreno Beach Drive	3	AM	--	F	--	F
		PM	--	F	--	F
Moreno Beach Drive to Redlands Boulevard	3	AM	--	F	--	F
		PM	--	F	--	F
East of Redlands Boulevard	2	AM	--	F	--	F
		PM	--	F	--	F
SR-60 Eastbound						
West of Moreno Beach Drive	3	AM	--	F	--	F
		PM	--	F	--	F
Moreno Beach Drive to Redlands Boulevard	3	AM	37.6	E	37.7	E
		PM	--	F	--	F
East of Redlands Boulevard	2	AM	--	F	--	F
		PM	--	F	--	F

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads) May 20, 2010 (Revised).
[1] Density is measured by passenger cars per mile per lane (pc/mi/ln). "--" indicates density that is greater than 45 pc/mi/ln. Beyond this density, efficiency estimates and calculations are not meaningful.

As indicated at Table 4.2-18, freeway segments within the Study Area are anticipated to operate at unacceptable levels of service in each scenario during the morning and/or evening peak hour periods under General Plan Buildout conditions, with or without Project-related traffic. These are potentially significant cumulative impacts. Project-related traffic will incrementally degrade already deficient freeway segment operations projected to occur under General Plan Buildout Conditions.

Level of Significance: Potentially Cumulatively Significant.

Mitigation Measures: No assured feasible and timely mitigation. While it is within the realm of possibility that improvements to SR-60 in the Project vicinity will be completed prior to General Plan Buildout, this cannot currently be assured. There is also the potential for reduced future freeway traffic volumes due to reduced growth, availability of other suitable transportation modes, or reduced traffic volumes through implementation of effective areawide transportation demand strategies. However, such assumptions are not employed within the analyses of this EIR.

In order to provide a reasonably conservative analysis, it is acknowledged that timely completion of freeway improvements under future out year scenarios cannot be definitively assured. Further, neither the Lead Agency nor the Project Applicant has the jurisdictional authority or purview to adopt or enforce mitigation measures requiring freeway segment improvements under the jurisdiction of Caltrans, nor to implement areawide transportation systems or transportation demand strategies that would effectively reduce freeway traffic volumes. On this basis, potential freeway segment LOS and vehicle density impacts under General Plan buildout conditions are considered cumulatively significant and unavoidable**.**

Level of Significance After Mitigation: ***Cumulatively Significant and Unavoidable****.*

Potential Impact*: Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.*

Impact Analysis Overview: Within the Study Area, the SR-60 is a designated Riverside County Congestion Management Program (CMP) facility. Under the County CMP, LOS E is established as the minimum acceptable LOS condition.[8] Further, as provided for under the 2007 Riverside County Congestion Management Program:

> Deficient segments or intersections will be identified through the biennial traffic monitoring process. When a deficiency is identified as part of the CMP Update LOS evaluation process, further detailed analysis of LOS shall be conducted to determine whether an actual deficiency has occurred. The LOS analysis conducted as part of the CMP Update process is only considered to be a "screening" level analysis, therefore additional, more detailed assessment of a potential deficiency would be required before a deficiency is formally identified. Coordination with the affected local jurisdiction(s) will be made to insure that appropriate data, geometrics, counts and other related information is applied to calculate LOS. [9]

In light of the preceding, potential CMP facility impacts of the Project under Opening Year Ambient Conditions, Opening Year Cumulative Conditions and General Plan Buildout Conditions are summarized below.

[8] 2007 Riverside County Congestion Management Program (County CMP) (VRPA Technologies, Inc. for the Riverside County Transportation Commission) December 12, 2007; Page ES-1 et al.
[9] County CMP, Page ES-4 et al.

CMP Analysis - Opening Year Ambient and Cumulative Conditions

Opening Year Ambient and Cumulative Conditions - CMP Facility Impacts, Without and With the Project

As discussed previously in this Section under the heading "Freeway Segment Analysis," in the Project Opening Year under both Ambient and Cumulative conditions, adequate LOS and operational efficiencies are maintained along SR-60 freeway segments within the Study Area. In the Project Opening Year, levels of service standards established by the Riverside County Congestion Management Agency are maintained. The potential for the Project to "exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways," is therefore less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

CMP Analysis-General Plan Buildout Conditions

General Plan Buildout Conditions - CMP Facility Impacts, Without and With the Project

As also noted previously under the heading "Freeway Segment Analysis," due to cumulative increased regional traffic volumes under General Plan Buildout Conditions (either with or without Project traffic), SR-60 freeway segments in the Study Area are projected to operate under deficient conditions during the morning and evening peak hour periods. In practical terms, actual deficiencies are, as noted in the CMP document, "identified through the biennial traffic monitoring process" and cannot be precisely quantified based on projected traffic volumes and their effects on existing facilities. In this context, projected CMP deficiencies may not occur due to reductions in future traffic volumes and/or physical improvements to freeway segments providing sufficient

future capacity. Notwithstanding, consistent with the conservative approach employed previously in evaluating freeway segment impacts based on LOS and vehicle density impacts, potential CMP deficiencies occurring under General Plan Buildout Conditions are recognized as potentially cumulatively significant.

Level of Significance: Potentially Cumulatively Significant.

Mitigation Measures: No assured feasible and timely mitigation. As discussed previously, there is a possibility that improvements to SR-60 in the Project vicinity will be completed prior to General Plan Buildout; however, improvements cannot be assured. There is also the potential for reduced future freeway traffic volumes due reduced growth, availability of other suitable transportation modes, or reduced traffic volumes through implementation of effective areawide transportation demand strategies. However, such assumptions are not employed within the analyses of this EIR. In order to provide a reasonably conservative analysis, it is acknowledged that timely completion of freeway improvements under future out year scenarios cannot be definitively assured. Further, neither the Lead Agency nor the Project Applicant has the jurisdictional authority or purview to adopt or enforce mitigation measures requiring freeway segment improvements by Caltrans, nor to implement areawide transportation systems or transportation demand strategies that would effectively reduce freeway traffic volumes.

On this basis, potential CMP facility deficiencies under General Plan Buildout Conditions are considered cumulatively significant and unavoidable**.**

Level of Significance After Mitigation: ***Cumulatively Significant and Unavoidable*****.**

Potential Impact*: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*

Impact Analysis: To ensure appropriate design and implementation of all Project access improvements, the final design of the Project site plan, to include locations and design of proposed driveways, shall be reviewed and approved by the City Traffic Engineer. Efficient and safe operations of the Project are provided by on-site and localized circulation and intersection improvements included as components of the Project. These improvements, noted previously, are reiterated below:

- Fir (future Eucalyptus) Avenue will be constructed to its ultimate half-section width (one-half of 104-foot right-of-way section improvements pursuant to City Standard No. 104B) as an arterial roadway from the westerly Project boundary, extending to Redlands Boulevard to the east. Signalization and turn lane improvements will be provided at the intersection of Fir (future Eucalyptus) Avenue at Redlands Boulevard consistent with City standards and requirements. At the westerly terminus of Fir (future Eucalyptus) Avenue full cul-de-sac improvements will be provided to allow for vehicle turnaround;
- The proposed public street (Street "A") at the Project's easterly boundary will be constructed to its ultimate half-section width (one-half of 78-foot right-of-way section improvements pursuant to City Standard No. 106) as an industrial collector roadway from the proposed northern terminus of the road to Fir (future Eucalyptus) Avenue in conjunction with development. Full improvements will be provided at the cul-de-sac "bulb" to allow for vehicle turnaround;
- Driveway access to Fir (future Eucalyptus) Avenue and future Street "A" will be provided consistent with City design standards; and
- Consistent with the City of Moreno Valley Master Plan of Trails, a proposed trail is shown along the Project frontage on the north side of Fir (future Eucalyptus) Avenue which will join with the proposed future trail on Redlands Boulevard. Pursuant to the City of Moreno Valley Bikeway Plan, a Class I bikeway is planned on the east side of Redlands Boulevard within the vicinity of the Project.

Additionally, to ensure safe and efficient Opening Year operations, and as mitigation for potentially significant Project-specific impacts, the Project will construct the following improvements at Redlands Boulevard-Fir (future Eucalyptus) Avenue, as required by Mitigation Measure 4.2.3.

- Install a traffic signal;
- Construct a southbound right turn auxiliary lane which extends the full length of the segment of Redlands Boulevard between the SR-60 Eastbound Ramps and Fir (future Eucalyptus) Avenue for a southbound lane configuration of one shared left-through lane and one right turn lane; and
- Construct an eastbound left-turn lane with 300 feet of storage for an eastbound lane configuration of one left-turn lane and one shared through-or-right-turn-lane.

The safety of bicyclists and pedestrians shall be taken into consideration during the final design of future intersections within the vicinity of the Project. Additionally, sight distance at each Project access point shall be reviewed with respect to standard Caltrans/City of Moreno Valley sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

It is also recognized that temporary and short-term traffic detours and traffic disruption will result during Project construction activities. These impacts are adequately addressed through the preparation and submittal of a construction area traffic management plan as required by the City Engineer. The required construction area traffic management plan will identify traffic control for any street closure, detour, or other disruption to traffic circulation. The plan also identifies construction vehicle access routes, hours of construction traffic, traffic controls and detours.

Based on the preceding discussion, the potential for the Project to result in hazards due to a design feature or incompatible uses is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact*: Result in inadequate emergency access.*

Impact Analysis: As an addendum to the Project TIA, an assessment of the Project's fire route and emergency response times has been prepared to ensure that adequate emergency access to the Project site and surrounding areas can be provided. The addendum, which is included in Draft EIR Appendix B, identifies three potential fire routes to the Project site for future emergency response. Police response routes were not evaluated as part of this assessment, because police units are typically dispatched from varying patrol points within the community, rather than from a fixed location. Fire suppression and emergency medical response services are customarily dispatched from the nearest fire station, which is Moreno Valley Fire Station No. 58, located at 28040 Eucalyptus Avenue, approximately one-quarter mile west of the Project site.

Until Fir (future Eucalyptus) Avenue is improved to its ultimate General Plan configuration, which would involve the construction of a Quincy Channel overcrossing, no direct access to the Project site from Station 58 is available. This future channel crossing is not a component of the proposed Project, and is dependent on the development of adjacent properties, which may occur in the next several years. Figure 4.2-3 illustrates the routes that have been evaluated for interim fire department emergency response purposes. Descriptions of each route are provided below.

- Route 1: westbound on existing Eucalyptus Avenue to the SR-60 eastbound; southbound on Redlands Boulevard and westbound on Fir (future Eucalyptus) Avenue to the Project site;

- Route 2A: westbound on existing Eucalyptus Avenue, southbound on Auto Mall Drive, southbound on Moreno Beach Drive, eastbound on Cottonwood Avenue, northbound on Redlands Boulevard and westbound on Fir (future Eucalyptus) Avenue to the Project site;

- Route 2B: westbound on existing Eucalyptus Avenue, southbound on Moreno Beach Drive, eastbound on Cottonwood Avenue, northbound on Redlands Boulevard and westbound on Fir (future Eucalyptus) Avenue to the Project site; and

- Route 3: westbound on existing Eucalyptus Avenue, northbound on Moreno Beach Drive, eastbound on Ironwood Avenue; southbound on Redlands Boulevard and westbound on Fir (future Eucalyptus) Avenue to the Project site.

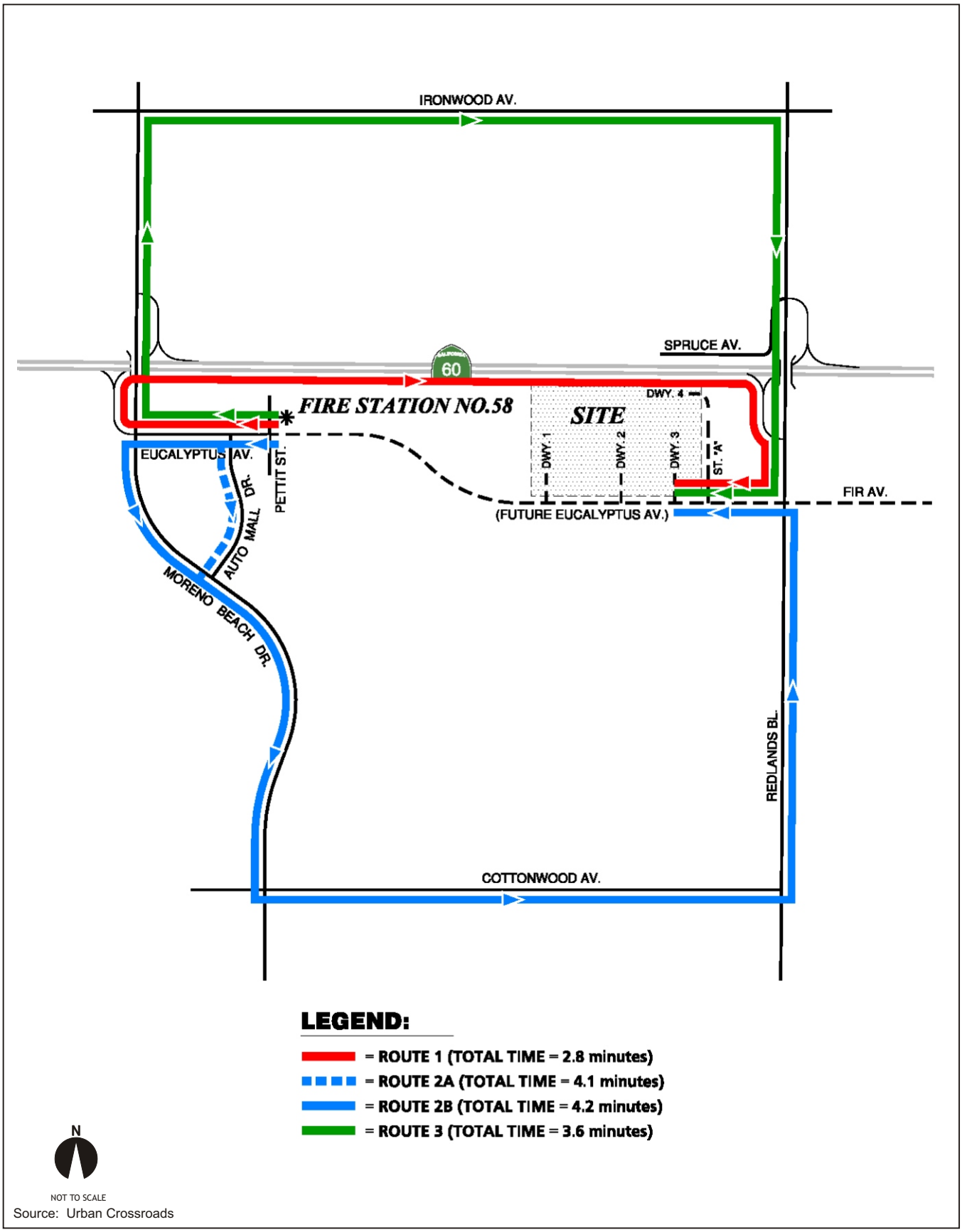
Based on the assessment of existing roadway configurations, speed limits, and distances using the routes above, average response times to the Project site from Fire Station 58 were determined to range from 165 seconds (approximately 2.8 minutes) via Route 1, to 250 seconds (approximately 4.2 minutes) on Route 2B. It is noted that emergency vehicles are permitted to travel faster than the posted speed limit; however, for the purposes of this assessment, posted speed limits were used in an effort to determine the most conservative results. The estimated response times identified in the assessment of fire routes for the Project are within the basic objective of the Moreno Valley Fire Protection Services Master Plan, which is "to establish and maintain a standard of the first unit arriving on the scene of a fire within five minutes of dispatch and the remainder of the first alarm assignment on scene within eight minutes at least 90% of the time."[10]

In the future, upon completion of the extension of Fir (future Eucalyptus) Avenue over the Quincy Channel, a more direct route from Fire Station 58 to the Project via Eucalyptus Avenue will be available, further improving emergency response times to the Project site. Based on the preceding discussion, the Project's potential to result in inadequate emergency access is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

[10] *Moreno Valley General Plan*, Safety Element, page 6-9.



Source: Urban Crossroads

Figure 4.2-3
Emergency Route Assessment

Potential Impact: ***Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.***

Impact Analysis: The Project will provide pedestrian and bikeway facilities consistent with City Municipal Code requirements and as may be identified in the Project Conditions of Approval, thereby precluding potential impacts below significance thresholds.

As discussed previously in this Section, RTA provides fixed-route bus service regionally along SR-60, and locally via Moreno Beach Drive, allowing for the possibility of future connections near the Project site. The City has coordinated with RTA and determined that installation of a bus stop or turn-out will not be required of the Project.

The Project does not propose elements or aspects that would interfere or conflict with current or proposed transit services. As supported by the preceding discussion, the Project will not create, nor facilitate hazards or barriers for pedestrians or bicyclists or other transportation modes. Nor will the Project conflict with adopted policies supporting alternative transportation.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: ***Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.***

Impact Analysis: The March Inland Port/March Air Reserve Base is the airport located nearest the Project site, approximately five miles to the southwest, east of I-215 and south of Cactus Avenue. The Project site is not located within an Airport Area of Influence or Airport Land Use Plan (ALUP).

The Project does not propose elements that would affect, or be affected by, air traffic facilities. As such, the Project will have no air traffic impacts.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

4.3 AIR QUALITY

4.3 AIR QUALITY

Abstract

This Section identifies and addresses potential air quality impacts that may result from construction and operations of the Project. More specifically, the air quality analysis evaluates the potential for the Project to result in the following impacts:

- *Conflict with or obstruct implementation of the applicable air quality plan;*
- *Violate any air quality standard or contribute substantially to an existing or projected air quality violation;*
- *Expose sensitive receptors to substantial pollutant concentrations;*
- *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;*
- *Create objectionable odors affecting a substantial number of people;*
- *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or*
- *Conflict with an applicable plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases.*

On the basis of the analysis presented herein, even after the application of all feasible mitigation measures, construction of the Project will result in temporary exceedances of regional thresholds for

VOC and NOx emissions and LST exceedances for PM_{10} (at receptor locations 71 meters [233 feet] or nearer to construction activities) and $PM_{2.5}$ (at receptor locations 35 meters [115 feet] or nearer to construction activities).

Further, even after application of all feasible operational mitigation, the Westridge Commerce Center Project would result in operational emissions of volatile organic compounds (VOC) and oxides of nitrogen (NOx) that exceed applicable SCAQMD regional thresholds. These are significant individual and cumulative air quality impacts. The Project will also result in an operational increase of the ozone precursors VOC and NOx, in a region that is in non-attainment for ozone. This is a significant cumulative air quality impact.

Other potential air quality impacts of the Project are either less-than-significant or can be reduced to levels that are less-than-significant with application of the mitigation measures described herein.

4.3.1 INTRODUCTION

This Section presents existing air quality conditions and identifies potential air quality impacts resulting from construction and operations of the Project. Local and regional climate, meteorology and air quality are discussed, as well as existing federal, state and regional air quality regulations. The information presented in this Section is summarized from three technical reports prepared by Urban Crossroads, Inc., each dated February 3, 2010 (revised): *Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley, California*; *Westridge Commerce Center Health Risk Assessment*; and *Westridge Commerce Center Climate Change Analysis*. Complete Project Air Quality Reports, including all supporting air quality modeling data, are presented in EIR Appendix C.

4.3.2 AIR QUALITY FUNDAMENTALS

Air pollution comprises many substances generated from a variety of sources, both man-made and natural. Since the rapid industrialization of the twentieth century, almost every human endeavor, especially those relying on the burning of fossil fuels, creates air pollution. Most contaminants are actually wasted energy in the form of unburned fuels or by-products of the combustion process. Motor vehicles are by far the most significant

source of air pollutants in urban areas, emitting photochemically reactive hydrocarbons (unburned fuel), carbon monoxide, and oxides of nitrogen. These primary pollutants chemically react in the atmosphere with sunlight and the passage of time to form secondary pollutants such as ozone.

Although substantive air quality improvements have been made in California over the past twenty years, Southern California still experiences severe air pollution problems. As discussed in greater detail in the following paragraphs, oxidants and suspended particulates represent the major air quality problems within the South Coast Air Basin (SCAB, Basin) encompassing the Project site.

Air pollutants are classified as either primary or secondary pollutants. Primary pollutants are generated daily and emitted directly from the source, whereas secondary pollutants are created over time and occur within the atmosphere as chemical and photochemical reactions take place. Examples of primary pollutants include carbon monoxide (CO), oxides of nitrogen (NO_2 and NO), sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$), and various hydrocarbons or reactive organic gases (ROG). Air pollutants from the Project, including CO, NOx, and ROG, are expected to originate primarily from motor vehicles during construction and operation, and fugitive dust during the construction phase. Examples of secondary pollutants include ozone (O_3), which is a product of the reaction between NOx and ROG in the presence of sunlight. Other secondary pollutants include photochemical aerosols. Secondary pollutants constitute a noteworthy air quality problem affecting the Basin.

To aid in the review of discussions presented subsequently in this Section, reoccurring terms, abbreviations, and acronyms are defined as follows: PPM - Parts Per Million; $\mu g/m^3$ - Micrograms Per Cubic Meter; PM_{10} - Particulate Matter Less Than 10 Microns In Diameter; $PM_{2.5}$ - Particulate Matter Less Than 2.5 Microns In Diameter.

4.3.2.1 Criteria Air Pollutants

Criteria air pollutants are those air contaminants for which air quality standards currently exist. Currently, state and federal air quality standards exist for ozone, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), carbon monoxide (CO), suspended particulate matter (PM_{10} and $PM_{2.5}$), and lead. California has also set standards for visibility, sulfates, hydrogen sulfide, and vinyl chloride. Evaluated criteria air contaminants or their precursors typically also include reactive organic gases (ROG), oxides of nitrogen (NOx), sulfur oxides (SOx), and respirable particulate matter (PM_{10}, $PM_{2.5}$). Pollutant characteristics, mechanisms of pollutant origination and potential health effects of air pollutants are described below.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless, toxic gas formed by incomplete combustion of fossil fuels. CO levels tend to be highest during the winter months when the meteorological conditions favor the accumulation of the pollutants. In the South Coast Air Basin, on-road motor vehicles are currently the primary source of CO. Other sources include aircraft, off-road vehicles, stationary equipment (e.g., fuel-fired furnaces, gas water heaters, fireplaces, gas stoves, gas dryers, charcoal grills), and landscape maintenance equipment such as lawnmowers and leaf blowers.

A consistent association between increased ambient CO levels and higher-than-average rates of hospital admissions for heart diseases (such as congestive heart failure) has been observed. Carbon Monoxide can cause decreased exercise capacity, and adversely affects conditions with an increased demand for oxygen supply (fetal development, chronic hypoxemia, anemia, and diseases involving the heart and blood vessels). Exposure to CO can cause impairment of time interval estimation and visual function.

Ozone

Ozone (O_3) is a photochemical oxidant formed when reactive organic gases (ROGs) and oxides of nitrogen (NOx), which are both byproducts of internal combustion engines, react in the presence of ultraviolet sunlight. Ozone creation can occur when primary pollutants

such as oxides of nitrogen and reactive organic gases are emitted, then undergo chemical changes in the presence of sunlight.

Short-term exposure to ozone can cause a decline in pulmonary function in healthy individuals including breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue and immunological changes. Additionally, an increase in the frequency of asthma attacks, cough, chest discomfort and headache can result.

A correlation has been reported between elevated ambient ozone levels and increases in daily hospital admission rates and mortality as a result of long-term ozone exposure. A risk to public health implied by altered connective tissue metabolism and host defense in animals has also been reported.

Oxides of Nitrogen

Oxides of nitrogen (NOx) serve as integral participants in the process of photochemical smog production. During combustion, oxygen reacts with nitrogen to produce NOx. Two major forms of NOx are nitric oxide (NO) and nitrogen dioxide (NO_2). Natural causal sources or originators of NOx include lightning, soils, wildfires, stratospheric intrusion, and the oceans. Natural sources accounted for approximately seven percent of 1990 emissions of NOx for the United States (U.S. Environmental Protection Agency (EPA) 1997). Atmospheric deposition of NOx occurs when atmospheric or airborne nitrogen is transferred to water, vegetation, soil, or other materials. Acid deposition involves the deposition of nitrogen and/or sulfur acidic compounds that can harm natural resources and materials. The major source of NOx in the Basin is on-road vehicles. Stationary commercial and service source fuel combustion are other contributors.

Exposure to NOx may alter sensory responses or impair pulmonary function, and may increase incidence of acute respiratory disease including infections and respiratory symptoms in children. Difficulty in breathing in healthy individuals as well as bronchitic groups may also occur. NOx is also an ozone precursor. Health effects of ground-level

ozone include: aggravated asthma; reduced lung capacity; increased respiratory illness susceptibility; increased respiratory and cardiovascular hospitalizations; and premature deaths.

Sulfur Dioxide

Sulfur dioxide (SO_2) is a colorless, pungent gas. At levels greater than 0.5 parts per million (ppm), SO_2 has a strong odor. Sulfuric acid is formed from sulfur dioxide, which is an aerosol particle component that affects acid deposition. Anthropogenic, or human-caused, sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. SO_2 is a precursor to sulfates and PM_{10}.

Health effects of SO_2 include higher frequencies of acute respiratory symptoms (including airway constriction in some asthmatics and reduction in breathing capacity leading to severe difficulties) and diminished ventilatory function in children. Very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

Lead

Lead (Pb) is a solid heavy metal that can exist in air pollution as an aerosol particle component. An aerosol is a collection of solid, liquid, or mixed-phase particles suspended in the air. It was first regulated as an air pollutant in 1976. Leaded gasoline was first marketed in 1923 and was used in motor vehicles until around 1970. The exclusion of lead from gasoline helped to decrease emissions of lead in the United States from 219,000 to 4,000 short tons per year between 1970 and 1997. Lead-ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources are from dust from soils contaminated with lead-based paint and solid waste disposal.

Lead adversely affects the development and function of the central nervous system, leading to learning disorders, distractibility, lower IQ and increased blood pressure. An increase in

blood lead levels may impair or decrease hemoglobin synthesis. Lead poisoning can cause anemia, lethargy, seizures, and death.

Lead concentrations once exceeded the state and federal air quality standards by a wide margin, but have not exceeded state or federal air quality standards at any regular monitoring station since 1982. Lead is no longer a gasoline additive, primarily accounting for reductions in airborne lead concentrations. Because airborne lead concentrations are currently nominal, and airborne lead is not a pollutant of concern within the Basin, lead is not discussed further in this Section.

Particulate Matter

Particulate matter is a generic term that defines a broad group of chemically and physically different particles (either liquid droplets or solids) that can exist over a wide range of sizes. Examples of atmospheric particles include those produced from combustion (diesel soot or fly ash), light produced (urban haze), sea spray produced (salt particles), and soil-like particles from re-suspended dust. Fugitive dust is defined as any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of humans (Rule 403, Fugitive Dust, SCAQMD).

Within air quality analyses, particulate matter is categorized by diameter: PM_{10} and $PM_{2.5}$. PM_{10} refers to particulate matter that is 10 microns or less in diameter (1 micron is one millionth of a meter, or one micrometer [μm]). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter. The size of particles can determine the residence time of the material in the atmosphere. $PM_{2.5}$ has a longer atmospheric lifetime than PM_{10} and, therefore, can be transported over longer distances.

Particulate matter originates from a variety of stationary and mobile sources. Stationary sources include: fuel combustion for electric utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal and recycling. Mobile or transportation-related sources include

particulate matter from highway vehicles and non-road vehicles and fugitive dust from paved and unpaved roads.

A consistent correlation between elevated ambient PM_{10} levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed.

Diesel Particulate Matter (DPM) is a mixture of many exhaust particles and gases that is produced when an engine burns diesel fuel. Many compounds found in diesel exhaust are carcinogenic, including sixteen compounds that are classified as possibly carcinogenic by the International Agency for Research on Cancer. DPM includes the particle-phase constituents in diesel exhaust. Some short-term (acute) effects of diesel exhaust include eye, nose, throat and lung irritation, as well as coughs, headaches, light-headedness and nausea. Diesel exhaust is a major source of ambient particulate matter pollution, and numerous studies have linked elevated particle levels in the air to increased hospital admission, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. DPM in the Basin poses the greatest cancer risk of all identified toxic air pollutants.

Reactive Organic Gases

Reactive organic gases (ROGs) are defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. It should be noted that there is no state or national ambient air quality standard for ROGs because they are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formulation of ozone. ROGs are also transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility. The major sources of ROGs in the Basin are on-road motor vehicles and solvent evaporation. ROGs are an also ozone precursor. Health effects of ground-level ozone include: aggravated asthma; reduced lung capacity; increased

respiratory illness susceptibility; increased respiratory and cardiovascular hospitalizations; and premature deaths.

Benzene is an ROG and a known carcinogen. Typical sources of benzene emissions include: gasoline service stations (fuel evaporation), motor vehicle exhaust, tobacco smoke, and oil and coal incineration. Benzene is also sometimes employed as a solvent for paints, inks, oils, waxes, plastic, and rubber. It is used in the extraction of oils from seeds and nuts. It is also used in the manufacture of detergents, explosives, dyestuffs, and pharmaceuticals. Short-term (acute) exposure of high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, unconsciousness can occur. Long-term (chronic) occupational exposure of high doses by inhalation has caused blood disorders, including aplastic anemia and lower levels of red blood cells.

Volatile Organic Compounds

Volatile organic compounds (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 form ozone 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: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O3, which is a criteria pollutant.

Toxic Air Contaminants

Toxic Air Contaminants (TACs) refer to a diverse group of air pollutants that can affect human health, however there are no ambient air quality standards adopted for TACs. With relation to the Project, the primary TACs of concern includes Diesel Particulate Matter (DPM). In 1998 the California Air Resources Board (CARB) identified diesel engine particulate matter as a toxic air contaminant. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Therefore DPM can be used as a surrogate measure of exposure for the mixture of chemicals that make up diesel exhaust as a whole. For purposes of this Project, the primary source of DPM will result from idling diesel trucks at the Project site.

4.3.3 SETTING

4.3.3.1 Local and Regional Climate

The Project site is located in the SCAB within the jurisdiction of SCAQMD. The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act (Act), which merged four (4) 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. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties), and the Riverside County portions of the Salton Sea Air Basin and Mojave Desert Air Basin.

The SCAB is bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. Neighboring air basins include the Mojave Desert Air Basin and Salton Sea Air Basin.

The regional climate, as well as localized temperature, wind, humidity, precipitation, and amount of sunshine, significantly influence the air quality in the SCAB. The annual average temperatures throughout the South Coast Air Basin vary from the low to middle 60s

(degrees Fahrenheit). 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 to sulfates 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 percent along the coast and 59 percent 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 diminish as distance from the coast increases.

More than 90 percent of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine (9) inches in the City of 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 increased shower frequency near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received at ground level 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 14 1/2 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 air pollutants. During the late

autumn to early spring rainy season, the SCAB is subjected to wind flows associated with storms traveling through the region from the northwest. This period also brings 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 areas.

In the SCAB, there are two (2) 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 NOX and 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.

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The Basin 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 on-shore 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.

Wind speed and direction data is not monitored by the California Air Resources Board (CARB) or SCAQMD for the Project area (Source Receptor Area (SRA) 24). This data was however obtained from the nearest site at the Redlands monitoring station (SRA 35), located approximately 8.4 miles north of the Project site. Prevailing winds move predominately from the northwest to the southeast with an average wind speed of 1.46 meters per second (m/s).

4.3.3.2 Existing Air Quality

Existing air quality is measured based upon 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, as well health effects of each pollutant regulated under these standards are shown in Table 4.3-1.

Table 4.3-1
State and National Criteria Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard	National Standard	Health and Atmospheric Effects	Major Sources
Ozone	1 hour	0.090 ppm	---	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when reactive organic gases (ROG) and nitrogen oxides (NOx) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
	8 hours	0.070 ppm	0.075 ppm		
Carbon Monoxide	1 hour	20.0ppm	35.0 ppm	Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9.0 ppm		
Nitrogen Dioxide	1 hour	0.180 ppm	---	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	Annual Avg.	0.030	0.053 ppm		
Sulfur Dioxide	1 hour	0.250 ppm	---	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	3 hours	---	0.50 ppm		
	24 hours	0.040 ppm	0.140 ppm		
	Annual Avg.	---	0.030 ppm		
Respirable Particulate Matter (PM-10)	24 hours	50.0 µg/m3	150.0 µg/m3	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	Annual Avg.	20.0 µg/m3	---		
Fine Particulate Matter (PM-2.5)	24 hours	---	35.0 µg/m3	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.
	Annual Avg.	12.0 µg/m3	15.0 µg/m3		
Lead	Monthly Ave.	1.50 µg/m3	---	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction.	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	---	1.50 µg/m3		
Hydrogen Sulfide	1 hour	0.030 ppm	No National Standard	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations)	Geothermal Power Plants, Petroleum Production and refining
Sulfates	24 hour	25.0 µg/m3	No National Standard	Breathing difficulties, aggravates asthma, reduced visibility	Produced by the reaction in the air of SO_2.
Visibility Reducing Particles	8 hour	Light extinction of 0.23/km; (visibility <10 miles)	No National Standard	Reduces visibility, reduced airport safety, lower real estate value, discourages tourism.	See PM_{10}/$PM_{2.5}$.

Source: California Air Resources Board, 2008. *Ambient Air Quality Standards,* available at http://www.arb.ca.gov/research/aaqs/aaqs2.pdf Standards last updated November 17, 2008; ppm = parts per million; µg/m3 = micrograms per cubic meter.

The determination of whether a region's air quality is in attainment with applicable federal and state standards is determined by comparing contaminant levels in ambient air samples to the state and federal standards. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O_3, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are not equaled or exceeded at any time in any consecutive three-year period; and the federal standards (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O_3 standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24 hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Table 4.3-2 presents the attainment designations.

The SCAQMD monitors levels of various criteria pollutants at monitoring stations located throughout the Basin. In 2006, the federal (national) and state standards for ozone at most monitoring stations exceeded applicable thresholds on one or more days. No areas of the SCAB exceeded federal or state standards for NO_2, SO_2, CO, sulfates or lead.

Table 4.3-2
Attainment Status of Criteria Pollutants in the South Coast Air Basin (SCAB)

Criteria Pollutant	State Designation	Federal Designation
Ozone - 1hour standard	Extreme Nonattainment	Extreme Nonattainment[1]
Ozone - 8 hour standard	Extreme Nonattainment	Severe-17 Nonattainment[2]
PM_{10}	Serious Nonattainment	Serious Nonattainment[3]
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment[4]
Nitrogen Dioxide	Attainment	Attainment/Maintenance
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
All others	Attainment/Unclassified	Attainment/Unclassified

Source: California Air Resources Board, changes to State Area Designations became effective July 26, 2007; changes to National Area Designations current as of February 2009 (http://www.arb.ca.gov/desig/adm/adm.htm).
[1] National 1-hour ozone standard was revoked in June 2005.
[2] CARB may petition for Extreme designation.
[3] Annual Standard Revoked September 2006.
[4] The EPA granted the request to redesignate the SCAB from nonattainment to attainment for the CO NAAQS on May 11, 2007 (Federal Register Volume 71, No.91), which became effective as of June 11, 2007.

Relative to the Project site, the nearest long-term air quality monitoring site for O_3 and PM_{10} is the SCAQMD Redlands monitoring station, located approximately 8.4 miles north of the Project site. Data for CO, NO_2, and $PM_{2.5}$ was obtained from the San Bernardino monitoring station, located approximately 13.3 miles northwest of the Project site. It should be noted that the San Bernardino monitoring station was utilized in lieu of the Redlands monitoring station only in instances where data was not available from the Redlands site. Data for SO_2 has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO_2 concentrations. The three (3) years of data in Table 4.3-3 indicates the number of days federal and/or state standards were exceeded within the study area.

With the exception of a single unoccupied temporary trailer and limited surface improvements, the Project site is currently vacant, and therefore does not generate emissions. Existing air quality conditions at the Project site reflect ambient monitored conditions as presented at Table 4.3-3.

Table 4.3-3
Project Area Air Quality Monitoring Summary 2006-2008
Redlands (SRA 35), and San Bernardino (SRA 34) Air Monitoring Station Data[a]

Pollutant	Standard	Year		
		2006	2007	2008
Ozone (O_3)				
Maximum 1-Hour Concentration (ppm)		0.160	0.149	0.154
Maximum 8-Hour Concentration (ppm)		0.135	0.124	0.120
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	60	54	72
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	64	79	100
Number of Days Exceeding Federal 8-Hour Standard	> 0.075 ppm	36	25	75
Number of Days Exceeding Health Advisory	≥ 0.15 ppm	5	0	1
Carbon Monoxide (CO)[b]				
Maximum 1-Hour Concentration (ppm)		3	4	2
Maximum 8-Hour Concentration (ppm)		2.3	2.3	1.8
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	0	0	0
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	0
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	0	0	0

Table 4.3-3
Project Area Air Quality Monitoring Summary 2006-2008
Redlands (SRA 35), and San Bernardino (SRA 34) Air Monitoring Station Data[a]

Pollutant	Standard	Year		
		2006	2007	2008
Nitrogen Dioxide (NO_2)[b]				
Maximum 1-Hour Concentration (ppm)		0.09	0.08	0.09
Annual Arithmetic Mean Concentration (ppm)		0.0252	0.0250	0.0217
Number of Days Exceeding State 1-Hour Standard	> 0.25[c] ppm	0	0	0
Inhalable Particulates (PM_{10})				
Maximum 24-Hour Concentration (µg/m³)		103	97	75
Number of Samples		60	60	60
Number of Samples Exceeding State Standard	> 50 µg/m³	12	19	14
Number of Samples Exceeding Federal Standard	> 150 µg/m³	0	0	0
Ultra-Fine Particulates ($PM_{2.5}$)[b]				
Maximum 24-Hour Concentration (µg/m³)		55.0	72.1	43.5
Annual Arithmetic Mean (µg/m³)		17.8	18.3	13.5
Number of Samples Exceeding Federal 24-Hour Standard	> 65[d] µg/m³	8	3	3

Source: South Coast AQMD http://www.aqmd.gov/smog/historicaldata.htm
[a] Redlands Monitoring Station (SRA 35) used unless otherwise noted.
[b] San Bernardino Monitoring Station (SRA 34) data
[c] CARB has revised the NO2 1-hour state standard from 0.25 ppm to 0.18 ppm, effective March 20, 2008.
[d] EPA has revised the federal 24-hour $PM_{2.5}$ standard from 65 µg/m³ to 35 µg/m³, effective December 17, 2006.

4.3.4 GENERAL PLAN GOALS AND APPLICABLE REGULATIONS

In addition to the state and national criteria pollutant standards previously presented, the Project is subject to the following applicable regulations.

4.3.4.1 Moreno Valley General Plan

The following discussions focus on General Plan goals and policies directly applicable to the Project within the context of the potential environmental impacts addressed by this Draft EIR. The Project's consistency with applicable Goals, Objectives and Policies from the General Plan are addressed in the following Table 4.3-4.

Table 4.3-4
City of Moreno Valley General Plan 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 located proximate to existing and proposed major roadways, acting to reduce vehicle trip lengths.*
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 reduce vehicle trip lengths and reducing vehicle-source emissions. The Project will further reduce mobile emissions by creating local employment opportunities, generally reducing commuter vehicle miles traveled (VMT) within the region. Additionally, the Project will implement measures that will reduce stationary source air pollutants.*
Policy 6.7.5: Require grading activities to comply with South Coast Air Quality Management 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.	***Consistent.*** *Pursuant to mitigation measures proposed herein, **t**he Project will surpass applicable Title 24 Energy Efficiency Standards by at least 20 percent. The Project design and operational programs will facilitate the goal of LEED Certification established by the Applicant.*

Source: City of Moreno Valley General Plan, Safety Element

4.3.4.2 Air Quality Management Planning

Air Quality Management Districts have the primary responsibility for controlling air pollution from all sources other than those directly emitted by motor vehicles, which falls under the jurisdiction of the CARB and the EPA. Air districts adopt and enforce rules and regulations to achieve state and federal ambient air quality standards. Air districts are further responsible for enforcing applicable state and federal laws.

The SCAQMD and the Southern California Association of Governments (SCAG) are the agencies responsible for preparing the AQMP for the Basin. Since 1979, a number of AQMPs have been prepared. The 1997 AQMP, updated in 1999 and replaced in 2003, was based on the 1994 AQMP and ultimately the 1991 AQMP and was designed to comply with state and federal requirements, reduce the high level of pollutant emissions in the Basin,

and ensure clean air for the region through various control measures. To accomplish its task, the 1991 AQMP relied on a multilevel partnership of governmental agencies at the federal, state, regional, and local level. These agencies (i.e., the EPA, CARB, local governments, SCAG, and SCAQMD) implement the AQMP programs.

The 2003 AQMP, adopted in August 2003, updated the attainment demonstration for the federal standards for ozone and PM_{10}, replaced the 1997 attainment demonstration for the federal CO standard and provided a basis for a maintenance plan for CO for the future, and updated the maintenance plan for the federal NO_2 standard that the Basin has met since 1992. The most recent comprehensive plan is the 2007 AQMP adopted on July 13, 2007, discussed in greater detail subsequently within this Section. In summary, the 2007 AQMP is designed to meet the State and Federal Clean Air Act planning requirements and focuses on ozone and $PM_{2.5}$. The 2007 AQMP incorporates significant new emissions inventories, ambient measurements, scientific data, control strategies, and air quality modeling.

Areas that meet the ambient air quality standards are classified as "attainment" areas, while areas that do not meet these standards are classified as "non-attainment" areas. The classifications for ozone non-attainment include and range in magnitude from: marginal, moderate, serious, severe, and extreme. The state and federal attainment status for the Basin are presented previously in Table 4.3-2.

The Basin is also designated as in attainment of the CAAQS for SO_2, lead, and sulfates. Areas that are designated as Severe 17 for the ozone standard must meet attainment of the 8-hour standard by 2021 (2024 if reclassified to Extreme). The $PM_{2.5}$ attainment date is to be met in the year 2015.

4.3.4.3 Federal Clean Air Act Requirements

The CAA requires plans to provide for the implementation of all reasonably available control measures including the adoption of reasonably available control technology for reducing emissions from existing sources. Other federal requirements addressed include mechanisms to track plan implementation and milestone compliance for O_3 and CO.

The EPA has recently phased out the federal 1-hour ozone standard and replaced it with a new 8-hour standard to protect against longer exposure periods. However, the Basin still experiences ozone levels over the prior federal 1-hour standard on more than 20 days per year. The Draft 2007 AQMP shows that by 2010, the Basin will still exceed the federal 1-hour ozone standard by 20 percent despite the implementation of existing air quality programs. The District and a number of environmental organizations have litigated against the EPA's revocation of the 1-hour standard with the case still pending.

The new 8-hour ozone standard is set at a concentration of 0.08 parts per million (ppm) and represents a tightening of the existing 1-hour ozone standard that was set at 0.12 ppm. Under the form of the standard adopted by the EPA, areas are allowed to disregard their three worst measurements every year and average their fourth highest measurements over a period of 3 years to determine if they meet the standard.

For particulate matter, the EPA established new annual and 24-hour standards for $PM_{2.5}$ to complement the existing PM_{10} standards. The new annual $PM_{2.5}$ standard is set at 15 micrograms per cubic meter and the new 24-hour $PM_{2.5}$ standard is set at 65 micrograms per cubic meter. The annual component of the standard was set to provide protection against typical day-to-day exposures as well as longer-term exposures, while the daily component protects against more extreme short-term events. For the new 24-hour $PM_{2.5}$ standard, the form of the standard is based on the 98^{th} percentile of 24-hour $PM_{2.5}$ concentrations measured in a year (averaged over 3 years) at the monitoring site with the highest measured values in an area. This form of the standard will reduce the impact of a single high exposure event that may be due to unusual meteorological conditions and thus provide a more stable basis for effective control programs.

While the EPA has retained the current annual PM_{10} standard of 50 micrograms per cubic meter, it has modified the form of the 24-hour PM_{10} standard set at 150 micrograms per cubic meter. More specifically, the EPA revised the one-expected exceedance form of the current standard with a 99^{th} percentile form, averaged over three (3) years. The current regulatory control strategies will continue to focus on attaining the 1-hour ozone standard

with the recognition that these controls will have benefits toward attaining the 8-hour ozone and $PM_{2.5}$ standards. The EPA is considering several options in transitioning from the 1-hour to the 8-hour standard, while ensuring that no backsliding will occur. Based on the recent consent decree guidance, it is most likely that the Basin will have to meet the federal $PM_{2.5}$ standards by 2015 and the 8-hour ozone standard by 2021 or 2024 if the area is re-designated as "Extreme."

4.3.4.4 2007 Air Quality Management Plan

To ensure continued progress toward clean air and compliance with state and federal requirements, the SCAQMD, in conjunction with the CARB and SCAG, prepared the 2007 revision to its AQMP. The 2007 AQMP employs up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources, and area sources.

The 2007 AQMP demonstrates attainment with the federal 8-hour ozone standard and for $PM_{2.5}$, replaces the 2003 attainment demonstration for the federal CO standard and maintenance plan for CO for the future; and updates the maintenance plan for the federal NO_2 standard that the Basin has met since 1992.

The 2007 AQMP also addresses several state and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The 2007 AQMP is consistent with and builds upon the approaches taken in the 2003 and 1997 AQMP and the 1999 Amendments to the State Implementation Plan (SIP) for the SCAB for the attainment of the federal ozone air quality standard.

Each revision of the AQMP represents a snapshot in time, based on the best available information. The 2007 AQMP generally is very similar to the structure of the 2003 AQMP, 1997 AQMP, and the 1999 Amendments to the SIP, but like all new editions it includes significant enhancements. The key updates incorporated in the 2007 AQMP are summarized as follows:

- Revised emissions inventory projections using 2002 as the base year, the CARB on-road motor vehicle emissions model EMFAC2007, and SCAG 2004 Regional Transportation Plan (RTP) forecast assumptions;

- Revised control strategy that updates remaining control measures from the 2003 AQMP, 1997/1999 SIP, and incorporation of new control measures toward attainment of the federal 8-hour ozone and $PM_{2.5}$ standards based on current technology assessments;

- Reliance on updated modeling tools for attainment demonstration relative to ozone, PM_{10} and $PM_{2.5}$; and

- Attainment demonstration of the federal 8-hour ozone and $PM_{2.5}$ standards.

The 2007 AQMP employs up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources, and area sources. While many technical tasks are still underway to complete the Plan revision, there is sufficient information to begin framing policy discussions on clean air strategies. Hence, the Draft Plan has been prepared and is being released for early public review and participation.

The 2007 AQMP proposes attainment demonstration of the federal $PM_{2.5}$ standards through a more focused control of SOx, directly emitted $PM_{2.5}$, and NOx supplemented with VOC by 2014. The 8-hour ozone control strategy builds upon the $PM_{2.5}$ strategy, augmented with additional VOC reductions to meet the standard by 2020. An extended attainment date (i.e., additional three years) is allowed under the Clean Air Act if a "bump-up" request is made by the state showing the need for such extension.

The 2007 AQMP proposes policies and measures currently contemplated by responsible agencies to achieve federal standards for healthful air quality in the Basin. The 2007 AQMP also addresses several federal planning requirements and incorporates significant new

scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools.

4.3.4.5 Standard Conditions and Uniform Codes

All projects constructed in the SCAB are subject to Standard Conditions and Uniform Codes. Compliance with these provisions is mandatory and as such, does not constitute mitigation under CEQA. Conditions specific to air quality are summarized below.

SCAQMD Rule 403

This rule sets requirements for dust control associated with grading and construction activities. In accordance with Rule 403, the SCAQMD requires that contractors implement Best Available Control Technology (BACT) for construction activities, and identifies a set of specific measures for projects less than 50 acres.

SCAQMD Rules 431.1 and 431.2

These rules require the use of low sulfur fuel for stationary construction equipment.

SCAQMD Rules 1108 and 1113

These rules set limitations on ROG content in asphalt and architectural coatings, respectively.

California Code of Regulations and Uniform Building Code

California Code of Regulations Title 24 specifies energy-efficient design requirements. In support of these requirements, the Uniform Building Code (UBC) prescribes window glazing, wall insulation and efficient ventilation methods.

4.3.4.6 Global Climate Change

Global Climate Change (GCC) is simply defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. GCC is currently one of the most controversial issues in the United States, and much debate exists within the scientific community whether or not global climate change is occurring naturally

or as a result of human activity. Some data suggests that global climate change has occurred in the past over the course of thousands or millions of years. These climate changes occurred naturally without human influence, as in the case of an ice age. However, many scientists believe that the climate shift presently taking place is occurring at a quicker rate and magnitude. Scientific evidence suggests that GCC is the result of increased concentrations of greenhouse gases in the earth's atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. Many scientists believe that this increased rate of climate change is the result of greenhouse gases resulting from human activity and industrialization over the past 200 years.

GCC Regulatory Setting

Global climate change first became a matter of concern in the 1980s, and the United Nations in 1988 created the Intergovernmental Panel on Climate Change (IPCC) in order to assess the potential impacts of global warming and develop strategies that could be instituted by nations in order to reduce greenhouse gas emissions.

Although global climate change did not become an international concern until the 1980s, efforts to reduce energy consumption began in California in response to the oil crisis in the 1970s, resulting in the unintended reduction of greenhouse gas emissions. In order to manage the state's energy needs and promote energy efficiency, AB 1575 created the California Energy Commission (CEC) in 1975.

Title 24 Energy Standards

Title 24 Part 6, enacted in 1978, requires buildings to meet energy efficiency standards. It is estimated by the CEC that consumers have saved $15.8 billion on utility bills since 1978 as a result of Title 24, indirectly resulting in a reduction in greenhouse gas emissions that would otherwise result from increased energy use.

Title 24 Energy Efficiency Standards (Title 24 Standards) are updated periodically to allow for the consideration and implementation of new energy efficient technologies. The CEC adopted new standards on April 23, 2008. All projects that apply for a building permit on

or after January 1, 2010 must meet the 2008 standards. Similarly, buildings proposed in subsequent years must comply with the then incumbent Title 24 Standards.

California Assembly Bill No. 1493 (AB 1493)

AB 1493, signed into law in 2002, requires CARB to develop and adopt the nation's first greenhouse gas emission standards for automobiles. The Legislature declared in AB 1493 that global warming was a matter of increasing concern for public health and environment in the state. It cited several risks that California faces from climate change, including reduction in the state's water supply, increased air pollution creation by higher temperatures, harm to agriculture, an increase in wildfires, damage to the coastline, and economic losses caused by higher food, water energy, and insurance prices. Further, the legislature stated that technological solutions to reduce greenhouse gas emissions would stimulate the California economy and provide jobs.

Executive Order S-3-05

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total greenhouse gas emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050. The Executive Order directed the Secretary of the CalEPA to coordinate a multi-agency effort to reduce greenhouse gas emissions to the target levels. The Secretary will also submit biannual reports to the Governor and state Legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California's resources; and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of the CalEPA created a Climate Action Team (CAT) made up of members from various state agencies and commission. CAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

California Assembly Bill 32

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the California Climate Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that CARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

California Senate Bill No. 1368

In 2006, the State Legislature adopted Senate Bill (SB) 1368, which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission (CPUC) to adopt a greenhouse gas emission performance standard (EPS) for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Due to the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law will effectively prevent California's utilities from investing in, otherwise financially supporting, or

purchasing power from new coal plants located in or out of the State. Thus, SB 1368 will lead to dramatically lower greenhouse gas emissions associated with California energy demand, as SB 1368 will effectively prohibit California utilities from purchasing power from out of state producers that cannot satisfy the EPS standard required by SB 1368.

Senate Bill 97

Senate Bill 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. The CEQA *Guidelines* were amended March 2010 to reflect topical questions/issues addressing GHG emissions and their potential impacts.

Executive Order S-01-07

On January 18, 2007 California Governor Arnold Schwarzenegger, through Executive Order S-01-07, mandated a statewide goal to reduce the carbon intensity of California's transportation fuel by at least ten percent by 2020. The order also requires that a California specific Low Carbon Fuel Standard be established for transportation fuels.

Senate Bills 1078 and 107 and Executive Order S-14-08

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Energy Standard to 33 percent renewable power by 2020. Governor Schwarzenegger plans to propose legislative language that will codify the new higher standard (Office of the Governor 2008).

Electricity and natural gas services are provided to the site by Southern California Edison. Currently, 15 percent of SCE's energy mix comes from renewable energy including wind, solar, biomass, small hydropower and geothermal sources. SCE is working toward achieving the 20 percent goal of SB 1078.

Senate Bill 375

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPOs regional transportation plan. CARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every 8 years but can be updated every 4 years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects will not be eligible for funding programmed after January 1, 2012.

This law also extends the minimum time period for the regional housing needs allocation cycle from 5 years to 8 years for local governments located within an MPO that meets certain requirements. City or county land use policies (including general plans) are not required to be consistent with the regional transportation plan (and associated SCS or APS). However, new provisions of CEQA would incentivize (through streamlining and other provisions) qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

California Climate Action Registry General Reporting Protocol

The California Climate Action Registry (CCAR) was established in 2001 by Senate Bill (SB) 1771 and SB 527 (Chapter 1018, Statutes of 2000, and Chapter 769, Statutes of 2001, respectively) as a nonprofit voluntary registry for GHG emissions. The purpose of the CCAR is to help companies and organizations with operations in the state to establish GHG emissions baselines against which any future GHG emissions reduction requirements may be applied. CCAR has developed a general protocol (CCAR 2008) and additional industry-specific protocols that provide guidance on how to inventory GHG emissions for participation in the registry.

This Protocol provides the principles, approach, methodology, and procedures required for participation in the California Registry. It is designed to support the complete, transparent, and accurate reporting of an organization's GHG emissions inventory in a fashion that minimizes the reporting burden and maximizes the benefits associated with understanding the connection between fossil fuel consumption, electricity use, and GHG emissions in a quantifiable manner. The most updated version of this protocol was prepared in April of 2008. All cabinet-level state agencies and departments have joined the CCAR. Membership in the CCAR means that all members of the Governor's Cabinet will be reporting their greenhouse gas emissions on a yearly basis.

CARB Early Action Measures

In June 2007, CARB directed staff to pursue 37 early actions for reducing GHG emissions under AB 32. The broad spectrum of strategies to be developed - including a Low Carbon Fuel Standard, regulations for refrigerants with high global warming potential, guidance and protocols for local governments to facilitate greenhouse gas reductions, and green ports - reflects the government's responsive actions to immediately address GHGs.

In addition to approving the 37 greenhouse gas reduction strategies, CARB directed staff to further evaluate early action recommendations made at the June 2007 meeting, and to report back to CARB within six months. CARB's approach suggested a desire to try to pursue greater GHG emissions reductions in California in the near-term. Since the June 2007 CARB hearing, CARB staff has evaluated all 48 recommendations submitted by several stakeholders and several internally-generated staff ideas, and has published the Draft List of Early Action Measures To Reduce Greenhouse Gas Emissions In California Recommended For Board Consideration.

The Board has identified nine (9) Discrete Early Action measures to date, including potential regulations affecting landfills, motor vehicle fuels, refrigerants in cars, port operations, and other sources in 2007. The Board has already approved two (2) Discrete Early Action measures (ship electrification at ports and reduction of high Global Warming

Potential (GWP) gases in consumer products). Regulatory development for the remaining measures is underway.

California Climate Action Team (CAT)

In response to Executive Order Executive Order S-3-05, the Secretary of the CalEPA created the CAT, which consists of 14 agencies and divided into 11 subgroups, nine (9) of which address specific economic sectors, and two that address implementing a multi-sector approach to addressing climate change. The subgroups consist of representatives from appropriate state agencies and departments.

In March 2006, the CAT published the Climate Action Team Report to Governor Schwarzenegger and the Legislature (the "2006 CAT Report"). The 2006 CAT Report identifies strategies that the state could pursue to reduce the potential for climate change from GHG emissions. These are strategies that could be implemented by various state agencies to ensure that the Governor's targets are met and can be met with existing authority of state agencies. The CAT Report provides GHG emission reduction strategies, which include the following:

- *Climate Change Standards.* AB 1493 (Pavley) requires the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by CARB in September 2004.

- *Green Buildings Initiative.* Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by 2015, as compared with 2003 levels. The Executive Order and related action plan spell out specific actions state agencies are to take with state-owned and state-leased buildings. The order and plan also provide various strategies and incentives to encourage private building owners and operators to achieve the 20 percent target.

- *Diesel Anti-Idling.* In July 2004, CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.

- *Building Energy Efficiency Standards in Place and in Progress.* Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (applicable to newly constructed buildings, and additions to and alterations to existing buildings).

- *Appliance Energy Efficiency Standards in Place and in Progress.* Public Resources Code 25402 authorizes the CEC to adopt and periodically update its appliance energy efficiency standards (applicable to devices and equipment using energy that are sold or offered for sale in California).

- *Fuel-Efficient Replacement Tires & Inflation Programs.* State legislation established a statewide program to encourage the production and use of more efficient tires.

- *Measures to Improve Transportation Energy Efficiency.* Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools, and information that advance cleaner transportation and reduce climate change emissions.

In March 2008, CAT subgroups submitted more than 100 GHG reduction measures to the CARB Office of Climate Change to be considered for inclusion in CARB's Scoping Plan. CalEPA also submitted a Report Card collected from CAT agencies on proposed GHG reduction measures, including an estimate of the actual emissions reductions anticipated from those measures.

CAPCOA January 2008 CEQA and Climate Change White Paper

In January 2008, the California Air Pollution Control Officers Association (CAPCOA) issued a "white paper" on evaluating GHG emissions under CEQA. The CAPCOA white paper strategies are not guidelines and have not been adopted by any regulatory agency;

rather, the paper is offered as a resource to assist lead agencies in considering climate change in environmental documents.

The CAPCOA white paper addresses what constitutes new emissions, how baseline emissions should be established, what should be considered cumulatively considerable under CEQA, what a "business as usual" scenario means, and whether an analysis should include life-cycle emissions.

The CAPCOA white paper contains a Climate Change Significance Criteria Flow Chart that proposes a tiered approach to determining significance under CEQA. The flow chart would consider a proposed plan's impact to be significant unless a General Plan for the project area exists that is in compliance with AB 32 (showing that GHG emissions for 2020 would be less than 1990 emissions for the plan area). The flow chart would consider a proposed project's impact to be significant unless one of the following can be demonstrated:

- The project is exempt under SB 97;
- The project is on the "Green List";
- A General Plan for the project area exists that is in compliance with AB 32; and/or
- GHG emissions are analyzed and mitigated to less-than-significant.

The CAPCOA white paper considers GHG impacts to be exclusively cumulative impacts. This is consistent with guidance provided in the OPR Technical Advisory.

Climate Change Proposed Scoping Plan

On December 11, 2008 CARB adopted its Climate Change Scoping Plan (Scoping Plan), which functions as a roadmap of CARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations (CARB 2008b). The Scoping Plan contains the main strategies California will implement to reduce carbon dioxide equivalent (CO_2e) emissions by 169 million metric tons (MMT), or approximately 30 percent, from the state's projected 2020 emissions level of 596 MMT of CO_2e under a business-as-usual scenario. (This is a reduction of 42 MMT CO_2e, or almost 10 percent, from

2002-2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.) The Scoping Plan also breaks down the amount of GHG emissions reductions CARB recommends for each emissions sector of the state's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e);
- The Low-Carbon Fuel Standard (15.0 MMT CO_2e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO_2e).

While CARB has identified a GHG reduction target of 15 percent for local governments, CARB has not yet determined what amount of GHG emissions reductions it recommends from local government land use decisions (Table 2 of the Proposed Scoping Plan). CARB has however, identified a 5 MMT GHG reduction estimate resulting from implementation of Reduction Strategy T-3 (provided at Appendix 1 of the Proposed Scoping Plan). Notwithstanding, the Scoping Plan notes that its successful implementation relies on locally-initiated land use planning and urban growth decisions. In this respect, local governments have primary authority to plan, zone, approve, and permit land development.. CARB further acknowledges that decisions on how land is used will have large effects on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. Also noteworthy is the fact that the Scoping Plan does not include any direct discussion about GHG emissions generated by construction activity. The Proposed Scoping Plan expands the list of nine (9) Discrete Early Action Measures to a list of 39 Recommended Actions.

OPR June 2008 Technical Advisory on CEQA and Climate Change

The OPR June 2008 Technical Advisory offers recommendations for identifying GHG emissions, determining significance under CEQA, and mitigating impacts.

The June 2008 OPR Advisory states that lead agencies under CEQA should develop their own approach to performing a climate change analysis, for projects that generate GHG emissions. The June 2008 OPR Advisory also states that the lead agency should assess whether project emissions are individually or cumulatively significant, and implement strategies to avoid, reduce, or otherwise mitigate the impacts of those emissions when impacts are potentially significant. However, CARB's subsequently released draft thresholds acknowledge that the GHG analysis be conducted on a cumulative basis as GHG is a global issue.

Regional agencies can attempt to reduce GHG emissions through their planning processes. For example, regional transportation planning agencies can adopt plans and programs that address congestion relief and reduce vehicle miles traveled (VMT).

CEQA Evaluation of Global Climate Change

Consistent with the criteria provided at Appendix H of the *CEQA Guidelines*, (*Guidelines*) the Project's GCC impacts would be considered potentially significant if the Project were to:

- *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or*

- *Conflict with an applicable plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases.*

Section 15064.4(b) of the *Guidelines* provides direction for lead agencies for assessing the significance of impacts of greenhouse gas emissions:

1. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; or

3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared . . .

Based on the direction provided in Section 15064.4 of the *Guidelines*, a lead agency should make a good-faith effort, based on available information, to describe, calculate, or estimate the amount of greenhouse gas emissions associated with a project. Because the methodologies for performing this assessment are anticipated to evolve over time, a lead agency shall have discretion to determine, in the context of a particular project, whether to:

1. Use a model or methodology to quantify greenhouse gas emissions associated with a project and which of any available model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should also include a qualitative discussion or analysis regarding the limitations of the particular model or methodology selected for use.

2. Rely on qualitative or other performance based standards for estimating the significance of greenhouse gas emissions.

CARB Preliminary Draft Staff Proposal, October 2008

Separate from its Scoping Plan approved in December of 2008, CARB issued a Staff Proposal in October 2008, as its first step toward developing recommended statewide interim thresholds of significance for GHGs that may be adopted by local agencies for their own use. CARB staff's objective in this proposal is to develop a threshold of significance that will result in the vast majority (approximately 90 percent statewide) of GHG emissions from new industrial projects being subject to CEQA's requirement to impose feasible mitigation. The proposal does not attempt to address every type of project that may be subject to CEQA, but instead focuses on common project types that, collectively, are responsible for substantial GHG emissions – specifically, industrial, residential, and commercial projects. CARB is developing these thresholds in these sectors to advance climate objectives, streamline project review, and encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the state. These draft thresholds are under revision in response to comments. Finalized thresholds are not expected until 2010.

As currently proposed by CARB, the threshold consists of a quantitative threshold of 7,000 metric tons (MT) of CO_2e per year for operational emissions (excluding transportation), and performance standards for construction and transportation emissions. These performance standards have not yet been developed.

However, CARB's proposal is not yet final, and thus cannot be applied to the Project. Further, CARB's proposal sets forth draft thresholds for industrial projects that have high operational stationary GHG emissions, such as manufacturing plants, or uses that utilize combustion engines. Thus, mobile source emissions are not addressed. This Project's GHG emissions are mostly from mobile sources, and as such, the CARB proposal is not applicable to the Project.[1]

[1] http://www.arb.ca.gov/cc/localgov/ceqa/meetings/102708/prelimdraftproposal102408.pdf

South Coast Air Quality Management District (SCAQMD) Draft Screening Flowchart
As an interim method for determining significance under CEQA until statewide significance thresholds are established, SCAQMD developed a draft tiered flowchart in August 2008, for determining significance thresholds for GHGs.[2] In October 2008, an update to the SCAQMD tiered flowchart modified its original flowchart slightly, in conformance with CARB's October 2008 Preliminary Draft Staff Proposal, by adding separate Significance Screening Levels for industrial projects (stationary source GHG emissions ≥ 10,000 metric tons per year of carbon dioxide equivalent) versus commercial/residential projects (stationary source GHG emissions ≥ 3,000 metric tons per year of carbon dioxide equivalent). In December 2008, SCAQMD adopted these thresholds, but only with respect to projects where SCAQMD is the lead agency. Additionally, SCAQMD is currently not recommending Tier 4 of these Screening Levels. However, as with the CARB proposal discussed above, SCAQMD's thresholds do not account for mobile source emissions, and thus are not applicable to the Project.

In addition to the thresholds, SCAQMD uses a tiered approach in which a proposed project is deemed not to have a significant impact related to GHG emissions if any of the following conditions are met:

- GHG emissions are within GHG budgets in an approved regional plan;
- Incremental increases in GHG emissions due to the project are below the defined Significance Screening Levels, or Mitigated to Less than the Significance Screening Level;
- Performance standards are met by incorporating project design features and/or implementing emission; and
- Carbon offsets are made to achieve target significance screening level.

[2] South Coast Air Quality Management District, *Greenhouse Gas CEQA Significance Threshold: Significance Threshold Stakeholder Working Group #5*, August 27, 2008. Retrieved October 23, 2008, from http://www.aqmd.gov/ceqa/handbook/GHG/aug27mtg/ghgmtg5.pdf.

Since the SCAQMD thresholds are currently in Draft form, they do not apply to the Project. Further, there is no approved regional plan setting out GHG budgets, thus the SCAQMD tiered approach cannot be applied to the Project.

Greenhouse Gas Emissions Inventories

It is estimated that the United States produces approximately 20 percent of global greenhouse gas emissions. Each year, the EPA prepares an inventory of national greenhouse gas emissions in order to track emissions trends and compare data on a global level. In the United States, the most abundant greenhouse gas emitted by human activity is carbon dioxide, comprising approximately 85 percent of total greenhouse gas emissions. Methane emissions, which are associated with livestock and waste decomposition, have steadily declined since 1990. Nitrous oxide emissions, produced by agricultural processes and motor vehicle exhaust, have decreased slightly since 1990. Overall, greenhouse gas emissions in the United States have risen by 16.3 percent between 1990 and 2005.

Although California's rate of growth of greenhouse gas emissions is slowing, the state is still a substantial contributor. In 2004, the state produced an estimated 492 million gross metric tons of carbon dioxide equivalent greenhouse gas emissions. It should be noted however that between the years of 1990 and 2004, California's population has increased by 16 percent while over the same period the growth of greenhouse gas emissions has slowed by 9.7 percent. Much of this reduction in greenhouse gas emissions can be attributed to energy conservation measures in residential and commercial buildings and appliances implemented under Title 24 of the California Building Code. With the implementation of the stricter 2005 Building Energy Efficiency Standards, the California Energy Commission estimates that residential electricity consumption will be reduced by 20.4 percent, and natural gas consumption will be reduced by 8.3 percent compared to 2001 standards. Based on the California Energy Commission's estimates, California's residential and commercial sectors are already in compliance with the goals set by AB 32 to reduce greenhouse gas emissions to 1990 levels.

Building-related energy consumption was further reduced by the 2008 Building Energy Efficiency Standards, which apply to new residential and commercial construction. The California Energy Commission estimates that these new standards will reduce energy consumption for nonresidential buildings by 8.3 percent. Compliance with these updated California Building Code Title 24 standards will not only reduce energy consumption and costs, but will further reduce emissions of greenhouse gases when compared to older construction.

Water use efficiency is another measure through which greenhouse gas emissions can be reduced. According to the California Climate Action Team Report, "19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute, and use water and wastewater. When a unit of water is saved, so too is the energy required to convey, treat, affect local delivery, perform wastewater treatment, and safely dispose of that unit of water." Thus, reduced energy use resulting from water conservation leads to reduced greenhouse gas emissions.

Global Climate Change

Global Climate Change (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, CO_2 (Carbon Dioxide), N_2O (Nitrous Oxide), CH_4 (Methane), hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. 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. According to the CARB, the climate change that is currently in effect differs from previous climate changes in both rate and magnitude (CARB, 2004, Technical Support document for Staff Proposal Regarding Reduction of Greenhouse Gas Emissions from Motor Vehicles).

Gases that trap heat in the atmosphere are often referred to as greenhouse gases. Greenhouse gases are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural greenhouse gas effect, the Earth's average temperature would be approximately 61° 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.

Although California's rate of growth of greenhouse gas emissions is slowing, the state is still a substantial contributor. In 2004, the state is estimated to have produced 492 million gross metric tons of carbon dioxide equivalent greenhouse gas emissions. Despite a population increase of 16 percent between 1990 and 2004, California has significantly slowed the rate of growth of greenhouse gas emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls.

Global Climate Change Gases

For the purposes of this analysis, emissions of carbon dioxide, methane, and nitrous oxide were evaluated. Although other substances such as fluorinated gases also contribute to global climate change, sources of fluorinated gases are not well defined and no accepted emissions factors or methodology exist to accurately calculate these gases. The potential for fluorinated gases to result from operation of the Project is primarily a concern for HCFC emissions associated with project air conditioning leakage.

Greenhouse gases have varying global warming potential (GWP) values; GWP values represent the potential of a gas to trap heat in the atmosphere. Carbon dioxide is utilized as the reference gas for GWP, and thus has a GWP of 1.

The atmospheric lifetime and GWP of selected greenhouse gases are summarized at Table 4.3-5. As indicated, GWP values range from 1 for carbon dioxide to 23,900 for sulfur hexafluoride.

Table 4.3-5
Global Warming Potentials and Atmospheric Lifetimes

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide	50 - 200	1
Methane	12 (+/-3)	21
Nitrous Oxide	120	310
HFC-23	264	11,700
HFC-134a	14.6	1,300
HFC-152a	1.5	140
PFC: Tetrafluoromethane (CF_4)	50,000	6,500
PFC: Hexafluoroethane (C_2F_6)	10,000	9,200
Sulfur Hexafluoride (SF_6)	3,200	23,900

Source: United States EPA, 2006.

Water Vapor: Water vapor (H_20) is the most abundant, important, and variable greenhouse gas 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.

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 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 also condense into clouds, which are more able to reflect incoming solar radiation, thereby reducing radiant and thermal heat gain.

There are no health effects from water vapor itself; however, when some pollutants come in contact with water vapor, they can dissolve, and water vapor then acts as a pollutant-carrying agent. The main source of water vapor is ocean evaporation (approximately 85 percent). Other sources include: evaporation from other water bodies, sublimation (change from solid to gas) of sea ice and snow, and transpiration from plants.

Carbon Dioxide: Carbon dioxide (CO_2) is an odorless and colorless GHG. Outdoor levels of carbon dioxide are not high enough to result in negative health effects. Carbon dioxide 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. Carbon dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks.

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, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30 percent. Left unchecked, the concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources.

Methane: Methane (CH_4) is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is

brief (10-12 years), compared to other GHGs. No health effects are known to occur from exposure to methane.

Methane 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 methane. Other anthropocentric sources include fossil-fuel and biomass combustion.

Nitrous Oxide: Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide 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).

Concentrations of nitrous oxide also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide 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 used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. Nitrous oxide can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction.

Chlorofluorocarbons: Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C2H6) 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 are no longer being used; therefore, it is not likely that health effects would be experienced. Nonetheless, 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.

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.

Hydrofluorocarbons: Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the greenhouse gases, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF3), HFC-134a (CF3CH2F), and HFC-152a (CH3CHF2). Prior to 1990, the only significant emissions were of HFC-23. HFC-134a emissions are increasing due to its use as a refrigerant. The EPA estimates that concentrations of HFC-23 and HFC-134a are now about 10 parts per trillion (ppt) each; and that concentrations of HFC-152a are about 1 ppt. No health effects are known to result from exposure to HFCs, which are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons: Perfluorocarbons (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 (CF4) and hexafluoroethane (C2F6). The EPA estimates that concentrations of CF4 in the atmosphere are over 70 ppt.

No health effects are known to result from exposure to PFCs. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur Hexafluoride: Sulfur hexafluoride (SF6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900). The EPA indicates that concentrations in the 1990s were about 4 ppt. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.

Sulfur hexafluoride 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.

Health Effects

The potential health effects related directly to the emissions of carbon dioxide, methane, and nitrous oxide as they relate to development projects such as the Project are still being debated. Their cumulative effects to global climate change have the potential to cause great harm to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also fear 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 (American Lung Association, 2004).

4.3.5 STANDARDS OF SIGNIFICANCE

As identified within the *CEQA Guidelines*, and consistent with recent state directives regarding greenhouse gas emissions, air quality impacts would be considered potentially significant if the Project would:

- *Conflict with or obstruct implementation of the applicable air quality plan.* This impact would occur if the Project were deemed inconsistent with applicable SCAQMD AQMP consistency criteria. According to the SCAQMD (1993), there are two key indicators of AQMP consistency: 1) that 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 timely attainment of air quality standards or the interim

emission reductions specified in the AQMP; and 2) whether the project will exceed the assumptions in the AQMP based on the year of project build out and phase.

- *Violate any air quality standard or contribute substantially to an existing or projected air quality violation.* Project violation of applicable SCAQMD, state, or federal standards would constitute a potentially significant impact in this regard. Table 4.3-1 presented earlier in this Section identifies current federal and state air quality standards. Similarly, previous Table 4.3-6 identifies regional and localized significance thresholds for criteria air pollutants, as established by SCAQMD.

- *Expose sensitive receptors to substantial pollutant concentrations.* Exceedance of SCAQMD Localized Significance Thresholds (identified in Table 4.3-6), exceedance of cancer risk exposure standards (emissions of toxic air contaminants that constitute an increased risk of greater than ten in one million); or creation of CO hot spots (based on CO generation that exceeds either the one-hour concentration threshold of 20.0 ppm or the 8-hour concentration threshold of 9.0 ppm) would be considered potentially significant.

- *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.* The Project lies within PM_{10}/$PM_{2.5}$, and ozone non-attainment areas. If the Project would result in significant impacts for these pollutants (i.e., exceedance of SCAQMD thresholds for PM_{10}/$PM_{2.5}$, or the exceedance of thresholds for the ozone precursors NOx or VOC), a potentially significant net increase of pollutants within the encompassing non-attainment area(s) would occur.

- *Create objectionable odors affecting a substantial number of people.* The Project does not propose activities or facilities subject to odor regulations. Absent specifically regulated odor-producing activities or facilities, evaluation of objectionable odors is largely qualitative and dependent on factors including but not limited to; the type and source of odors, presence or proximity of receptors, meteorological conditions, and any history of complaints surrounding similar proposal.

- *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.* The City of Moreno Valley has not yet adopted a numeric threshold of significance for emissions of greenhouse gases. Within this analysis, Project GHG emissions are preliminarily evaluated against quantitative thresholds proposed by CARB (7,000 metric tons per year of carbon dioxide equivalent from non-transportation related GHG sources); or SCAQMD (for projects where SCAQMD is the lead agency, generation of stationary source GHG emissions equal to or greater than 10,000 metric tons per year of carbon dioxide equivalent.)

- *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.* Consistent with provisions of the AB 32 Scoping Plan the potential for Project GHG emissions to "conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases" would be potentially significant if: (1) the Project would conflict with the GHG reduction measures adopted in CARB's AB 32 Scoping Plan and/or (2) the Project generates GHG that may have a cumulatively significant impact on the environment.

In order to determine whether or not a given project would cause a significant effect on the environment, the impact of the project must be determined by examining the types and levels of emissions generated and their impacts on factors that affect air quality. To accomplish this determination of significance, the SCAQMD has established air pollution thresholds against which a project can be evaluated and assist lead agencies in determining whether or not the project under consideration is significant. If the thresholds are exceeded by a project, then the impact should be considered potentially significant.

While the final determination of significance thresholds is within the purview of the lead agency pursuant to the State *CEQA Guidelines*, the SCAQMD recommends that the following air pollution thresholds be used by lead agencies in determining whether the construction or operational phase of a project is significant. If the lead agency finds that the project under consideration has the potential to exceed any of the air pollution thresholds, project-related air quality impacts should be considered potentially significant.

4.3.5.1 Regional and Local Thresholds of Significance

The SCAQMD has developed regional and localized significance thresholds for regulated pollutants, as summarized at Table 4.3-6. The SCAQMD's CEQA Air Quality Significance Thresholds (March 2009) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having potential individually and cumulatively significant air quality impacts.

Table 4.3-6
SCAQMD Thresholds

Maximum Daily Emissions Thresholds (Regional Thresholds)		
Pollutant	**Construction**	**Operational**
NOx	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
SOx	150 lbs./day	150 lbs./day
CO	550 lbs./day	550 lbs./day
Lead	3 lbs./day	3 lbs./day
Ambient Air Quality for Criteria Pollutants (Localized Thresholds)		
NO_2		
1-hour average (state)	0.18 ppm	
annual average (state)	0.030 ppm	
PM_{10}		
24-hour average (construction)	10.4 $\mu g/m^3$	
24-hour average (operations)	2.5 $\mu g/m^3$	
$PM_{2.5}$		
24-hour average (construction)	10.4 $\mu g/m^3$	
24-hour average (operations)	2.5 $\mu g/m^3$	
CO		
1-hour average	20.0 ppm	
8-hour average	9.0 ppm	

Source: *Westridge Commerce Center Air Quality Impact Analysis* (Urban Crossroads), February 3, 2010.

4.3.6 POTENTIAL IMPACTS AND MITIGATION MEASURES

Following is an analysis of potential air quality impacts that are expected to occur as a result of the Project. Potential emissions are considered for Project construction and operation. For each topical discussion, potential impacts are evaluated under applicable criteria established above at Section 4.3.5, "Standards of Significance."

Potential Impact: Conflict with or obstruct implementation of the applicable air quality plan.

Impact Analysis: The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 12,000 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what used 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 Basin. 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 evolving land use plans, and to minimize any negative fiscal impacts of air pollution control on the economy.

SCAQMD 2007 AQMP

The SCAQMD has published the Final 2007 AQMP, which was adopted by the SCAQMD Governing Board on June 1, 2007. In September 2007, the CARB Board adopted the SCAQMD 2007 AQMP as part of the SIP. The purpose of the 2007 AQMP for the SCAB (and those portions of the Salton Sea Air Basin under the SCAQMD's jurisdiction) is to set forth a comprehensive program that will lead these areas into compliance with federal and

state air quality planning requirements for ozone and $PM_{2.5}$. On September 27, 2007, the CARB Board adopted the State Strategy for the 2007 State Implementation Plan and the 2007 South Coast Air Quality Management Plan as part of the (SIP). Additionally, the 2007 AQMP has been submitted to the EPA for approval, no timeline on the approval is available at this time.

As part of the 2007 AQMP, the SCAQMD is requesting EPA's approval of a "bump-up" to the "extreme" nonattainment classification for ozone in the SCAB, which would extend the attainment date to 2024 and allow for the attainment demonstration to rely on emission reductions from measures that anticipate the development of new technologies or improvement of existing control technologies. Although $PM_{2.5}$ plans for nonattainment areas were due in April 2008, the 2007 AQMP also focuses on attainment strategies for the $PM_{2.5}$ standard through stricter control of sulfur oxides, directly-emitted $PM_{2.5}$, NO_X, and VOCs. The need to commence $PM_{2.5}$ control strategies before April 2008 is due to the attainment date for $PM_{2.5}$ (2015) being much earlier than that for ozone (2021 for the current designation of severe-17 or 2024 for the extreme designation). However, it should be noted that the $PM_{2.5}$ plans are still in the process of being submitted. Control measures and strategies for $PM_{2.5}$ will also help control ozone generation in the region because $PM_{2.5}$ and ozone share similar precursors (e.g., NO_X). The SCAQMD has integrated $PM_{2.5}$ and ozone reduction control measures and strategies in the 2007 AQMP. In addition, the AQMP focuses on reducing VOC emissions, which have not been reduced at the same rate as NO_X emissions in the past. Hence, the SCAB has not achieved the reductions in ozone as were expected in previous plans.

The 2007 AQMP was based on assumptions provided by both CARB and SCAG in the new EMFAC2007 model for the most recent motor vehicle and demographics information, respectively. The air quality levels projected in the 2007 AQMP are based on several assumptions. For example, the 2007 AQMP has assumed that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its 2004 RTP. The 2007 AQMP also has assumed that such development projects will

implement strategies to reduce emissions generated during the construction and operational phases of development. An evaluation of the Project's consistency with the 2007 AQMP follows.

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). These indicators are discussed below:

- Consistency Criterion No. 1: The project under consideration 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 violations of the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). As evaluated as part of the Project LST analysis, the Project may temporarily exceed the short-term construction standards for localized PM_{10} and $PM_{2.5}$ emissions. However, it is important to note that PM_{10} and $PM_{2.5}$ concentrations are highly localized, and tend to settle out close to the source of emissions. For the Project, PM_{10} and $PM_{2.5}$ emissions are primarily a concern during the initial construction period, during which fugitive dust is generated by rough grading activities. This period, during which the predominance of PM_{10} and $PM_{2.5}$ emissions are generated, will be of relatively short duration and the emissions produced will be temporary and intermittent. The resulting localized, short-term and intermittent concentration of $PM_{10}/PM_{2.5}$ would not contribute substantially to an existing or potential future violation.

Moreover, emissions generated by Project operational activities will not exceed applicable operational LSTs, and would not violate the CAAQS or NAAQS. While operational emissions will be generated in excess of SCAQMD's regional threshold criteria, these emissions are already accounted for in the AQMP since the Project is consistent with the land uses and development intensities reflected in the City General Plan and incorporated

in the adopted AQMP. Moreover, consistent with intent and provisions of the AQMP, the Project will implement all feasible mitigation, and comply with all applicable SCAQMD rules developed to reduce air pollutant emissions. On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

- Consistency Criterion No. 2: The project under consideration will not exceed the assumptions in the AQMP in 2011 or increments based on the years of Project build-out phase.

Assumptions of the AQMP used in projecting future emissions levels are based in part on land use data provided by General Plan documentation. Projects that propose general plan amendments and changes of zone may increase the intensity of use and/or result in higher traffic volumes, thereby resulting in increased stationary area source emissions and/or vehicle source emissions when compared to the AQMP assumptions. If however, 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 land use proposed by the Project would require a change of zone, from Business Park to Light Industrial. However, the uses proposed by the Project are consistent with the range of development intensities for the subject site reflected in the City General Plan. In this regard, the site's current General Plan Land Use designation (Business Park/ Light Industrial/) allows for either business park or light industrial uses, with the range of permitted uses further defined by the site's current zoning designation, "Business Park."

With regard to consistency with AQMP assumptions, the City's General Plan Buildout traffic modeling yields proportional daily trip generation that is approximately four (4) times greater than would be generated by the Project.[3] Similarly, when compared to the

[3] In this regard, for Traffic Analysis Zone (TAZ) 209 encompassing the Project site, the General Plan Buildout traffic model reflects development of the subject site with Business Park/Light Industrial uses, and projects approximately 4.18 times the trip generation for TAZ 209 than would otherwise be generated by logistics/distribution warehouse uses such as those proposed under the Project.

Project, proportional increases in traffic-generated mobile source pollutants [which typically account for greater than 98 percent of urban development emissions (by weight)] could also be expected under the current General Plan Buildout scenario. On this basis, the extent of air pollutant emissions generated by the Project would be no greater than is reflected in the current General Plan and incorporated in the adopted AQMP. The Project is in compliance with Consistency Criterion No. 2. As supported by the preceding discussion, the Project will not conflict with or obstruct implementation of the AQMP.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Impact Analysis:
Land uses and development such as that proposed under the Project impact air quality through emissions generated by construction and operational activities. The Urban Emissions (URBEMIS) 2007 (version 9.2.4) was utilized to forecast emissions levels for Project construction and operational activities, which are discussed below.

Construction-Related Air Quality Impacts
Construction activities associated with the Project will result in emissions of CO, VOCs, NOx, SOx, PM_{10}, and $PM_{2.5}$. Construction-related emissions are expected from the following typical construction activities:

- Mass Site Grading, including soil import/export
- Off-Site Construction Activities
- Fine Site Grading
- Underground Utility Construction
- Paving

- Building Construction
- Architectural Coatings
- Construction Workers Commuting
- Vendor Deliveries

Total construction time for the Project is estimated at 18 months. In order to represent worst-case conditions, it is assumed for purposes of this analysis that construction will take place in two defined "phases" of activity. Phase 1 includes mass site grading (including soil export activities) and off-site construction, and is expected to extend over 129 working days (approximately 6 months). Phase 2 includes fine site grading, underground utility construction, paving, building construction, and architectural coating. Phase 2 construction activities are expected to commence at the approximate conclusion of Phase 1 construction, and is projected to extend for an estimated 260 working days (12 months). Worker commutes will occur during both Phases, however vendor deliveries are associated primarily with building construction, and are modeled as a Phase 2 emissions source.

Detailed construction equipment assumptions are presented in the Air Quality Impact Analysis, presented as EIR Appendix C. Summarized aspects of each phase of construction are presented below.

Mass Grading. Exhaust emissions from grading activity result from both on-road and off-road heavy equipment operating during this phase of construction. Dust is typically a major concern during rough grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." 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.). The Project Applicant indicates approximately 80,000 cubic yards of soil export will be required, as reflected in the Project URBEMIS construction emissions modeling.

Off-Site Construction Activity. Exhaust emissions will result from heavy equipment operations during off-site construction and paving activity, primarily associated with

roadway/right-of-way improvements along the Project boundaries. The types of activities that generally take place may include trench work, pipe laying with associated base material and cover, ancillary earthwork, and paving. These activities are assumed to take place over a period of approximately three (3) months. It is estimated that up to approximately ten (10) acres will be disturbed during off-site construction activities, including areas abutting the Project site and to the east of the site associated with off-site road and infrastructure construction.

Fine Site Grading. Fine site grading activity is conservatively estimated to disturb up to 13.66 acres per day of the total 54.66 acre site, consistent with mass site grading activity. Fine site grading activity is expected to take place over a period of approximately two (2) months.

Underground Utility Construction. Exhaust emissions will result from heavy equipment that will be operational during underground utility construction. The types of activities that generally take place may include general trench-work, pipe laying with associated base material and cover, ancillary earthwork, manholes, etc. This activity is assumed to take place over a period of approximately four (4) months.

Paving. Paving activities include the movement of any remaining material as well as necessary curb and gutter work, road base material placement and blacktop. This activity is assumed to take place over a period of approximately three (3) months.

Building Construction. Building construction activity will result in emissions from heavy equipment that will be operational during physical building construction. This activity is expected to last for approximately nine (9) months.

Architectural Coatings. The application of architectural surface coatings (painting) generates VOC emissions when organic solvents in the coating evaporate as the coating dries. Architectural coating activities are expected to last approximately three (3) months.

Construction Workers Commuting/Vendor Trips. Construction emissions for construction worker vehicles traveling to and from the Project site, as well as vendor trips are also accounted for within the Project construction emissions modeling.

Construction Emission Summary

The estimated maximum daily construction emissions are summarized at Table 4.3-7. As indicated at Table 4.3-7, under the assumed "worst-case" conditions, unmitigated emissions resulting from Project construction will exceed regional criteria pollutant thresholds established by the SCAQMD for emissions of VOC, NOx, PM_{10} and $PM_{2.5}$.

Table 4.3-7
Emissions Summary of Construction Activities - Without Mitigation
(pounds per day)

Construction Activity	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase 1						
Mass Site Grading						
Fugitive Dust	0	0	0	0	273.20	57.06
Haul Truck Emissions	1.44	20.65	7.35	0.02	0.91	0.78
Off Road Equipment Emissions	15.34	138.52	62.68	0	6.39	5.88
Worker Commute	0.12	0.22	3.71	0	0.03	0.02
Off-Site Construction						
Off-Gas Emissions	0.20	0	0	0	0	0
Off Road Equipment Emissions	6.16	43.20	20.48	0	2.79	2.57
On-Road Equipment Emissions	0.07	0.93	0.33	0	0.04	0.04
Worker Commute	0.08	0.15	2.57	0	0.02	0.01
Maximum Daily Emissions during Phase 1	**23.41**	**203.67**	**97.12**	**0.02**	**283.38**	**66.36**
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	**NO**	**YES**	**NO**	**NO**	**YES**	**YES**
Phase 2						
Fine Site Grading						
Fugitive Dust	0	0	0	0	273.20	57.06
Off Road Equipment Emissions	9.03	78.75	36.89	0	3.72	3.42
Worker Commute	0.07	0.13	2.28	0	0.02	0.01
Underground Utility Construction						
Equipment Emissions	2.81	22.74	10.64	0	1.29	1.18
Worker Commute	0.04	0.07	1.14	0	0.01	0.01
Paving						
Off-Gas Emissions	0.54	0.00	0	0	0	0
Off-Road Equipment Emissions	4.28	27.71	13.13	0	2.10	1.94
On-Road Equipment Emissions	0.17	2.47	0.88	0	0.11	0.09

Table 4.3-7
Emissions Summary of Construction Activities - Without Mitigation
(pounds per day)

Construction Activity	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Worker Commute	0.05	0.10	1.71	0	0.01	0.01
Building Construction						
Off-Road Equipment	5.87	37.56	19.03	0	2.23	2.05
Vendor Trips	7.71	98.54	66.99	0.16	4.53	3.83
Worker Commute	2.79	5.30	89.78	0.10	0.75	0.41
Architectural Coating						
Architectural Coatings	304.20	0	0	0	0	0
Worker Commute	0.13	0.24	4.05	0	0.03	0.02
Maximum Daily Emissions for Phase 2	**337.63**	**273.97**	**246.52**	**0.26**	**288.00**	**70.03**
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	**YES**	**YES**	**NO**	**NO**	**YES**	**YES**

Source: *Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley, California* (Urban Crossroads), February 3, 2010.

LST Analysis-Construction

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-4. 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.

LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects up to 5 acres in size. Larger projects are advised to rely on dispersion modeling to determine localized pollutant concentrations. Since the Project is larger than five acres in size, dispersion modeling has been conducted to determine localized pollutant concentrations.

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (Methodology) (SCAQMD, June 2003).

Applicable LSTs employed in this analysis are as follows:

- California State 1-hour (construction and operational) CO standard of 20.0 ppm;
- California State 8-hour (construction and operational) CO standard of 9.0 ppm;
- California State 1-hour (construction and operational) NO_2 standard of 0.18 ppm;
- SCAQMD 24-hour construction PM_{10} LST of 10.4 $\mu g/m^3$;
- SCAQMD 24-hour construction $PM_{2.5}$ LST of 10.4 $\mu g/m^3$;
- SCAQMD 24-hour operational PM_{10} LST of 2.5 $\mu g/m^3$; or
- SCAQMD 24-hour operational $PM_{2.5}$ LST of 2.5 $\mu g/m^3$**.**

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of a project are above or below state standards. In the case of CO and NO_2, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. For the Project, this would apply to PM_{10} and $PM_{2.5}$, both of which are non-attainment pollutants. In these instances, local emissions are considered potentially significant if they exceed 10.4 $\mu g/m^3$ during construction, and/or 2.5 $\mu g/m^3$ during the subsequent operation of the site, both as measured at the nearest sensitive receptor location(s).

Emissions Considered

In order to estimate localized pollutant concentrations resulting from Project construction, the SCAQMD-approved Industrial Source Complex - Short Term (ISCST3) dispersion model was utilized. The modeling approach utilized is discussed as follows:

Construction activity is anticipated to disturb an area of approximately 13.66 acres on any given day, thus it was conservatively estimated that emissions would be concentrated over this area. In order to model worst-case conditions, the highest daily peak emissions resulting from construction activity was utilized.

In order to model emissions of PM_{10} and $PM_{2.5}$ resulting from grading activity, an area source of 13.66 acres was utilized. Per SCAQMD LST methodology, a ground level release height and a one meter initial vertical dimension (sigma z) were utilized in order to account for the vertical spread of emissions. Additionally, dry depletion parameters consistent with LST methodology were utilized.

In order to account for equipment exhaust emissions of PM_{10}, $PM_{2.5}$, NO_2, and CO, a total of 36 volume sources measuring 40 meters (131 feet) by 40 meters were spread over an area of approximately 13.66 acres. In order to represent equipment exhaust emissions, a release height of 5.0 meters, or 16 feet, (consistent with LST methodology) was utilized. Additionally, it should be noted that in order to account for the gradual conversion of NO_X to NO_2 as a function of distance, a conservative NO_X to NO_2 ratio of 0.074 was utilized (representing a worst-case distance of 100 meters [328 feet]), consistent with SCAQMD LST methodology.

Receptors

To account for sensitive receptors near construction areas, receptors were utilized in the ISCST3 model, and placed surrounding the 13.66 acre area. Receptors were conservatively placed at a distance of 25 meters (82 feet) in order to account for sensitive receptors in the

Project vicinity. It should be noted that the SCAQMD recommends that 25 meters be utilized even when receptors are actually located nearer than 25 meters.[4]

Specifically, in order to estimate concentrations of PM_{10} and $PM_{2.5}$ resulting from fugitive dust, receptors were placed at the Project fenceline (boundary), and the SCAQMD-approved downwind distance equation was utilized. For equipment exhaust emissions of CO, NO_2, PM_{10}, and $PM_{2.5}$, receptors were conservatively placed surrounding the 13.66 acre daily disturbance area at a distance of 25 meters. Per model guidance, a flagpole receptor height of two (2) meters (6.5 feet) was utilized.

Meteorological Data and Other Model Options

In order to account for meteorological conditions at the Project site, data from the Redlands monitoring station (located approximately 8.4 miles north of the Project site) was utilized, as this is the closest station to the Project site for which meteorological data is available.

Additionally, per SCAQMD LST methodology, the NOCALM option was selected, and the urban dispersion coefficient was utilized.

Localized Significance Threshold Analysis Summary

Table 4.3-8 presents the results of localized emissions during construction activity.

Table 4.3-8
Localized Significance Summary Construction - Without Mitigation

Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.98	0.38	0.05	107.03	28.45
Background Concentration	4	2.4	0.09	-	-
Total Concentration	4.98	2.77	0.14	107.03	28.45

[4] *SCAQMD Final Localized Significance Threshold Methodology*, page 3-3.

Table 4.3-8
Localized Significance Summary Construction - Without Mitigation

Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
SCAQMD Localized Significance Threshold	20	9	0.18	10.40	10.40
Significant?	No	No	No	YES	YES

Source: *Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley, California* (Urban Crossroads), February 3, 2010.
Note: PM10 and PM2.5 concentrations are expressed in μg/m3. CO and NO_2 concentrations are expressed in ppm.

As indicated at Table 4.3-8, without mitigation, emissions resulting from Project construction activities are expected to exceed localized thresholds established by the SCAQMD for emissions of PM_{10} and $PM_{2.5}$.

Level of Significance: Based on the preceding discussions, emissions resulting from Project construction will exceed regional criteria pollutant thresholds established by the SCAQMD for emissions of VOCs, NOx, PM_{10} and $PM_{2.5}$; and localized thresholds established by the SCAQMD for emissions of PM_{10} and $PM_{2.5}$. These are considered potentially significant impacts.

Mitigation Measures:
In order to facilitate monitoring and compliance, applicable SCAQMD and CARB regulatory requirements are restated as mitigation measures, and shall be incorporated in all Project plans, specifications and contract documents.

4.3.1 The following measures shall be incorporated into Project plans and specifications as implementation of Rule 403:

- *All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.*
- *The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three times daily during dry weather. Watering, with*

complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.

- *The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less to reduce PM10 and PM2.5 fugitive dust haul road emissions.*

4.3.2 The contractor shall minimize pollutant emissions by maintaining equipment engines in good condition and in proper tune according to manufacturer's specifications and during smog season (May through October) by not allowing construction equipment to be left idling for more than five minutes (per California law).

4.3.3 The contractor shall ensure use of low-sulfur diesel fuel in construction equipment as required by the California Air Resources Board (CARB) (diesel fuel with sulfur content of 15 ppm by weight or less).

4.3.4 Construction contractors shall use only low-polluting paints and coatings as defined in SCAQMD Rule 1113..

Additional mitigation required of the Project is identified below, and shall be shall be incorporated in all Project plans, specifications and contract documents.

4.3.5 Contractor(s) shall ensure that all off-road heavy-duty construction equipment utilized during construction activity shall be CARB Tier 2 Certified or better.

4.3.6 In order to reduce localized Project impacts to sensitive receptors in the Project vicinity during construction, construction equipment staging areas shall be located at least 300 feet away from sensitive receptors.

4.3.7 During Project construction, existing electrical power sources (e.g., power poles) shall be provided for electric construction tools including saws, drills and compressors, to minimize the need for diesel or gasoline powered electric generators.

4.3.8 The Applicant shall use Zero Volatile Organic Compounds paints (no more than 150 grams/liter of VOC) and/or High Pressure Low Volume (HPLV) applications consistent with South Coast Air Quality Management District Rule 1113. Alternatively, the Applicant shall use materials that do not require painting or are pre-painted.

4.3.9 Grading plans, construction specifications and bid documents shall include notation that off-road construction equipment shall utilize biodiesel fuel (a minimum of B20), except for equipment where use of biodiesel fuel would void the equipment warranty.

Level of Significance After Mitigation: ***Significant and Unavoidable***. Tables 4.3-9 and 4.3-10 present, respectively, the regional and localized construction-related emissions after the implementation of Mitigation Measures 4.3.1 through 4.3.9.

As indicated at Table 4.3-9, even after the implementation of the recommended mitigation measures, emissions resulting from short-term construction activity will exceed the regional pollutant thresholds for emissions of VOCs and NOx. ***This impact is significant and unavoidable.*** As indicated at Table 4.3-10, Even after implementation of all feasible mitigation measures, construction source emissions will exceed applicable LSTs for PM_{10} at receptors located 71 meters (approximately 233 feet) or nearer the Project site, and emissions of $PM_{2.5}$ at receptors located 35 meters (approximately 115 feet) or nearer the Project site. ***This impact is significant and unavoidable.***

Table 4.3-9
Regional Significance Summary Construction– With Mitigation (pounds per day)

Construction Activity	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase 1 - Mass Site Grading						
Fugitive Dust	0	0	0	0	93.58	19.69
Haul Truck Emissions	1.44	20.65	7.35	0.02	0.91	0.78
Off Road Equipment Emissions[1]	3.33	62.93	62.68	0	2.89	2.92
Worker Commute	0.12	0.22	3.71	0	0.03	0.02
Phase 1 - Off-Site Construction						
Off-Gas Emissions	0.20	0	0	0	0	0
Off Road Equipment Emissions[1]	1.34	19.63	20.48	0	1.26	1.27
On-Road Equipment Emissions	0.07	0.93	0.33	0	0.04	0.04
Worker Commute	0.08	0.15	2.57	0	0.02	0.01
Maximum Daily Emissions	**6.58**	**104.51**	**97.12**	**0.02**	**98.73**	**24.73**
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**
Phase 2 - Fine Site Grading						
Fugitive Dust	0	0	0	0	93.58	19.69
Off Road Equipment Emissions[1]	1.96	35.78	36.89	0	1.68	1.70
Worker Commute	0.07	0.13	2.28	0	0.02	0.01
Phase 2 - Underground Utility Construction						
Equipment Emissions	0.61	10.33	10.64	0	0.58	0.59
Worker Commute	0.04	0.07	1.14	0	0.01	0.01
Phase 2 - Paving						
Off-Gas Emissions	0.54	0.00	0	0	0	0
Off-Road Equipment Emissions[1]	0.93	12.59	13.13	0	0.95	0.96
On-Road Equipment Emissions	0.17	2.47	0.88	0	0.11	0.09
Worker Commute	0.05	0.10	1.71	0	0.01	0.01
Phase 2 - Building Construction						
Off-Road Equipment[1]	1.27	17.06	19.03	0	1.01	1.02
Vendor Trips	7.71	98.54	66.99	0.16	4.53	3.83
Worker Commute	2.79	5.30	89.78	0.10	0.75	0.41
Phase 2 - Architectural Coating						
Architectural Coatings	182.52	0	0	0	0	0
Worker Commute	0.13	0.24	4.05	0	0.03	0.02
Maximum Daily Emissions	**198.79**	**182.61**	**246.52**	**0.26**	**103.26**	**28.34**
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: *Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley, California* (Urban Crossroads), February 3, 2010.

[1] Use of CARB Certified Tier II equipment is estimated to reduce emissions of VOCs, NOX, PM_{10}, and $PM_{2.5}$ by approximately 78.31%, 54.57%, 54.82%, and 50.43%, respectively.

Table 4.3-10
Localized Significance Summary Construction – With Mitigation

Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.98	0.37	0.033	39.51	12.40
Background Concentration	4	2.4	0.09		
Total Concentration	**4.98**	**2.77**	**0.12**	**39.51**	**12.40**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Significant?	**NO**	**NO**	**NO**	**YES [1]**	**YES [2]**

Source: *Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley, California* (Urban Crossroads), February 3, 2010.
[1] The exceedance occurs at a distance of 25 meters from the project boundary, as distance from the source increases, the concentration decreases. As such, the concentration at 71 meters from the project boundary is 9.98 $\mu g/m^3$, and therefore less than significant at this distance and beyond.
[2] The exceedance occurs at a distance of 25 meters from the project boundary, as distance from the source increases, the concentration decreases. As such, the concentration at 35 meters from the project boundary is 9.78 $\mu g/m^3$, and therefore less than significant at this distance and beyond.
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. CO and NO_2 concentrations are expressed in ppm.

Application of Mitigation Measures 4.3.1 through 4.3.9 will reduce all construction-source air pollutant emissions, including PM_{10} and $PM_{2.5}$ emissions, to the extent feasible. Additionally, it is noted that these exceedances would occur temporarily and intermittently during site preparation and grading processes, and would not substantively affect any receptors at greater distances from the emissions source. At present, a single developed residential property (the residence at 28855 Fir Avenue) would be potentially affected by the noted $PM_{10}/PM_{2.5}$ LST exceedances. Moreover, in that construction emissions are short-term and intermittent, they will not result in any chronic or long-term impacts.

Operational Air Quality Impacts

Operational activities associated with the Project will result in emissions of VOCs, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. Operational emissions would be expected from the following primary sources:

- Vehicles;
- Fugitive dust related to vehicular travel;
- Heating, Ventilation and Air Condition (HVAC) Systems;
- Landscape maintenance equipment; and
- Architectural coatings.

Vehicles. Project operational (vehicular) impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The Project-related operational air quality impact centers primarily on the approximate 1,585 net vehicle trips (the raw arithmetic number of truck and passenger vehicle trips) generated by the Project. It should be noted that because different classes of vehicles (e.g., passenger cars, light trucks, heavy duty trucks) exhibit differing emissions characteristics that for the purposes of quantifying and evaluating air quality impacts, vehicle trips are quantified and segregated by vehicle type. In comparison, the Project's traffic study evaluates the effects of traffic at intersections and roadways, and therefore presents the total vehicle trips in terms of Passenger Car Equivalents (PCEs), thereby recognizing and acknowledging physical size differences in vehicles and related effects on roadways and at intersections. Trip generation characteristics for the Project are presented in *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads, Inc., October 8, 2009), EIR Appendix B. A more detailed discussion of how the actual number of vehicles was programmed into the model is within the Project Air Quality Impact Analysis, EIR Appendix C.

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. The emissions estimates for travel on paved roads were calculated using the URBEMIS 2007 model.

Heating, Ventilation and Air Condition (HVAC) Systems Emissions. Combustion emissions would be generated by the use of natural gas to power heating, HVAC systems in the development. The emissions associated with natural gas use were calculated based on assumptions from the URBEMIS 2007 model.

Landscape Maintenance Emissions. Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project.

Architectural Coatings. Over time, the buildings that are part of this Project will be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of Project maintenance. Emissions associated with repainting were calculated as part of the Project's operational emissions.

Operations Emissions Summary

The Project-related operations emissions summary, along with a comparison of SCAQMD regional significance thresholds, is presented at Table 4.3-11. Unmitigated Project-related emissions levels for operational emissions would exceed the regional criteria pollutant thresholds established by the SCAQMD for emissions of VOCs and NOx.

Table 4.3-11
Summary of Operational Emissions – Without Mitigation (pounds per day)

	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Operational Activities (Summer)						
Area Source Emissions [1]	5.67	0.83	2.23	0	0.01	0.01
Mobile Source emissions [2]	62.14	738.86	449.58	1.46	139.21	45.70
Maximum Daily Emissions	**67.81**	**739.69**	**451.81**	**1.46**	**139.22**	**45.71**
SCAQMD Regional Threshold	55	55	550	150	150	55
Significant?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**
Operational Activities (Winter)						
Area Source Emissions [1]	5.55	0.81	0.68	0	0	0
Mobile Source Emissions [2]	64.24	818.29	426.44	1.39	139.21	45.70
Maximum Daily Emissions	**69.79**	**819.10**	**427.12**	**1.39**	**139.21**	**45.70**
SCAQMD Regional Threshold	55	55	550	150	150	55
Significant?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: *Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley, California* (Urban Crossroads), February 3, 2010.
[a] Includes emissions of natural gas, landscape maintenance equipment, and architectural coatings emissions
[b] Includes emissions of vehicle emissions and fugitive dust related to vehicular travel

LST Analysis-Operations

As previously discussed, the SCAQMD has established that impacts to air quality are potentially significant if there is a potential to contribute or cause localized exceedances of the applicable operational LSTs. It is also noted that SCAQMD's LST Methodology clearly states that "off-site mobile emissions from the project should NOT be included in the

emissions compared to the LSTs."[5] Therefore, for purposes of the operational LST analysis the average trip length in URBEMIS was altered to 0.5 miles which conservatively characterizes on-site vehicle travel. Additionally, the vehicle speed in URBEMIS was altered to five miles per hour as a conservative measure to account for on-site vehicular travel.

Localized operational emissions concentrations were estimated using the SCREEN3 model. SCREEN3 is an EPA approved air quality model containing algorithms associated with the USEPA's Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, and uses dispersion screening techniques to estimate impacts of point, area, and volume stationary sources. This approach is consistent with the U.S. EPA's Community Air Screening How-To Manual, which recommends the use of a screening level model (such as SCREEN3) first, as this level of analysis is highly conservative and therefore greatly overestimates pollutant concentrations. The use of a more refined model, such as ISCST3, is only recommended if emissions exceed localized thresholds using the screening level (SCREEN3) model.

For purposes of this analysis, receptors are conservatively assumed to be located 25 meters (approximately 82 feet) from the Project boundary for emissions of CO, PM_{10}, and $PM_{2.5}$ to represent a conservative, "worst case" scenario. For emissions of NO_2, discrete receptors were placed at distances ranging from 20 meters (66 feet) to 5,000 meters (16,404 feet) from the fence-line of the Project site, to account for the change in NO_X to NO_2 conversion as a function of distance. It should be noted that for PM_{10} / $PM_{2.5}$ (fugitive dust only) a discrete receptor was placed at the facility fence-line and the downwind distance equation approved by SCAQMD was utilized. Additional detail regarding the LST modeling methodology is provided in the Project Air Quality Analysis (Draft EIR Appendix C). Table 4.3-12 presents the results of the long-term operational LST analysis.

[5] *SCAQMD Final Localized Significance Threshold Methodology*, Page 1-4.

Table 4.3-12
Localized Significance Summary Operations – Without Mitigation

	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Operations)	
Peak Day Localized Emissions (Summer)	0.02	0.02	3.19	0.12	0.11
Background Concentration	4	2.4	0.09		
Total Concentration	**4.02**	**2.41**	**0.09**	**0.12**	**0.11**
SCAQMD Localized Significance Threshold	20	9	0.18	2.50	2.50
Significant?	**NO**	**NO**	**NO**	**NO**	**NO**
Peak Day Localized Emissions (Winter)	0.02	0.02	3.19	0.12	0.11
Background Concentration	4	2.4	0.09		
Total Concentration	**4.02**	**2.41**	**0.09**	**0.12**	**0.11**
SCAQMD Localized Significance Threshold	20	9	0.18	2.50	2.50
Significant?	**NO**	**NO**	**NO**	**NO**	**NO**

Source: *Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley, California* (Urban Crossroads), February 3, 2010.
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.

As indicated at Table 4.3-12, long-term operational emissions will not exceed applicable LSTs established by the SCAQMD.

Level of Significance: Potentially Significant (VOC and NOx regional threshold exceedances only).

Mitigation Measures:

4.3.10 All Project entrances shall be posted with signs which state:

- *Truck drivers shall turn off engines when not in use;*
- *Diesel delivery trucks servicing the Project shall not idle for more than three (3) minutes; and*
- *Telephone numbers of the building facilities manager and CARB, to report violations.*

These measures shall be enforced by the on-site facilities manager (or equivalent).

4.3.11 Buildings shall surpass incumbent California Title 24 Energy Efficiency performance standards by a minimum of 20 percent for water heating and space heating and cooling.

Verification of increased energy efficiencies shall be documented in Title 24 Compliance Reports provided by the Applicant, and reviewed and approved by the City prior to the issuance of the first building permit. Any combination of the following design features may be used to fulfill this mitigation measure provided that the total increase in efficiency meets or exceeds 20 percent.

- *Increase in insulation such that heat transfer and thermal bridging is minimized;*
- *Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption;*
- *Incorporate dual-paned or other energy efficient windows;*
- *Incorporate energy-efficient space heating and cooling equipment;*
- *Interior and exterior energy efficient lighting which exceeds the California Title 24 Energy Efficiency performance standards shall be installed, as deemed acceptable by the City of Moreno Valley. Automatic devices to turn off lights when they are not needed shall be implemented*
- *To the extent that they are compatible with landscaping guidelines established by the City of Moreno Valley, shade producing trees, particularly those that shade buildings and paved surfaces such as streets and parking lots and buildings shall be planted at the Project site.*
- *Paint and surface color palette for the Project shall emphasize light and off-white colors which will reflect heat away from the buildings.*
- *All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design.*

4.3.12 *The Project shall be designed to facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills by providing easily accessible areas that are dedicated to the collection and storage of recyclable materials including: paper, cardboard, glass, plastics, and metals. Locations of proposed recyclable materials collection areas are subject to review and approval by the City. Prior to Final Site Plan approval, locations of proposed recyclable materials collection areas shall be delineated on the Project Site Plan.*

4.3.13 GHG emissions reductions measures shall also include the following:

- *The Project shall provide on-site bicycle storage/parking consistent with City of Moreno Valley requirements;*
- *The Project shall provide pedestrian and bicycle connections to surrounding areas, consistent with provisions of the City of Moreno Valley General Plan. Location and configurations of proposed pedestrian and bicycle connections are subject to review and approval by the City. Prior to Final Site Plan approval, pedestrian and bicycle connections shall be indicated on the Project Site Plan;*
- *Any traffic signals installed as part of the Project will utilize light emitting diodes (LEDs);*
- *The Project will establish a Transportation Management Association (TMA). The TMA will coordinate with other TMAs within the City to encourage and coordinate carpooling among building occupants. The TMA will advertise its services to building occupants, and offer transit and/or other incentives to reduce GHG emissions. Additionally, a shuttle will be provided during any one hour period where more than 20 employees utilize public transit. A plan will be submitted by the TMA to the City within two months of Project completion that outlines the measures implemented by the TMA, as well as contact information;*
- *The Project shall provide preferential parking for carpools and vanpool. Locations and configurations of proposed preferential parking for carpools and vanpools are subject to review and approval by the City. Prior to Final Site Plan approval, preferential parking for carpools and vanpools shall be delineated on the Project Site Plan;*
- *The Project shall provide at least two electric vehicle charging stations. Locations and configurations of proposed charging stations are subject to review and approval by the City. Prior to issuance of the first building permit, stub outs for charging stations shall be indicated on the Project building plans.*

Table 4.3-13 summarizes the Project operational emissions levels after the implementation of mitigation. As indicated, even after implementation of all feasible mitigation measures, Project operational-source emissions of VOCs and NOx will exceed applicable SCAQMD regional thresholds.

Table 4.3-13
Regional Significance Summary Operations – With Mitigation (pounds per day)

Operational Activities (Summer)	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emissions [1]	5.66	0.66	2.09	0	0.01	0.01
Mobile Source Emissions [2]	62.14	738.86	449.58	1.46	139.21	45.70
Maximum Daily Emissions	**67.80**	**739.52**	**451.67**	**1.46**	**139.22**	**45.71**
SCAQMD Regional Threshold	55	55	550	150	150	55
Significant?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**
Operational Activities (Winter)	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emissions [1]	5.54	0.64	0.54	0	0	0
Mobile Source Emissions [2]	64.24	818.29	426.44	1.39	139.21	45.70
Maximum Daily Emissions	**69.78**	**818.93**	**426.98**	**1.39**	**139.21**	**45.70**
SCAQMD Regional Threshold	55	55	550	150	150	55
Significant?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: *Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley, California* (Urban Crossroads), February 3, 2010.
[1] Includes emissions of natural gas, landscape maintenance equipment, and architectural coatings emissions
[2] Includes emissions of vehicle emissions and fugitive dust related to vehicular travel

With application of proposed mitigation measures, operational-source emissions will not exceed any of the applicable LSTs, as shown in Table 4.3-14.

Table 4.3-14
Localized Significance Summary Operations – With Mitigation

	CO		**NO_2**	**PM_{10}**	**$PM_{2.5}$**
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Operations)	
Peak Day Localized Emissions (Summer)	0.018	0.013	3.19	0.12	0.11
Background Concentration	4	2.4	0.09		
Total Concentration	**4.02**	**2.41**	**0.09**	**0.12**	**0.11**
SCAQMD Localized Significance Threshold	20	9	0.18	2.5	2.5
Significant?	**NO**	**NO**	**NO**	**NO**	**NO**
Peak Day Localized Emissions (Winter)	0.018	0.013	3.19	0.12	0.11
Background Concentration	4	2.4	0.09		
Total Concentration	**4.02**	**2.41**	**0.09**	**0.12**	**0.11**
SCAQMD Localized Significance Threshold	20	9	0.18	2.5	2.5
Significant?	**NO**	**NO**	**NO**	**NO**	**NO**

Source: *Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley, California* (Urban Crossroads), February 3, 2010.
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.

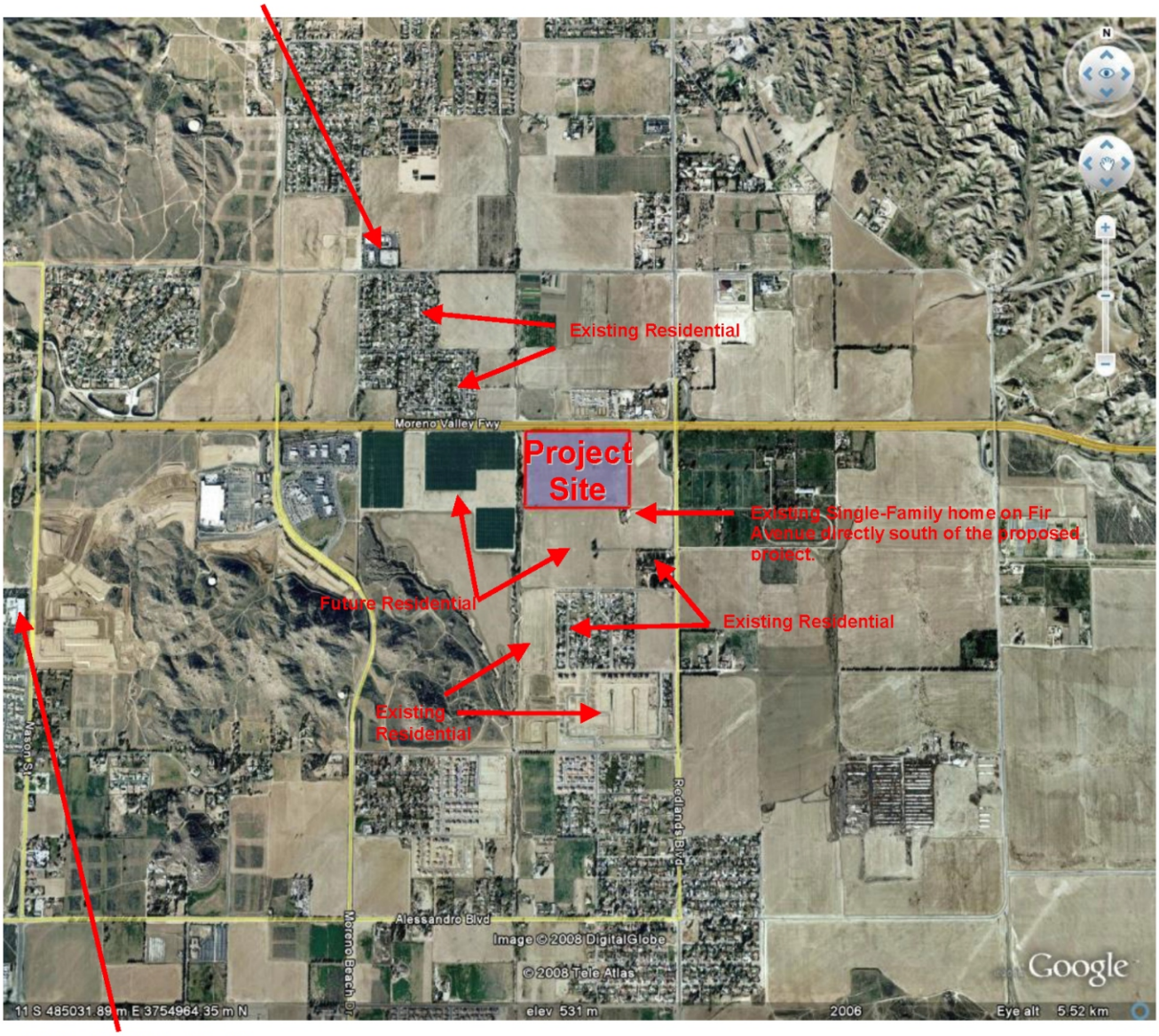
Level of Significance After Mitigation: Significant and Unavoidable (VOC and NOx regional threshold exceedances only).

Potential Impact: Expose sensitive receptors to substantial pollutant concentrations.

Impact Analysis: Sensitive receptors considered in air quality analyses include uses such as health care facilities, rehabilitation centers, retirement homes, residences, schools, playgrounds, child care centers, and athletic facilities. Sensitive receptors located proximate to the Project site are indicated at Figure 4.3-1, and are described below.

Sensitive receptors nearest the Project site include an existing residence adjacent to the site's southerly boundary, located at 28855 Fir (future Eucalyptus) Avenue. Additional parcels zoned for residential land uses (potential future sensitive receptors) are located south of future Eucalyptus Avenue, and to the west and southwest, across Quincy Channel. Residential uses also exist approximately 0.2 miles (approximately 322 meters or 1,056 feet) to the northwest, across the Moreno Valley Freeway, and south of Eucalyptus (future Encilia) Avenue, approximately 0.3 miles (approximately 400 meters or 1,312 feet) from the Project site.

The nearest schools are the Calvary Chapel Christian School located approximately 0.7 miles (approximately 1,127 meters or 3,698 feet) northwest of the Project site, and Valley View High School, located approximately 1.6 miles (approximately 2,575 meters or 8,448 feet) southwest of the Project site. The following discussions address the potential impacts of the Project's construction and operation on nearby sensitive receptors, including the creation of CO hot spots and the generation of diesel particulate material (DPM) emissions.



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NOT TO SCALE

Source: Urban Crossroads, Inc. (February 2010).

Figure 4.3-1
Sensitive Receptor Locations

Potential Effects of Construction-source Emissions at Sensitive Receptors

For modeling purposes, receptors were conservatively placed at a distance of 25 meters (approximately 82 feet) from the site, which is the most conservative distance recommended for use by the SCAQMD. As previously discussed, even with application of all feasible mitigation measures, localized PM_{10} and $PM_{2.5}$ construction-source emissions will exceed applicable LSTs. More specifically, during construction activity (after mitigation), PM_{10} emissions concentrations will exceed applicable LSTs at receptors located 71 meters (approximately 233 feet) or nearer, and $PM_{2.5}$ emissions concentrations will exceed applicable LSTs at receptors located 35 meters (approximately 115 feet) or nearer.

These LST exceedances represent a potentially significant impact to sensitive receptors in the Project vicinity for short-term construction activity. It is noted, however, that these exceedances would affect only one existing residence, located to the south of the Project site at 28855 Fir (future Eucalyptus) Avenue. Although parcels designated for residential land uses are present within the area of LST exceedance, they are largely undeveloped. All other study area receptor locations (existing residences south of Eucalyptus (future Encilia) Avenue and north of SR-60, and area school sites) are well beyond the area of the Project's temporary LST exceedances for particulate matter.

It is noted that these exceedances would occur temporarily and intermittently during site preparation and grading processes, and would not substantively affect any receptors at greater distances from the emissions source. Moreover, in that construction emissions are short-term and intermittent, they will not result in any chronic or long-term impacts.

Level of Significance: Potentially Significant for construction-source $PM_{10}/PM_{2.5}$ emissions only. More specifically, PM_{10} emissions (at receptors located 71 meters [233 feet] or nearer to construction activity) and $PM_{2.5}$ emissions (at receptors located 35 meters [115 feet] or nearer to construction activity).

Mitigation Measures: Please refer to previous Mitigation Measures 4.3.1 through 4.3.9.

Level of Significance After Mitigation: ***Significant and Unavoidable*** **(*Construction-source PM_{10}/$PM_{2.5}$ emissions only).*** Even after compliance with applicable SCAQMD Rules and application of all feasible mitigation measures, PM_{10} emissions (at receptors located 71 meters [233 feet] or nearer to construction activity) and $PM_{2.5}$ emissions (at receptors located 35 meters [115 feet] or nearer to construction activity) will exceed applicable thresholds. Please refer also to previous Table 4.3-10, "Localized Significance Summary Construction – With Mitigation."

CO "Hot Spot" Analysis

Air pollutant emissions related to Project traffic have the potential to create new, or worsen existing, localized air quality. A CO impact analysis is required to assess the localized CO impacts on sensitive receptors that are situated adjacent to congested roadways and intersections. For purposes of this analysis, intersections selected for evaluation as part of the Project traffic study have been evaluated for their potential to result in a CO Hot Spot.

The SCAQMD recommends the use of CALINE-4, a dispersion model for predicting CO concentrations, as the preferred method of estimating localized pollutant concentrations at sensitive receptors near congested roadways and intersections. For each intersection analyzed, CALINE-4 adds roadway-specific CO emissions calculated from peak-hour traffic volumes to ambient CO air concentrations. For this analysis, localized CO concentrations were calculated based on a simplified CALINE-4 screening procedure developed by the Bay Area Air Quality Management District (BAAQMD) and accepted by the SCAQMD. The simplified procedure is intended as a screening analysis, which identifies a potential CO hotspot. This methodology assumes worst-case conditions and provides a screening of maximum, worst-case CO concentrations. The emissions factors used in this analysis have been updated using EMFAC2007, as the emissions originally for use with the simplified CALINE-4 screening procedure are outdated.

The SCAQMD recommends performing a CO hotspot analysis if the project under consideration causes or results in LOS declines from C to D (or worse), or if the project contributes additional traffic to pre-existing LOS D (or worse) intersection conditions. To establish a likely maximum potential impact scenario, the three highest volume roadways

under Opening Year Cumulative Conditions with the Project (see Table 4.3-15), were evaluated to determine if a significant CO hotspot will occur. The considered scenario reflects maximum vehicular source CO emissions concentrations under potential maximum congestion conditions. In this regard, nominal vehicle speeds (3 mph) are assumed, discounting any potential improved intersection efficiencies that may be achieved, while assuming maximum potential traffic volumes and vehicular source CO emissions.

Traffic volumes for the AM and PM peak hours were input into the simplified screening procedure to evaluate potential Project impacts. These volumes were available from the report, *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads, Inc., October 8, 2009). Future CO concentrations were determined for the weekday peak time periods by adding the predicted increase in CO concentrations attributable to traffic-volumes in the study area to an ambient CO concentration within the study area. According to future, conservative (worst-case) SCAQMD projections, the background 1 hour CO level for the study area will be approximately 5.1 parts per million (ppm).

1-hour and 8-hour CO concentrations were calculated using methodology outlined in the BAAQMD's simplified CALINE-4 screening procedure. The results of these calculations are presented in Table 4.3-15 for representative receptor locations at roadway edge, 25, 50, and 100 feet from each roadway. The national 1-hour ambient air quality standard is 35.0 ppm and the state 1-hour ambient air quality standard is 20.0 ppm. The 8-hour national and state ambient air quality standard is 9.0 ppm.

Table 4.3-15
Carbon Monoxide Hotspot Levels,
Existing Plus Ambient Plus Project Plus Cumulative Conditions

Intersection	CO Concentrations in Parts Per Million											
	At Edge			25 feet			50 feet			100 feet		
	AM Peak	PM Peak	8-Hour	AM Peak	PM Peak	8-Hour	AM Peak	PM Peak	8-Hour	AM Peak	PM Peak	8-Hour
Moreno Beach Drive and SR-60 Eastbound Ramps	5.4	5.6	2.9	4.7	4.8	2.9	4.5	4.5	2.9	4.2	4.3	2.9
Redlands Boulevard and Fir (future Eucalyptus) Avenue	5.8	5.9	2.9	4.8	4.8	2.9	4.5	4.6	2.9	4.3	4.3	2.9
Redlands Boulevard and Eucalyptus (future Encilia) Avenue	4.6	4.7	2.9	4.2	4.2	2.9	4.1	4.1	2.9	3.9	3.9	2.9
Threshold	20.0	20.0	9.0	20.0	20.0	9.0	20.0	20.0	9.0	20.0	20.0	9.0
Threshold Exceeded?	No	No	No	No	No	No	No	No	No	No	No	No

Source: *Westridge Commerce Center Air Quality Impact Analysis, City of Moreno Valley, California* (Urban Crossroads), February 3, 2010.

As seen in Table 4.3-15, even with operation of the Project and other regional cumulative development in addition to existing ambient conditions, none of the locations reviewed is expected to experience CO levels in excess of the allowable concentration of 20.0 ppm. The highest one-hour CO "hot spot" level is predicted to be 5.7 ppm. The analysis also indicates that none of the locations experience CO levels in excess of the 8-hour allowable concentration of 9.0 ppm; the highest predicted 8-hour concentration is 2.9 ppm.

Since currently there are no significant impacts at intersections with the highest potential for CO hotspot formation, no significant impacts are anticipated to occur at any other locations in the vicinity as a result of the Project. Consequently, sensitive receptors would not be significantly affected by CO emissions generated by Project-related traffic.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Health Risk Assessment of Diesel Particulate Emissions

A Health Risk Assessment has been prepared to address Diesel Particulate Matter (DPM) generated by diesel trucks and the operation of heavy-duty equipment. The Health Risk Assessment was 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* (SCAQMD 2003), and is presented in its entirety as Appendix C to this EIR.

The number of trucks and the truck distribution along roadways in the Project vicinity were derived from the traffic study prepared for the Project. As a conservative measure, it is assumed that all trucks will be diesel powered.

Health risks associated with exposure to carcinogenic compounds are defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. CARB estimates that the average Californian is exposed to 1.3 $\mu g/m^3$ of DPM. This exposure results in an average cancer risk of 390 in one million for the average Californian exposed to DPM (OEHHAA 2000). The Health Risk Assessment is based on SCAQMD guidelines to produce conservative estimates of risk posed by exposure to DPM. The conservative nature of the analysis is based on the following factors:

- The CARB-adopted diesel exhaust unit risk factor (URF) of 300 in one million per $\mu g/m^3$ is based upon the upper 95 percentile of estimated risk for each of the epidemiological studies utilized to develop the URF. Therefore the risk factor is already representative of the conservative risk posed by DPM.

- The risk estimates assume sensitive receptors will be subject to DPM for 24 hours a day, 365 days a year. In other words, that resident will continuously be outside and exposed to DPM. As a conservative measure, the SCAQMD does not recognize indoor adjustments for residents. However, the typical person spends the majority of their time indoors versus remaining outdoors for 24 hours a day, 365 days a year.

- The exposure to DPM is assumed to be constant for the given period analyzed (i.e., 70 years). It should be noted however that emissions from DPM are expected to substantially decrease in the future with the implementation of standard regulatory requirements and technological advancement to reduce DPM.

Emissions Estimation

Vehicle DPM emissions were estimated using emission factors for particulate matter less than 10μm in diameter (PM_{10}) generated with the 2007 version of the EMission FACtors model (EMFAC) developed by the CARB. EMFAC 2007 is a mathematical model that was developed to calculate emission rates 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. The most recent version of this model, EMFAC 2007 (version 2.30), incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day. The EMFAC 2007 model generates emission factors based on the vehicle weight class. On December 11, 2008, the CARB approved On-Road Heavy-Duty Vehicles (In-Use) Regulation for vehicles greater than 14,000 pounds of gross vehicle weight (GVW) which requires increasingly stringent emissions standards starting in 2010. It should be noted that EMFAC 2007 has not yet been updated to account for the passage of this regulation; therefore the analysis is a conservative representation of actual emissions.

Emissions were estimated for the following scenarios:

- 40-year exposure: 2011 through 2050 (Off-Site Worker Exposure Scenario); and

- 70-year exposure: 2011 through 2080 (Residential Exposure Scenario).

It should be noted that SCAQMD guidance does not require assessment of the potential health risk to on-site workers; additionally assessment of health risk to on-site workers is not required by OEHHA HRA guidelines. As such, for purposes of this analysis, risk to on-site workers has not been evaluated.

On-site truck idling was estimated to occur as trucks enter and travel through the facility. Although the Project is required to comply with CARB'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,[6] 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 estimated truck idling at 15 minutes, consistent with SCAQMD's recommendation.

Exposure Quantification

According to the guidelines in the *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*, SCAQMD recommends using the Industrial Source Complex-Short Term (ISCST3) model, version 02035, for mobile source emissions impact assessments. The model is a steady state Gaussian plume model used to estimate ground level impacts from point and fugitive sources in simple and complex terrain.

For purposes of this analysis, the model was used to calculate annual average particulate concentrations associated with site operations. Meteorological data from the SCAQMD's City of Redlands monitoring station (SRA 35) located approximately 8.4 miles north of the Project site was used to represent local weather conditions and prevailing winds.

Local sensitive receptors include residents located to the south and east of the Project site, the nearest sensitive receptors are the existing single-family homes on Fir Avenue directly south of the site.

Carcinogenic Exposures

The SCAQMD CEQA Air Quality Handbook (1993) states that emissions of toxic air contaminants (TACs) are considered significant if a health risk assessment shows an increased risk of greater than ten (10) in one million. Based on guidance from the SCAQMD

[6] Personal communication, SCAQMD (James Koizumi), phone call, May 6, 2009.

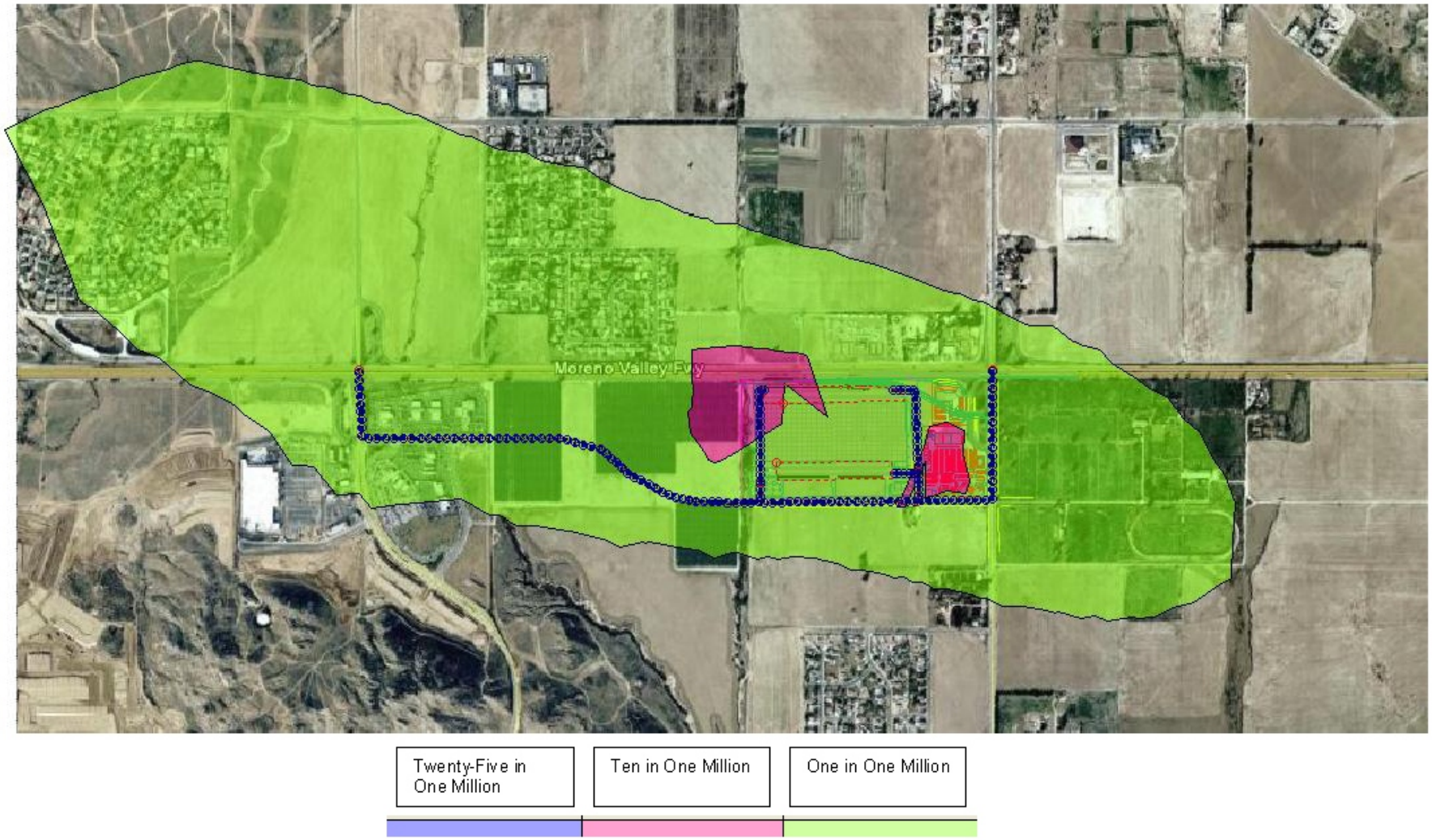
in the document *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (2003), for purposes of this analysis, 10 in one million is used as the threshold of significance for the Project. Unmitigated cancer risk exposures are summarized at Table 4.3-16 and graphically represented at Figure 4.3-2.

Table 4.3-16
Summary of Cancer Risk - Without Mitigation

Time Period	Location	Maximum Lifetime Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Threshold Exceeded?
70 Year Exposure (2011 to 2080)	Point of Maximum Impact	13.4	10	**YES**
70 Year Exposure (2011 to 2080)	Maximum Exposed Sensitive Receptor	10.1	10	**YES**
40 Year Exposure (2011 to 2050)	Maximum Exposed Worker Receptor	3.1	10	**NO**

Source: *Westridge Commerce Center Health Risk Assessment* (Urban Crossroads, Inc.) February 3, 2010.

The point of maximum impact (PMI) is located approximately 75 meters (246 feet) north of the Project site across the SR-60 Freeway; however, no residences or other sensitive receptors are currently located at the PMI. The maximum exposed sensitive receptors are located immediately adjacent to the Project to the south, across Fir Avenue. The maximum exposed worker receptor is conservatively assumed to be located at the PMI. As shown at Table 4.3-16, Project operations would exceed the SCAQMD's significance threshold at the PMI and maximum exposed sensitive receptor. This is a potentially significant impact.



Source: Urban Crossroads, Inc.

Figure 4.3-2
Cancer Risk Diagram - Without Mitigation

Noncarcinogenic Exposures

An evaluation of the potential noncarcinogenic effects of chronic exposures was also conducted. Noncarcinogenic effects of DPM typically include health concerns such as respiratory impairment and eye irritation. 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 $\mu g/m^3$. [7]

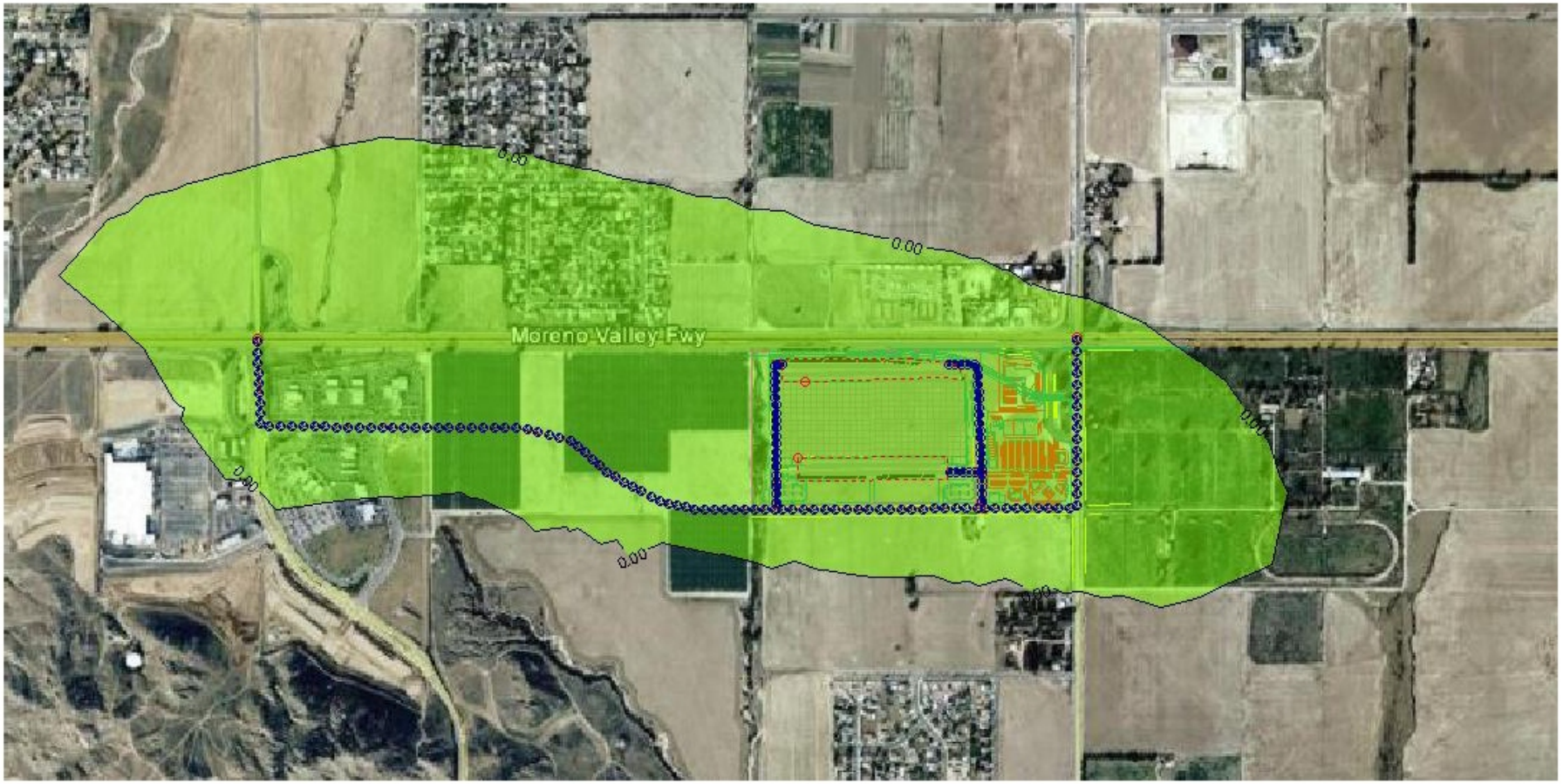
Non-carcinogenic impacts are hazard index-based. That is, the hazard index assumes that chronic sub-threshold exposures will adversely affect a specific organ or organ system. To calculate hazard index, the chemical concentration or dose is divided by its REL. Where the total equals or exceeds one, a health hazard is presumed to exist. For non-cancer risks, the threshold of significance is a hazard quotient value greater than one (1.0). For non-carcinogenic impacts, maximum exposures are estimated at a hazard quotient value of 0.0088 at the nearest receptor, and thus a less-than-significant impact.

Level of Significance: Potentially Significant (for DPM-source carcinogenic exposures).

Mitigation Measures: Please refer to Mitigation Measure 4.3.10.

Level of Significance After Mitigation: Less-Than-Significant. Mitigated DPM-source cancer risk exposures are summarized at Table 4.3-17 and graphically represented at Figure 4.3-2. DPM emission-source reductions will be realized through controls on on-site idling (Mitigation Measure 4.3.10).

[7] OEHHA Toxicity Criteria Database, http://www.oehha.org/risk/chemicaldb/index.asp.



Source: Urban Crossroads, Inc.

Figure 4.3-3
Cancer Risk Diagram - With Mitigation

Table 4.3-17
Summary of Cancer Risk - With Mitigation

Time Period	Location	Maximum Lifetime Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Threshold Exceeded?
70 Year Exposure (2011 to 2080)	Point of Maximum Impact	8.6	10	**NO**
70 Year Exposure (2011 to 2080)	Maximum Exposed Sensitive Receptor	6.9	10	**NO**
40 Year Exposure (2011 to 2050)	Maximum Exposed Worker Receptor	2.0	10	**NO**

Source: *Westridge Commerce Center Health Risk Assessment* (Urban Crossroads, Inc.) February 3, 2010.

With mitigation, no sensitive receptors or off-site workers will be exposed to DPM-source cancer risks exceeding the SCAQMD's significance criteria. As such, impacts are considered less-than-significant.

Potential Impact: ***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, including releasing emissions which exceed quantitative thresholds for ozone precursors.***

Impact Analysis: The Project area is designated as an extreme non-attainment area for ozone, and a non-attainment area for PM_{10} and $PM_{2.5}$. Germane to this non-attainment status, the Project-specific evaluation of emissions presented in the preceding analysis demonstrates that even after application of all feasible mitigation, construction of the Project will result in temporary exceedances of regional thresholds for VOC and NOx emissions and LST exceedances for PM_{10} (at receptor locations 71 meters [233 feet]or nearer to construction activities) and $PM_{2.5}$ (at receptor locations 35 meters [115 feet]or nearer to construction activities). These are significant and unavoidable impacts of the Project that for the duration of construction activities would result in a cumulatively considerable net increase for the pollutants $PM_{10}/PM_{2.5}$ within the encompassing $PM_{10}/PM_{2.5}$ non-attainment area; and a cumulatively considerable net increase for the pollutants VOC and NOx (ozone precursors) within the encompassing ozone non-attainment area.

Further Project operational-source VOC and NOx emissions will exceed the applicable SCAQMD regional threshold. This is a significant and unavoidable impact of the Project that for the useful life of the Project would result in a cumulatively considerable net increase for the pollutants VOC and NOx (as noted above, ozone precursors) within the encompassing ozone non-attainment area.

Please refer also to the discussion of cumulative air quality impacts presented at EIR Section 5.0, "Other CEQA Considerations."

Level of Significance: Potentially Significant.

Mitigation Measures: Please refer to Mitigation Measures 4.3.1 through 4.3.14.

Level of Significance After Mitigation: ***Significant and Unavoidable.*** Temporary, construction-related emissions of VOCs, NOx and particulate matter (PM_{10}/$PM_{2.5}$) are reduced to the extent feasible through compliance with established rules and regulations and application of Mitigation Measures 4.3.1 through 4.3.10. ***However, Project temporary construction-source exceedance of VOC, NOx, PM_{10} and $PM_{2.5}$ emissions thresholds, in combination with emissions generated by other sources affecting the encompassing ozone and PM_{10}/$PM_{2.5}$ non-attainment areas, will result in a cumulatively considerable net increase in these emissions within the non-attainment areas for the duration of construction activities.***

Similarly, operational VOC and NOx emissions are reduced to the extent feasible through compliance with established rules and regulations and application of Mitigation Measures 4.3.10 through 4.3.13. ***However, Project exceedance of VOC and NOx emissions thresholds, in combination with emissions generated by other sources affecting the encompassing ozone non-attainment area, will result in a cumulatively considerable net increase in VOC and NOx emissions within the encompassing non-attainment area over the life of the Project.***

Potential Impact: ***Create objectionable odors affecting a substantial number of people.***

Impact Analysis: Objectionable odors are not anticipated as a result of Project development or operation. Temporary, short-term odor releases are potentially associated with Project construction activities. Potential construction-related odor sources include, but are not limited to: asphalt/paving materials, glues, paint, and other architectural coatings. Construction-related odor impacts are controlled by established requirements for a material handling and procedure plan which identifies odor sources, odor generating materials and quantities on-site, and isolation/containment devices or mechanisms to prevent significant release of odors.

Moreover, the Project does not propose land uses or operations typically associated with, or regulated for, emission of objectionable odors. Project-related operational odor sources such as vehicle exhaust and routine painting/maintenance activities are typical of industrial/commercial activities and would be localized to the immediate Project vicinity, with little or no off-site effects.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: ***Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.***

Impact Analysis: There are several unique challenges to analyzing global warming under CEQA, largely because of its "global" nature. Typical CEQA analyses address local actions that have local, or at most, regional impacts, whereas global warming presents the considerable challenge of analyzing the relationship between local and global activities and the resulting potential, if any, for local and/or global environmental impacts. Most environmental analyses examine the "project-specific" impacts that a particular project is likely to generate. With regard to global warming, however, it is generally accepted that the

magnitude of global warming effects is so substantial and the contribution of an individual project to global warming is so extremely minuscule that direct significant adverse impacts (albeit not necessarily cumulative significant adverse impacts) would be highly unlikely.

The issue of greenhouse gases (GHG) emissions and global climate change (GCC) is also fundamentally different from any other areas of air quality impact analysis, which are all linked to some region or area in which the impact is significant. Instead, a GCC analysis must be conducted on a global level, rather than the typical local or regional setting, and requires consideration of not only emissions from the Project under consideration, but also the extent of the displacement, translocation, and redistribution of emissions.

In the usual context, where air quality is linked to a particular location or area, it is appropriate to consider the creation of new emissions in that area to be an environmental impact whether or not the emissions are truly "new" emissions to the overall globe. In fact, the approval of a new developmental plan or project does not necessarily create new automobile drivers (the primary source of a land use project's emissions). The use of models that measure overall emissions increases without accounting for existing emissions tend to substantially overstate the impact of a new development project on global warming. Overstating the impacts can lead to a misallocation of resources in seeking solutions to GHG emissions and climate change-related problems. This makes an accurate analysis of GHG emissions substantially different from other air quality impacts, where the "addition" of redistributed emissions can make a substantial difference to overall air quality.

To assess the Project's emissions of GHGs and whether they would result in a cumulatively considerable contribution to global climate change, a GCC analysis was conducted. The following discussions summarize the findings of the *Westridge Commerce Center Climate Change Analysis* (Urban Crossroads) February 3, 2010 (presented in its entirety at Appendix C to this EIR).

Project-Related GHG Emissions

Greenhouse gas emissions associated with the development and operation of the Project were estimated utilizing the URBEMIS 2007 emissions inventory model. Emissions sources and categories discussed in the Project Air Quality Analysis have the potential to generate emissions of GHGs; as such the URBEMIS 2007 emissions inventory model was utilized to calculate CO_2 emissions resulting from the construction and operational phases of the Project.

The *CEQA Guidelines* 15064.4 (b) (1) states that a lead agency may use a model or methodology to quantify greenhouse gas emissions associated with a project. The lead agency may include a qualitative discussion or analysis regarding the limitations of the particular model or methodology selected for use.

Although every attempt has been made to accurately and comprehensively quantify the greenhouse gas emissions associated with the Project, a number of inherent limitations are unavoidable in an emissions inventory of this scope. The primary limitation of the URBEMIS 2007 model is that it only accounts for emissions of CO_2. Additional limitations are discussed in detail below.

Construction and Mobile Source Emissions Calculations Limitations

In order to calculate the emissions that will occur as a result of vehicular activity, a number of assumptions must be made regarding the number of vehicle trips generated by each land use, as well as the distance traveled over the course of each trip. Although the best information available for the number of trips as well as trip lengths was obtained for the project, a number of assumptions must still be made. Notably, not all the vehicular trips that result from the Project will be "new" vehicle trips, but that a majority of these trips already occur elsewhere, and currently generate GHG emissions within a global context.

Area Source Emissions Calculations Limitations

Additionally, it should be noted that although area source emissions associated with the Project have been calculated utilizing the best available data, there are a number of limitations that cannot be avoided in the preparation of these estimates.

It should be noted that the URBEMIS 2007 emissions inventory model does not calculate or account for greenhouse gas emissions related to electricity consumption, water usage, and solid waste. The URBEMIS 2007 model accounts only for natural gas usage as an area source greenhouse gas generator.

Construction GHG Emissions in addition to URBEMIS 2007

As previously noted, the URBEMIS 2007 model does not quantify CH_4 and N_2O emissions, although these two greenhouse gases are known to be emitted from construction equipment. CH_4 and N_2O emissions associated with construction emissions from off-road equipment were determined by scaling the construction CO_2 emissions predicted by URBEMIS by the ratio of CH_4/ CO_2 and N_2O / CO_2 emissions expected per gallon of diesel fuel according to The Climate Registry General Reporting Protocol Version 3.1 diesel fuel emissions estimates (The Climate Registry 2009). The Climate Registry emission factor for CO_2 is 10.15 kilograms (kb) CO_2 per gallon of diesel fuel. Construction equipment using diesel fuel emits 0.58 grams CH_4 per gallon and 0.26 grams N_2O per gallon (The Climate Registry 2009). The ratios of CH_4 and N_2O to CO_2 per gallon of diesel fuel are 0.0006 and 0.0003, respectively. CO_2 emissions for each year were multiplied by these ratios to estimate CH_4 and N_2O emissions from construction equipment operation. These emissions were then converted to CO_2e using the GWPs of each gas.

Mobile Source GHG Emissions in addition to URBEMIS 2007

As previously noted, the URBEMIS 2007 model does not quantify CH_4 and N_2O emissions, although these two greenhouse gases are known to be emitted from mobile sources. In order to account for emissions of CH_4 and N_2O from mobile sources, The Climate Registry Protocol was utilized. Specifically, the grams/mile emission factors for CH_4 and N_2O available in Table C.4 of The Climate Registry General Reporting Protocol by vehicle class,

model year, and fuel type were utilized. A composite emission factor was generated based on the vehicle fleet mix programmed into the URBEMIS 2007 model.

Area Source Emissions in addition to URBEMIS 2007

As previously noted, the URBEMIS 2007 model does not account for greenhouse gas emissions related to electricity consumption, water usage, and solid waste. Additionally, the URBEMIS 2007 model only accounts for CO_2 emissions from natural gas.

CO_2e emissions from electricity energy were calculated based on energy usage emission factors consistent with other warehouse projects. CO_2e emissions from waste generation were calculated based on factors available from the California Integrated Waste Management Board and the EPA. CO_2e emissions from water usage are based on the energy intensity and use factors from the EPA eGRID 2006, WECC California Subregion and the Demand Response Research Center: Water Supply Related Electricity Demand in California, 2006. A summary of the Project's GHG emissions are presented at Table 4.3-18.

Table 4.3-18
Total Greenhouse Gas Emissions (Annual, Metric Tons Per Year)

Emission Source	CO_2	CH_4 (CO_2E)	N_2O(CO_2E)	Total CO_2E
Annual construction-related emissions amortized over 30 years	174.16	2.19	161.97	338.32
Natural Gas	141.10	0.49	6.94	148.53
Landscaping	0.51	-	-	0.51
Mobile Sources	27,724.82	7.32	125.94	27,858.08
Electricity Energy	732.09	0.17	9.45	741.71
Solid Waste Generation	-	474.67	-	474.67
Water Usage	39.63	0.035	0.14	39.81
Refrigerant Leakage	-	-	-	401.76
Subtotal Transportation Sources				**27,858.08**
Subtotal Non-Transportation Sources				**2,145.31**
TOTAL ALL SOURCES				**30,003.39**

Source: *Westridge Commerce Center Climate Change Analysis* (Urban Crossroads) February 3, 2010.

Proposed CARB and SCAQMD GHG Emissions Quantitative Thresholds

OPR has requested that CARB draft statewide standards to provide guidance to local agencies in adopting thresholds of significance. CARB's Draft Thresholds of Significance for industrial projects (7,000 metric tons per year of carbon dioxide equivalent from non-transportation related GHG sources)[8], indicates the current state of CARB's efforts to establish a GHG significance standard under CEQA for industrial projects. Once finalized by CARB, and adopted, local agencies would be free to utilize the recommended standard as their own. However, because the threshold has not been finalized and is subject to change, it is not definitive in determining impact significance. The threshold does however provide germane impact/emissions considerations, and is therefore reflected in this analysis.

Similarly, SCAQMD has adopted Significance Screening Levels for industrial projects (stationary source GHG emissions ≥ 10,000 metric tons per year of carbon dioxide equivalent) for which it is the lead agency and also released, but not adopted, draft thresholds for commercial and residential projects for which it is a responsible agency.[9] The adopted threshold represents the present intent of SCAQMD to provide interim guidance until CARB formally adopts its Draft Statewide Interim Thresholds of Significance, and although not binding on the Project, is considered in this analysis.

Findings and Recommendations

As indicated in Section 15064(b) of the *CEQA Guidelines*, the determination of significance of greenhouse gases is not "ironclad;" rather, the "determination of whether a project may have a significant effect on the environment calls for careful judgment" by the City "based to the extent possible on scientific and factual data." The City of Moreno Valley has not yet adopted a numeric threshold of significance for emissions of greenhouse gases.

[8] http://www.arb.ca.gov/cc/localgov/ceqa/meetings/102708/prelimdraftproposal102408.pdf (page 9), accessed April 19, 2010.
[9] http://aqmd.gov/ceqa/handbook/GHG/2009/nov19mtg/nov19.html, accessed April 21, 2010.

Nonetheless, the Project will not exceed the CARB or SCAQMD proposed quantitative thresholds. Therefore, Project GHG emissions impacts are considered less-than-significant

Level of Significance: Less-Than-Significant. Although Project-related GHG emissions are considered less-than-significant, to facilitate their monitored implementation throughout Project development and operations, design features and operational attributes of the Project are incorporated into this EIR as Mitigation Measures 4.3.10 through 4.3.13, presented previously. These measures act to reduce Project-related operational source air pollutants and GHG emissions, and promote sustainability through conservation of energy and other natural resources.

Mitigation Measures: Please refer to Mitigation Measures 4.3.10 through 4.3.13.

Level of Significance After Mitigation: Less-Than-Significant.

Potential Impact: ***Conflict with an applicable plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases.***

Impact Analysis: No air district or other regulatory agency in California, including the SCAQMD, has formally adopted a significance threshold for GHG emissions generated by a given project (for which SCAQMD is not the lead agency), or a uniform methodology for analyzing impacts related to GHG emissions or global climate change. However, the OPR has asked CARB to "recommend a method for setting thresholds of significance to encourage consistency and uniformity in the CEQA analysis of GHG emissions" throughout the state because OPR has recognized that "the global nature of climate change warrants investigation of a statewide threshold for GHG emissions." OPR interim guidance provided June 19, 2008 included a Technical Advisory addressing climate change through CEQA review. OPR's technical advisory offers informal guidance on the steps that lead agencies should take to address climate changes in their CEQA documents, in the absence of statewide thresholds.

In the absence of any approved guidelines or thresholds, the informal guidelines in OPR's technical advisory provide an approach for determining the Project's contribution of GHG emissions and its contribution to global climate change. In the absence of adopted statewide thresholds, OPR recommends the following approach for analyzing GHG emissions:

1. Identify and quantify the project's GHG emissions;

2. Assess the significance of the impact on climate change; and

3. If the impact is found to be significant, identify alternatives and/or mitigation measures that would reduce the impact to less than significant levels.

The Project's consistency with the AB 32 goals for reducing GHG emissions is assessed by determining whether the Project is consistent with or obstructs the 39 Recommended Actions identified by CARB in its Climate Change Scoping Plan which includes nine Early Action Measures (qualitative approach). In addition, the analysis considers the numeric level of emissions generated by the Project to determine whether the emissions are cumulatively significant (quantitative approach).

Significance Criteria Considerations

The increased concentration of GHGs in the atmosphere has been linked to global warming, which can lead to climate change. Construction and operation of the Project would incrementally contribute to GHG emissions along with past, present and foreseeable future activities. As such, impacts of GHG emissions are analyzed here on a cumulative basis.

Scientific evidence suggests that even without a net increase in GHG emissions, effects would remain significant due to past and existing emissions levels. In the most recent 2007 IPCC assessment report, the international body acknowledges that anthropogenic warming and sea level rise would continue for centuries due to the time scales associated with

climate processes and feedbacks even if GHG concentrations were to be stabilized. The study further found that both past and future anthropogenic CO_2 emissions will continue to contribute to warming and sea level rise for more than a millennium, due to the time scales required for the removal of this gas from the atmosphere. Further, the IPCC assessment noted that defining what is dangerous anthropogenic interference with the climate system and, consequently, the limits to be set for policy purposes are complex tasks that can only be partially based on science, as such definitions inherently involve normative judgments.

CARB Significance Criteria

As part of its guideline amendment process, OPR requested that CARB draft statewide standards to provide guidance to local agencies in adopting thresholds of significance. CARB's Draft Thresholds of Significance for industrial projects (7,000 metric tons per year of carbon dioxide equivalent from non-transportation related GHG sources)[10], indicates the current state of CARB's efforts to establish a GHG significance standard under CEQA for industrial projects. Once finalized by CARB, and adopted, local agencies would be free to utilize the recommended standard as their own. However, because the threshold has not been finalized and is subject to change, it is not applicable to the Project although it is considered in this analysis.

SCAQMD Significance Criteria

Similarly, SCAQMD has adopted Significance Screening Levels for industrial projects (10,000 metric tons per year of carbon dioxide equivalent) for which it is the lead agency and also released, but not adopted, draft thresholds for commercial and residential projects for which it is a responsible agency.[11] The adopted threshold represents the present intent of SCAQMD to provide interim guidance until CARB formally adopts its Draft Statewide Interim Thresholds of Significance, and although not binding on the Project, is considered in this analysis.

[10] http://www.arb.ca.gov/cc/localgov/ceqa/meetings/102708/prelimdraftproposal102408.pdf (page 9), accessed April 19, 2010.

[11] http://aqmd.gov/ceqa/handbook/GHG/2009/nov19mtg/nov19.html, accessed April 21, 2010.

AB 32 Scoping Plan

In the absence of an adopted significance threshold, this impact analysis considers the following criteria: (1) whether the project under consideration would conflict with the GHG reduction measures adopted in CARB's AB 32 Scoping Plan and (2) whether the project generates GHG that may have a cumulatively significant impact on the environment.

With the passage of AB 32, the State of California adopted a goal of reducing state-wide emissions to 1990 levels by 2020 and directed CARB to develop a Scoping Plan to meet that goal utilizing cost effective reductions. This threshold is consistent with OPR's preliminary guidelines which provide in Appendix G, in the absence of an applicable threshold of significance, "Would the project . . . [c]onflict with any applicable plan, policy or regulation of an agency adopted for the purposes of reducing the emissions of greenhouse gases."

The primary purpose of the Scoping Plan is to develop a set of measures that will provide the maximum technologically feasible and cost-effective greenhouse gas emission reductions. The plan includes, among other items, energy conservation measures, use of new energy efficient technologies, a cap and trade emissions program as well as transportation and land use standards and policies. Full implementation of the Plan depends upon actions taken by other regulatory agencies (state and federal) including future CARB actions. The Plan notes that 38 percent of GHG in the state results from the transportation sector, and that the sector is expected to grow 25 percent by 2020 without GHG reduction measures. Accordingly, the greatest GHG reductions come from vehicle emissions standards, estimated at 31.7 million metric tons of carbon dioxide equivalent (CO_2e) reductions expected from implementation of the so-called Pavley standards for Light-Duty Vehicle Greenhouse Gas Standards. Implementation of the Pavley standards is dependent upon the state receiving a waiver under the CAA from the EPA. In contrast, the industrial sector, which includes refineries, cement plants, oil and gas production, food processors, and other large industrial sources, is not expected to grow significantly by 2020. The Plan assumes growth of less than 5 MMT CO_2e. GHG reductions for this sector are largely confined to cap and trade program to be launched in 2011 and oil and gas extraction and transmission measures.

However, it is important to note that even if the state reaches its 2020 goal, it is likely that the reductions will be offset by emissions increases in developing countries such as Brazil, Russia, India and China, and that significant effects of climate change, such as global warming and sea level rise, will nevertheless occur due to the continuing effects of past and existing levels of emissions. In the absence of worldwide reduction commitments that are fully funded, any project level reduction measures cannot assure that significant effects on global temperatures and sea levels will be fully mitigated. Due to the potential global impacts that may remain even with implementation of the measures set forth in the Scoping Plan, this impact analysis further considers whether the Project GHG emissions may have a cumulatively significant impact on the environment.

Accordingly, consistent with OPR's preliminary guidance, this impact analysis focuses on the following two criteria:

1. Would the Project generate GHG that may have a cumulatively significant impact on the environment; and

2. Would the Project conflict with GHG reduction measures identified in CARB's AB 32 Scoping Plan.

Consistency with the CARB Scoping Plan

AB 32 requires California to reduce its GHG emissions by approximately 29 percent below business as usual. CARB identified reduction measures to achieve this goal as set forth in the CARB Scoping Plan. Thus, projects that are consistent with the CARB Scoping Plan are also consistent with the 29 percent reduction below business as usual required by AB 32.

As presented in Table 4.3-18, presented previously, the Project would generate GHG emissions from a variety of sources which would all emit CO_2, CH_4 and N_2O. GHGs could also be indirectly generated by incremental electricity consumption and waste generation from the Project.

To date, CARB has also identified 39 Recommended Actions (qualitative measures) within its Climate Change Proposed Scoping Plan (Scoping Plan). Of the 39 measures identified, those that would be considered to be applicable to the Project would primarily be those actions related to transportation, electricity and natural gas use, green building design and industrial uses. Through the design features, operational programs and mitigation measures identified herein the Project is considered consistent with and would not conflict with applicable provisions and recommendation of the Scoping Plan. Table 4.3-19 presents all 39 Recommended Actions and includes statements of applicability and response to the OPR significance criteria "Would the Project conflict with GHG reduction measures identified in CARB's AB 32 Scoping Plan." Supporting statements addressing each applicable Recommended Action and the Project potential to conflict with its implementation follow Table 4.3-19. Please refer also to related discussions presented in the Project GCC Analysis included at EIR Appendix C.

Table 4.3-19
CARB Scoping Plan Recommended Actions

ID#	Sector	Strategy Name	Applicable to Project?	Will Project Conflict with Implementation?
T-1	Transportation	Pavley I and II - Light Duty Vehicle GHG Standards	YES	NO
T-2	Transportation	Low Carbon Fuel Standard (Discrete Early Action)	YES	NO
T-3	Transportation	Regional Transportation - Related GHG Targets	YES	NO
T-4	Transportation	Vehicle Efficiency Measures	YES	NO
T-5	Transportation	Ship Electrification at Ports (Discrete Early Action)	NO	NO
T-6	Transportation	Goods - Movement Efficiency Measures	NO	NO
T-7	Transportation	Heavy Duty Vehicle Greenhouse Gas Emission Reduction Measure - Aerodynamic Efficiency (Discrete Early Action)	YES	NO
T-8	Transportation	Medium and Heavy Duty Vehicle Hybridization	YES	NO
T-9	Transportation	High Speed Rail	NO	NO

Table 4.3-19
CARB Scoping Plan Recommended Actions

ID#	Sector	Strategy Name	Applicable to Project?	Will Project Conflict with Implementation?
E-1	Electricity and Natural Gas	Increased Utility Energy Efficiency Programs More Stringent Building and Appliance Standards	YES	NO
E-2	Electricity and Natural Gas	Increase Combined Heat and Power Use by 30,000GWh	NO	NO
E-3	Electricity and Natural Gas	Renewable Portfolio Standard	NO	NO
E-4	Electricity and Natural Gas	Million Solar Roofs	YES	NO
CR-1	Electricity and Natural Gas	Energy Efficiency	NO	NO
CR-2	Electricity and Natural Gas	Solar Water Heating	NO	NO
GB-1	Green Buildings	Green Buildings	YES	NO
W-1	Water	Water Use Efficiency	YES	NO
W-2	Water	Water Recycling	NO	NO
W-3	Water	Water System Energy Efficiency	YES	NO
W-4	Water	Reuse Urban Runoff	NO	NO
W-5	Water	Increase Renewable Energy Production	NO	NO
W-6	Water	Public Goods Charge (Water)	NO	NO
I-1	Industry	Energy Efficiency and Co-benefits Audits for Large Industrial Sources	YES	NO
I-2	Industry	Oil and Gas Extraction GHG Emission Reduction	NO	NO
I-3	Industry	GHG Leak Reduction from Oil and Gas Transmission	NO	NO
I-4	Industry	Refinery Flare Recovery Process Improvements	NO	NO
I-5	Industry	Removal of Methane Exemption from Existing Refinery Regulations	NO	NO
RW-1	Recycling and Waste Management	Landfill Methane Control (Discrete Early Action)	NO	NO
RW-2	Recycling and Waste Management	Additional Reductions in Landfill Methane - Capture Improvements	NO	NO

Table 4.3-19
CARB Scoping Plan Recommended Actions

ID#	Sector	Strategy Name	Applicable to Project?	Will Project Conflict with Implementation?
RW-3	Recycling and Waste Management	High Recycling/Zero Waste	NO	NO
F-1	Forestry	Sustainable Forest Target	NO	NO
H-1	High Global Warming Potential Gases	Motor Vehicle Air Conditioning Systems (Discrete Early Action)	NO	NO
H-2	High Global Warming Potential Gases	SF_6 Limits in Non-Utility and Non-Semiconductor Applications (Discrete Early Action)	NO	NO
H-3	High Global Warming Potential Gases	Reduction in Perflourocarbons in Semiconductor Manufacturing (Discrete Early Action)	NO	NO
H-4	High Global Warming Potential Gases	Limit High GWP Use in Consumer Products (Discrete Early Action, Adopted June 2008)	NO	NO
H-5	High Global Warming Potential Gases	High GWP Reductions from Mobile Sources	NO	NO
H-6	High Global Warming Potential Gases	High GWP Reductions from Stationary Sources	NO	NO
H-7	High Global Warming Potential Gases	Mitigation Fee on High GWP Gases	NO	NO
A-1	Agriculture	Methane Capture at Large Dairies	NO	NO

Source: CARB, 2008.

Action T-1 proposes legislation requiring improved controls and standards for light vehicle manufacturers. If implemented, light vehicles utilized by the Project would be subject to the new regulation, and the Project would comply as required.

Action T-2 recommends reduced carbon-intensity transportation fuels. In this regard, CARB is developing Low Carbon Fuel Standard (LCFS), which would reduce the carbon intensity of California's transportation fuels by at least ten percent by 2020. If the proposed LCFS are implemented, the Project would comply with applicable provisions.

Action T-3 recommends regional transportation targets for reducing GHG emissions, based in part on consistency with adopted regional plans. The Project is consistent with the City of Moreno Valley General Plan, and the City General Plan is reflected in adopted regional plans. Further, the Project proposes GHG emissions reduction programs and strategies that are consistent with criteria. On this basis, the Project would not conflict with implementation of recommended Action T-3.

Action T-4 recommends implementation of vehicle efficiency standards and regulatory actions. While beyond effecting vehicle efficiency standards and regulations is beyond the purview of the Project, the Project will comply with such standards and regulations as adopted.

Action T-7 recommends existing trucks/trailers to be retrofitted with the best available technology and/or CARB-approved technology. Implementation of such a standard is not within the purview of the Project. GHG emissions reductions would be achieved however through standards compliance by vehicles accessing the Project.

Action T-8 recommends the hybridization of medium- and heavy-duty vehicles and implementation of related standards. Implementation of such standards is not within the purview of the Project since various trucks access the site. GHG emissions reductions would be achieved however through standards compliance by vehicles accessing the Project.

Action E-1, together with **Action GB-1** (Green Building), promotes energy efficiencies within utilities systems, and adoption of more stringent building and appliance standards. Project design features, operational programs and EIR Mitigation Measures in combination act to support, and would not interfere with recommended Actions E-1, GB-1.

Action E-4 promotes solar generated electricity. As discussed within this EIR, the Project design accommodates renewable energy sources, such as photovoltaic solar electricity systems. The Project supports, and would not interfere with Recommended Action E-4.

Action W-1 (Water Use Efficiency) and **Action W-3** (Water System Energy Efficiency). Water efficient designs and related energy efficiency measures incorporated in the Project and required through the EIR mitigation measures support and would not interfere with Recommended **Actions W-1** and **W-3**. Moreover, the Project would not exceed audit limitations specified under the Recommended Actions.

Action I-1 targets large emitters of GHGs (in excess of 0.5 MMT/year of CO_2e) for auditing. As discussed previously within this EIR, the Project would not exceed the audit threshold and therefore the Project is consistent with, and would not interfere with, Recommended Action I-1.

As summarized above and indicated at Table 4.3-19, the Project is consistent with and would not conflict with implementation of the recommended actions. A detailed discussion of the applicability of each measure and analysis of Project consistency is presented within the GCC Analysis, presented as Appendix C to this EIR.

Consistency with GHG Emission Reduction Strategies set forth in the 2006 CAT Report
Table 4.3-20 sets forth the emission reduction strategies set forth in the 2006 CAT Report, as well as Project compliance.

Table 4.3-20
Project Compliance with Applicable 2006 CAT Report
Greenhouse Gas Emission Reduction Strategies

Strategy	Applicability/Compliance
California Air Resource Board	
Vehicle Climate Change Standards AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the CARB in September 2004.	Enforcement of State regulation is beyond the scope of the Project. The Project will not interfere or conflict with AB 1493 (Pavley).

Table 4.3-20
Project Compliance with Applicable 2006 CAT Report
Greenhouse Gas Emission Reduction Strategies

Strategy	Applicability/Compliance
Other Light Duty Vehicle Technology New standards would be adopted to phase in beginning in the 2017 model.	Enforcement of State standards for Light Duty Vehicles is beyond the scope of the Project. The Project will not interfere or conflict with new standards adopted for Light Duty Vehicles.
Heavy-Duty Vehicle Emission Reduction Measures Increased efficiency in the design of heavy-duty vehicles and an education program for the heavy-duty vehicle sector.	Enforcement of State standards for Heavy Duty Vehicles is beyond the scope of the Project. The Project will not interfere or conflict with new standards adopted for Heavy Duty Vehicles.
Diesel Anti-Idling In July 2004, the CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	Heavy-duty diesel trucks that access the Project site will be required to limit idling to no more than three (3) minutes (EIR Mitigation Measure 4.3.10).
Hydrofluorocarbon Reduction 1) Ban retail sale of HFC in small cans; 2) Require that only low GWP refrigerants be used in new vehicular systems; 3) Adopt specifications for new commercial refrigeration; 4) Add refrigerant leak tightness to the pass criteria for vehicular Inspection and Maintenance programs; 5) Enforce federal ban on releasing HFCs.	This measure applies to consumer products. When CARB adopts regulations for these reduction measures, any products that the regulations apply to will comply with the measures.
Transportation Refrigeration Units (TRUs), Off Road Electrification, Port Electrification Strategies to reduce emissions from TRUs, increase off road electrification, and increase use of shore side/port electrification.	Not Applicable.
Alternative Fuels: Biodiesel Blends CARB would develop regulations to require the use of 1 to 4 percent biodiesel displacement of California diesel fuel.	When CARB adopts regulations for the use of biodiesel fuel in heavy duty trucks, trucks supplying the commercial uses will comply with this measure.
Reduced Venting and Leaks in Oil and Gas Systems Rule considered for adoption by the Air Pollution Control Districts for improved management practices.	Not Applicable.
Hydrogen Highway The California Hydrogen Highway Network (CA H2 Net) is a State initiative to promote the use of hydrogen as a means of diversifying the sources of transportation energy.	Not Applicable.

Table 4.3-20
Project Compliance with Applicable 2006 CAT Report
Greenhouse Gas Emission Reduction Strategies

Strategy	Applicability/Compliance
Integrated Waste Management Board	
Achieve 50 percent Statewide Recycling Goal Achieving California's 50 percent waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48 percent has been achieved on a statewide basis. Therefore, a 2 percent additional reduction is needed.	In support of AB 939, the Project will comply with requirements of the City of Moreno valley Source reduction and Recycling Element (SRRE), to include additional waste reduction/waste recycling measures as may be implemented by the City. Project design will include provisions for tenants to recycle.
Zero Waste - High Recycling Additional recycling beyond the State's 50 percent recycling goal.	In support of AB 939, the Project will comply with requirements of the City of Moreno valley Source reduction and Recycling Element (SRRE), to include additional waste reduction/waste recycling measures as may be implemented by the City. Project design will include provisions for tenants to recycle.
Department of Forestry	
Forest Management Strategies for storing more carbon through forest management activities can involve a range of management activities such as increasing either the growth of individual trees, the overall age of trees prior to harvest, or dedicating land to older age trees.	Not Applicable.
Forest Conservation Conservation projects are designed to minimize/prevent the climate change emissions that are associated with the conversion of forestland to non-forest uses by adding incentives to maintain an undeveloped forest landscape.	Not Applicable.

Table 4.3-20
Project Compliance with Applicable 2006 CAT Report
Greenhouse Gas Emission Reduction Strategies

Strategy	Applicability/Compliance
Fuels Management/Biomass Large, episodic, unnaturally hot fires are an increasing trend on California's wild lands because of decades of fire suppression activities, sustained drought, and increasing insect, disease, and invasive plans infestations. Actions taken to reduce wildfire severity through fuel reduction and biomass development would reduce climate change emissions from wildfire, increase carbon sequestration, replace fossil fuels, and provide significant economic development opportunities.	Not Applicable.
Urban Forestry A new statewide goal of planting 5 million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.	In support of Urban Forestry strategies, the Project landscaping concept provides for additional trees and vegetation at the Project site.
Afforestation/Reforestation Projects Reforestation projects focus on restoring native tree cover on lands that were previously forested and are now covered with other vegetative types.	Not Applicable.
Department of Water Resources	
Water Use Efficiency Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions.	In support of water Use Efficiency strategies, the Project will implement U.S. EPA Certified WaterSense labeled or equivalent faucets and high-efficiency toilets (HETs), and implement water-conserving shower heads to the extent feasible.
California Energy Commission (CEC)	
Building Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	As required through the EIR air quality mitigation measures noted herein, and based on energy efficiency/sustainability attributes of the Project presented in the EIR Project Description (EIR Section 3.0), energy efficiencies achieved by the Project will surpass incumbent Title 24 Energy Efficiency Standards by at least 20 percent. Verification of increased energy efficiencies is documented in Title 24 Compliance Reports provided by the Applicant, and reviewed and approved by the City prior to the issuance of the first building permit. Energy efficient Project designs and operational programs will facilitate Applicant-initiated LEED Certification actions.

Table 4.3-20
Project Compliance with Applicable 2006 CAT Report
Greenhouse Gas Emission Reduction Strategies

Strategy	Applicability/Compliance
Appliance Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	Appliances purchased for use in Project will be consistent with incumbent energy efficiency standards as may be established by the Energy Commission.
Fuel-Efficient Replacement Tires & Inflation Programs State legislation (Chapter 912, Statues of 2001) directed the Energy Commission to investigate and to recommend ways to improve fuel efficiency of vehicle tires. The bill established a statewide program to encourage the production and use of more fuel efficient tires.	Not Applicable.
Cement Manufacturing Cost-effective reductions to reduce energy consumption and to lower carbon dioxide emissions in the cement industry.	Not Applicable.
Municipal Utility Strategies Includes energy efficiency programs, renewable portfolio standard, combined heat and power, and transitioning away from carbon-intensive generation.	Not Applicable.
Alternative Fuels: non-Petroleum Fuels Increasing the use of non-petroleum fuels in California's transportation sector, as recommended in the CEC's 2003 and 2005 Integrated Energy Policy Reports.	Not Applicable.

Table 4.3-20
Project Compliance with Applicable 2006 CAT Report
Greenhouse Gas Emission Reduction Strategies

Strategy	Project Compliance
Business Transportation and Housing	
Smart Land Use and Intelligent Transportation Systems (ITS) Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services. Governor Schwarzenegger is finalizing a comprehensive 10-year strategic growth plan with the intent of developing ways to promote, through state investments, incentives and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity, and a quality environment.	The Project's location adjacent to SR-60 is appropriate for warehouse distribution uses, and takes advantage of the site's adjacency to this major, region-serving transportation corridor. More specifically, adjacency to SR-60 facilitates access to the Project site and reduces the potential for Project truck traffic to affect residential neighborhoods.
Measures to Improve Transportation Energy Efficiency Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools and information that advance cleaner transportation and reduce climate change emissions.	Location of the Project proximate to SR-60 promotes overall efficiency of the local and regional transportation systems by limiting truck traffic to major freeways and roadways designed to industrial standards. Potential for access to future alternative transportation modes is also enhanced.
Department of Food and Agriculture	
Conservation tillage/cover crops Conservation tillage and cover crops practices are increasingly being used by California farmers for a variety of reasons, including improved soil tilth, improved water use efficiency, reduced tillage requirements, saving labor and fuel, and reduced fertilizer inputs.	Not Applicable.
Enteric Fermentation Cattle emit methane from digestion processes. Changes in diet could result in a reduction in emissions.	Not Applicable.
State and Consumer Services Agency	Not Applicable.

Table 4.3-20
Project Compliance with Applicable 2006 CAT Report
Greenhouse Gas Emission Reduction Strategies

Strategy	Project Compliance
Green Buildings Initiative Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels.	As required through the EIR air quality mitigation measures presented herein, and based on energy efficiency/sustainability attributes of the Project presented in the EIR Project Description (EIR Section 3.0), energy efficiencies achieved by the Project will surpass incumbent Title 24 Energy Efficiency Standards by at least 20 percent. Energy efficient Project designs and operational programs will facilitate Applicant-initiated LEED Certification of the Project.
Public Utilities Commission (PUC)	
Accelerated Renewable Portfolio Standard The Governor has set a goal of achieving 33 percent renewables in California's resource mix by 2020. The joint PUC/Energy Commission September 2005 Energy Action Plan II (EAP II) adopts the 33 percent goal.	Not Applicable.
California Solar Initiative Installation of 1 million solar roofs or an equivalent 3,000 MW by 2017 on homes and businesses; increased use of solar thermal systems to offset the increasing demand for natural gas; use of advanced metering in solar applications; and creation of a funding source that can provide rebates over 10 years through a declining incentive schedule.	In support of the California Solar Initiative, the Project design accommodates potential future installation and use of renewable energy sources, such as photovoltaic solar energy systems. (See EIR Section 3.0, Project Description).
Investor-Owned Utility This strategy includes energy efficiency programs, combined heat and power initiative, and electricity sector carbon policy for investor owned utility.	Not Applicable.

Source: State of California, Environmental Protection Agency, Climate Action Team, 2006.

Although implementation of the CAT strategies will likely reduce GHG emissions to the extent possible, it is not possible to specifically quantify the reduction in GHG that will result from implementation of CAT strategies and programs. However, a project that is consistent with CAT strategies is consistent with the strategies suggested to reduce California's emissions to the levels proposed by Executive Order S-3-05 and AB 32, and therefore the Project will result in a less-than-significant cumulative impact on GCC.

Consistency with CAPCOA White Paper Significance Determination

Because, as discussed herein, the Project is consistent with the CARB Scoping Plan and the 2006 CAT Report, the last criteria set forth in the CAPCOA white paper criteria flow chart (discussed previously) is satisfied. Thus, according to the methodology in the CAPCOA white paper, the Project's cumulative contribution to global climate change is less than significant pursuant to CEQA.

Conclusion

Results of the analysis indicate that the Project would generate GHG emission that may have a significant impact on the environment. However, the Project is consistent with, or otherwise not in conflict with the CARB Scoping Plan recommended measures and actions and the GHG emission reduction strategies set forth in the 2006 CAT Report.

As such, a qualitative assessment of the Project impacts based upon consistency with the CARB Scoping Plan and the 2006 CAT Report, supports the conclusion that the Project GHG emissions are not cumulatively considerable. Table 4.3-21 identifies the various sources of guidance for determining the significance of impacts from GHG emissions, and the applicability of each source to this Project. Further, Project GHG emissions will be further reduced with implementation of the Project design features and mitigation measures. This analysis does not take any credit for a reduction of GHG emissions as a result of implementation of such features and measures.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Table 4.3-21
Current Guidance/Methodology for CEQA Evaluation of Impacts from GHG Emissions

Guidance Source	Status	Applied in Analysis of the Project Impacts from GHG Emissions?
OPR Technical Advisory	Finalized - June 2008	Yes: Project emissions are quantified; mitigation measures are recommended and a significance determination is made.
CARB Scoping Plan	Finalized - December 2008	Yes: Project is consistent with the actions and measures set forth in the CARB Scoping Plan.
2006 CAT Report	Finalized - March 2006	Yes: Project is consistent with the GHG reduction measures and goals set forth in the 2006 CAT Report.
CAPCOA White Paper	Finalized - January 2008	Yes: Because the GHG emissions for the Project are quantified and analyzed, and it is determined that the Project would be consistent with the CARB Scoping Plan and 2006 CAT Report measures. As such, the Project's impacts are less than significant according to the flow chart for determining whether the Project would have a significant impact as set forth in the CAPCOA white paper.
OPR Proposed CEQA Guideline Amendments Addressing Impacts from GHGs	Not Finalized - OPR transmitted final draft in April 2009; Resources Agency has set public hearings to consider adoption for August 2009.	Yes: In the absence of other guidance for making a significance determination, Project impacts from GHG emissions are analyzed in accord with the methodology set forth in the CEQA Guidelines.
CARB Draft Proposed Thresholds of Significance	Not Finalized	Not Applicable: These draft thresholds have not been adopted. The draft thresholds for industrial projects are intended to apply to industrial projects that have GHG emissions associated with heavy manufacturing, and thus do not apply to the Project.
SCAQMD Draft Thresholds of Significance	Finalized with respect to use by SCAQMD as lead agency for industrial projects.	Not Applicable: These draft thresholds have not been adopted. The draft thresholds for industrial projects are intended to apply to industrial projects that have GHG emissions associated with heavy manufacturing, and thus do not apply to the Project.

Source: *Westridge Commerce Center Climate Change Analysis, City of Moreno Valley, California* (Urban Crossroads) February 3, 2010.

4.4 NOISE

4.4 NOISE

Abstract

This Section assesses whether the Project would substantially increase ambient noise levels or expose land uses to noise levels exceeding established standards. Noise impacts would be considered potentially significant if the Project would result in any of the following:

- *Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan, noise ordinance, or other applicable standards; result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project; or result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.*

- *Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels;*

- *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, or private airstrip, exposure of people residing or working in the project area to excessive noise levels.*

As supported by the analysis presented in this Section, even with application of mitigation measures, temporary construction-source noise received at proximate residential properties is considered to be significant and unavoidable. All other potential noise impacts are either less-than-significant, or can be reduced to levels that are less-than-significant with application of the mitigation measures described herein.

4.4.1 INTRODUCTION

This section presents the noise setting, standards of significance, methodology, and potential impacts associated with the Project. The information presented here has been summarized from *Westridge Commerce Center Noise Analysis, City of Moreno Valley, California* (Urban Crossroads, Inc.) May 17, 2010 (Revised). A copy of this report in its entirety is provided at EIR Appendix D.

4.4.2 SETTING

Following are discussions of noise fundamentals applicable to the Project, together with assessments of existing ambient noise levels and identification of noise sources in the Project vicinity.

4.4.2.1 Noise Criteria Background

Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dB higher than another is judged to be twice as loud; a sound 20 dB higher is perceived to be four times as loud; and so forth. Everyday sounds normally range from 30 dB (very quiet) to 100 dB (very loud).

Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Community noise levels are measured in terms of the "A-weighted decibel," abbreviated dBA. Sound levels decrease as a function of distance from the source as a result of wave divergence, atmospheric absorption and ground attenuation. As the sound wave form travels away from the source, the sound energy is dispersed over a greater area, thereby dispersing the sound power of the wave. Atmospheric absorption also influences the levels that are received by the observer. The greater the distance

traveled, the greater the influence and the resultant fluctuations. The degree of absorption is a function of the frequency of the sound as well as the humidity and temperature of the air. Turbulence and gradients of wind, temperature and humidity also play a significant role in determining the degree of attenuation. Intervening topography can also have a substantial effect on the perceived noise levels.

Noise has been defined as unwanted sound and is known to have several adverse effects on people. From these known effects of noise, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. This criterion is based on known effects of noise on people, such as hearing loss, speech interference, sleep interference, physiological responses and annoyance, described below:

- **Hearing Loss** is more commonly associated with occupational noise exposures in heavy industry or very noisy work environments. Noise levels in residential settings, even in high exposure areas such as occurs proximate to airports, are not sufficiently loud as to cause hearing loss.

- **Speech Interference** is one of the primary concerns in environmental noise problems. Normal conversational speech is in the range of 60 to 65 dBA and any noise in this range or louder may interfere with speech. There are specific methods of describing speech interference as a function of distance between speaker and listener and voice level.

- **Sleep Interference** is a major noise concern for traffic noise. Sleep disturbance studies have identified interior noise levels that have the potential to cause sleep disturbance. Note that sleep disturbance does not necessarily mean awakening from sleep, but can refer to altering the pattern and stages of sleep.

- **Physiological Responses** are those measurable effects of noise on people that are realized as changes in pulse rate, blood pressure, etc. While such effects can be

induced and observed, the extent to which these physiological responses cause harm or signs of harm is presently unknown.

- **Annoyance** is the most difficult of all noise responses to describe. Annoyance is a very individual characteristic and can vary widely from person to person. What one person considers tolerable can be quite unbearable to another of equal hearing capability.

4.4.2.2 Noise Assessment Metrics

The description, analysis and reporting of community noise levels reflects the complexity of human response to noise and the myriad of noise metrics that have been developed for describing noise impacts. Each of these noise metrics attempts to quantify noise levels with respect to community response. Most of the metrics use the A-weighted noise level to quantify noise impacts on humans. A-weighting is a frequency weighting that accounts for human sensitivity to different frequencies.

Several rating scales have been developed for measurement of community noise. These account for: (1) parameters of noise that have been shown to contribute to the effects of noise, (2) variety of noises found in the environment, (3) variations in noise levels within a given environment, and (4) effects of noise based on their potential occurrence within noise-sensitive evening and nighttime hours. The two most predominant noise rating scales are the: Equivalent Noise Level (Leq) and the Community Noise Equivalent Level (CNEL). These scales are described in the following paragraphs along with the L(%) scales that are also used for community noise assessment.

Leq is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. Leq is the "energy" average noise level during the time period of the sample. Leq can be measured for any time period, but is typically measured for one hour. This 1-hour noise level can also be referred to as the Hourly Noise Level (HNL), which is the energy average of all the events and background noise levels that occur during that time period.

CNEL is the predominant rating scale now in use in California for land use compatibility assessment. The CNEL scale represents a time weighted 24-hour average noise level based on the A-weighted decibel. Time weighted refers to the fact that noise which occurs during certain sensitive time periods is penalized. The evening time period (7 p.m. to 10 p.m.) penalizes noises by 5 dBA, while nighttime (10 p.m. to 7 a.m.) noises are penalized by 10 dBA. These time periods and penalties were selected to reflect people's increased sensitivity to noise during these time periods. A CNEL noise level may be reported as a "CNEL of [#] dBA," "[#] dBA CNEL," or simply "[#] CNEL."

L(%) is a statistical method of describing noise which accounts for variance in noise levels throughout a given measurement period. L(%) is a way of expressing the noise level exceeded for a percentage of time in a given measurement period. The L50 noise level is the median noise level. For half of the measurement period the noise level exceeds the L50 and for the other half of the measurement period, the noise level is less than the L50. The L90 is considered the background noise level and is the level exceeded 90 percent of the time.

4.4.2.3 Existing Noise Conditions

The Project site is currently vacant. Adjacent parcels to the east, between the Project site and Redlands Boulevard, are designated for commercial use, but are currently undeveloped. Adjacent properties to the south of the Project site are designated for rural residential use, and are currently vacant with the exception of one (1) single-family home located opposite the Project site, on the south side of Fir (future Eucalyptus) Avenue. An existing residential neighborhood is located just over one-quarter mile south of the Project site, south of Eucalyptus Avenue (future Encilia Avenue). Properties to the west, across the existing Quincy Channel, are currently vacant and unimproved, and designated for single-family, multiple-family, rural residential and business park uses.

SR-60 forms the site's northerly boundary, and the dominant source of noise affecting the site is traffic on this roadway. The site is also subject to traffic-related noise from

Redlands Boulevard, approximately 700 feet to the east of the Project boundary. To document the existing noise environment in the vicinity of the Project site, noise level measurements were taken at six locations within the Project noise study area. These locations are illustrated at Figure 4.4-1, "Noise Monitoring Locations." Noise monitoring results are provided at Table 4.4-1.

Ambient noise levels were also calculated for the roadway segments near the Project site, as presented at Table 4.4-2. The "noise contours" referenced in this Table represent the distance to noise levels of a constant value, and are measured from the centerline of the roadway. These noise contours do not take into account the effect of any existing noise barriers or topography that may act to reduce noise levels at any given receptor.

4.4.2.4 Noise Receptor Sensitivity

Land uses deemed noise-sensitive by the State of California include: schools, hospitals, rest homes, long-term care and mental care facilities. Moderately noise-sensitive land uses include: multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs and equestrian clubs. Relatively noise tolerant land uses include business, commercial, and professional developments. Non-sensitive noise receptors include industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

The nearest sensitive receptor to the Project site is the one (1) single-family home located to the south of the Project, at 28855 Fir Avenue (future Eucalyptus Avenue). The closest residential neighborhood considered to be a sensitive receptor is located just over one-quarter mile to the south of the Project, south of Eucalyptus Avenue (future Encilia Avenue). The nearest school is Valley View High School, located approximately 1.5 miles southwesterly of the Project site at 13135 Nason Street. Of these potential receptors, based on distance, only the nearest residence, south of Fir Avenue (future Eucalyptus Avenue) is expected to be affected by Project-related noise.

LEGEND:

(1) = NOISE MONITORING LOCATION

N

NOT TO SCALE

Source: Urban Crossroads, Inc.

Figure 4.4-1
Noise Monitoring Locations

Table 4.4-1

Existing (Ambient) Noise Level Measurements[1]

Location[2]	Description	Time of Measurement	Primary Noise Source	Noise Levels (Leq dBA)	Estimated Noise Levels (Leq CNEL)[3]
1	Located near the existing residential neighborhood at the current terminus of Eucalyptus Avenue (future Encilia Avenue)	9:30 a.m.	Ambient noise	40.1	--
2	Located 100 feet south of the SR-60 centerline on the northwestern portion of the Project site	9:50 a.m.	Traffic on SR-60	71.6	74.8
3	Located near the existing single-family home on Fir Avenue directly south of the Project site	10:06 a.m.	Traffic on SR-60/ Ambient	44.0	47.7
4	Located 100 feet west of Redlands Boulevard near the existing Redlands Boulevard/ Fir Avenue (future Eucalyptus Avenue) intersection	10:21 a.m.	Traffic on Redlands Blvd.	58.9	59.5
5	Located 100 feet west of Redlands Boulevard near the existing Redlands Boulevard/ Dracaea Avenue intersection	10:34 a.m.	Traffic on Redlands Blvd.	59.1	59.7
6	Located 100 feet west of the Moreno Beach Boulevard centerline in front of the existing Brookstone Overlook Apartments	10:55 a.m.	Traffic on Moreno Beach Blvd.	63.8	64.4

Source: *Westridge Commerce Center Noise Analysis, City of Moreno Valley, California* (Urban Crossroads, Inc.) May 17, 2010 (Revised).

[1] Noise measurements were taken by Urban Crossroads, Inc., on September 18, 2008, using a Larson Davis 824 Series Type 1 noise meter.

[2] Please refer to EIR Figure 4.4-1 for the location of the monitoring sites, and EIR Appendix D for study area photos.

[3] Please refer to Noise Analysis, EIR Appendix D for Leq to CNEL conversion calculations.

Table 4.4-2

Roadway Noise Contours – Existing Conditions

Street - Segment	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL	CNEL at 100 Feet
Cottonwood Ave. – west of Redlands Blvd.	RW	RW	RW	57	51.3
Eucalyptus (future Encilia) Ave. – west of Redlands Blvd.	RW	RW	RW	RW	47.9
Fir (future Eucalyptus Ave.) – east of Redlands Blvd.	---	---	---	---	---
Fir (future Eucalyptus Ave.) – east of Quincy St.	---	---	---	---	---
Fir (future Eucalyptus Ave.) – east of Street "A"	---	---	---	---	---
Fir (future Eucalyptus Ave.) – west of Quincy St.	---	---	---	---	---
Fir (future Eucalyptus Ave.) – east of Moreno Beach Dr.	RW	RW	54	116	55.9
Moreno Beach Dr. – north of SR-60 WB On-Ramp	RW	RW	99	213	59.9
Moreno Beach Dr. – south of Eucalyptus Ave.	RW	131	282	608	66.8
Moreno Beach Dr. – south of SR-60 WB On-Ramp	RW	102	219	473	65.1
Quincy St. – south of Eucalyptus Ave.	---	---	---	---	20.7
Redlands Blvd. – north of SR-60 WB On-Ramp	RW	116	251	540	66.0
Redlands Blvd. – south of Cottonwood Ave.	RW	79	170	367	63.5
Redlands Blvd. – south of Encilia Ave.	RW	80	173	373	63.6
Redlands Blvd. – south of Fir Ave.	RW	80	173	373	63.6
Redlands Blvd. – south of SR-60 EB Off-Ramp	RW	81	174	376	63.6
Redlands Blvd. – south of SR-60 WB On-Ramp	RW	102	221	475	65.2

Source: *Westridge Commerce Center Noise Analysis, City of Moreno Valley, California* (Urban Crossroads, Inc.) May 17, 2010 (Revised).

4.4.3 EXISTING POLICIES AND REGULATIONS

The Noise Section of the Moreno Valley General Plan (included as part of the Safety Element) contains the City of Moreno Valley's policies on noise, and presents limits on noise generated by transportation noise sources, including vehicles on public roadways, railroads and aircraft. These limits are imposed on new development.

The City's Noise Ordinance applies to "stationary source" noise occurring on one property, which may affect a neighboring property. The ordinance sets limits on the noise levels that can be experienced at the neighboring property. The Noise Ordinance is part of the City's Municipal Code and is enforceable throughout the City. Any new development must incorporate all feasible measures to ensure that the limits of the General Plan and the Noise Ordinance are not exceeded. The City of Moreno Valley Noise Ordinance and General Plan Noise policies are presented below.

4.4.3.1 General Plan Noise Policies

The discussion of noise in the Safety Element of the City of Moreno Valley General Plan considers land use compatibility based on community noise exposure, and establishes policies and objectives to reduce or avoid potentially adverse effects of noise. General Plan noise objectives and policies are summarized at Table 4.4-3.

Table 4.4-3

City of Moreno Valley General Plan Consistency

Objective 6.3: Provide noise compatible land use relationships by establishing noise standards utilized for design and siting purposes.	***Consistent.*** *The proposed Project will comply with all relevant noise standards established by the City.*
Objective 6.4: Review noise issues during the planning process and require noise attenuation measures to minimize acoustic impacts to existing and future surrounding land uses.	***Consistent.*** *The Project's site-specific noise study will be reviewed as part of this Draft EIR. Long-term operations of the Project will not result in significant noise impacts. Temporary, intermittent construction noise is reduced to the extent feasible, but is recognized as significant and unavoidable for the duration of construction activities.*
Policy 6.4.1: Site, landscape, and architectural design features shall be encouraged to mitigate noise impacts for new developments, with a preference for noise barriers that avoid freeway sound barrier walls.	***Consistent.*** *Project-related uses will not be affected by freeway noise, in part due to grade differentials, and as such, freeway sound barrier walls will not be constructed adjacent to the Project site.*
Objective 6.5: Minimize noise impacts from significant noise generators such as, but not limited to, motor vehicles, trains, aircraft, commercial, industrial, construction, and other activities.	***Consistent.*** *The Project's potential noise impacts are evaluated within this Section of the Draft EIR. As noted above, long-term operations of the Project will not result in significant noise impacts. Temporary, intermittent construction noise is reduced to the extent feasible, but is recognized as significant and unavoidable for the duration of construction activities.*

Table 4.4-3

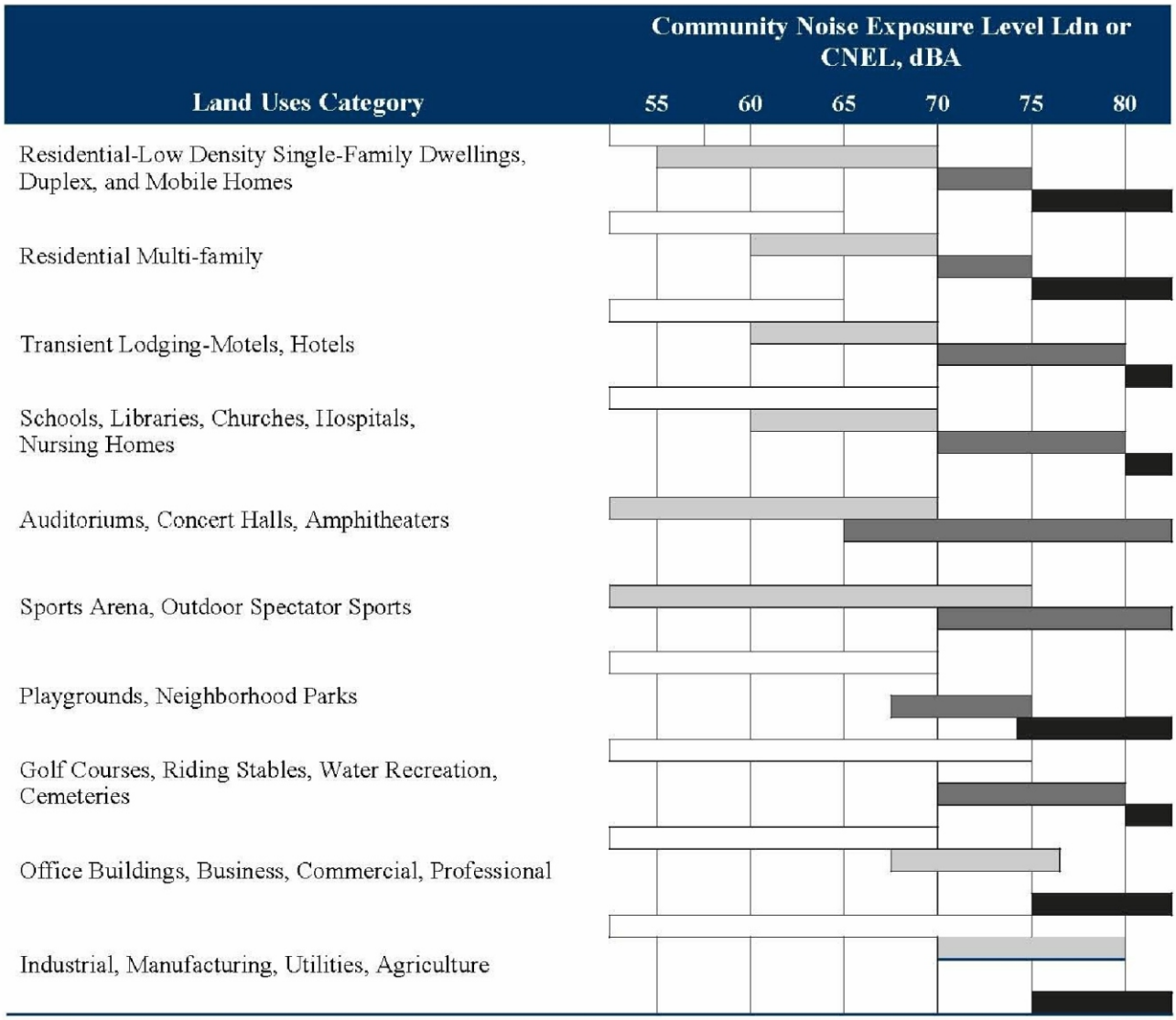
City of Moreno Valley General Plan Consistency

Policy 6.5.1: New commercial and industrial activities (including the placement of mechanical equipment) shall be evaluated and designed to mitigate noise impacts on adjacent uses.	***Consistent.*** *The Project's potential noise impacts are evaluated within this Section of the Draft EIR. Project design and operational programs reduce the Project's potential operational noise impacts to a less-than-significant level.*
Policy 6.5.2: Construction activities shall be operated in a manner that limits noise impacts on surrounding uses.	***Consistent.*** *The Project's potential construction-related noise impacts are evaluated within this Section of the Draft EIR. Even after the application of all feasible mitigation, temporary, intermittent construction noise would be considered significant and unavoidable for the duration of construction activities.*

Source: City of Moreno Valley General Plan, Safety Element Objectives and Policies.

Noise policies and standards applicable to the Project are also considered in the context of California guidelines which address land use/noise compatibility issues and concerns. Figure 4.4-2 presents a land use and noise compatibility matrix derived from standards contained in the *General Plan Guidelines*, a publication of the California Office of Planning and Research. These standards are widely applied throughout California cities and counties. As indicated at Figure 4.4-2, industrial uses such as the Project in noise environments of 75 dBA CNEL or less are considered "normally acceptable." For noise-sensitive residential areas, such as exist in the Project vicinity, exterior noise levels should remain below 65 dBA CNEL, and noise levels measured at interior areas must remain below 45 dBA CNEL.

Within the context of this analysis, potentially affected noise sensitive uses within the Project noise study area are single-family homes within the Project vicinity. As noted previously, the closest single family receptor is the lone residential property located at 28855 Fir Avenue, southerly adjacent to the Project site. The Project site is located adjacent to areas zoned for residential, however, they are not currently developed with residential uses. The nearest residential neighborhood is located just over one-quarter mile south of the Project site.



Explanatory Notes

Normally Acceptable:
Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Conditionally Acceptable:
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice. Outdoor environment will seem noisy.

Normally Unacceptable:
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 with needed noise insulation features included in the design. Outdoor areas must be shielded.

Clearly Unacceptable:
New construction or development should generally not be undertaken. Construction cost to make the indoor environment acceptable would be prohibitive and the outdoor environment would not be usable.

Source: California Office of Noise Control; Urban Crossroads, Inc.

Figure 4.4-2
Land Use and Noise Compatibility Matrix

4.4.3.2 Noise Ordinance

The City's Noise Ordinance applies to "stationary source" noise occurring on one property, which may affect a neighboring property. The City of Moreno Valley Noise Ordinance (Municipal Code Table 11.80.030-2) establishes the following maximum sound levels for nighttime hours (10 p.m. to 7 a.m.), and daytime hours (7 a.m. to 10 p.m.) at receiving residential and commercial areas.

Table 4.4-4
Moreno Valley Noise Ordinance
Maximum Sound Level Thresholds (in dBA)

Residential		Commercial	
Daytime	**Nighttime**	**Daytime**	**Nighttime**
60	55	65	60

Source: Moreno Valley Municipal Code, Table 11.80.030-2.

The City of Moreno Valley also establishes the following standards addressing construction activities and construction noise:

- Construction activities shall be operated in a manner that limits noise impacts on surrounding uses [Moreno Valley General Plan Noise Element Policy 6.5.2; Moreno Valley General Plan Final EIR Mitigation Measure N5];

- 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 creates a noise disturbance . . . [Moreno Valley Municipal Code, Chapter 11.80, Noise Regulation; Section 11.80.030, Prohibited acts; (D) 7];

- The maximum permissible sound level for daytime hours (8:00 a.m. to 10:00 p.m.) as received at residential land uses is 60 dBA Leq [Moreno Valley Municipal Code, Chapter 11.80, Noise Regulation; Section 11.80.030, Table 11.80.030-2].

The City of Moreno Valley has not established quantified vibration thresholds. However, relevant vibration impact criteria has been established by the California Department of Transportation (Caltrans), and is employed here.

4.4.4 STANDARDS OF SIGNIFICANCE

The following criteria for establishing the significance of potential noise impacts were derived from Appendix G of the *CEQA Guidelines*. A significant impact would occur if the Project would result in any of the following:

- **Exposure of people to severe noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.** The Safety Element of the City's General Plan discusses noise and future projected noise levels within the City. For planning purposes, the City employs a 65 CNEL standard for noise sensitive outdoor areas (e.g., rear yards of single family homes), and an indoor noise standard of 45 CNEL for residential developments. City Noise Ordinance standards are summarized at the previous Table 4.4-4.

- **Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.** As noted above, maximum vibration levels are not established by the City. For the purposes of this analysis, groundborne vibration and groundborne noise are assessed in the context of Caltrans vibration impact guidance.

- **A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.** Increased ambient noise levels at sensitive receptors which exceed the General Plan residential exterior standard of 65 dBA CNEL would be considered a substantial increase in ambient noise levels in the project vicinity above levels existing without the project. If ambient conditions already exceed 65 dBA CNEL, an audible increase in noise levels (greater than 3.0 dBA) would be considered substantial.

- **A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.** Temporary or periodic Project-source noise that would result in noise levels exceeding City Noise Ordinance standards (EIR Table 4.4-4) would be considered a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. If ambient conditions exceed Table 4.4-4 standards, an audible increase in noise levels (greater than 3.0 dBA) would be considered a substantial increase.

- **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, exposure of people residing or working in the project area to excessive noise levels.** Not applicable to the Project.

- **For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels.** Not applicable to the Project.

4.4.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

For development proposals such as the Westridge Commerce Center Project, potential noise impacts are commonly divided into two groups: temporary (construction-source) noise impacts, and long-term (operational-source) noise impacts. Construction-source impacts are usually associated with heavy equipment operations occurring within or proximate to the Project site. Operational-source noise impacts are attributable to mobile sources (off-site vehicular-source noise impacts), and stationary or area-source noise generated by equipment and activities within the Project site.

Potential Impacts: ***Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan, noise ordinance, or other applicable standards; result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project; or result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.***

Impact Analysis: General source categories of potential Project-related noise include:

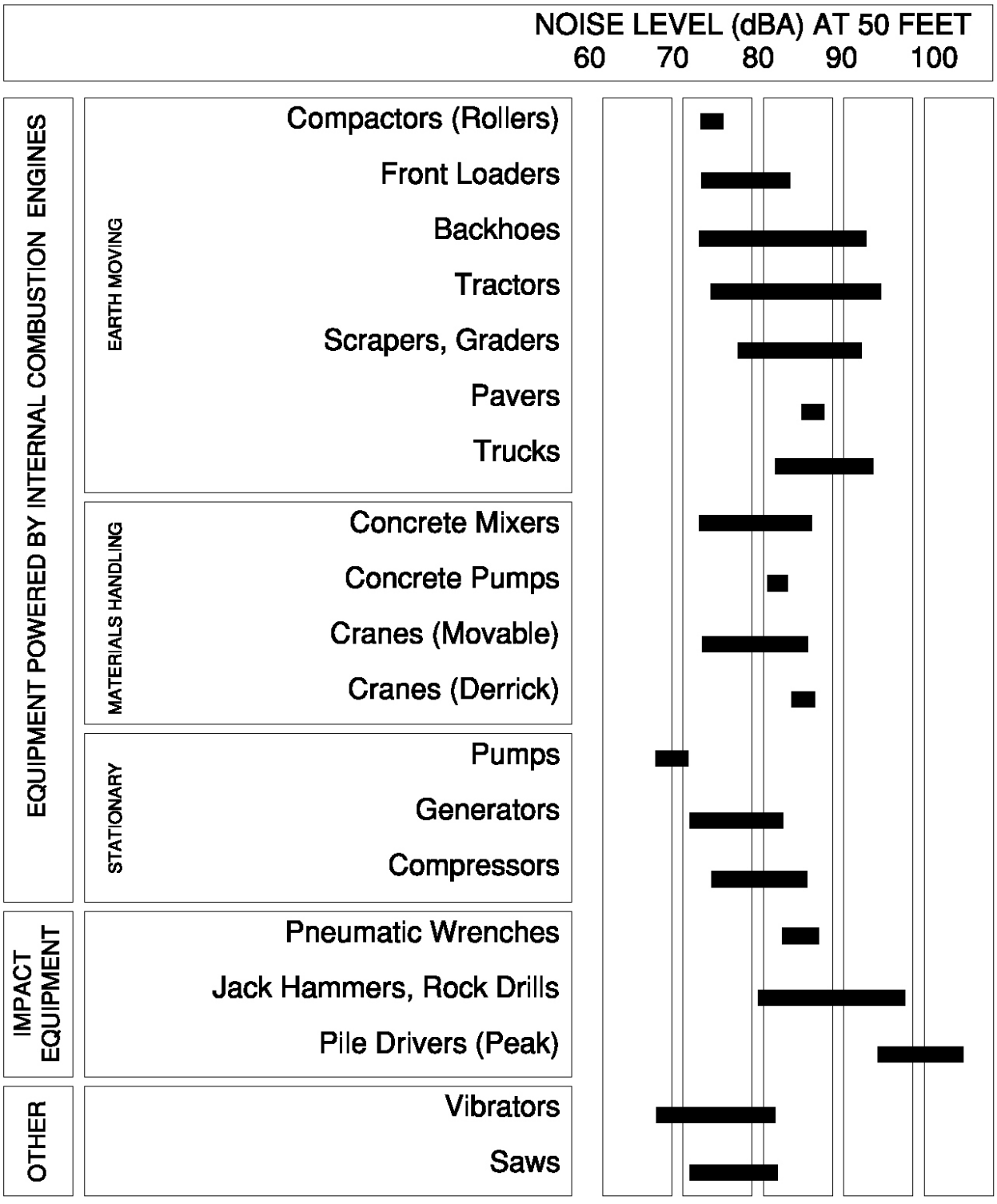
- Construction-source noise;
- Operational noise, off-site mobile-sources; and
- Operational noise, on-site stationary/area-sources.

A summary of the Project's potential impacts attributable under each noise source category, along with any necessary mitigation measures follows.

Construction-Source Noise

Project construction activities will result in temporary and periodic increases in noise levels. These noise levels may be higher than the ambient noise levels in the Project area today, but will subside once construction is completed. Development of the Project would require site preparation (i.e., land grading, excavation and trenching) and construction of buildings and supporting infrastructure. These activities typically involve the use of heavy equipment, such as graders, backhoes, and cranes. Trucks would be used to deliver equipment and building materials, and to haul away waste materials. Smaller equipment, such as air compressors, pneumatic tools, plate compactors, and concrete vibrators would also be used throughout the site during its development.

Figure 4.4-3 lists typical construction equipment noise levels for equipment that could be used during construction of the Project. Construction activities are carried out in discrete steps, each of which has its own mix of equipment, and consequently its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow noise ranges to be categorized by work phase.



Source: United States Environmental Protection Agency (USEPA); Urban Crossroads, Inc.

Figure 4.4-3
Typical Construction Noise Levels

The grading and site preparation phase tends to create the highest noise levels, (the noisiest construction equipment is evident in the earthmoving equipment category). This category includes excavating machinery (backhoes) and earthmoving and compacting equipment (graders, compactors, etc.). Typical operating cycles may involve 1 or 2 minutes of full power operation producing peak noise levels similar to those shown in Figure 4.4-3, followed by 3 or 4 minutes of lower power settings. Combined instantaneous noise levels at 50 feet from earthmoving equipment were estimated to range from 73 to 96 dBA, while combined Leq noise levels may approximate 89 dBA.

The closest noise sensitive receptor that will be subject to potential construction noise impacts is the residence located at 28855 Fir Avenue (future Eucalyptus Avenue), approximately 150 feet southerly of the Project site's southernmost boundary. Because roadway improvements along future Eucalyptus Avenue are also part of Project development, an overall grading noise level of 89 dBA at 50 feet has been used as the worst-case, maximum exterior noise level when heavy equipment is nearest this sensitive receptor. At the nearest residential neighborhood, located more than one-quarter mile from the Project site, received construction-related noise levels would be reduced by 30 decibels or more based on physical separation between these residences and the Project site.

As noted previously, the City of Moreno Valley establishes the following standard addressing construction activities and construction noise, cited in pertinent part:

- The maximum permissible sound level for daytime hours (8:00 a.m. to 10:00 p.m.) as received at residential land uses is 60 dBA Leq [Moreno Valley Municipal Code, Chapter 11.80, Noise Regulation; Section 11.80.030, Table 11.80.030-2].

Construction-related noise levels received at proximate residential properties (estimated to temporarily and periodically reach 89 dBA) would therefore temporarily

and intermittently exceed the City's maximum permissible sound level for daytime hours (8:00 a.m. to 10:00 p.m.) of 60 dBA Leq. This is also a substantial temporary and periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project. These are identified as potentially significant impacts.

Level of Significance: Potentially Significant. As noted, Project construction-source noise would temporarily and periodically exceed the City's Noise Ordinance maximum permissible sound level for daytime hours as received at a residential land use. Project construction-source noise is therefore also considered substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project. Mitigation for these potentially significant impacts is presented below. Construction-source noise is temporary and intermittent and therefore would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Mitigation Measures:

4.4.1 *Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that during all Project site construction, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. And further that the construction contractor shall place all stationary construction equipment so that emitted noise is directed away from off-site receptors nearest the Project site. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.*

4.4.2 *Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that the construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and off-site receptors nearest the Project site during all project construction. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.*

4.4.3 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that construction activities, including haul truck operations, shall be limited to the hours between 7:00 a.m. and 8:00 p.m. Monday through Friday. No Project-related construction activities shall occur on weekends or Federal holidays. The statement in the plans and specifications shall be reviewed and approved by the City of Moreno Valley Planning Department, or their designee.

4.4.4 Prior to the issuance of any grading or building permit, the Project plans and specifications shall include a statement that for the duration of grading and site preparation activities, temporary construction noise curtains or similar line-of-sight noise reduction measures shall be installed along the Project's southerly boundary. Noise curtains shall be installed so as to provide maximum reduction for noise sensitive uses (at present a single residence located southerly of the Project site) and shown on the grading plans prepared for the Project.

Level of Significance After Mitigation: Mitigation Measures 4.4.1 through 4.4.4 will qualitatively reduce construction-source noise and its perceived impacts to the extent feasible. The proposed use of noise curtains during the most noise intensive activities (grading/site preparation) may reduce received noise levels by 10-20 dBA at the nearest receptors. Nonetheless, it is anticipated that construction-source noise received at the nearest affected residential receptor adjacent may temporarily and periodically reach the maximum anticipated exterior noise level of 89 dBA Leq. This condition would occur in particular when heavy equipment is used for the construction of adjacent Fir (future Eucalyptus) Avenue. At more distant residential neighborhoods, the maximum received noise level is conservatively estimated at 60 to 65 dBA Leq. As such, even with the application of proposed mitigation, Project construction equipment activities would exceed the City's maximum permissible sound level for daytime hours as received at a residential land use (60 dBA Leq), and consequently would be considered a substantial temporary and periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Notwithstanding, it is also recognized that Project construction noise, as noted, will be temporary and intermittent. The highest noise levels will occur during Project grading activities as tractors or similar heavy equipment implement roadway improvements along future Eucalyptus Avenue. These noise levels will tend to diminish as the use of heavy equipment in the early construction stages concludes, and will dissipate entirely at the end of construction activities.

Level of Significance After Mitigation: ***Significant and Unavoidable.***

Operational-Source Noise

Mobile Sources (Project Traffic)

Based on trip generation data presented in the Traffic Impact Analysis prepared for the Project, Future No-Project noise conditions and Future With-Project noise conditions along roadways surrounding the Project site were estimated. These future conditions were compared to the existing noise levels at similar locations in the Project vicinity. This comparison is presented at Table 4.4-5.

Table 4.4-5
Existing and Opening Year Vehicular-Source Noise Impacts

Street – Segment	Noise Levels in dBA CNEL				
	Existing	Future - No Project	Future - With Project	Chg. from Existing	Project Contribution
Cottonwood Ave. – west of Redlands Blvd.	51.3	55.7	55.7	4.3	0.0
Eucalyptus (future Encilia) Ave. – west of Redlands Blvd.	47.9	51.3	51.7	3.8	0.4
Fir (future Eucalyptus Ave.) – east of Redlands Blvd.	---	63.7	63.8	63.8	0.1
Fir (future Eucalyptus Ave.) – east of Quincy St.	---	59.9	61.2	61.2	1.3
Fir (future Eucalyptus Ave.) – east of Street "A"	---	61.9	62.9	62.9	1.0
Fir (future Eucalyptus Ave.) – west of Quincy St.	---	59.5	59.9	59.9	0.4

Table 4.4-5
Existing and Opening Year Vehicular-Source Noise Impacts

Street – Segment	Noise Levels in dBA CNEL				
	Existing	Future - No Project	Future - With Project	Chg. from Existing	Project Contribution
Fir (future Eucalyptus Ave.) – east of Moreno Beach Dr.	55.9	63.8	64.0	8.1	0.2
Moreno Beach Dr. – north of SR-60 WB On-Ramp	59.9	61.7	61.8	1.9	0.1
Moreno Beach Dr. – south of Eucalyptus Ave.	66.8	68.3	68.3	1.5	0.0
Moreno Beach Dr. – south of SR-60 WB On-Ramp	65.1	68.0	68.1	3.0	0.1
Quincy St. – south of Eucalyptus Ave.	20.7	50.3	50.3	29.6	0.0
Redlands Blvd. – north of SR-60 WB On-Ramp	66.0	67.0	67.1	1.1	0.1
Redlands Blvd. – south of Cottonwood Ave.	63.5	65.7	65.7	2.2	0.0
Redlands Blvd. – south of Eucalyptus (future Encilia) Ave.	63.6	66.0	66.0	2.4	0.0
Redlands Blvd. – south of Fir (future Eucalyptus) Ave.	63.6	66.1	66.2	2.6	0.1
Redlands Blvd. – south of SR-60 EB Off-Ramp	63.6	68.9	69.3	5.7	0.4
Redlands Blvd. – south of SR-60 WB On-Ramp	65.2	68.2	68.4	3.2	0.2
SR-60 – west of Moreno Beach Dr.	--	83.8	83.9	--	0.1
SR-60 – east of Moreno Beach Dr.	--	83.0	83.0	--	0.0
SR-60– east of Redlands Blvd.	--	82.1	82.1	--	0.0

Source: *Westridge Commerce Center Noise Analysis, City of Moreno Valley, California* (Urban Crossroads, Inc.) May 17, 2010 (Revised).

As indicated at Table 4.4-5, the development of the proposed Project, along with other projects and regional growth, is anticipated to result in substantial increases in traffic noise (greater than 3.0 dBA) for noise study area roadway segments under year 2013 conditions. However, the Project's contribution to roadway noise levels, which is determined by comparing the "Future No Project" scenario to noise levels under the "Future With Project" condition, is a comparatively small component of the total noise

increases anticipated. As also indicated at Table 4.4-5, the Project will not cause or result in an increase in noise levels from below 65 dBA CNEL to above 65 dBA CNEL. However, some roadway segments will experience such an increase due to vehicular traffic attributable to development other than the Project. Further, Project vehicular-source noise will incrementally increase noise levels by a maximum of 1.3 dBA CNEL, which is not considered perceptible. These levels of increase do not exceed the applicable thresholds for permanent operational mobile-source noise increases and are considered less-than-significant. Further, as demonstrated above, Project operational mobile-source noise will not result in exposure of people to noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Operational mobile-source noise affecting area roadways is a permanent, not a temporary or periodic noise source, and is not evaluated under temporary or periodic noise impact criteria.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Operational-Source Noise

Stationary/Area Sources (On-site Activities and Equipment Operations)

Project-related operational stationary/area source noise levels will vary depending on the time of day and level of activity at the facility. The primary sources of noise from activities and equipment operations at the Project site will be truck delivery movements, the loading and unloading of trucks at the loading docks, and the rooftop air conditioners on top of the proposed facility.

Modeling and analysis of operational on-site noise was conducted, which reflected noise measurements previously taken at the G.I. Trucking Facility in Pomona, California. These noise measurements were utilized as a reference for Project-related noise levels. Measurements included loading and unloading of truck trailers, truck drive-by noise, truck engine noise, and the movement of goods with forklifts. Reference

noise level measurements for the predominant and most intense noise sources measured at the G.I. Trucking Facility site are summarized at Table 4.4-6. As indicated, at a distance of 50 feet from the loading docks, the operation of the terminal near the center of activity produced a reference noise level of 72.8 dBA Leq. At three (3) feet, measured noise levels from air conditioning units was approximately 82.9 dBA Leq.

Table 4.4-6
Reference Noise Level Measurements

Noise Source	Duration (minutes)	Distance from Noise Source (feet)	Noise Source Height (feet)	Drop-Off Rate (Leq dBA)	Noise Levels (Leq dBA)
Delivery Trucks[1]	10	50	5	6.0	72.8
Air Conditioner[2]	--	3	20	6.0	82.9

Source: *Westridge Commerce Center Noise Analysis, City of Moreno Valley, California* (Urban Crossroads, Inc.) May 17, 2010 (Revised).

[1] Includes noise associated with the loading and unloading of truck trailers, truck drive-by noise, truck engine noise, and the movement of goods with forklifts. Measured at a G.I. trucking facility in Pomona, California on April 20, 2006.

[2] Representative of industry standard typical Trane Model WSC072 heat pump.

As illustrated in Figure 4.4-4, the distance from between the onsite noise sources identified above and the nearest sensitive receptor, the residential property at 28855 Fir Avenue (future Eucalyptus Avenue), is more than 400 feet. Every doubling of distance from 50 feet results in the reduction of noise levels by an additional six dBA Leq. Utilizing this "drop-off" rate, estimated noise levels received at the residence nearest the Project site are provided in Table 4.4-7.

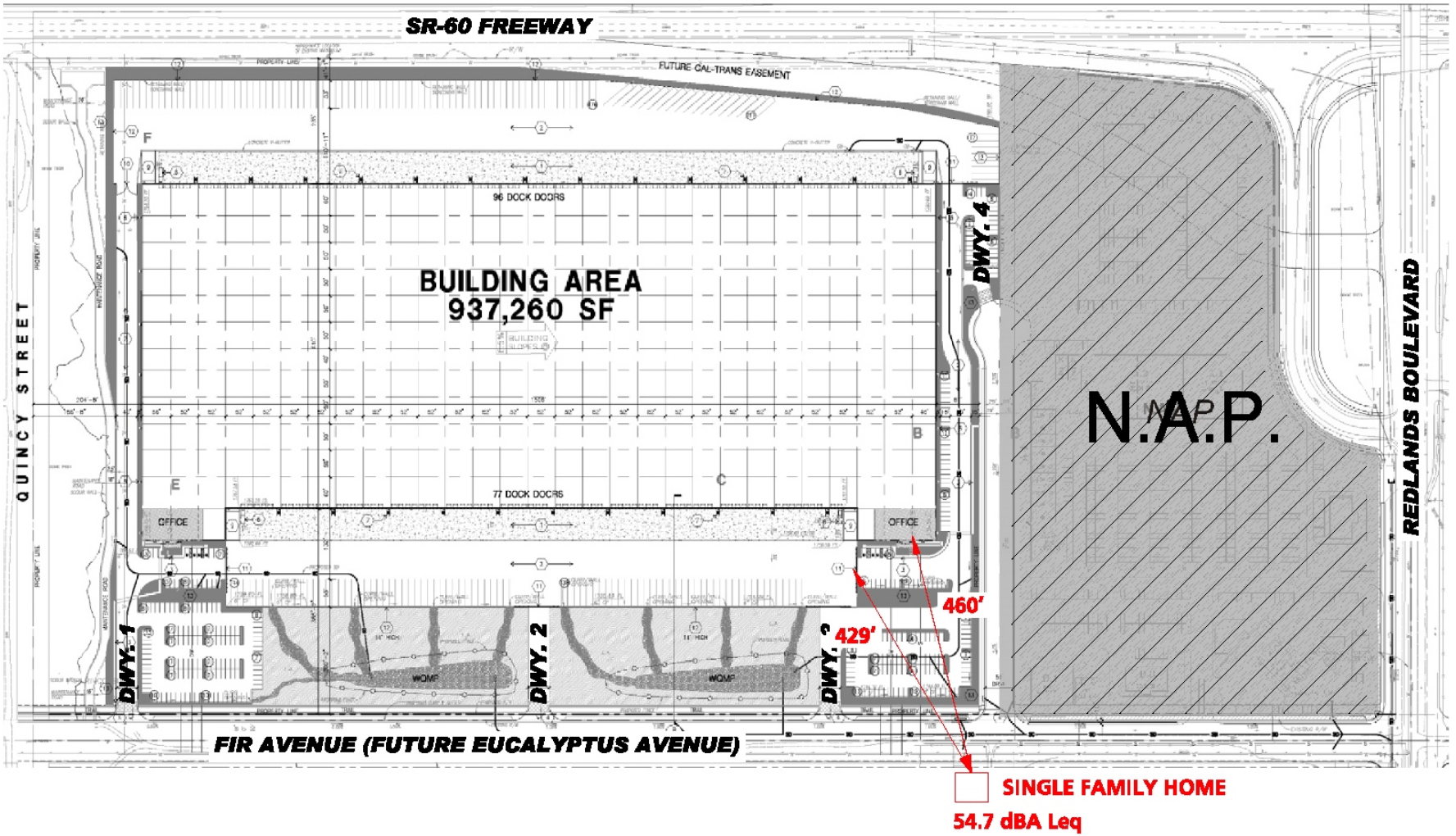
Table 4.4-7
Operational Stationary/Area Source Noise Contribution

Noise Source	Distance to Sensitive Receptor [1]	Unmitigated Noise Level (Leq dBA)
Delivery Trucks	429 feet	54.1
Air Conditioner	460 feet	45.8
	Combined Project Noise Level	54.7
	Existing Ambient Noise[2]	40.1
	Combined Project and Ambient Noise Level[2]	54.8

Source: *Westridge Commerce Center Noise Analysis, City of Moreno Valley, California* (Urban Crossroads, Inc.) May 17, 2010 (Revised).

[1] Figure 4.4-4 provides an illustration of these distances.

[2] See Table 8-3 from Project Noise Study.



N

NOT TO SCALE

Source: Google Earth, Applied Planning, Inc.

Please refer also to latest available Site Plan information/configuration presented at EIR Section 3.0, Figure 3.5-1, "Site Plan Concept."

applied planning inc

Figure 4.4-4
Distance to Sensitive, Stationary Source Noise Receptors

As indicated at Table 4.4-7, when Project-related operational stationary/area source noise is combined with existing ambient noise levels, the received noise level at 28855 Fir Avenue is approximately 54.8 dBA Leq. This noise level is within the City's most restrictive nighttime noise threshold of 55 dBA Leq, and as such, Project-related operational noise would not result in a significant impact.

Combined area/source noise (measured as a peak hour Leq) and vehicular source noise (measured as a 24-hour averaged CNEL value) was also considered. However, it is important to note that there is no precise way to convert and add a peak hourly Leq value to a CNEL value. However, in urban areas near heavy traffic, the peak hourly vehicular-source Leq value is typically 2 to 4 dB lower than the daily Ldn value (Ldn typically approximates CNEL +/- 1.5 dBA). In less heavily developed areas, the peak hourly Leq is often equal to the daily CNEL/Ldn value. In rural areas with little nighttime traffic, the peak hourly Leq value will often be 3-4 dB greater than the daily CNEL/Ldn value. In this regard, the Project's area/source noise levels of approximately 54.7 dBA would likely not be discernible against future opening year "With Project" vehicular source peak hourly Leq's estimated to range from 57.2 dBA Leq to 65.2 dBA Leq along Fir (future Eucalyptus) Avenue adjacent to the Project site.

On this basis, the Project's potential to expose people to severe noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, is less-than-significant. Operational stationary/area-source noise is a permanent, not a temporary or periodic noise source, and is not evaluated under temporary or periodic noise impact criteria.

Level of Significance: Less-Than-Significant.

Mitigation Measure: Not Applicable.

Potential Impact: ***Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels.***

Impact Analysis: Groundborne vibration refers to groundborne noise and perceptible motion. Typical sources of groundborne vibration include the use of heavy-duty construction equipment to be employed at the Project site. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where motion may be discernible but without the accompanying effects (e.g., the shaking of a building).

Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Vibration-caused building damage is not a factor for normal projects, with the occasional exception of blasting and pile driving during foundation construction, neither of which is anticipated as part of construction of the Project considered here.

The City of Moreno Valley does not currently have adopted vibration regulations. Notwithstanding, germane vibration criteria has been established by the California Department of Transportation (Caltrans) and is employed in analyses presented here.

The Project does not propose activities or uses that would result in long-term substantial or even perceptible vibration levels. However, heavy equipment employed during Project construction could potentially generate groundborne vibration impacts at adjacent land uses. 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. Construction vibration is generally associated with pile driving and rock blasting. Occasionally, proximate operations of large bulldozers and loaded trucks can cause perceptible vibration levels, notwithstanding, according to the *Transportation and Construction-Induced Vibration Guidance Manual* prepared for Caltrans, groundborne vibration from construction activities and equipment such as such as D-8 and D-9 Caterpillar bulldozers, earthmovers and haul trucks at distances of 10 feet do

not create vibration amplitudes that would cause structural damage to nearby structures. The proposed Project is not anticipated to employ any pile driving equipment, nor require blasting activities. Further, the nearest heavy equipment operations would occur at a distance of 40 to 50 feet from the nearest residential use (28855 Fir Avenue). Impacts from construction-source groundborne vibration are therefore anticipated to be less-than-significant.

Based on the preceding discussion, the potential for Project construction or operations to cause or result in adverse impacts due to groundborne vibration or groundborne noise is determined to be less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impacts: ***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, public use airport, or private airstrip, exposure of people residing or working in the project area to excessive noise levels.***

Impact Analysis: The Project site is not located within an airport land use plan or within two miles of a public airport, public use airport, or private airstrip. The Project would not expose people residing or working in the Project area to excessive noise levels from aircraft operations. Occasional aircraft overflight noise from regional air facilities is an intermittent, rather than constant noise source. On this basis, the Project's potential to result in the exposure of people working in the Project area to excessive noise levels is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

4.5 WATER SUPPLY

4.5 WATER SUPPLY

Abstract

This Section describes existing and planned water supplies available to support development of the Westridge Commerce Center Project (the Project), identifies existing and projected water demands, and assesses potential water supply impacts resulting from implementation of the Project. This Section provides an assessment of potential Project-related impacts to water supplies. Further, consistent with the requirements and provisions of SB 610 and SB 221, this assessment demonstrates the sufficiency of water supplies to serve the needs of the Project in the near-term and long-term timeframes, and under normal precipitation and extended drought conditions. The Project's potential water supply impacts were evaluated based on the following criteria:

- *Potential to substantially deplete groundwater supplies or 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; or*

- *Potential to require new or expanded water supplies.*

Based on the analysis presented in this Section, and subject to conditions stipulated in the Project Water Supply Assessment (WSA, EIR Appendix E) and reflected in the EIR mitigation measures, water demands of the Project can be met consistent with the requirements of SB 610 and SB 221, and with no adverse effects on water supplies or water resources, including groundwater.

4.5.1 INTRODUCTION AND BACKGROUND

4.5.1.1 Overview

As noted above, this Section provides an assessment of potential Project-related impacts to water supplies. Consistent with the requirements and provisions of SB 610 and SB 221,[1] this assessment demonstrates the sufficiency of water supplies to serve the needs of the Project in the near-term and long-term timeframes, and under normal precipitation and extended drought conditions. The information presented in this assessment is summarized from *Water Supply Assessment for West Ridge* [Westridge], *a 56-Acre Industrial Project Located West of Redlands Boulevard, Between Interstate 60 and Fir Avenue, in the City of Moreno Valley, Proposed by Ridge Property Trust* (Eastern Municipal Water District) June 4, 2008 (WSA); Metropolitan Water District (MWD) Regional Urban Water Management Plan (RUWMP), and Eastern Municipal Water District (EMWD, Eastern) Urban Water Management Plan (UWMP). Summarized and excerpted portions of the Project WSA, RUWMP, and UWMP provide the basis for the analysis and conclusions presented in this Section. The Project WSA, RUWMP and UWMP are provided at EIR Appendix E.

The Eastern Municipal Water District (EMWD, Eastern) is the water purveyor serving the Project and surrounding areas. EMWD was formed in 1950 and annexed into the Metropolitan Water District of Southern California in 1951. EMWD is one of 26 member agencies that make up MWD. The EMWD Service Area (Service Area) currently encompasses approximately 555 square miles, and includes an estimated population of over 660,000 persons.

[1] SB 610 and SB 221 were codified as California Water Code sections 10910 et seq. and Government Code section 66455.3, respectively. These require a lead agency to comply with certain sections of the State Water Code when a project is subject to CEQA. In general, those laws require the lead agency to obtain information from the serving water purveyor addressing the purveyor's ability to adequately serve the project for the following twenty years in normal, dry, and extended dry periods.

4.5.2 SETTING

The following description of existing conditions provides context for Project-related water supply/demand issues, addressing existing and projected water supplies as well as current and future water demands.

4.5.2.1 Water Supply Sources

EMWD relies on MWD to provide approximately 80 percent of its potable water supply and 30 percent of its non-potable supply.[2] Water supply sources available to MWD, and ultimately to EMWD, include the Colorado River Aqueduct, California Aqueduct, and In-Basin Storage. Quantified supplies from these sources are summarized below at Section 4.5.2.2.

4.5.2.2 Available Water Supplies Under Drought and Average Conditions

MWD Water Supplies

Projected water supplies available to MWD and its member agencies are presented at Tables 4.5-1 through 4.5-3. Table 4.5-1 presents water supplies assuming a repeat of year 1977 hydrology, the single driest year of record. Table 4.5-2 presents water supplies based on three (3) consecutive dry years (1990-1992). Table 4.5-3 presents water supplies based on the average hydrologic conditions over the period of record (1922-2004).

[2] Water Supply Assessment (WSA) for Westridge (EMWD) June 4, 2008, Page 8.

Table 4.5-1
Single Dry-Year Supply Capability[1] and Projected Demands (acre-feet)
(Repeat of 1977 Hydrology)

	2010	2015	2020	2025	2030
Current Supplies					
Colorado River Aqueduct[2]	722,000	699,000	699,000	699,000	699,000
California Aqueduct[3]	777,000	777,000	777,000	777,000	777,000
In-Basin Storage[3]	1,149,000	1,161,000	1,113,000	1,066,000	1,017,000
Supplies Under Development					
Colorado River Aqueduct	95,000	460,000	400,000	400,000	400,000
California Aqueduct	330,000	259,000	350,000	350,000	350,000
In-Basin Storage	78,000	103,000	103,000	103,000	103,000
Transfers to Other Agencies	0	(35,000)	(35,000)	(35,000)	(35,000)
Metropolitan Supply Capability	3,151,000	3,424,000	3,407,000	3,360,000	3,311,000
Metropolitan Supply Capability w/CRA Maximum of 1.25 Million Acre Feet [4]	3,151,000	3,356,000	3,309,000	3,252,000	3,203,000
Firm Demands on Metropolitan [5,6]	2,320,000	2,196,000	2,229,000	2,358,000	2,487,000
Potential Reserve & Replenishment Supplies	831,000	1,160,000	1,080,000	894,000	716,000

Source: Water Supply Assessment for Westridge (EMWD) June 2008.
1 Represents supply capability for resource programs under listed year type.
2 Colorado River Aqueduct (CRA) includes water management program supplies conveyed by the aqueduct.
3 California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.
4 Maximum CRA deliveries limited to 1.25 Million Acre Feet (MAF), including San Diego County Water Authority (SDCWA, CWA)/Imperial Irrigation District (IID) Transfer supplies and Coachella and All-American Canals lining supplies.
5 Based on Southern California Association of Governments (SCAG) 2004 forecasts, San Diego Association of Governments (SANDAG) forecasts, projections of member agency existing and contracted active conservation and local supplies, remaining regional targets for active conservation, SDCWA/IID Transfer supplies and Coachella and All-American Canals lining supplies.
6 Includes projected firm sales plus 70% of projected Interim Agricultural Water Program (IAWP), agricultural sales.

Table 4.5-2
Multiple Dry-Year Supply Capability[1] and Projected Demands (acre-feet)
(Repeat of 1990-1992 Hydrology)

	2010	2015	2020	2025	2030
Current Supplies					
Colorado River Aqueduct[2]	722,000	699,000	699,000	699,000	699,000
California Aqueduct[3]	912,000	912,000	912,000	912,000	912,000
In-Basin Storage[3]	514,000	518,000	502,000	487,000	470,000
Supplies Under Development					
Colorado River Aqueduct	95,000	460,000	400,000	400,000	400,000
California Aqueduct	330,000	215,000	299,000	299,000	299,000
In-Basin Storage	78,000	103,000	103,000	103,000	103,000
Transfers to Other Agencies	0	(35,000)	(35,000)	(35,000)	(35,000)
Metropolitan Supply Capability	2,651,000	2,872,000	2,880,000	2,865,000	2,848,000
Metropolitan Supply Capability w/CRA Maximum of 1.25 MAF [4]	2,651,000	2,804,000	2,782,000	2,757,000	2,740,000
Firm Demands on Metropolitan [5,6]	2,392,000	2,302,000	2,309,000	2,448,000	2,585,000
Potential Reserve & Replenishment Supplies	259,000	502,000	473,000	309,000	155,000

Source: Water Supply Assessment for Westridge (EMWD) June 2008.
1 Represents supply capability for resource programs under listed year type.
2 Colorado River Aqueduct (CRA) includes water management program supplies conveyed by the aqueduct.
3 California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.
4 Maximum CRA deliveries limited to 1.25 Million Acre Feet (MAF), including San Diego County Water Authority (SDCWA)/Imperial Irrigation District (IID) Transfer supplies and Coachella and All-American Canals lining supplies.
5 Based on Southern California Association of Governments (SCAG) 2004 forecasts, San Diego Association of Governments (SANDAG) forecasts, projections of member agency existing and contracted active conservation and local supplies, remaining regional targets for active conservation, SDCWA/IID Transfer supplies and Coachella and All-American Canals lining supplies.
6 Includes projected firm sales plus 70% of projected Interim Agricultural Water Program (IAWP), agricultural sales.

Table 4.5-3
Average Year Supply Capability[1] and Projected Demands (acre-feet)
(Average of 1922-2004 Hydrologies)

	2010	2015	2020	2025	2030
Current Supplies					
Colorado River Aqueduct [2]	711,000	678,000	677,000	677,000	677,000
California Aqueduct[3]	1,772,000	1,772,000	1,772,000	1,772,000	1,772,000
In-Basin Storage[3]	0	0	0	0	0
Supplies Under Development					
Colorado River Aqueduct	0	0	0	0	0
California Aqueduct	185,000	185,000	240,000	240,000	240,000
In-Basin Storage	0	0	0	0	0
Transfers to Other Agencies	0	(35,000)	(35,000)	(35,000)	(35,000)
Metropolitan Supply Capability	2,668,000	2,600,000	2,654,000	2,654,000	2,654,000
Metropolitan Supply Capability w/CRA Maximum of 1.25 MAF [4]	2,668,000	2,600,000	2,654,000	2,654,000	2,654,000
Firm Demands on Metropolitan [5,6]	2,036,000	1,947,000	1,983,000	2,110,000	2,246,000
Potential Reserve & Replenishment Supplies	632,000	653,000	671,000	544,000	408,000

Source: Water Supply Assessment for Westridge (EMWD) June 2008.
1 Represents supply capability for resource programs under listed year type.
2 Colorado River Aqueduct (CRA) includes water management program supplies conveyed by the aqueduct.
3 California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.
4 Maximum CRA deliveries limited to 1.25 Million Acre Feet (MAF), including San Diego County Water Authority (SDCWA)/Imperial Irrigation District (IID) Transfer supplies and Coachella and All-American Canals lining supplies.
5 Based on Southern California Association of Governments (SCAG) 2004 forecasts, San Diego Association of Governments (SANDAG) forecasts, projections of member agency existing and contracted active conservation and local supplies, remaining regional targets for active conservation, SDCWA/IID Transfer supplies and Coachella and All-American Canals lining supplies.
6 Includes projected firm sales plus 70% of projected Interim Agricultural Water Program (IAWP), agricultural sales.

Local Water Supply

Currently, EMWD has four sources of water supply; including imported water purchased from MWD, local potable groundwater, desalted groundwater, and recycled water. With specific regard to the availability of imported water purchased from MWD, the statutory relationship between MWD and its member agencies establishes the scope of EMWD's entitlements from MWD. There are no set limits on supply quantities to member agencies, and MWD has provided evidence in the 2005 RUWMP that its supplies will meet member agency demands during normal, historic single-dry, and historic multiple-dry years within a 20-year projection. Potable water suitable for drinking will be supplied mainly from MWD with some potable and desalted groundwater supplies. Non-potable demand will be met with recycled water from EMWD's Regional Water Reclamation Facilities (RWRF) and imported water from MWD. Eastern's potable and non-potable water supplies, by source, are summarized at Table 4.5-4.

Recycled Water

The supply of recycled water will continue to grow commensurate with population growth in the area. The four (4) regional water reclamation facilities that EMWD is currently operating are all either in the process of expansion or have an expansion planned in the near future. Currently the use of recycled water is limited by the amount available to serve during peak demands and with livestream discharge occurring in off peak periods. EMWD has initiated investigation of means and programs to eliminate discharge, allowing for productive use of the recycled water available within the District. Such means and programs include: augmentation during peak demand periods; pursuit of new demands including residential customers; and using recycled water to recharge the groundwater basins. All of these options will be explored in the future.

Table 4.5-4
Water Supply By Source (acre-feet/year)

Source	2010	2015	2020	2025	2030
POTABLE SUPPLIES					
EMWD Groundwater Production in the San Jacinto Basin[1]					
West San Jacinto Area	6,000	6,000	6,000	6,000	6,000
Hemet/San Jacinto Basin Area- Native Groundwater	7,200	7,200	7,200	7,200	7,200
Hemet/San Jacinto Recovery of Recharged Groundwater	5,600	6,600	6,400	6,200	6,200
EMWD Groundwater Desalination Program in the San Jacinto Basin					
Menifee	3,000	3,000	3,000	3,000	3,000
Perris	4,500	4,500	4,500	4,500	4,500
Perris II	--	4,500	4,500	4,500	4,500
EMWD Microfiltration Plants					
Perris FP	10,900	16,000	16,000	16,000	16,000
Hemet FP	5,400	8,000	8,000	8,000	8,000
MWD Full Service Treated Water Deliveries					
Mills	58,600	62,200	76,700	86,800	94,800
Skinner	14,000	16,000	18,000	20,000	22,000
SUBTOTAL POTABLE WATER SUPLIES	**115,200**	**134,000**	**150,300**	**162,200**	**172,200**
NON-POTABLE SUPPLIES					
Recharge to Hemet/San Jacinto Basin	20,000	22,200	22,600	22,600	22,500
MWD Untreated Agricultural Supplies	1,200	2,100	2,600	3,100	3,500
Recycled Municipal & Industrial (M&I)	10,320	13,156	17,582	22,236	26,891
Industrial Enterprise and Aesthetic Improvement	7,000	8,250	9,500	10,750	12,000
Recycled Water-Agricultural Use/Habitat	20,000	20,000	20,000	20,000	20,000
SUBTOTAL NON-POTABLE WATER SUPLIES	**58,520**	**65,706**	**72,282**	**78,686**	**84,891**
TOTAL WATER SUPPLY	**173,720**	**199,706**	**222,582**	**240,886**	**257,091**

Source: Water Supply Assessment for Westridge (EMWD) June 2008.

[1] Although the Project will not be the direct recipient of local groundwater supplies, local sources offset the overall demand on Eastern's imported supplies, thus increasing system-wide water supply availability and reliability.

Three (3) primary uses of recycled water occur within EMWD's Service Area: municipal and industrial, industrial enterprise and aesthetic impoundment, and agricultural. Each of these groups has a different approach to recycled water. Municipal and industrial customers typically use potable water for non-potable applications if recycled water were not available. In contrast, industrial enterprise and aesthetic impoundments employ essentially only recycled water, either because of cost or ordinance. It is also believed that cost would limit some agricultural customers from ever using potable water. Recycled water is also used by agricultural customers in lieu of groundwater production, thereby increasing groundwater available for municipal use without increased groundwater recharge requirements.

Efficiency and Conservation Measures

Efficient use of available supplies, in combination with aggressive conservation measures contribute to water supply reliability within EMWD's Service Area. In this regard, the 2005 Urban Water Management Plan projects that within the planning timeframe through 2030, more than 16,000 Acre Feet per Year (AFY) of water will be saved through efficiency and conservation measures. As an example of EMWD efficiency and conservation measures, EMWD worked with the building community and the County of Riverside as early as 2005 to ensure passage of Ordinance 859, which requires water efficient landscaping in new development proposed within unincorporated Riverside County. Water efficient landscaping is now mandated under AB 1881, which went into effect statewide on January 1, 2010, and requires all local agencies to adopt the Model Water Efficient Landscape Ordinance provided by the California Department of Water Resources, or one that is at least as effective as the Model Ordinance.

In accordance with the requirements under AB 1881, EMWD has also adopted Ordinance 72.24, requiring water efficient landscape in all new development. Further, EMWD has increased its pursuit of active conservation through rebates and installation of water saving devices. Finally, EMWD is expanding the allocation-based tiered rate that was implemented for landscape customers in 2006. This tiered rate water pricing would be based on a water budget for each of EMWD's customers. Although estimates

of water savings from such tiered rates vary, EMWD has historically experienced an eight (8) percent decrease in the amount of water landscape accounts use compared to other customer types since significant penalties for excessive water use have been imposed.[3]

4.5.2.3 Factors Affecting Water Supply Availability

As noted in the Project WSA (Draft EIR Appendix E, page 8), MWD has analyzed the reliability of water delivery through the State Water Project (SWP) and the Colorado River Aqueduct (CRA). As seen in Tables 4.5-1 through 4.5-3, more than half of the water supply available to MWD and its member agencies, including EMWD, is imported from these two sources. The Colorado River Basin is currently emerging from the same drought conditions that have affected California and the remainder of the southwestern United States. Surplus water deliveries to MWD from the Colorado River have been limited since 2003.[4] Recent court decisions and related actions summarized below have affected potential availability and flexibility of SWP water deliveries to MWD and its member agencies, including Eastern.

Statewide Drought Conditions

Due to recent drought conditions and court-ordered restrictions on SWP and County Water Authority (CWA) water deliveries, in June 2008 Governor Schwarzenegger issued an Executive Order (EO) proclaiming a condition of statewide drought. The EO directed the California Department of Water Resources (DWR) to expedite existing conservation grant programs, facilitate water transfers, conduct water conservation and outreach campaigns in cooperation with local water agencies and organizations, and take additional drought response and water conservation actions. In response to the Governor's EO, MWD declared a Condition 2 water scenario and issued a Water Supply Alert calling on local agencies and residents to take immediate steps for conserving water.

[3] Westridge WSA, Page 28.

[4] *Regional Urban Water Management Plan* (RUWMP), Metropolitan Water District of Southern California, November 2005, Page III-60.

The 2009 Water Year (October 1, 2008 through September 30, 2009) was the third consecutive year of below average precipitation for the state. Annual statewide precipitation totaled 76 percent, 72 percent, and 63 percent of average for Water Years 2009, 2008, and 2007, respectively. On February 26, 2010 the Department of Water Resources (DWR) increased anticipated 2010 SWP deliveries to California's water contractors from five to 15 percent of requests. If this amount remains unchanged by the final allocation in late spring, this will be the lowest allocation percentage in the Project's history.[5]

Potential SWP Restrictions

Recognizing that environmental conditions in the Delta have the potential to affect the availability and reliability of water supplies from that region, MWD has indicated that SWP operational requirements may be further modified through the consultation process for new biological opinions for listed species under the Federal Endangered Species Act or from the California Department of Fish and Game's actions under California law.

On December 15, 2008, the U.S. Fish and Wildlife Service (USFWS) issued a new biological opinion (BiOp) for delta smelt which set forth certain operating criteria and restrictions for the State Water Project (SWP) and Central Valley Project (CVP). For example, the BiOp recommends reduction of water flow during vulnerable spawning periods, with a simultaneous 5-day running average flow no more negative than -5,000 cfs to protect adult delta smelt during 14-day periods. (USFWS Biological Opinion, at p. 281-82). Use of these operational constraints will depend on variable factors such as water temperature and presence of female delta smelt.

On March 4, 2009, the State Water Contractors (SWC) filed a lawsuit against the United States Department of the Interior and the USFWS to challenge the constraints outlined in the BiOp, contending that the BiOp is invalid because it fails to comply with the

[5] A full update is available at: http://www.water.ca.gov/drought/docs/DroughtUpdate-030110.pdf and contains the most current information regarding drought conditions in California.

requirements of the Endangered Species Act: (1) to use the best available scientific data; (2) to make findings or undertake the necessary analysis regarding the BiOp's "reasonable and prudent alternative;" and (3) to comply with applicable standards when analyzing the effects of the action and reaching the "jeopardy" conclusion.

Also on March 4, 2009, the California Fish and Game Commission ("Commission") voted to upgrade the protected status of the delta smelt from "threatened" to "endangered" and simultaneously added the longfin smelt to the list of threatened species. The longfin smelt listing may lead to further cutbacks to water supplies within the service areas of the SWP and the CVP. The USFWS is also considering whether to raise the delta smelt's status from threatened to endangered under the Endangered Species Act.

Lawsuits are also still pending from when the Commission re-adopted an emergency take regulation while deciding whether to list the longfin smelt as a threatened species. The lawsuits contend that the water supply impact of the regulation was grossly disproportional to any potential benefit the regulation would provide to the species; that the regulation failed to maintain the purpose of the SWP to the maximum extent possible; and that the regulations were not supported by credible, scientific information demonstrating that SWP operations have a significant impact on the longfin smelt.

As recently as May 12, 2009, the director of the California Department of Water Resources (DWR) stated in a letter to the USFWS that the new BiOp overstates threats to the smelt, which are "less than susceptible to a catastrophic event than previously thought." According to unpublished research conducted by the DWR and the California Department of Fish and Game, a separate delta smelt population exists in an area that is not affected by state water operations. Typically, a federal agency such as the Bureau of Reclamation must request a revision to a biological opinion, although the DWR asserts that the state has the right to file a petition because of a "triggering event" in the form of the new research identifying a separate delta smelt population.

Pending litigation and contradictory agency opinions and research may ultimately result in the 2008 delta smelt biological opinion being rendered invalid. This, combined with the fact that any operational constraints will vary depending on variable factors such as breeding patterns and water temperatures, makes it impossible to predict the exact impact of the 2008 delta smelt biological opinion, or the recent listing of the longfin smelt on SWP deliveries. On February 10, 2010, a federal judge denied a request for a temporary restraining order against the pumping restrictions imposed under the BiOp.

4.5.2.4 Department of Water Resources SWP Reliability Report

Within the context of the above considerations, DWR's Final 2007 State Water Project Delivery Reliability Report (DWR Reliability Report, August 2008), assumes and accounts for recent institutional and environmental limitations, including water quality issues, fishery protections, export curtailments, and other requirements summarized above and discussed in detail in the Project WSA.

More specifically, according to the DWR Reliability Report, the long-term average delivery of contractual SWP "Table A"[6] supplies is expected to range from 63 percent under current (2007) conditions to between 66 and 69 percent under future (2027) conditions. Within that 1ong-term average, SWP Table A deliveries can range from 6 percent (single dry year) to 90 percent of contractual amounts under current (2007) conditions, and from 6 percent (single dry year) to 100 percent of contractual amounts under future (2027) conditions. The analyses provided in the DWR Reliability Report are based upon 82 years of historical records (1922-2003) for rainfall and runoff that

[6] The contracts between DWR and the 29 State Water Project water contractors (including MWD) define the terms and conditions governing SWP water delivery and associated cost repayment. Table A is an exhibit to these contracts. Each contractor has a "Table A," which lists acre-feet amounts per year, usually increasing over time. Table A is used to define each contractor's proportion of the available water supply that DWR will allocate and deliver to that contractor. The Table A amounts in any particular contract, accordingly, should not be read as a guarantee of that amount but rather as the tool in an allocation process that defines an individual contractor's "slice of the pie."

have been adjusted to reflect the current and future levels of development in the sources areas by analyzing land use patterns and projecting future land and water uses.[7]

4.5.2.5 Water Demand

EMWD Water Demand Estimates Reflected in Urban Water Management Plan

The EMWD Board of Directors adopted an updated UWMP in December of 2005. This plan details EMWD's demand projections. Water demand estimates reflected in the UWMP are calculated across the District's Service Area, and are not project specific. Since various economic, environmental, or other factors can effect the development of a specific project, using local absorption studies that consider regional economic conditions and specific project information, allows EMWD to develop a more accurate projection of probable demand.

Within the context of area wide water demands projected in the WWMP, EMWD uses a development tracking database that assesses future water demands for specific projects, including the proposed Westridge Commerce Center Project. EMWD uses this database in planning for future water supply and infrastructure needs by monitoring new projects through various stages of development. Subject to the Board of Director's approval of the Westridge project, information associated with this project will be included in the supply and demand projections EMWD uses for planning. Changes in density and land use are also tracked in this database for planning purposes. The developer is required to notify EMWD if any changes to project density or land use occur. In January of 2008, EMWD updated its water demand projections employing the Forecast of Connections for New Single-Family Detached Homes (Empire Economics, March 2008) that provided probable absorption for new single-family residential homes from 2008 to 2030.

[7] Westridge WSA, Page 15.

Projected Water Demands Reflect Anticipated Service Area Growth

As indicated at Table 4.5-5, the population within EMWD's Service Area is expected to nearly double between 2005 and 2030. With this increase in population and associated growth in supporting commercial and industrial development, water use by customer type is anticipated to increase, as indicated at Table 4.5-6. Almost seventy (70) percent of current and future demand comes from single-family residential development.

Table 4.5-5
Current and Projected Population
EMWD Service Area 2005-2030

Year	2005	2010	2015	2020	2025	2030
Population	495,080	575,346	645,073	741,967	842,767	943,567

Source: Water Supply Assessment for Westridge (EMWD) June 2008.

Table 4.5-6
Current and Projected Water Demand by Retail Customer Demand Sector
EMWD Service Area 2005-2030

	2005	**2010**	**2015**	**2020**	**2025**	**2030**
Demand Sector	**Water Demand-AFY**					
Single Family	61,604	72,988	82,574	96,368	110,901	125,499
Multi-Family	5,441	8,597	9,738	11,323	12,971	14,619
Commercial	3,919	5,916	6,700	7,790	8,924	10,059
Industrial	405	652	738	858	983	1,108
Institutional/Governmental	2,871	4,570	5,177	6,019	6,895	7,772
Landscaping	7,423	8,509	10,400	10,375	10,305	9,534
Agricultural	2,435	2,776	2,403	2,403	2,403	2,403
Total	**84,098**	**104,008**	**117,730**	**135,136**	**153,382**	**170,994**

Source: Water Supply Assessment for Westridge (EMWD) June 2008.

Total Service Area Demand

Inclusive of retail water demands summarized above, total water demands within the EMWD Service Area are summarized at Table 4.5-7.

Table 4.5-7
EMWD Total Water Demand 2005-2030

	2005	2010	2015	2020	2025	2030
Sales to Other Agencies						
Lake Hemet MWD AG Water	0	1,200	2,100	2,600	3,100	3,384
Lake Hemet MWD	91	0	0	0	0	0
City of Hemet Water Dept.	89	0	0	0	0	0
San Jacinto Water Dept.	47	0	0	0	0	0
City of Perris	1,879	2,641	2,722	2,757	2,769	2,773
Murrieta Water County Dist.	113	0	0	0	0	0
Nuevo Water Company	848	1,002	1,457	1,745	1,903	1,979
Total Untreated AG	**0**	**1,200**	**2,100**	**2,600**	**3,100**	**3,384**
Total Potable *	**3,114**	**3,643**	**4,179**	**4,502**	**4,672**	**4,752**
Other Water Uses						
Recharge Water	5,482	20,000	22,200	22,600	22,600	22,500
Recycled – Industrial Enterprise and Aesthetic Improvement	0	7,000	8,250	9,500	10,750	12,000
Recycled – Municipal	4,500	10,320	13,156	17,582	22,236	26,891
Recycled – Agriculture/Wildlife Habitat	16,141	20,000	20,000	20,000	20,000	20,000
System Losses	10,486	7,900	9,400	10,600	11,600	12,700
Total Other Uses*	**36,609**	65,220	**73,006**	80,282	**87,186**	94,091
Total Retail Demand (From Table 4.5-5)	**84,098**	**104,008**	**117,731**	**135,136**	**153,383**	**170,994**
Total Service Area Projected Water Demand *	123,821	174,071	197,015	222,521	248,340	273,336
Water Efficiency Savings	0	(9,649)	(12,407)	(14,197)	(16,010)	(18,143)
Total Water Use *	123,821	164,422	184,610	208,323	232,331	255,193

Source: Water Supply Assessment for Westridge (EMWD) June 2008.
* May not total due to rounding.

Project Water Demand

WSA water demand estimates for the Project are summarized at Table 4.5-8. Water demand for this Project is calculated for planning purposes only, and reflects potential maximum demand conditions. Actual water use will be reduced through conservation, use of water efficient devices, and use of recycled water as it becomes available. In these regards, the Project is required to meet the requirements of EMWD's water use efficiency ordinance(s) (e.g., EMWD Ordinance 72.24 and updates) at the time of construction.

As identified in the Project WSA, the water demands of the Project are accounted for in the projected Service Area water demands summarized at Table 4.5-6, and are within the limit of retail water demand growth, also reflected at Table 4.5-6.[8]

Table 4.5-8
Westridge Commerce Center Water Demand

Description	Acres	GPD/AC[1]	Gallons per Day	Acre Feet per Year
Light Industrial Project	55.51	700	38,857	44

Source: Water Supply Assessment for Westridge (EMWD) June 2008.
[1] GPD/AC = Gallons per day, per acre. This is an estimation developed for planning purposes.

4.5.2.6 Water Supply Assessment

The following analysis provides an assessment of whether the total projected water supplies available to Eastern during normal, single-dry, and multiple-dry years over the next 20-year period (2010 through 2030) are sufficient to meet the water demands for all existing and planned uses, including the proposed Westridge Commerce Center Project. As indicated in the water supply and demand comparisons for normal, single-dry, and multiple-dry years spanning the time frame 2010 through 2030 (Table 4.5-9), EMWD water supplies are considered adequate to serve the Project and all existing and projected Service Area demands.

[8] Westridge WSA, Page 30.

Table 4.5-9
Water Supply Reliability, Average, Single-Dry and Multiple-Dry Years

2010 Projected Supply and Demand Comparison	Average	Single-Dry	Multiple-Dry Years		
			2008	2009	2010
Groundwater Production	18,800	18,800	18,480	18,640	18,800
Desalination	7,500	7,500	5,940	6,720	7,500
Micro-filtration (MWD Untreated)	16,300	16,300	12,980	14,640	16,300
MWD Treated Water	72,600	74,700	74,700	74,700	74,700
MWD Recharge	20,000	20,000	14,760	17,380	20,000
Recycled Water	37,320	39,523	32,634	36,079	39,523
MWD Untreated AG	1,200	1,300	1,900	1,600	1,300
Supply Total	173,720	**178,123**	161,394	169,759	178,123
Demand Total	**164,422**	**167,945**	**161,074**	**165,700**	**171,900**
Supply/Demand	106%	106%	100%	100%	100%
2015 Projected Supply and Demand Comparison	**Average**	**Single-Dry**	**Multiple-Dry Years**		
			2013	**2014**	**2015**
Groundwater Production	19,800	19,800	19,400	19,600	19,800
Desalination	12,000	12,000	10,200	11,100	12,000
Micro-filtration (MWD Untreated)	24,000	24,000	20,920	22,460	24,000
MWD Treated Water	78,200	79,500	77,580	78,540	79,500
MWD Recharge	22,200	22,200	21,320	21,760	22,200
Recycled Water	41,406	38,600	41,963	42,776	43,590
MWD Untreated AG	2,100	2,300	1,900	2,100	2,300
Supply Total	**199,706**	**203,390**	**193,283**	**198,336**	**203,390**
Demand Total	**184,610**	**188,346**	**179,307**	**183,674**	**188,346**
Supply/Demand	108%	108%	108%	108%	108%

Table 4.5-9
Water Supply Reliability, Average, Single-Dry and Multiple-Dry Years

2020 Projected Supply and Demand Comparison	Average	Single-Dry	Multiple-Dry Years		
			2018	2019	2020
Groundwater Production	19,600	19,600	19,680	19,640	19,600
Desalination	12,000	12,000	12,000	12,000	12,000
Micro-filtration (MWD Untreated)	24,000	24,000	24,000	24,000	24,000
MWD Treated Water	94,700	96,100	89,460	92,780	96,100
MWD Recharge	22,600	22,600	22,440	22,520	22,600
Recycled Water	47,082	49,358	47,051	48,204	49,358
MWD Untreated AG	2,600	2,900	2,660	2,780	2,900
Supply Total	**222,582**	**226,558**	**217,291**	**221,924**	**226,558**
Demand Total	**208,323**	**212,325**	**202,442**	**207,354**	**212,325**
Supply/Demand	107%	107%	107%	107%	107%
2025 Projected Supply and Demand Comparison	**Average**	**Single-Dry**	**Multiple-Dry Years**		
			2023	**2024**	**2025**
Groundwater Production	19,400	19,400	19,480	19,440	19,400
Desalination	12,000	12,000	12,000	12,000	12,000
Micro-filtration (MWD Untreated)	24,000	24,000	24,000	24,000	24,000
MWD Treated Water	106,800	108,400	104,632	108,284	108,300
MWD Recharge	22,600	22,500	22,588	22,576	22,600
Recycled Water	52,986	55,359	53,666	55,575	55,359
MWD Untreated AG	3,100	3,400	3,260	3,420	3,400
Supply Total	**240,886**	**245,059**	**239,626**	**245,295**	**245,059**
Demand Total	**232,331**	**236,607**	**227,430**	**232,829**	**236,607**
Supply/Demand	104%	103%	105%	105%	104%

Table 4.5-9
Water Supply Reliability, Average, Single-Dry and Multiple-Dry Years

2030 Projected Supply and Demand Comparison	Average	Single-Dry	Multiple-Dry Years		
			2028	2029	2030
Groundwater Production	19,400	19,400	19,400	19,400	19,400
Desalination	12,000	12,000	12,000	12,000	12,000
Micro-filtration (MWD Untreated)	24,000	24,000	24,000	24,000	24,000
MWD Treated Water	116,800	118,400	114,360	116,380	118,400
MWD Recharge	22,500	22,500	22,540	22,520	22,500
Recycled Water	58,891	61,260	58,899	60,080	61,260
MWD Untreated AG	3,500	3,900	3,700	3,800	3,900
Supply Total	**257,091**	**259,725**	**250,482**	**255,107**	**259,725**
Demand Total	**255,649**	**260,185**	**250,852**	**255,522**	**260,185**
Supply/Demand	101%	99%	99%	99%	98%

Source: Water Supply Assessment for Westridge (EMWD) June 2008.

As indicated at Table 4.5-9, projected water supplies will equal or exceed demands under all conditions through the Year 2025, and under average conditions through the year 2030. Calculated demands could nominally exceed supplies (by 2 percent or less) under single-year and multiple year drought conditions under projected long-range (2025 through 2030) conditions.

With regard to supply/demand projections, EMWD notes:

> It is anticipated that the majority of water for future development will be supplied by imported water from MWD recognizing the conditions of approval outlined in this document [WSA]. MWD does not place imported water limits on a member agency, but predicts the future water demand based on regional growth information. MWD stated in its 2005 RUWMP that, with the addition of all water supplies, existing and planned, MWD would have the ability to meet all of its member agencies' projected supplemental demand through 2030 even under a repeat of historic drought scenarios. For any short-term water shortages

> and interruptions caused by disaster or unprecedented drought, the plans and policies outlined in the RUWMP [RUWMP, Section II.4 Water Shortage Contingency Analysis] will be implemented.[9]

In summary, the Project WSA concludes that . . . [b]ased on present information and the assurance that MWD is engaged in planning processes that will identify solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies, EMWD has determined that it will be able to provide adequate water supply to meet the potable water demand for the [Westridge Commerce Center] project in addition to existing and future users.[10]

As stated in the WSA Conditions of Approval, water supply availability for the Project is based on representations by MWD that it will provide the water requested by EMWD for the next 20 years under the conditions set forth in Water Code Section 10910 as authorized by Water Code Section 10631(k). If new regulations, court decisions or other events reduce or impair EMWD's ability to provide such water, the impact will be reflected in the plan of service for the project. Additionally, the provision of water to the Project is contingent upon the Project Applicant's payment of water commodity rates specified by EMWD. Effective commodity rate(s) for the Project may exceed rates paid by existing customers in order to offset increasing water supply costs. If there is a change in the circumstances detailed in the Project WSA, EMWD reserves the option to suspend approval of the WSA.[11]

[9] Westridge WSA, Page 32.

[10] Westridge WSA, Page 35.

[11] Westridge WSA, Page 3.

4.5.3 EXISTING POLICIES AND REGULATIONS

4.5.3.1 Senate Bills 610 and 221

California Senate Bills 610 (Costa) and Senate Bill 221 (Kuehl) were adopted in 2003, with the intention of ensuring that adequate water supplies are or will be available to meet the water demand associated with the proposed development within the State of California. SB 610 focuses on the content of a water supply agency's Urban Water Management Plan (UWMP). It also stipulates that, when an environmental impact report is required in connection with a project, the appropriate water supply agency must provide an assessment of whether its total projected water supplies will meet the projected water demands associated with the proposed project. SB 221 requires a water supply verification when a tentative map, parcel map or development agreement for a project is submitted to a land use agency for approval.

Both Senate Bills define a "project" as having the water demand equal or greater than that associated with a 500-dwelling unit. In the case of industrial development, the stated equivalent is a project larger than 650,000 square feet or 40 acres in size. The Westridge Commerce Center Project is thus subject to the requirements of SB 610 and SB 221.

4.5.3.2 California Water Code

California Water Code sections 10910 et seq. and Government Code section 66455.3 require a lead agency to comply with certain sections of the State Water Code when a project is subject to CEQA. In general, those laws require the lead agency to obtain information from the water system that will supply water to the project concerning the ability of the water system to adequately serve the project for the following twenty years in normal, dry, and extended dry periods.

4.5.3.3 MWD Regional Urban Water Management Plan (RUWMP), EMWD 2005 Urban Water Management Plan (UWMP)

The RUWMP and UWMP provide information specifically related to water demands and supplies. The RUWMP considers all MWD member agencies, while UWMP

provides analysis more directly related to Eastern's retail customers. Notwithstanding, the UWMP also presents regional water demand and supply information germane to the 555 square mile area comprising Eastern's Service Area.

Both Plans satisfy the requirements contained within the California Water Code, and provide information to aid in the evaluation of future water supplies in accordance with Senate Bill SB 610 and SB 221.

The EMWD Board of Directors adopted an update Urban Water Management Plan (UWMP) in December of 2005. This plan details EMWD's demand projections and gives information regarding EMWD's supply. As part of the 2005 UWMP, demand projections were adjusted from the 2000 UWMP based on the 2004 Southern California Association of Governments Regional Transportation Plan Population Projections and local demand forecasting. Supply projections have also been adjusted based on new information from MWD and updated estimates of local supply quantities. The most current demand and supply information were employed in the Project Water Supply Assessment, and potable water demand for this Project is within the growth limits projected in the 2005 UWMP. The MWD Regional Urban Water Management Plan and Eastern 2005 UWMP are presented at EIR Appendix E.

City of Moreno Valley General Plan

The Community Development Element and Conservation Element of the Moreno Valley General Plan presents Objectives and Policies relevant to water supply issues affecting the City and general and the Project in specific. Table 4.5-10 summarizes Project consistency with applicable General Plan Objectives and Policies.

Table 4.5-10

City of Moreno Valley General Plan Consistency

Objective 2.11 Maintain a water system that is capable of meeting the daily and peak demands of Moreno Valley residents and businesses, including the provision of adequate fire flows.	***Consistent.*** *Consistent with provisions of the Project WSA and associated EMWD Conditions of Approval, the Project will implement all water system improvements necessary to serve the Project. Based on final site and building designs, Fire flows for the Project will be provided consistent with City of Moreno Valley Fire Prevention Bureau fire flow design requirements.*
Policy 2.11.1 Permit new development only where and when adequate water services can be provided.	***Consistent.*** *Through established City development review processes, and as reflected in the Project Conditions of Approval, building permits for the Project will only be issued upon obtaining a full review from the City to include verification that a will-serve letter has been issued by EMWD and that fire flow requirements stipulated by the City of Moreno Valley Fire Prevention Bureau have been met.*
Policy 2.13.2 Unless otherwise approved by the City, public water, sewer, drainage and other backbone facilities needed for a project phase shall be constructed prior to or concurrent with initial development within that phase.	***Consistent.*** *All backbone facilities necessary to serve the Project will be implemented prior to issuance of the first Certificate of Occupancy.*
Policy 2.14.3 Review development projects for their impacts on public services and facilities including, but not necessarily limited to, roadways, water, sewer, fire, police, parks, and libraries and require public services or facilities to be provided at the standards outlined in the Moreno Valley General Plan and the standards of applicable service agencies.	***Consistent.*** *Potential impacts of the Project on public services are evaluated and addressed within this EIR. As discussed herein, all potential impacts on public services and facilities are less-than-significant, or are mitigated to levels that are less-than-significant.*
Objective 7.2 Maintain surface water quality and the supply and quality of groundwater.	***Consistent.*** *The Project incorporates requisite water quality protection measures and will comply with all water quality regulatory requirements. The Project will be provided water from EMWD service lines and does not propose nor require direct withdrawal of groundwater. Nor does the Project propose other elements or aspects that would otherwise adversely affect groundwater quality.*
Objective 7.3 Minimize the consumption of water through a combination of water conservation and reuse.	***Consistent.*** *The Project will implement all water all conservation measures stipulated by EMWD and the City including but not limited to: EMWD Ordinance 72.24 ". . . Requirements Established for Water Use Efficiency," and amendments; and City of Moreno Valley Municipal Code Section 9.17.030, "Landscape and Irrigation design Standards," and amendments.*

Table 4.5-10
City of Moreno Valley General Plan Consistency

Policy 7.3.1 Require water conserving landscape and irrigation systems through development review. Minimize the use of lawn within private developments, and within parkway areas. The use of mulch and native and drought tolerant landscaping shall be encouraged.	***Consistent.*** *The Project will implement all water all conservation measures stipulated by EMWD and the City including but not limited to: EMWD Ordinance 72.24 ". . . Requirements Established for Water Use Efficiency," and amendments; and City of Moreno Valley Municipal Code Section 9.17.030, "Landscape and Irrigation design Standards," and amendments. The City will ensure implementation of the above requirements through its development review processes.*
Policy 7.3.2 Encourage the use of reclaimed wastewater, stored rainwater, or other legally acceptable non-potable water supply for irrigation.	***Consistent.*** *The Project will use non-potable water for irrigation to the extent that such water sources are available to the Project. In anticipation of reclaimed/recycled water availability, the Project will design and implement all irrigation systems per EMWD recycled water facilities standards.*

Source: City of Moreno Valley General Plan, Community Development Element and Conservation Element

4.5.4 SIGNIFICANCE THRESHOLDS

As provided for under Appendix G of the *CEQA Guidelines* as adopted and implemented by the City of Moreno Valley, Project-related impacts to water supplies would be significant if the Project would:

- Substantially deplete groundwater supplies or 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; or

- Require new or expanded water supplies.

4.5.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

Following is an analysis of water supply impacts that could occur as a result of Project implementation. For each topical discussion, potential impacts are evaluated under applicable criteria established in the preceding "Standards of Significance."

Potential Impact: ***Substantially deplete groundwater supplies or 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.***

Impact Analysis: As presented in the Project WSA:

> Groundwater is EMWD's only source of locally produced potable water. Protecting and developing local resources to reduce dependency on imported water is an important objective in EMWD's Strategic Plan. Groundwater information is included in this assessment to assist the lead agency in determining the adequacy of EMWD's total supply. Groundwater, however, is not being proposed to serve this project. New developments, including this project, will be supplied with imported water through MWD, either directly with treated water or with raw water treated by EMWD or recharged into the basin.[12]

As noted previously within this Section, water provided to the proposed Westridge Commerce Center Project will be supplied from imported water through MWD, with no impact to groundwater supplies. The Project does not propose nor require direct ground water withdrawals. As such, the Project would not substantially deplete groundwater supplies.

Nor will the Project substantially interfere with groundwater recharge capabilities. In this regard, no designated groundwater recharge facilities exist within or proximate to the Project site (see EIR Section 4.1, Land Use). Nor does the Project propose elements or operations that would directly or indirectly affect any designated groundwater recharge facilities. The Project will establish open space areas and landscaping allowing for potential capture, retention and infiltration of storm waters to the groundwater table.

[12] Westridge WSA, Page 16.

On the basis of the preceding discussion, the potential for the Project to substantially deplete groundwater supplies or 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 is considered to be less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: ***Require new or expanded water supplies.***

Impact Analysis: As discussed previously in this Section, estimated annual water demands for the Project under buildout conditions is 44 acre-feet/year. Please refer to previous EIR Table 4.5-8.

As required under SB 610/221, a Water Supply Assessment (WSA) has been prepared for the Project by the serving water purveyor, Eastern Municipal Water District (EMWD, Eastern). The WSA in its entirety is presented at EIR Appendix E.

Consistent with the analysis presented in detail in the Project WSA and summarized within this Section under the heading "Water Supply Assessment," Eastern has the ability to reliably serve the Project and all existing and projected customers within its service area under near term and long-term conditions, and under normal precipitation and extended drought conditions.[13] More specifically, the analysis demonstrates that Eastern has adequate supplies under the single-year and multiple-dry year scenario standards of SB 610. Water sources available to the Project through Eastern are constituents of existing or previously planned water supply resources, and are not new or expanded water supplies specifically necessary to serve this Project. Within the WSA,

[13] Pursuant to stipulations of the June 4, 2008 EWMB Minute Order approving and authorizing the Project WSA, that side WSA will be reviewed every three years until the commencement of Project construction. This review will ensure that the information included in the WSA remains accurate and current, and that no significant changes to either the Project, or to EMWD's water supply have occurred.

EMWD has stipulated Conditions of Approval ensuring implementation and operation of the Project in a manner that provides for efficient use of available water supplies.

Summary

As required under SB 610/221, a WSA has been prepared for the Project. The Project WSA demonstrates water supply sufficiency from existing and planned resources, and under conditions that are even more restrictive than the single-year and multiple-dry year scenario standards of SB 610. Within the WSA, Eastern has stipulated Conditions of Approval ensuring implementation and operation of the Project in a manner that provides for efficient use of available water supplies. Based on the preceding, the potential for the Project to require new or expanded water supplies is less-than-significant.

Level of Significance: Less-Than-Significant based on mandated compliance with EMWD Conditions of Approval.

Mitigation Measures: To ensure timely, monitored compliance with requirements stipulated in the Project WSA, the following EMWD Project Conditions of Approval are incorporated as EIR Mitigation Measures. Prior to building permit issuance, the developer shall provide a will-serve letter from EMWD demonstrating compliance with the following Conditions of Approval.

4.5.1 *Prior to the issuance of building permits, the Project Applicant shall contribute funding toward the acquisition of new water supplies, new treatment or recycled water facilities, and water efficiency measures for existing customers to develop new water supplies. The extent of additional funding shall be determined by the EMWD and may take the form of a new component of connection fees or a separate charge.*

4.5.2 *The Applicant shall install water efficient devices and landscaping according to the requirements of EMWD's water use efficiency ordinance(s) effective at the time of Project construction.*

4.5.3 The Applicant shall meet with EMWD staff to develop a Plan of Service (POS) for the Project. The POS shall detail water, wastewater and recycled water requirements to serve the Project.

4.5.4 Until the Project begins construction, the Project Water Supply Assessment shall be reviewed for its continued accuracy and adequacy every three (3) years, commencing on the WSA approval date of June 4, 2008. The Project Applicant shall maintain communication with EMWD on the status of the Project, and the lead agency shall request the referenced three-year periodic review and update of the WSA. If neither the project applicant nor the lead agency contacts EMWD within three (3) years of approval of this WSA, it shall be assumed that the Project no longer requires the estimated water demand as calculated in the WSA. The demand for the Project will not be considered in assessments for future projects, and the assessment provided within the Project WSA shall be considered invalid.

4.6 HYDROLOGY/WATER QUALITY

4.6 HYDROLOGY AND WATER QUALITY

Abstract

This Section of the EIR addresses potential impacts of the Project related to hydrology and water quality. More specifically, the analysis presented here examines whether the Project would:

- *Violate any water quality standards or waste discharge requirements;*

- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;*

- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;*

- *Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;*

- *Otherwise substantially degrade water quality;*

- *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;*

- *Place within a 100-year flood hazard area structures which would impede or redirect flood flows;*

- *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or*

- *Expose populations or properties to inundation by seiche, tsunami, or mudflow.*

As supported by the analysis presented in this Section, the potential for the Project to result in, or be affected by, significant hydrology, drainage or flooding impacts is considered to be less-than-significant. That is, the Project drainage concept reflects adequate provisions for detention and controlled release of storm waters in a manner that will not exceed pre-development conditions. Nor will the Project otherwise adversely affect drainage systems or water quality. All necessary storm water management system elements and system modifications, to include design and construction of new storm water retention/detention and conveyance systems, connections and improvements to existing systems, as well as implementation and monitoring of an approved Storm Water Pollution Prevention Plan/Water Quality Management Plan, will be realized to the satisfaction of the City, Riverside County Flood Control & Water Conservation District (RCFCWCD), and Santa Ana Regional Water Quality Control Board (SARWQCB).

4.6.1 INTRODUCTION

This Section evaluates potential impacts of the Project on hydrology and water quality. Information presented here is summarized from: *Preliminary Hydrology Study for Ridge Property Trust* (Huitt-Zollars, Inc.), June 9, 2010 (Project Hydrology Study); and *Project Specific Preliminary Water Quality Management Plan for Westridge Commerce Center - Moreno Valley* (Huitt-Zollars, Inc.), June 10, 2010 (Project WQMP). These reports are included as EIR Appendix F. Additional source and background information was obtained from the *Jurisdictional Delineation Report for the Westridge Commerce Center Project* (ICF Jones & Stokes) February 2010 and the *Ridge Moreno Valley Off-site Area Biological Surveys* (Harmsworth Associates) May 11, 2010 (included in Appendix G of this EIR); through the *City of Moreno Valley General Plan* (General Plan); and information published by the Santa Ana Regional Water Quality Control Board (SARWQCB).

4.6.2 SETTING

4.6.2.1 Regional Hydrology

The City of Moreno Valley is located within the Santa Ana Water Quality Control Region, one of nine regions defined by the State of California Department of Water Resources. Within the Santa Ana Water Quality Control Region, the Project site is located within the San Jacinto River Watershed. The City's existing storm drain system directs flows to the San Jacinto River, and ultimately to the Pacific Ocean through a network of local and regional storm water conveyances.

As one component of its watershed and water quality management responsibilities, the Santa Ana Regional Water Quality Control Board (SARWQCB) implements and maintains the *Santa Ana River Basin Water Quality Control Plan* (Basin Plan). The Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan designates beneficial uses for surface and ground waters, sets narrative and numerical objectives acting to protect beneficial uses, assures consistency with California's anti-degradation policy, and describes implementation programs to protect all waters in the Region. The Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations.

Urban storm water runoff is the largest source of unregulated pollution affecting waterways and coastal areas of the United States, and is similarly the largest source of unregulated pollutants affecting the *Santa Ana River Basin*. Storm water runoff can be contaminated with a variety of pollutants that contribute to increased health risks and environmental damage. The Clean Water Act (CWA) and other federal, state and regional regulations require the City of Moreno Valley to regulate the discharge of pollutants to the storm drain system, including the discharge of pollutants from construction sites and areas of new development or significant redevelopment.

4.6.2.2 Beneficial Uses

The Basin Plan, adopted by the Santa Ana Regional Water Quality Control Board on March 11, 1994, identifies the various ways that water in the region can be used for the benefit of people and/or wildlife (beneficial uses). Within the San Jacinto River Basin, the following have been identified as Intermittent Beneficial Uses. The intermittent designation indicates that some of the beneficial uses may occur seasonally, rather than year-round.

- Municipal and Domestic Supply (MUN) waters are used for community, military, municipal or individual water supply systems. These uses may include, but are not limited to, drinking water supply.

- Agricultural Supply (AGR) waters are used for farming, horticulture or ranching. These uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.

- Industrial Service Supply (IND) waters are used for industrial activities that do not depend primarily on water quality. These uses include but are not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well re-pressurization.

- Groundwater Recharge (GWR) waters are used for natural or artificial recharge of groundwater for purposes that may include, but are not limited to, future extraction, maintaining water quality or halting saltwater intrusion into freshwater aquifers.

- Water Contact Recreation (REC1)[1] waters are used for recreational activities involving body contact with water where ingestion of water is reasonably

[1] The Basin Plan notes that *"REC1 and REC2 beneficial use designations assigned to surface waterbodies in this Region should not be construed as encouraging recreational activities. In some cases, such as Lake Mathews and certain reaches of the Santa Ana River, access to the waterbodies is prohibited because of potentially hazardous conditions and/or because of the need to protect other uses, such as municipal supply or sensitive wildlife habitat. Where REC1 or REC2 is indicated as a beneficial use in Table 3-1, the designations are intended to indicate that the uses exist or that the water quality of the waterbody could support recreational uses."*

possible. These uses may include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.

- Non-contact Water Recreation (REC2)[1] waters are used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction with the above activities.

- Warm Freshwater Habitat (WARM) waters support warm water ecosystems that may include, but are not limited to, preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates.

- Wildlife Habitat (WILD) waters support wildlife habitats that may include, but are not limited to, the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.

- Fish Spawning (SPWN) waters support high quality aquatic habitats suitable for reproduction and early development of fish.

- Preservation of Rare and Endangered Species (RARE) waters support habitats necessary for the survival and successful maintenance of plant or animal species established under state and/or federal law as rare, threatened, or endangered.

4.6.2.3 Receiving Waters and Listed Impairments

Receiving waters (direct and indirect) that could be potentially affected by Project-related storm water discharges, together with their designated beneficial uses and any listed impairments, are summarized in Table 4.6-1.

Table 4.6-1
Receiving Waters, Impairments and Beneficial Uses

Receiving Waters	Clean Water Act (CWA) Section 303(d) Listed Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
Heacock Channel	None	None	Not classified as RARE
Perris Valley Storm Drain Channel	None	None	Not classified as RARE
San Jacinto River Reach 3	None	MUN, AGR, GWR, REC 1, REC 2, WARM, WILD	Not classified as RARE
Canyon Lake	Nutrients	MUN, AGR, GWR, REC 1, REC 2, WARM, WILD	Not classified as RARE
San Jacinto River Reach 1	None	MUN, AGR, GWR, REC 1, REC 2, WARM, WILD	Not classified as RARE
Lake Elsinore	Nutrients, Organic Enrichment/Low Dissolved Oxygen, Sedimentation/Siltation	MUN, REC 1, REC 2, WARM, WILD	Not classified as RARE
Alberhill Creek	None	None	Not classified as RARE
Temescal Creek (Reach 6)	None	MUN, GWR, REC1, REC2, WARM, WILD	Not classified as RARE
Temescal Creek (Reach 5)	None	MUN, AGR, GWR, REC1, REC2, WARM, WILD, RARE	19 miles
Temescal Creek (Reach 4)	None	MUN, AGR, GWR, REC1, REC2, WARM, WILD, RARE	16 miles
Lee Lake	None	MUN, AGR, IND, GWR, REC1, REC2, WARM, WILD	Not classified as RARE
Temescal Creek (Reach 2)	None	MUN, AGR, IND, GWR, REC1, REC2, WARM, WILD	Not classified as RARE
Temescal Creek (Reach 1B)	None	MUN, REC1, REC2, WARM, WILD	Not classified as RARE
Temescal Creek (Reach 1A)	None	MUN, AGR, IND, GWR, REC1, REC2, WARM, WILD, SPWN, RARE	19 miles
Santa Ana River (Reach 3)	Pathogens, nitrogen, and phosphorus	MUN, AGR, GWR, REC1, REC2, WARM, WILD, RARE	20 miles
Prado Flood Control Basin	Nutrients and pathogens	MUN, REC1, REC2, WARM, WILD	26 miles
Santa Ana River (Reach 2)	None	MUN, AGR, GWR, REC1, REC2, WARM, WILD, RARE	26 miles
Santa Ana River (Reach 1)	None	MUN, REC1, REC2, WARM, WILD	Not classified as RARE
Pacific Ocean	None	None	Not classified as RARE

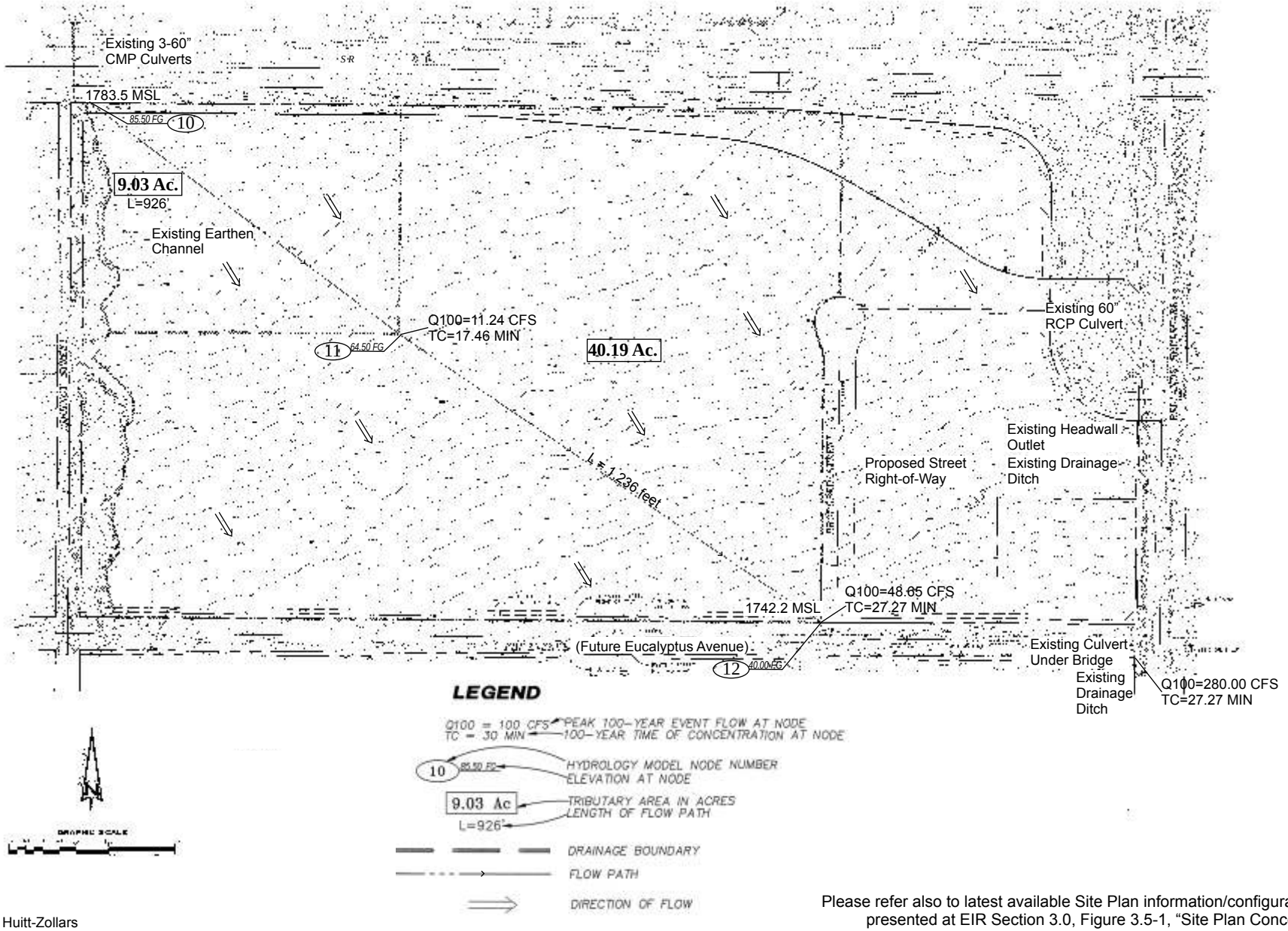
Source: *Preliminary Water Quality Management Plan* (Huitt-Zollars, Inc.) June 2010.

4.6.2.4 Local Context

Existing hydrologic conditions are schematically presented at Figure 4.6-1. As indicated, elevation at the northwest corner of the Project site is approximately 1783.5 feet above mean sea level (MSL), descending to approximately 1742.2 MSL at the site's southeasterly limits. Over the approximately 1,236 foot span from the northwest to southeast property limits, this translates to an approximately three (3) percent slope on average.

Consistent with existing slope conditions, storm water runoff from the Project site currently drains generally from northwest to southeast in a 'sheet flow' condition, ultimately reaching the drainage ditch along the west side of Redlands Boulevard south of Fir (future Eucalyptus) Avenue. This drainage ditch also currently collects flows from north of SR-60, via a 60-inch culvert that outlets south of the eastbound freeway off-ramp at Redlands Boulevard, easterly of the Project site. The report of Off-site Area Biological Surveys (included in Draft EIR Appendix G) indicates that this drainage ditch is a highly disturbed, unvegetated feature of approximately five feet in width. The drainage area begins approximately 210 feet northerly of the Fir (future Eucalyptus) Avenue alignment, where it enters an underground concrete culvert at the SR-60 ramp, to a point approximately 500 feet southerly (downstream) of the intersection of Fir (future Eucalyptus) Avenue and Redlands Boulevard. This area is jurisdictional under the U.S. Army Corps of Engineers, the California Department of Fish and Game, the California Regional Water Quality Control Board, and the MSHCP Riverine/Riparian Habitat (as defined under Section 6.1.2 of the MSHCP) programs.

The Quincy Channel, located at the Project's westerly boundary, similarly collects runoff from the north side of SR-60 via a triple culvert (three 60-inch pipes). As identified in the EIR Jurisdictional Delineation (presented at EIR Appendix G), Quincy Channel is an eroded earthen channel located on the western boundary of the project site. The feature is ephemeral and carries stormwater runoff from north of the project site to the southern site boundary and continues southerly.



Source: Huitt-Zollars

Please refer also to latest available Site Plan information/configuration presented at EIR Section 3.0, Figure 3.5-1, "Site Plan Concept."

Figure 4.6-1
Existing Hydrologic Condition

Quincy Channel is a tributary to the Perris Valley Storm Drain, which flows to the San Jacinto River and ultimately into Canyon Lake. The Project Hydrology Study notes that in the westerly portion of the Project site, runoff that is supposed to be contained within the Channel has migrated easterly onto the Project site limits and has caused considerable erosion to the west side of the property.

The Project site is not located within a designated Federal Emergency Management Agency (FEMA) 100-year floodplain area. Current FEMA Flood Insurance Rate Map (FIRM) designation of the Project site is *Shaded* Zone "X." Areas mapped as *Shaded* Zone "X" are considered to be subject to moderate flood hazards, usually the area between the limits of the 100-year and 500-year floods, with average flooding depths of less than one foot.

4.6.3 EXISTING POLICIES AND REGULATIONS

4.6.3.1 Federal Water Pollution Control

The Federal Water Pollution Control Act, also referred to as the Federal Clean Water Act (CWA), requires discharges into navigable waters to meet stringent standards regulated under the National Pollutant Discharge Elimination System (NPDES). On February 16, 1990, the U.S. Environmental Protection Agency (EPA) published regulations establishing application requirements for storm water permits for specified categories of industries, municipalities and certain construction activities. The regulations require that discharges of storm water from construction activity of one acre or more must be regulated as an industrial activity and covered by an NPDES permit, issued by the applicable Regional Water Quality Control Board (RWQCB).

Section 404 of the CWA requires permitting of activities that would result in discharge of dredge or fill material into "waters of the United States" or adjacent wetlands. By definition, these include waterways, streams, and intermittent streams which could be used for interstate commerce, and their tributaries. In non-tidal waters, the limits of jurisdiction are "ordinary high water marks" such as stream banks. Where wetlands occur above high water marks, they are considered "adjacent wetlands" and are included within Army Corps of Engineers (Corps) jurisdiction. The term "interstate

commerce" has been broadly interpreted to include use by migratory waterfowl or out-of-state tourists, and Corps jurisdiction has often been extended to wetlands not adjacent to waters of the United States ("isolated wetlands").

In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

4.6.3.2 Federal Floodplain Regulation and Administration

The Federal Emergency Management Agency (FEMA) develops and maintains Flood Insurance Rate Maps (FIRMs) for the City. In accordance with FEMA requirements, and in order for the City to maintain its flood insurance eligibility status, all development within the General Plan Area is required to be designed and implemented in a manner that does not adversely affect flood carrying capacities of upstream or downstream facilities or drainage ways. Reflecting these requirements, all new development in Moreno Valley must comply with storm runoff management requirements identified in Riverside County's Moreno Area Drainage Plan (ADP). The Area Drainage Plan is essentially the Master Drainage Plan with additional language supporting the costs and distribution of the fee within the Plan Area.

In areas subject to FIRM-designated 100-year floodplain areas, new development is further required to be floodproofed, typically by ensuring that first finished floors are a minimum of one foot above the mapped 100-year event floodplain elevation. FIRMs are employed at the local level by planning and building departments in the review and permitting of new development proposals.

4.6.3.3 State of California, Riverside County, and City of Moreno Valley Storm Water Management

At the federal level, the CWA allows the EPA to delegate its NPDES system permitting authority to states with an approved regulatory program. The State of California is one of the delegated states. The California Water Code authorizes discharge of pollutants into waters of the State by issuance of NPDES permits. An NPDES permit has been

issued by the California Regional Water Quality Control Board (RWQCB) to Riverside County and local agencies. The City of Moreno Valley is one of many cities included as a "co-permittee" in the NPDES permit issued to the County. The NPDES permit requires development and implementation of management programs (Best Management Practices or BMPs) during the life of the permit to improve long term quality of storm water discharge and improve the water quality of the receiving waters. The beneficial uses of the receiving waters will be protected through implementation of these BMPs.

BMP storm water pollutant source control measures are articulated in the County's NPDES permit, and include such measures as first flush diversion, detention/retention basins, infiltration trenches/basins, porous pavement, oil/grease separators, grass swales, education programs, and maintenance practices. The NPDES permitting program also includes measures to reduce the release of pollutants such as sediment, construction materials, or accidental spillage of polluting materials during construction.

The City of Moreno Valley has implemented BMPs that reduce, to the extent practicable, pollutant concentrations discharged into the waters of Southern California from storm water and urban runoff. General categories of construction and post-construction BMPs employed by the City include, but are not limited to, the following:

Short-Term BMPs—Developer responsibility

- Monitoring of storm water quality for one year after Project completion;
- Distribution of educational materials to new owners/residents;
- Stenciling of storm drains; and
- Notification to the RWQCB and Riverside County Executive Committee on transfers of responsibilities.

Long-Term BMPs—Various responsibilities

- Maintenance of catch basins and gutters in public roadways—County of Riverside Transportation Department;
- RCFCWCD facilities—RCFCWCD;

- Good housekeeping practices—all property owners;
- Participation in City-administered street sweeping program; and
- Post-construction structural BMPs maintenance and operation—owners.

Within these categories of BMPs, project developers are required to develop and implement site and use-specific measures that preclude or minimize potential discharge of pollutants to the storm drain system. Implementation of BMPs is facilitated by the City's requirement that prior to the issuance of a building or grading permit, project developers submit a completed project-specific Storm Water Pollution Prevention Plan (SWPPP) addressing construction storm water discharges, and a Water Quality Management Plan (WQMP) addressing post-construction storm water discharges. For construction activity on sites greater than one acre (such as the Project), clearance must be obtained from the State Water Resources Control Board pursuant to the NPDES Statewide Industrial Storm Water Permit for General Construction activities.

Complementing the requirements summarized above, Section 303 of the CWA and the State's Porter-Cologne Water Quality Act establish applicable water quality objectives for ground and surface waters in the State. Surface water quality is the responsibility of the RWQCB, water supply and wastewater management agencies, as well as City and County governments, and requires the coordinated efforts of these various entities. General sources of pollutants affecting ground and surface water are classified as "point" or "non-point" sources as discussed below.

Point source water pollution is defined as pollution directly entering surface water via defined discharge locations, such as pipes or outfalls. When such wastewater discharges are proposed, the applicant must obtain a set of Waste Discharge Requirements from the RWQCB which are designed to establish specific limits on the amount and type of pollutant discharge from a point source, in order to protect and achieve applicable water quality standards and objectives within the receiving water body.

Nonpoint sources of water pollution consist of surface runoff from a site or area during or following a storm where the source of pollution cannot be traced to a specific

location. Typical nonpoint water pollution sources consist of agricultural fields with sediment and fertilizers, construction sites with sediment and debris, and roads with oil, tire particles, and debris common to roads. When construction areas exceed one acre in size or when specific types of industrial facilities are involved, the applicant must develop and implement a Storm Water Pollution Prevention Plan (SWPPP) to control nonpoint water pollution.

The Safety and Conservation Elements of the Moreno Valley General Plan also contains Objectives and Policies addressing storm water management and water quality. Applicable Objectives/Policies and the Project's consistency with or support of the stated Objective/Policy are summarized at Table 4.6-2.

Table 4.6-2

City of Moreno Valley General Plan Consistency

Objective 6.2: Minimize the potential for loss of life and protect residents, workers, and visitors to the City from physical injury and property damage, and to minimize nuisances due to flooding.	***Consistent.*** *As discussed within this Section, the design and construction of Project-related drainage facilities will ensure adequate flood carrying capacity for storm drainage generated on-site, as well as existing runoff entering the Project site from adjacent properties.*
Policy 6.2.3: Maximize pervious areas in order to reduce increases in downstream runoff resulting from new development.	***Consistent.*** *On-site bio-retention and detention basins, along with selected areas of pervious concrete and perimeter landscape areas are provided throughout the Project site. Please refer to the Water Quality Management Plan Site Plan, included in Draft EIR Appendix F.*
Policy 6.2.4: Design, construct and maintain street and storm drain flood control systems to accommodate 10-year and 100-year storm flows respectively.	***Consistent.*** *To the satisfaction of the City and the RCFCWCD, the Project's storm drain facilities will be designed, at a minimum, to protect on- and off-site uses from historic 100-year storm flow levels.*
Policy 6.2.5: The storm drain system shall conform to Riverside County Flood Control and Water Conservation District master drainage plans and the requirements of the Federal Emergency Management Agency.	***Consistent.*** *As a component of permit review and approval processes, the City, County, and RWQCB will ensure and mandate that all Project storm water management and conveyance features are designed and implemented consistent with established requirements and performance standards.*

Table 4.6-2

City of Moreno Valley General Plan Consistency

Objective 7.2: Maintain surface water quality and the supply and quality of groundwater.	***Consistent.*** *The Project will be constructed and operated in compliance with all applicable water quality regulations. As discussed within this Section, these include the implementation of a Storm Water Pollution Prevention Plan (SWPPP) and Preliminary and Final Water Quality Management Plan (WQMP).*
Policy 7.2.2: The City shall comply with the provisions of its permit(s) issued by the Regional Water Quality Control Board for the protection of water quality pursuant to the National Pollutant Discharge Elimination System.	***Consistent.*** *As discussed within this Section, the Project will be subject to the City's NPDES permitting requirements.*

Source: City of Moreno Valley General Plan, Safety Element and Conservation Element.

4.6.4 SIGNIFICANCE THRESHOLDS

Consistent with the standards of significance outlined in the *CEQA Guidelines*, impacts related to hydrology and water quality would be considered potentially significant if the Project would:

- Violate any water quality standards or waste discharge requirements;

- Substantially deplete groundwater supplies or 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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;

- Otherwise substantially degrade water quality;

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or

- Expose populations or properties to inundation by seiche, tsunami, or mudflow.

The Project's potential to substantially deplete or otherwise impact groundwater supplies, or be affected by water availability is addressed at EIR Section 4.5, "Water Supply." The remaining hydrologic and water quality considerations for the Project are addressed in the following discussions.

4.6.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

Potential Impact: ***Violate any water quality standards or waste discharge requirements; substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation on- or off-site; or otherwise substantially degrade water quality.***

Impact Analysis: Development of the warehouse/distribution structure and supporting paved parking and circulation areas proposed by the Project will substantially increase impervious areas within the site, introducing approximately 45 acres of impervious surfaces, or up to 82 percent of the total developed Project area. Storm water runoff from the Project site could affect receiving surface waters, and could eventually affect groundwater as it discharges into natural and manmade conveyances, and eventually percolates to the underlying water table. The following discussions identify the Project's potential hydrologic and water quality impacts during construction, and in the post-construction, or operational period.

Potential Construction-Related Impacts

During site preparation activities prior to construction, up to 80,000 cubic yards of the existing native soils will be removed from the site, exposing the Project area to increased erosion potential. Further, construction site runoff may carry increased loads of sediment, heavy metals and petroleum hydrocarbons (from machinery) which could degrade water quality. Current regulatory programs (as previously described in Section 4.6.3) operate to minimize specific hydrologic and water quality impacts related to construction. For example, in accordance with NPDES requirements, new development projects are required to develop construction activities erosion control plans, including implementation of Best Management Practices (BMPs) in order to alleviate potential sedimentation and storm water discharge contamination impacts of new development.

Specific to the Project, a City-approved Storm Water Pollution Prevention Plan (SWPPP) is required prior to the issuance of the first development permit. Mandated components of the SWPPP include identified sources of sediments and other pollutants that could affect the quality of storm water discharge, and associated BMPs to reduce sediment and other pollutants to storm water discharge consistent with City, County, and SARWQCB performance standards. BMPs typical of the Project SWPPP will include installation of filter fabric fences, sandbars and checkdams. Mandated implementation of the SWPPP, and associated compliance with NPDES and Southern California Regional Water Quality Control Board requirements and performance standards reduce potential construction source storm water pollutant discharges and erosion impacts to levels that are less-than-significant.

In addition to the above requirements, the Project will require a General Permit for storm water discharge from the Santa Ana Regional Water Quality Control Board, in accordance with the Notice of Intent instructions. Under the General Permit, discharge of materials other than storm water is prohibited.

Based on the preceding, the potential for construction-related impacts to exceed impact thresholds is less-than-significant with respect to the potential violation of any water quality standards or waste discharge requirements; substantial alteration of the existing drainage pattern of the site or area; or substantial degradation of water quality.

Potential Post-Construction Impacts

The developed Project site would include up to 45 acres of impermeable surfaces including the warehouse and distribution facility, paved parking areas, roadways, and related supporting uses. Approximately ten acres within the developed Project site will accommodate landscaping, parks/trails areas, or will otherwise be developed with permeable facilities. The Quincy Channel area within the westerly portion of the Project site is excluded from development activities, and will not be disturbed. Storm water runoff will be collected and directed easterly/southeasterly away from Quincy Channel.

Potential pollutant sources under post-construction conditions include oil and grease, sediment, nutrients (from landscape fertilizers), pesticides, organic compounds (specifically solvents) and metals. Recognizing the general potential hazards of such urban runoff, the EPA has issued regulations which require municipalities to participate in the NPDES. As part of this program, Riverside County has received an NPDES permit for urban runoff. Compliance with the provisions specified in the NPDES permit (including those identified in the following Table 4.6-3) provide for proper management of urban runoff from development of the Project. In many cases, potential water quality impacts may be considered less than significant with incorporation of BMPs into project plans (e.g., as presented within a project-specific WQMP).

Storm waters from the developed Project site will discharge into the local area storm drain system, and then will be discharged into area Receiving Waters. The Proximate Receiving Waters are:

- Heacock Channel;
- Perris Valley Storm Drain Channel; and
- San Jacinto River (Reach 3) – Hydrologic Basin Unit Number (HU#) 802.11.

The Downstream Receiving Waters are:

- Canyon Lake – HU# 802.11;
- San Jacinto River (Reach 1) – HU# 802.32;
- Lake Elsinore – HU# 802.31;
- Alberhill Creek;
- Temescal Creek (Reach 6) – HU# 801.35;
- Temescal Creek (Reach 5) – HU# 801.35;
- Temescal Creek (Reach 4) – HU# 801.34;
- Lee Lake – HU# 801.34;
- Temescal Creek (Reach 2) – HU# 801.32;
- Temescal Creek (Reach 1B) – HU# 801.25;
- Temescal Creek (Reach 1A) – HU# 801.25;
- Santa Ana River (Reach 3) – HU# 801.21;
- Prado Flood Control Basin – HU# 801.25;
- Santa Ana River (Reach 2) – HU# 801.11;
- Santa Ana River (Reach 1) – HU# 801.11; and
- Pacific Ocean.

As noted at Table 4.6-1, the following waters are Federal 303(d)-listed Impaired Water Bodies.

- Canyon Lake – HU# 802.11;
- Lake Elsinore – HU# 802.31;
- Santa Ana River (Reach 3) – HU# 801.21; and
- Prado Flood Control Basin – HU# 801.25.

Due to existing impairments of receiving waters, specific Pollutants of Concern (POC) for this Project include: nutrients, pathogens, organic enrichment/low dissolved oxygen,

PCBs (polychlorinated biphenyls) and unknown toxicity. Accordingly, treatment control BMPs with a medium or high effectiveness will be incorporated into the final Project design and WQMP.

Selected BMPs will be approved by the City, RCFCWCD, and the SARWQCB), and will be incorporated into an approved Project Final Water Quality Management Plan (WQMP) for the Project. The Project Final WQMP will establish a program and means to prevent or minimize potential storm water pollutant discharges over the life of the Project. The following Table 4.6-3 contains a summary of the BMP requirements identified as part of the Project's Preliminary WQMP (Draft EIR Appendix F) that are considered likely to be included in the Project Final WQMP.

Table 4.6-3
Recommended Site Design Water Quality Management BMPs

Design Category, Specific BMPs	Project Implementation
Site Design Concept 1: Minimize Urban Runoff	
Maximize the permeable area.	On-site bio-retention systems, a detention basin, pervious concrete areas within selected parking stall areas, and perimeter landscape areas are provided to maximize permeable areas onsite, as shown in the Project Site Plan Concept, Figure 3.5-1 in this Draft EIR, and in the Water Quality Management Plan Site Plan, included in Draft EIR Appendix F.
Incorporate landscaped buffer between sidewalks and streets.	Pursuant to City standards, upon construction, Fir (future Eucalyptus) Avenue (the site's southern boundary) will incorporate a landscaped parkway between the sidewalk and the street's curb and gutter.
Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought-tolerant trees and large shrubs.	Existing native trees and shrubs along the Project's westerly boundary, within the Quincy Channel, will be left intact and preserved. Planting of native and drought-tolerant trees and large shrubs is planned as part of Project landscaping, as discussed in Draft EIR Section 3.0, "Project Description." All Project landscaping will be designed and implemented pursuant to a City-approved landscape and irrigation plan.
Use natural drainage systems.	Vegetated mini-pond areas are included in the Project design to ensure that runoff is conveyed in a controlled manner; and to treat runoff by removing pollutants, and promote runoff infiltration into the soil.
Where soil conditions are suitable, use perforated pipe or gravel filtration pits for low flow infiltration.	Underground perforated pipe will be used in the on-site vegetated mini-pond areas to improve drainage and avoid above-surface ponding.

Table 4.6-3
Recommended Site Design Water Quality Management BMPs

Design Category, Specific BMPs	Project Implementation
Construct onsite ponding areas or retention facilities to increase opportunities for infiltration consistent with vector control objectives.	Vegetated mini-pond areas are included as part of the Project site design. Retention basins will be designed to dewater within 72 hours, in order to minimize vector generation.
Site Design Concept 2: Minimize Impervious Footprint	
Maximize the permeable area.	On-site bio-retention systems, a detention basin, pervious concrete areas within selected parking stall areas, and perimeter landscape areas are provided to maximize permeable areas onsite, as shown in the Project Site Plan Concept, Figure 3.5-1 in this Draft EIR, and in the Water Quality Management Plan Site Plan, included in Draft EIR Appendix F.
Construct walkways, trails, patios, overflow parking lots, alleys, driveways, low-traffic streets and other low-traffic areas with open-jointed paving materials or permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials.	Pervious concrete areas will be incorporated in selected parking stalls located in areas to the south and east of the proposed building. These parking stalls will accept nuisance flows from irrigation and normal flows including some roof runoff. Specific locations of these pervious concrete areas are shown as part of the Water Quality Management Plan Site Plan, included in Draft EIR Appendix F.
Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.	All drive aisles, parking stalls, walkways, streets, and driveways will be designed to the minimum width acceptable for safe and efficient access to the Project site. Driveway widths may exceed City minimum design standards in order to efficiently and safely accommodate ingress/egress of large trucks accessing the Project.
Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.	Decorative concrete and multiple sidewalk travel paths have been eliminated from the Project's landscape design, in order to maximize the amount of pervious landscape areas available onsite.

Table 4.6-3
Recommended Site Design Water Quality Management BMPs

Design Category, Specific BMPs	Project Implementation
Site Design Concept 3: Conserve Natural Areas	
Conserve natural areas.	Natural areas along the Project's westerly boundary, adjacent to the Quincy Channel, will be left intact and conserved.
Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought-tolerant trees and large shrubs.	Existing native trees and shrubs along the Project's westerly boundary, within the Quincy Channel, will be left intact and preserved. Planting of native and drought-tolerant trees and large shrubs is planned as part of Project landscaping, as discussed in Draft EIR Section 3.0, "Project Description." All Project landscaping will be designed and implemented pursuant to a City-approved landscape and irrigation plan.
Use natural drainage systems.	Vegetated mini-pond areas are included in the Project design to ensure that runoff is conveyed in a controlled manner; and to treat runoff by removing pollutants, and promote runoff infiltration into the soil.
Site Design Concept 4: Minimize Directly Connected Impervious Areas	
Where landscaping is proposed, drain impervious sidewalks, walkways, trails and patios into adjacent landscaping.	Proposed impervious walkways and patios will be designed to drain into adjacent landscaping wherever feasible.
Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design.	Vegetated detention areas are included in the Project design to ensure that runoff is conveyed in a controlled manner. Detention areas also treat runoff by removing pollutants, and promote runoff infiltration into the soil.
Overflow parking (parking stalls provided in excess of the co-permittee's minimum parking requirements) may be constructed with permeable paving.	Pervious concrete areas will be incorporated in selected parking stalls located in areas to the south and east of the proposed building. These parking stalls will accept nuisance flows from irrigation and normal flows including some roof runoff. Specific locations of these pervious concrete areas are shown as part of the Water Quality Management Plan Site Plan, included in Draft EIR Appendix F.

Source: *Preliminary Water Quality Management Plan for West Ridge, Moreno Valley* (Huitt-Zollars, Inc.) 2010.

Additional Source Control and Treatment Control BMPs, including detailed descriptions of the mechanical and vegetative filtration to be implemented as part of the site's landscape areas and infiltration basins, are identified in the Preliminary WQMP at Draft EIR Appendix F.

Detailed design and engineering of storm water management systems, including storm water treatment, will be provided pursuant to the mandated Project Water Quality Management Plan (WQMP), and as currently required under City, County and SARWQCB permitting processes. As a component of permit review and approval processes, the City, County, and SARWQCB will require and ensure that the Project WQMP and all Project storm water management systems and features are appropriately designed, implemented and maintained.

Based on the preceding discussions, and pursuant to mandated WQMP and NPDES permitting requirements, the potential for post-construction aspects of the Project to violate any water quality standards or waste discharge requirements; substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; or otherwise substantially degrade water quality is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

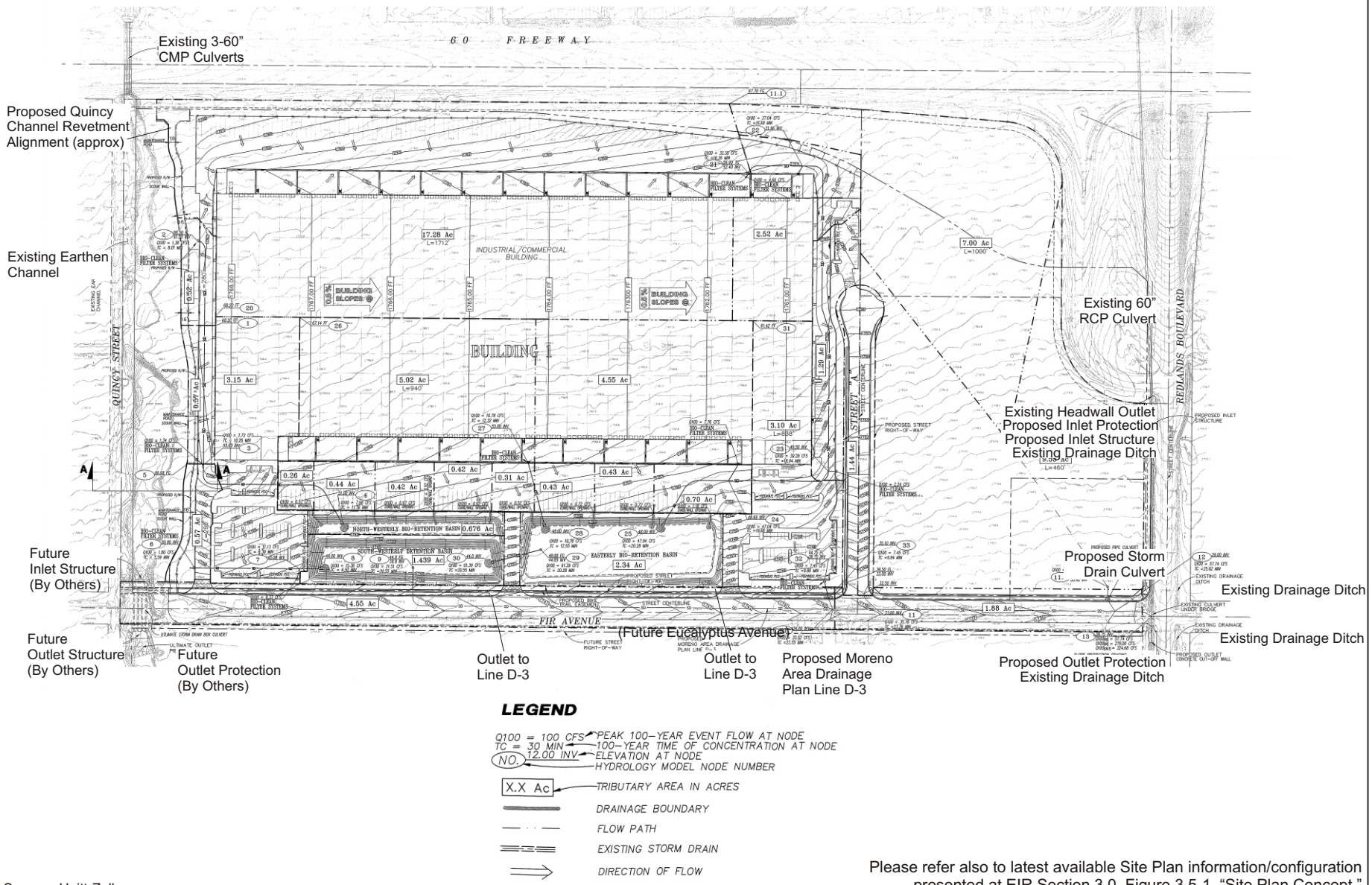
Potential Impact: ***Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional sources of polluted runoff.***

Impact Analysis: Under the proposed hydrologic condition, existing drainage patterns (trending from northwest to southeast) will be maintained. Consistent with Project measures to avoid or minimize potential impacts to biological resources and associated Army Corps of Engineers (ACOE) and California Department of Fish and Game (CDFG) jurisdictional areas, no stormwater runoff from the Project site will be directed

to the Quincy Channel. Necessary storm water management improvements will be implemented to accommodate existing off-site flows in combination with increased on-site storm water discharge rates/volumes, and to address Project-related urban storm water pollutants. Project drainage improvements are based on detailed hydrologic information presented at EIR Appendix F, and assume a worst-case condition based on existing carrying capacities of receiving drainage improvements. Improvements to be implemented by the Project are schematically presented at Figure 4.6-2, "Proposed Hydrologic Condition," and are summarized below. Please refer also to the *Preliminary Hydrology Report*, and *Preliminary Water Quality Management Plan* presented at EIR Appendix F.

Along the westerly edge of the Project area, a concrete cut-off wall protection barrier will be constructed. As illustrated in Figure 4.8-1 (provided in Section 4.8, "Biological Resources"), this wall will be located and designed so as not to impact any Delineated Jurisdictional Areas within the Quincy Channel along the eastern bank of Quincy Channel. This wall will be designed to help prevent any further erosion caused by the migrating flows from the Quincy culvert crossing the SR-60 freeway.

Along the south side of the Project, within the Fir (future Eucalyptus) Avenue right-of-way, the developer will install the drainage facilities consistent with the ADP, line D-3. The ADP designates Line D-3 as a 42-inch main in Fir (future Eucalyptus) Avenue along the project frontage. Line D-3 then transitions to a 48-inch main at the Project's easterly boundary, continuing as such to Redlands Boulevard. Line D-3 then confluences with planned APD Line D-1 in Redlands Boulevard. Line D-1 continues southerly as a 48-inch main and ultimately confluences with Line D. Line D is a reinforced concrete box (RCB) drainage structure ranging in size from 8.5-feet x 5-feet to 14.25-feet by 4-feet. Line D then conveys area stormwater runoff to the east.



Source: Huitt-Zollars

Please refer also to latest available Site Plan information/configuration presented at EIR Section 3.0, Figure 3.5-1, "Site Plan Concept."

applied planning inc

Figure 4.6-2
Proposed Hydrologic Condition

In the interim proposed condition, pending completion of Line D-1 in Redlands Boulevard, the drainage facility in Eucalyptus Street (Line D-3) will be limited to outlet the runoff quantities specified in the ADP into the existing drainage ditch along the west side of Redlands Boulevard. In no case will post-development flows exiting the Project site exceed pre-development flows. The Line D-3 storm drain facility will connect to a new storm drain culvert along Redlands Boulevard at Eucalyptus Street. The outlet of the new storm drain culvert will be lined with energy dissipating rip-rap before allowing the runoff to enter the existing earthen drainage ditch.

Along the east side of the property, the existing 60-inch culvert will remain in place to convey the runoff from north of the freeway to the existing drainage ditch on the west side of Redlands Boulevard. No improvements are recommended for this facility.

At the southwesterly corner of the Project site, future drainage improvements will be constructed by others in association with eventual bridged crossing of the Quincy Channel.

Based on detailed site-specific hydrologic modeling presented at EIR Appendix F, the Project drainage concept reflects those improvements necessary to adequately collect and convey off-site storm waters, as well as increased storm water runoff resulting from development of the Project site. The proposed on-site system will consist of a series of underground pipes that collect the runoff from around the proposed facility. The underground pipes will be routed to the proposed bio-retention basins and detention basin at the south side of the facility. These basins, illustrated in Figure 4.6-2, would reduce storm water discharge from the site to levels equivalent to pre-development conditions, thereby precluding incremental impacts to receiving storm drain facilities. The on-site detention basin system will be designed to detain the differential runoff created due to the development of the site for the 2, 5, 10 and 100 year; 1, 3, 6 and 24 hour storm events. The detention basins will be equipped with an overflow structure that will release runoff into the public storm drain facility (Line D-3) and will ultimately drain to the drainage ditch along the west side of Redlands Boulevard. A relief "bleeder" outlet discharging to Line D-3 will also be provided on the downstream end

of the basin system to ensure that the system empties within 72 hours of any storm event. The basins will be designed to have a minimum of one (1) foot freeboard along the perimeter and a spillway on to Eucalyptus Avenue will be provided in the event that the basin outlets should be obstructed, resulting in basin overtopping.

Over the long-term, Project storm water management systems, complemented by off-site area-wide drainage improvements including, but not limited to, planned improvement of the adjacent drainage facilities in Redlands Boulevard, act to ensure that potential future increases in area storm water runoff will be managed and maintained within acceptable parameters.

Prior to issuance of grading permits, detailed final grading and drainage plans will be reviewed and approved by the City, in compliance with City, County, and SARWQCB requirements. This review and approval of the Project development plans, and implementation of necessary Project drainage improvements act to ensure that the Project will be designed and implemented in a manner that appropriately conveys storm water runoff without adversely affecting upstream or downstream drainage characteristics. Further, pursuant to the Project SWPPP and WQMP (which, as discussed previously, are designed to minimize potential hydrologic and water quality impacts), Project-generated storm water runoff would not constitute a substantial pollutant source.

On this basis, the potential for the Project to exceed impact thresholds is less-than-significant with respect to the substantial alteration of the existing drainage pattern of the site or area; and the creation or contribution of runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: ***Place within a 100-year flood hazard area structures which would impede or redirect flood flows.***

Impact Analysis: As shown on Figure 6-4, "Flood Hazards," of the Moreno Valley General Plan, the Project site is not located within a 100-year flood hazard area, nor is the Project site located within a Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 100-year floodplain. As noted previously in this Section, current FEMA Flood Insurance Rate Map designation of the Project site is *Shaded* Zone "X." *Shaded* Zone "X" is defined by FEMA as an "area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods."

Implementation of new drainage facilities, as described in the preceding discussion, will ensure adequate flood carrying capacity for storm drainage generated on-site, as well as existing runoff entering the Project site from adjacent properties. As such, the potential for the Project to place within a 100-year flood hazard area structures which would impede or redirect flood flows is less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: ***Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.***

Impact Analysis: Housing is not proposed as part of the Project; this environmental concern is thus not applicable to the Project.

Level of Significance: No Impact.

Mitigation Measures: Not Applicable.

Potential Impact: ***Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or inundation by seiche, tsunami, or mudflow.***

Impact Analysis: As shown on Figure 6-4, "Flood Hazards," of the Moreno Valley General Plan, the Project site is not located within a dam inundation area. As noted previously, the Project site does not lie within a General Plan-designated 100-year flood hazard area or FIRM 100-year floodplain area. Notwithstanding, in order to preclude potential flood damage, the Project will be designed to provide protection of the proposed buildings for the 100-year flood event by ensuring that the finished floor is set a minimum of one foot above the 100-year on-site flood elevation. Further, the proposed Project site is not located within the vicinity of a hazardous coastal area, large water body, or unstable hills or slope. As such, the Project would not expose people to a significant risk of loss, injury, or death involving flooding**,** including flooding as a result of the failure of a levee or dam; or by inundation from a seiche, tsunami, or mudflow.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

4.7 CULTURAL RESOURCES

4.7 CULTURAL RESOURCES

Abstract

This Section examines the potential for implementation of the Westridge Commerce Center Project to impact cultural and/or historic resources within the Project site. Specifically, this analysis seeks to determine whether the Project would result in any of the following:

- *A substantial adverse change in the significance of a historical resource as defined in §15064.5 of the State CEQA Guidelines;*
- *A substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the State CEQA Guidelines;*
- *The direct or indirect destruction of a unique paleontological resource or site or unique geological feature;*
- *Disturb any human remains, including those interred outside of formal cemeteries.*

As supported by the analysis presented in this Section, as mitigated, potential impacts of the Project in regard to cultural resources are considered less-than-significant.

4.7.1 INTRODUCTION

Cultural resources can be of scientific, aesthetic, educational, archaeological, architectural, or historical significance to the community. The analysis contained within this section is based on and supported by: *A Phase I Cultural Resources Investigation of the Proposed Westridge Commerce Center at Redlands Blvd. and the Moreno Valley Freeway and in the City of Moreno Valley, Riverside County, California,* prepared by McKenna et al., September 18, 2008 (Project Cultural Resources Investigation), which is provided as

Appendix J to this EIR. Summarizing the Project Cultural Resources Investigation, the following discussion identifies and classifies the significance of prehistoric and/or historic cultural resources which may exist on the subject site, and assesses the proposed Project's impacts on those resources.

4.7.2 SETTING

The Project site is located in western Riverside County, California, and within the City of Moreno Valley. More specifically, the site is located within Township 3 South, Range 3 West, and within the southeastern portion of Section 2. The Project site is located just northwest of the historic *Rancho San Jacinto Nuevo y Potrero*.

The Moreno Valley is a northwestern extension of both the San Jacinto Valley and Perris Valley. As such, it is directly associated with geology of the larger Perris Plain; the Moreno Valley extending west from the San Jacinto Mountains. The Moreno Valley/San Jacinto Valley/ Perris Plains are described as:

> . . . a broad, nearly flat surface dotted with bedrock hills ... this plain has an average elevation of about 520 meters (1700 feet) ... The numerous bedrock hills that interrupt its surface have been described as residual knobs of resistant rock, which survived prolonged erosion (monadnocks). It has been suggested that a surface of low relief was developed on the crystalline bedrock, leaving behind the scattered monadnocks.

The Moreno Valley is equated with the geomorphologic Peninsula Ranges of Southern California with Cretaceous and pre-Cretaceous materials that include limestone, schist, and gneiss. Igneous rock includes the intrusive gabbros, quartz diorite, tonalite, and/or granodiorite. Post-Cretaceous rocks include crystallines, sandstones, siltstones, and conglomerates. Quaternary deposits include volcanics and coastal marine terraces. Located south and west of the San Jacinto Mountains, this general area is known to contain banded gneiss and quartz diorite, including great fossil landslides. Hot springs, in this case associated with the San Jacinto and Elsinore Fault Zones, were known and utilized by prehistoric and historic populations.

This area of Southern California is located near the western boundary of the Sonoran desert. Flora native to the Sonoran Desert include creosote bush (*Larrea tridentata*), white bur sage (*Ambrosia dumosa*), and bur sage (*Ambrosia deltoides*), along with varieties of cactus and cholla, among other plants. Various spiders, scorpions, ants, grasshoppers, toads, lizards, and snakes are also known in the Sonoran Desert. Birds include sparrows, quail, roadrunners, thrashers, owl, dove, gnatcatchers, flycatchers, warblers, mockingbirds, wrens, ravens, vultures, and kestrels.

Mammals include coyotes (*Canis latrans*), badgers (*Taxidea taxus*), black-tailed jack rabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), bighorn sheep (*Ovis canadensis*), and many rodent varieties. Historic agriculture and grazing activities have obliterated much of the native vegetation in this area. In the case of this property, the floral and faunal environment has been altered considerably and many of these species are no longer identified within the Project site.

4.7.2.1 Cultural Resources History

It is generally accepted that the Moreno Valley area has been utilized and/or occupied during both the prehistoric and historic periods. As such, the resources were exploited and, in some cases, the terrain was altered or impacted by human occupations. The Project area is located within an area of Riverside County that borders the traditional and ethnographic boundaries of the Luiseño and Cahuilla Native American populations.

While the Luiseño are generally associated with coastal and inland areas of present-day Orange and southern Riverside counties, they also extended well inland. Their inland cultural characteristics are described as being similar to those of the Cahuilla, a population generally associated with areas northeast of the San Jacinto Mountains.

The Luiseño and Cahuilla are described as hunters and gatherers who also lived in semisedentary villages, practiced a complex form of territoriality and exploitation, and are known throughout Southern California for their rock art. Exchange between the

Luiseño and Cahuilla has been documented and, in this context, physical evidence of either Luiseño or Cahuilla may be present within the study area.

Moreno Valley can be tentatively associated with numerous Native American villages and/or settlements. The Luiseño and Cahuilla relied on intermittent drainages and springs for fresh water sources. Villages were established near the natural springs and smaller encampments were founded in other areas. Trails, temporary small camp sites, and other limited use areas have been recorded throughout the Valley and attest to the widespread use of the Valley by prehistoric man.

Both prehistoric populations practiced a relatively complex social organization based on lineages and clans. Individual clans occupied village sites and exploited individualized territories. Interactions provided exchange in the forms of trade, marriage alliances, and social/ceremonial contact. Marriage occurred between moieties, thereby avoiding marriages between blood relatives. Clan associations were more directly related to the exploitation of resources, trade, and social interaction. Analysis of ethnographic data and archaeological data has resulted in the development of various chronologies for the Sonoran [California] Desert synthesized this data and proposed the following chronology for comparative purposes:

> 10,000 - 6,000 B.C.: The Lake Mojave/San Dieguito Complex and/or Western Lithic Co-Tradition. Characterized by the presence of projectile points, large knives, scrapers, chopping tools, and scraper planes. Items associated with vegetal food processing and hunting and the presence of coniferous woodlands and pluvial lakes.
>
> 6,000 B.C.-A.D. 500: Archaic or Pinto Armagosa periods. Characterized by diagnostic projectile points, leaf shaped blades, choppers, and scraper planes. Some sites exhibit a small assemblage of milling stones. A shift in climate and vegetation led to a shift in exploitation with an emphasis on vegetal resources.

A.D. 500 - Historic: (un-named). Characterized by the presence of the bow and arrow (as opposed to darts), ceramics, and cremations. Milling tools increase, including mortars and pestles. There is evidence of limited agriculture and the appearance of Shoshonean-speakers displacing local Hokan-speaking populations.

More recent archaeological investigations in portions of the San Jacinto Valley areas suggest Native Americans can be identified in the area as early as 8,000 to 9,000 B.P. (Before Present). Such studies have resulted in the development of a revised general chronological sequence for these inland areas of Southern California, which can be summarized as follows:

11,000-8,000 B.P. Pleistocene/Early Holocene (Early Man) Period
8,000-5,500 B.P. San Dieguito Period
5,500-1,500 B.P. Millingstone/La Jolla-Pauma/Archaic/Encinitas Period
1,500-300 B.P. Late Prehistoric/Luiseño Period

Research oriented towards the understanding of contact between Native American populations and non-Native populations emphasizes the impacts of European contact, chronologically presented by many anthropologists and historians as follows:

1500s-1760s Long distance contact with Europeans
1770s-1820s Mission Period
1830s-1840s Rancho Period
1850s-1870s American Migration to California
1880s-present Reservation Period

The "historic" Period of California history begins in 1769 with the initiation of the Mission system in San Diego and the subsequent establishment of Missions throughout Alta California. Missionization was followed by many years of sporadic settlement by Spanish populations traveling predominantly from Mexico and into Alta California. Spanish explorers, such as Pedro Fages and Juan Bautista de Anza, traveled through the

San Jacinto Plains as early as 1772-1774. However, no European settlement occurred in the vicinity until after 1800.

The first European-American settlers in western Riverside County arrived in the late 1860s and were generally concentrated in the area of San Jacinto, the oldest non-Native community in the general area. A land boom swept through much of Southern California in the 1880s and other settlements (e.g. Perris, Hemet, and Valle Vista) appeared. Individuals began acquiring lands, some with considerable acreage. With respect to the Moreno Valley development, the historic reference entitled *Riverside County, California, Place Names: Their Origins and Their Stories*[1] provides the following entry on Moreno Valley.

> MORENO. When this town was first platted in 1890, the Bear Valley and Alessandro Development Co., owners of the land, announced that it would be named New Haven [RP&H Oct. 11, 1890], but on November 1, 1890, The Citrograph carried a small item that stated simply, "The new town at this end of Alessandro Valley has had its name changed from New Haven to Moreno (Spanish for Brown)" ... there was no one living there at that time, the land still being prepared ...
>
> Moreno post office was established on February 19, 1891 ... Moreno was called "the new town on the Alessandro tract at the upper end of the Perris Valley" ... The surrounding farmland became known as MORENO VALLEY.

The study area was platted as Block 35 in 1890 by the Bear Valley and Alessandro Development Company. Each block consisted of 80 acres of land subdivided into eight parcels of ten acres. The project area is also located within an area that was once a part of San Bernardino County, but redefined as Riverside County in 1893. Prior to the advent of the Bear Valley and Alessandro Development Company ownership, this area

1 From *Riverside County, California, Place Names: Their Origins and Their Stories,* by Jane Davies Gunther, Rubidoux Printing Co., Riverside, California, 1984.

was part of the larger holdings of Gustave Mahe (also referenced as "Make"). Mahe purchased approximately 13,350 acres in 1870, roughly equating to the land eventually purchased by the Bear Valley and Alessandro Development Company.

There is no evidence to suggest that Gustave Mahe ever lived in Southern California. Rather, Mahe was the Director General of the French Savings and Loan Society in San Francisco. This savings and loan entity was declared "insolvent" in 1878 and, according to the *Historical Abstract of San Francisco*, Mahe committed suicide in 1878 and the Savings and Loan was officially dissolved in 1879. A new bank was immediately established and the holdings were transferred to the new entity. Much of Mahe's holdings were immediately sold, indicating the acreage in Southern California, which was held as personal property and not bank property. The property was eventually purchased by French, Packard and Rockwell of Pomona, who were instrumental in the establishment of the Bear Valley and Alessandro Company.

Between the founding of the Bear Valley and Alessandro Development Company in 1890 and approximately 1892, a minimum of 106 properties were sold. Many of the purchasers acquired multiple lots with the promise of water for crops. With the failure of a sister company, the Bear Valley Irrigation Company, investments were lost and the Bear Valley and Alessandro Company went bankrupt.

Development within the current project area is more recent. The historic 1901 Elsinore Quadrangle map illustrates the presence of Redlands Blvd. and a crossroad in the vicinity of today's Moreno Valley Freeway, but no structures are present in the area. Later, in 1943, the Perris 15' Quadrangle map illustrates a single structure in the vicinity of the project area (in the vicinity of Lot 3 of Block 35). This structure was no longer present in 1980, when the freeway was established and the road was widened. A water well is still illustrated in the center of the property (near the intersection of historic Lots 2, 3, 6, and 7), indicating the well served multiple lots owned by a single owner. At the time of the Project Cultural Resources Investigation survey, no evidence of the well was found.

4.7.3 CULTURAL RESOURCES INVESTIGATION METHODOLOGY

The Project Cultural Resources Investigation examined a study area consisting of approximately 70 acres of agricultural land, bordered by Redlands Boulevard to the east, the Moreno Valley Freeway to the north, and Quincy Street to the west. This study area incorporates the entirety of the proposed Project site, along with several smaller parcels to the east. The cultural resources investigation of the Project site included the following tasks.

- **Archaeological Records Check.** An archaeological records check was completed at the University of California, Riverside, Eastern Information Center (UCR-EIC). The UCR-EIC is the County-wide clearing house/repository for all archaeological and/or cultural studies completed within Riverside County. Research was supplemented by applying data obtained for nearby studies. All pertinent data was researched, including previous studies for a one-mile radius surrounding the Project site and the identification of resources in the vicinity.

- **Native American Consultation.** In August of 2008, the Native American Heritage Commission in Sacramento was contacted to request listings of sacred or religious properties within the Project area. In addition, a listing of local (county-wide) Native American representatives was requested and received. Letters with maps identifying the Project area were mailed to these individuals requesting input regarding the Project area. No responses had been received prior to the completion of the Project Cultural Resources Investigation report (September 18, 2008).

- **Paleontological Overview.** A paleontological overview was completed using data from the Natural History Museum of Los Angeles County. The results were incorporated into the discussion presented in this analysis.

- **Historic Background Research.** Historic background research emphasized data available through the McKenna et al. in-house library resources; published literature on local and regional history; archival records available through the

Bureau of Land Management General Land Office files; the Riverside Historical Society, and County Archives; and research at the Historic Map Library at the Science Library of the University of California at Riverside.

- **Intensive Archaeological Field Survey.** As required for compliance with CEQA/NEPA guidelines and the data requirements of the Office of Historic Preservation (OHP), an intensive archaeological field survey was conducted to adequately identify, describe, and report cultural resources within the Project site. The field survey was completed on September 2, 2008. The field work was conducted by Ahab Afifi, M.A., and supervised by Jeanette A. McKenna, Principal Investigator, who meets the requirements of the Secretary of the Interior and is a Registered Professional Archaeologist.

  At the time of the survey, the field had been recently disked, and low dry grasses dominated the area. The ground surface was considered excellent for surveying and deemed more than adequate for an intensive level of coverage. The field studies were supplemented by field notes and a photographic record.

- **Analysis and Technical Report.** The analysis and technical report, completed in a manner requested by Riverside County, provide the required data for CEQA/NEPA compliance and present recommendations for the treatment of archaeological/cultural sites, should they be identified.

4.7.4 GENERAL PLAN GOALS AND APPLICABLE REGULATIONS

Cultural resources are recognized as a non-renewable resource and therefore receive protection pursuant to CEQA. Native American interments and associated funerary objects receive additional protection under State Public Resources Code 5097.98. Historic properties and resources are protected pursuant to a wide variety of policies and regulations adopted at local, regional, state and federal levels. The Project's consistency with applicable General Plan Conservation Element Objectives and Policies is addressed in the following Table 4.7-1.

Table 4.7-1

City of Moreno Valley General Plan Consistency

Objective 7.6: Identify and preserve Moreno Valley's unique historical and archaeological resources for future generations.	***Consistent.*** *Cultural resources within the City are identified and managed in part through on-site monitoring during development activities. Encountered cultural resources are identified, evaluated for significance, and subsequently catalogued and/or preserved consistent with applicable local, state, and federal requirements. The Project will implement cultural resources monitoring consistent with the City requirements.*
Policy 7.6.1: Historical, cultural and archaeological resources shall be located and preserved, or mitigated consistent with their intrinsic value.	***Consistent.*** *Mitigation measures included in this Section require that cultural resource professionals monitor the earth-moving phases of the Project's construction. Such monitoring will ensure the protection of cultural resources that may be present on the Project site in a buried context. Salvage of any identified archaeological or paleontological resources would be conducted in compliance with local, state and federal requirements, and in coordination with local Native American representatives, as appropriate.*
Policy 7.6.2: Implement appropriate mitigation measures to conserve cultural resources that are uncovered during excavation and construction activities.	***Consistent.*** *The implementation of the mitigation measures included in this EIR section will ensure the Project's consistency with General Plan Policy 7.6.2.*

Source: City of Moreno Valley General Plan, Conservation Element.

4.7.5 STANDARDS OF SIGNIFICANCE

Consistent with the standards of significance outlined in the *CEQA Guidelines*, Project-related impacts to cultural resources would be considered significant if they cause or result in any of the following:

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

- Disturb any human remains, including those interred outside of formal cemeteries.

4.7.6 POTENTIAL IMPACTS AND MITIGATION MEASURES

Potential Impact: Cause a substantial adverse change in the significance of an archaeological or historical resource as defined in §15064.5.

Impact Analysis: As concluded in the Project Cultural Resources Investigation, no known cultural resources of significance exist within the Project site. Unlike areas surrounding the site, where exposed bedrock provided the potential for exposed milling stations to be identified, no bedrock was observed within the Project area. The Project Cultural Resources Investigation report does not recommend monitoring for prehistoric resources, noting that "[w]ith no exposed bedrock and little evidence to suggest bedrock would be encountered within the property, it is unlikely that prehistoric resources would be present or identifiable."

In regard to historic resources, no significant evidence of the early twentieth century occupation of the property was identified by the Project Cultural Resources Investigation. No standing structures are present within the Project area. The field survey conducted as part of the Project Cultural Resources Investigation failed to locate the onsite water well indicated in the current (1980) USGS Sunnymead Quadrangle map, suggesting that the well may have been abandoned and removed. Small fragments of red brick and broken ceramic and concrete pipe were identified within the property, apparently scattered by agricultural and disking activities. These items are considered likely remnants of the earlier residential use that was demolished prior to the widening of the SR-60 freeway. None of these items were deemed significant.

The Project Cultural Resources Investigation report notes that "there was early occupation in the area and evidence of this occupation may be present in a buried context – e.g., evidence of the water well in the center of the property, buried refuse deposits, privies, irrigation systems, foundations, etc. If evidence of such remains are

uncovered during the grading of this property, the proponent should contact a qualified archaeologist to assess the find(s) and to make recommendations for a monitoring program to oversee the remainder of the grading program." The report further notes that "the paleontological monitor [discussed below] can also serve to oversee archaeological monitoring and negate the need for two monitors." The following mitigation measures will ensure that the recommendations of the Project Cultural Resources Investigation are implemented during Project development.

Level of Significance: Potentially Significant.

Mitigation Measures:

4.7.1 *A professional cultural resources monitor (Project Paleontological Monitor) shall conduct full-time monitoring throughout site excavation and grading activities. The monitor shall be equipped to salvage and record the location of historic and/or archaeological resources as they may be unearthed to avoid construction delays. The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens or finds and to allow the preparation of recovered resources to a point of identification. One monitor for both archaeological and paleontological resources is sufficient if the monitor is qualified in both disciplines to the satisfaction of the City of Moreno Valley.*

4.7.2 *Should historic or prehistoric resources of potential significance be identified, a qualified archaeologist shall be contacted to assess the find(s) and make recommendations in regard to further monitoring. All recovered resources shall then be curated in an established, accredited museum repository with permanent retrievable archaeological/historic resource storage. A report of findings shall also be prepared by a qualified archaeologist, and shall include an itemized inventory of any specimens recovered. The report and confirmation of curation of any recovered resources from an accredited museum repository shall signify completion of the program to mitigate impacts to archaeological/ historic resources. If disturbed resources are required to be collected and preserved, the*

applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2.

Level of Significance After Mitigation: Less-Than-Significant.

Potential Impact: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Impact Analysis: Based on information presented in the Cultural Resources Investigation, the Project area is considered to have a moderate level of sensitivity for paleontological resources, indicating that paleontological resources may be encountered within the Project site. The area consists of older Quaternary alluvial deposits that have been associated with fossil specimens, which are covered by surficial deposits of younger Quaternary alluvium. In the course of Project site preparation activities, paleontological specimens may be uncovered. Therefore, Mitigation Measure 4.7.3 requires paleontological monitoring during ground-disturbing activities that would exceed the relative depths of the younger alluvium on-site.

Level of Significance: Potentially Significant.

Mitigation Measure:

4.7.3 *Prior to the issuance of a grading permit, a City-approved Project Paleontologist shall be retained to initiate and supervise paleontological mitigation-monitoring in all areas of the Project site, subject to the following certain constraints:*

- *Once excavations reach ten (10) feet in depth, monitoring of excavation in areas identified as likely to contain paleontologic resources by a qualified paleontologic monitor or his/her representative must take place;*

- *A paleontological mitigation-monitoring plan shall be developed before grading begins;*

- *Paleontological monitors shall 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; and*

- *Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.*

Level of Significance After Mitigation: Less-Than-Significant.

Potential Impact: Disturb any human remains, including those interred outside of formal cemeteries human remains.

Impact Analysis: The likelihood of encountering human remains in the course of Project development is considered remote. However, as required by California Health and Safety Code Section 7050.5, should human remains be found, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are found to be prehistoric, the coroner would coordinate with the California Native American Heritage Commission as required by State law. Based on compliance with these existing regulations, the Project's potential to adversely disturb human remains is considered unlikely, and therefore is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

4.8 BIOLOGICAL RESOURCES

4.8 BIOLOGICAL RESOURCES

Abstract

This Section identifies and addresses potential impacts to biological resources resulting from the Project. More specifically, the analysis presented here examines whether the Project would:

- *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;*

- *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;*

- *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*

- *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;*

- *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or*

- *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

As supported by the analysis presented in this Section, with application of proposed mitigation measures, the Project's potential impacts to biological resources are less-than-significant.

4.8.1 INTRODUCTION

Information presented in this Section is summarized from the general assessment of biologic resources presented in the *Report on Habitat Assessments and Biological Surveys for the West Ridge Project Site* (Harmsworth Associates, Inc.) October 2008; *Report on Burrowing Owl Surveys for the West Ridge Project Site* (Harmsworth Associates, Inc.) July 2009; *Ridge Moreno Valley Off-site Area Biological Surveys* (Harmsworth Associates, Inc.) May 11, 2010; and *Jurisdictional Delineation Report for the Westridge Commerce Center Project, City of Moreno Valley, County of Riverside, California* (ICF Jones and Stokes) February 2010. These reports are presented at Appendix G of this EIR.

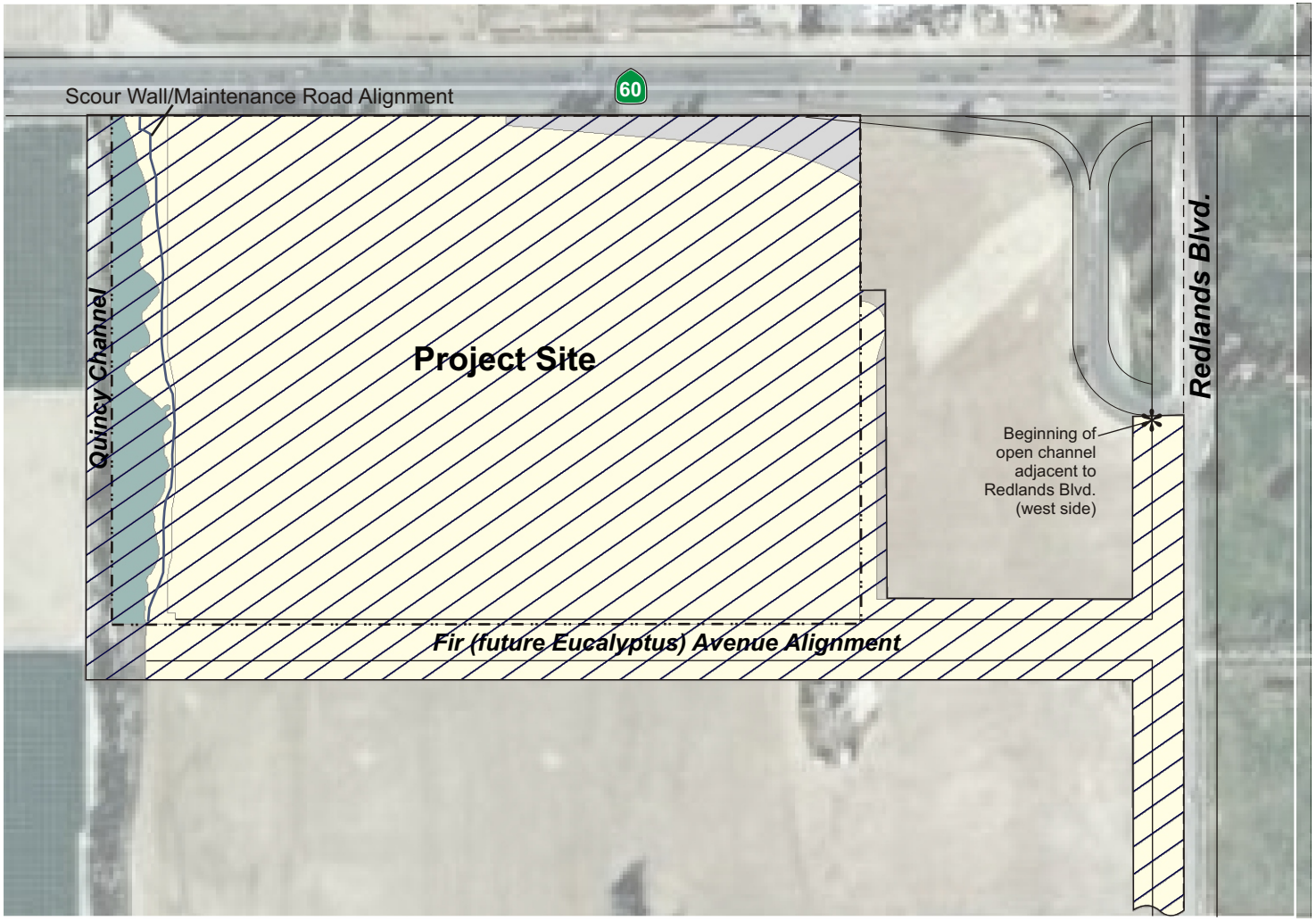
The biological assessment for the Project consisted of the following surveys and analysis, conducted throughout the Project area:

- General biological assessment of Project site and nearby off-site areas that could be affected by utility and circulation system improvements, as identified in the following Figure 4.8-1;

- General plant and wildlife surveys;

- Habitat assessment to examine potential for special status plant species;

- Habitat assessment to examine potential for special status wildlife species;



Source: Google Earth, Applied Planning, Inc.

applied planning inc

Figure 4.8-1
Areas of Environmental Analysis and Potential Disturbance

- Habitat assessment for burrowing owl (*Athene cunicularia*), following the recommendations of the California Department of Fish and Game, the burrowing owl survey protocol (CBOC 1993), and the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) Section 5.3.2 and MSHCP burrowing owl survey instructions; and

- Jurisdictional delineation.

Focused surveys for threatened, endangered and sensitive plant and wildlife species were not conducted as part of this general Biological Assessment; however, protocol surveys were subsequently performed to determine the presence or absence of burrowing owls within areas of potential disturbance. As previously stated, the *Report on Burrowing Owl Surveys for the West Ridge Project Site* (Harsmworth Associates, July 2009) is also included at EIR Appendix G.

4.8.2 SETTING

4.8.2.1 Physical Context

The Project site is located in Riverside County, California within the U.S. Geological Survey (USGS) topographic maps: Sunnymead and Riverside West quadrangles. The entire site consists of disked agricultural land and ruderal fields in an area of agricultural fields and rural development. The Project site has been in agricultural use, producing a variety of dryland crops, for at least twenty years. The region surrounding the Project site is dominated by cultivated or plowed fields, and more recent urban development. The entire site is flat with no topographical variation, with the exception of the Quincy Channel that borders the western boundary of the site, at an elevation of approximately 1,760 feet.

The climate in the area is typified by a Mediterranean type climate, with hot dry summers and cool relatively wet winters. Annual precipitation for the area ranges from 9 to 18 inches, and average annual temperature ranges from 59 degrees to 67 degrees

Fahrenheit. Rainfall during the winter of 2007-08 was below average for low-lying parts of western Riverside County, with total rainfall of two to four inches, compared with the 114-year average of 10.32 inches.

4.8.2.2 Plant Communities/Habitat Types

The Project site and surrounding area is dominated by disked agricultural land, but contains two semi-natural vegetation communities: riparian and ruderal agricultural land. These communities are discussed further below.

Riparian, Mulefat series

This series type describes vegetation developed in ephemeral stream drainages or in areas where soils are intermittently or seasonally saturated with fresh water. Mulefat *(Baccharis salicifolia)* is the dominant shrub in the canopy with a sparse ground layer; willows may also be present. Mulefat series was found within the Project area in the Quincy Channel, on the site's western boundary.

Within the Quincy Channel, Mulefat was the dominant species encountered, but occurred only in patches, with large areas devoid of vegetation. In addition, there was a high concentration of invasive exotic weeds, including tree tobacco *(Nicotania glauca)*, castor bean (*Ricinus communis*), eucalyptus (*Eucalyptus globulus*), pepper trees (*Schinus molle*), and palo verde (*Parkinsonia aculeata*) present in the Channel. Two southern California black walnut (*Juglans californica*), a special status species, and a few Mexican elderberry (*Sambucus mexicana*) were also present in the Channel. A few coastal sage scrub plants grew along the bank of the Channel and these were included in the area mapped as riparian. Mapped riparian areas included vegetated and un-vegetated portions of the Channel and the banks of the Channel.

It may be noted that the property boundary goes through the center of the Quincy Channel, so additional riparian habitat within the Channel is located outside the Project site. A total of 2.4 acres of Mulefat series was found to occur on-site.

Ruderal Agricultural Land

The majority of the Project area was found to consist of a wheat field, which had been recently disked. The site was almost devoid of vegetation, except for a few ruderal weeds including Lamb's quarter *(Chenopodium album)*, tumbleweed *(Salsola tragus)*, summer mustard *(Hirschfeldia incana)*, and cheeseweed *(Malva parviflora)*. The field was disked all the way to the bank of the Quincy Channel and no intermediate vegetation type occurred between the Channel and the disked field. A few ornamental trees occurred in the middle of the field. A narrow strip of vegetation hugged portions of the fence along Highway 60, including ornamental pepper trees and ruderal weeds. These were included in the area mapped as ruderal agricultural land. A total of 52.6 acres of ruderal agricultural land was determined to occur on-site.

Plant Inventory

Plant species in the Project area consisted of species associated with riparian, ruderal, and ornamental landscaping. A total of 30 vascular plant species, representing 15 families, were detected within the Project site during the Project Biological Assessment. Eighteen of these species were native, and the remaining twelve species were exotic. The family best represented was *Asteraceae,* commonly referred to as the "Sunflower Family," with eight species, including Western Ragweed (*Ambrosia psilostachya*), and Coastal Sagebrush (*Artemesia californica*). The Biological Assessment Report contains the complete inventory of plant species identified during biological surveys.

Special Status Plant Species

The Project site is outside the MSHCP's designated areas for narrow endemic plant species and "Criteria Area" plant species. However, based on a review of the California Natural Diversity Data Base (CNDDB), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California, the MSHCP and field surveys, a total of 17 special status plant species were identified as potentially occurring within the Project vicinity. These species were evaluated for their potential occurrence within potential areas of Project-related disturbance.

As noted previously, one special status species, the southern California black walnut *(Juglans californica)*, was found to occur on-site. Two individuals were identified in the Quincy Channel along the west side of the site. The Project site was found to contain no vernal pools, alkali playa, alkali annual grasslands, alkali depressions, and no suitable hydrological conditions for potentially supporting any of the narrow endemic plants or criteria area plants identified by the MSHCP were observed. Although several coastal sage scrub plants were recorded as occurring on the banks of the Quincy channel, no larger coastal sage scrub plant community or habitat area was identified. In addition, the agricultural practices that have occurred on-site for the past twenty years preclude any of these plant species from occurring on the Project site.

The Project Biological Assessment Report notes that, with the exception of the Southern California black walnut, no special status plant species has the potential to occur on-site. This determination is based on the lack of appropriate habitat, current and historic site disturbances, absence of historic site records and absence of the species during the site surveys.

4.8.2.3 Wildlife

Wildlife at the Project site consisted of common species associated with open habitats. The most abundant species detected during the site visit were house finches *(Carpodacus mexicanus)*. A total of 13 wildlife species were detected during the September 2008 site survey, including one reptile, nine bird and three mammalian species. A complete list of all wildlife detected is listed in the Project Biological Assessment.

Special Status Wildlife Species

Based on a review of CNDDB, the MSHCP, and field surveys, several special status wildlife species were identified as potentially occurring in the Project area. However, due to lack of appropriate habitats, limited native habitats, and site disturbances, the only sensitive species considered to have the potential to occur on-site are the Stephens' kangaroo rat and the burrowing owl, discussed below.

Stephens' kangaroo rat

The Stephens' kangaroo rat is a California Species of Special Concern, and is also listed as a federal endangered and state threatened species. Stephens' kangaroo rats occur in non-native grassland, sparse scrub and disturbed areas. These habitats are found within the Project area. Since the site has been subject to ongoing agricultural development and is adjacent to a major highway, the Project area is unlikely to support Stephens' kangaroo rat. Focused trapping surveys were not conducted on-site to confirm presence/absence status. However, for the purpose of presenting the most conservative biological approach, Stephens' kangaroo rat(s) are assumed to occupy the Project area.

Burrowing owl

The burrowing owl is a California Species of Special Concern, and is protected under *Fish & Game Code* Sections 3503 and 3503.5 which makes it unlawful to take, possess, or needlessly destroy any bird of prey or the nests or eggs of any kind of bird species except as otherwise provided in the *Fish & Game Code.* Disturbance of any active bird nest during the breeding season, including any active owl burrow, would be prohibited by the *Fish & Game Code*. The burrowing owl is also protected by the international Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. §§ 703-711).

Burrowing owls occur in shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a yearlong resident. They require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. As a critical habitat feature, they require the use of rodent or other burrows for roosting and nesting cover. They can also use pipes, culverts, and nest boxes.

The Project area does provide suitable burrowing owl foraging habitat; however, no burrowing owls or their sign were detected during the Project burrowing owl survey. Soils at the site are soft, loamy, and moderately compacted; thus mostly not suitable for supporting burrows. However, a few suitable burrows were detected on-site. Due to

the presence of suitable burrows and suitable foraging areas, burrowing owls could occur within the Project area.

4.8.2.4 Wetland Delineation

The Quincy Channel, which runs in a north/south direction along the westerly Project boundary, is an ephemeral drainage entering the site through triple five-foot diameter culverts underlying Highway 60. The Channel is subject to the jurisdiction of the Army Corps of Engineers (Corps) and the California Department of Fish and Game (CDFG).

The Project Jurisdictional Delineation survey determined that the main Channel was an average of 15 to 20 feet wide, and included shelving and side channels. The Channel continues downstream to the south, outside the Project boundaries. Corps jurisdiction is restricted to the Channel, and totals approximately 1,295 linear feet on-site, encompassing approximately 0.30 acres of non-wetland Waters of the United States. CDFG jurisdiction areas include the Channel, all riparian areas and the banks of the Channel. This area totals approximately 1,295 linear feet and encompasses approximately 2.4 acres of vegetated riparian habitat.

The Channel was dry at the time of field surveys. As discussed previously, vegetation in the Channel area is dominated by mulefat scrub, but this occurs only in patches, with large areas devoid of vegetation. In addition, there was a high concentration of invasive exotic weeds, including tree tobacco *(Nicotania glauca)*, castor bean (*Ricinus communis*), eucalyptus (*Eucalyptus globulus*), pepper trees (*Schinus molle*), and palo verde (*Parkinsonia aculeata*) present in the Channel. Two southern California black walnut (*Juglans californica*), a special status species, and a few Mexican elderberry (*Sambucus mexicana*) were also present in the Channel. A few coastal sage scrub plants grew along the bank of the Channel.

An additional off-site jurisdictional area was identified within the existing drainage channel adjacent to Redlands Boulevard, which could be affected by the construction of Project-related drainage improvements. At the channel, the off-site area extends north of the Fir (future Eucalyptus) Avenue alignment for 210 feet and south for

approximately 500 feet. This channel currently consists of a five (5) foot wide steep-sided channel with a sandy substrate. The channel's western bank is unreinforced dirt, and the eastern bank (adjacent to the road) is partially reinforced with concrete, but in places the concrete has broken off and fallen into the channel. The channel is ephemeral and was dry at the time of the field survey. The channel was devoid of vegetation and the banks supported a sparse cover of the non-native weed summer mustard (*Hirschfeldia incana*) and some non-native grasses (*Bromes* spp.). The channel ends upstream before the ramp onto SR-60, where it enters an underground concrete culvert.

The channel is highly disturbed, un-vegetated and of very low value to native plants or animals. Nevertheless, the channel is jurisdictional under the U.S. Army Corps of Engineers, the California Department of Fish and Game, the California Regional Water Quality Control Board and the MSHCP Riverine/Riparian Habitat (as defined under Section 6.1.2 of the MSHCP) programs. Under a maximum potential impact scenario, construction of off-site improvements could result in permanent disturbance and alteration of approximately 0.08 acres (710 lineal feet of 5-foot wide channel, or a total of 3,550 square feet) of un-vegetated riparian habitat. Consultation and permits from these agencies will be required prior to any disturbance of this channel.

4.8.3 GENERAL PLAN GOALS AND APPLICABLE REGULATIONS

4.8.3.1 Overview

The following discussions identify, in pertinent part, General Plan Goals as well as regulations applicable to the Project. The intent of these discussions is threefold, as follows:

- Identify existing biological goals and regulations applicable to the Project which act to reduce or eliminate potentially significant environmental effects.

- Provide the basis for identifying the Project's consistency or potential conflict with adopted biological goals and regulations.

- Based on the extent and nature of biological goals and regulations, provide an indication of community and regional values and prerogatives relative to environmental concerns.

4.8.3.2 Moreno Valley General Plan Biological Resources Policies

Biological Resources Objectives and Policies established under the City of Moreno Valley General Plan Conservation Element are presented in the following Table 4.8-1. A discussion of the Project's consistency with these objectives and policies is also included.

Table 4.8-1

City of Moreno Valley General Plan Consistency

Objective 7.4: *Maintain, protect, and preserve biologically significant habitats where practical, including the San Jacinto Wildlife Area, riparian areas, habitats of rare and endangered species, and other areas of natural significance.*	***Consistent.*** *Habitat areas and biologically significant resources within the City are identified and managed in part through on-site monitoring during development activities. Encountered biological resources are identified, their significance is evaluated, and development projects are required to comply with applicable local, state, and federal requirements to avoid potential impacts. The Project will be implemented subject to applicable requirements of the City of Moreno Valley, the Western Riverside County Multi-Species Habitat Conservation Plan, and California Department of Fish and Game, and therefore supports Objective 7.4.*
Policy 7.4.1: *Require all development, including roads, proposed adjacent to riparian and other biologically sensitive habitats to provide adequate buffers to mitigate impacts to such areas.*	***Consistent.*** *The Project avoids potential impacts to riparian areas through preclusion of any substantive development within such areas. Mitigation is proposed for the Project's limited incursion (approximately .003 acres, 22 lineal feet) into CDFG jurisdictional mule-fat riparian areas in the adjacent Quincy Channel as well as potential impacts to approximately 0.08 acres of off-site un-vegetated riparian habitat.*

Table 4.8-1

City of Moreno Valley General Plan Consistency

Policy 7.4.3: *Preserve natural drainage courses in their natural state and the natural hydrology, unless the protection of life and property necessitate improvement as concrete channels.*	***Consistent.*** *The Project avoids potential impacts to natural drainage courses through preclusion of any substantive development within such areas. A scour wall will be constructed between the developed site and the adjacent Quincy Channel and will be aligned so as not to encroach on Corps/CDFG jurisdictional areas. Limited and temporary disturbance of CDFG jurisdictional areas is anticipated, and will be mitigated consistent with CDFG requirements. Mitigation measures included in this Section require that the Project demonstrate compliance with CDFG requirements related to potential streambed alteration impacts prior to the issuance of grading permits. The Project therefore is consistent with, and supports, General Plan Policy 7.4.3.*
Policy 7.4.5: *The City shall fulfill its obligations set forth within any agreement(s) and permit(s) that the City may enter into for the purpose of implementing the Western Riverside County Multi-species Habitat Conservation Plan.*	***Consistent.*** *As discussed in this Section, the Project will be implemented consistent with the requirements of the MSHCP. Thus, the Project is consistent with, and supports, General Plan Policy 7.4.5.*

Source: City of Moreno Valley General Plan, Conservation Element.

4.8.3.3 Regulation of Special Status Species

Federal Endangered Species Act/California Endangered Species Act

The Federal Endangered Species Act (FESA, 1973) and California Endangered Species Act (CESA, 1984) collectively act to protect species that are identified as endangered or threatened with extinction. The State and Federal Endangered Species Acts operate in conjunction with, and support, the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The United States Fish and Wildlife Service (USFWS) is responsible for FESA implementation, while the California Department of Fish and Game (CDFG) is charged with CESA implementation. During project review, CDFG and USFWS are provided the opportunity to comment on the potential biological impacts of the Project, including its consistency with relevant provisions of FESA and CESA.

4.8.3.4 Other Statutes, Codes, and Policies Affording Limited Species Protection

Species of Special Concern

In addition to formal listing under FESA and CESA, plant and wildlife species receive additional consideration during CEQA environmental review processes. Species that may be considered for review are included on a list of "Species of Special Concern," developed by CDFG. It tracks species in California whose numbers, reproductive success, or habitat may be threatened.

CNPS-Listed Plants

The California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

Raptors and Migratory Birds

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

4.8.3.5 Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP), focusing on conservation of species and their associated habitat in western Riverside County. The goal of the MSHCP is to maintain biological and ecological diversity within a rapidly urbanizing region. The MSHCP is administered by the Riverside County Regional

Conservation Authority (RCA). The City of Moreno Valley, which is a participant of the MSHCP, is located within the Reche Canyon/Badlands Area Plan of the MSHCP area.

The MSHCP allows participating jurisdictions within the plan area to incorporate projects onto the incidental "take" permit for all species covered by the MSHCP, including State and federally listed species as well as other identified sensitive species and/or their habitat. Each city or local agency imposes a Development Mitigation Fee for projects within their jurisdiction.

Payment of the mitigation fee and compliance with the requirements of the MSHCP are intended to provide full mitigation under CEQA, although certain areas within the MSHCP boundaries require additional surveys to determine the presence or absence of specific MSHCP-covered resources, including sensitive plants, burrowing owls, and riparian or riverine areas. Depending upon the outcome of the survey(s), the area could be considered occupied suitable habitat and, if it is unfeasible to conserve at least 90 percent of this area, then the applicant must submit an analysis supporting a Determination of Biologically Equivalent or Superior Preservation (DBESP). The DBESP discussion details the reasons that avoidance is not possible, quantifies unavoidable impacts, proposes project design features and mitigation measures that reduce indirect effects, and demonstrates that the project would be biologically equivalent or superior to avoidance.

4.8.3.6 Riverside County Stephens' Kangaroo Rat HCP

Prior to the implementation of the MSHCP, Riverside County adopted a separate HCP for the Stephens' kangaroo rat (SKR, *Dipodomys stephensi)*, which are federally listed as endangered and state listed as threatened. As with the MSHCP, participants of the SKR HCP can incorporate projects into the incidental "take" permit for SKR if the project complies with the requirements of the SKR HCP implementing agreement. Payment of the mitigation fees and compliance with the SKR HCP requirements provides full mitigation under CEQA for impacts to SKR.

4.8.3.7 Regulation of Jurisdictional Waters/Wetlands

U.S. Army Corps of Engineers-Waters of the United States/Wetlands

The U.S. Army Corps of Engineers (ACOE, Corps) and the Regional Water Quality Control Board (RWQCB) regulate discharge of dredged or fill material into Waters of the United States under Section 404 and 401 of the Federal Clean Water Act (CWA), respectively. "Discharges of fill material" is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows.

In 2006, the United States Supreme Court[1] found that wetlands were "waters of the United States" if they significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as navigable. Until this time, the Corps had typically regulated as waters of the United States, any body of water (navigable and non-navigable) displaying an ordinary high water mark (OHWM), defined as "that 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 soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area."

In June 2007, the ACOE issued guidelines responding to the Supreme Court's 2006 findings. This guidance states that the Corps will continue to assert jurisdiction over traditional navigable waters, wetlands adjacent to traditional navigable waters,

1 Consolidated cases *Rapanos v. United States* and *Carabell v. United States* (126 S. Ct. 2208), collectively referred to as "Rapanos."

relatively permanent non-navigable tributaries that have a continuous flow at least seasonally (typically three months), and wetlands that abut relatively permanent tributaries. The guidelines also state that ACOE will determine jurisdiction over non-navigable tributaries that are not relatively permanent and wetlands adjacent to non-navigable tributaries that are not relatively permanent only after making a significant nexus of water quality in traditional waters finding.

Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met.

CDFG Streambeds and Riparian Habitat

Additionally, CDFG, under Section 1600 of the California Fish and Game Code, regulates alterations to streambeds including adjacent riparian habitat areas. Typically, CDFG jurisdictional streambeds and riparian habitat are inclusive of Water of the United States and associated wetlands areas.

The California Department of Fish and Game (CDFG) has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code over fish and wildlife resources of the state. Under Section 1602, a private party must notify the CDFG if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, except when the department has been notified pursuant to Section 1601." If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFG may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the party, they may

enter into an agreement with the CDFG identifying the approved activities and associated mitigation measures.

4.8.4 STANDARDS OF SIGNIFICANCE

CEQA has identified the following significance thresholds relative to biological resources. If the Project would result in any one of the following, its impacts to biological resources would be considered significant.

- 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;

- 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;

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.8.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

Potential Impact: 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.

Impact Analysis:

Vegetation Communities and Special Status Plant Species

As identified in the Project Biological Resources Assessment, development of the Project would result in the loss of ruderal agricultural land. This is a non-sensitive habitat and provides limited opportunity for supporting special status plant or wildlife species. Impacts due to the loss of this habitat would be less-than-significant.

No vernal pools, temporary rain pools, or potential fairy shrimp habitat (as defined under Section 6.1.2 of the MSHCP) occur within the Project site. Although several coastal sage scrub plants were recorded as occurring on the banks of the Quincy channel, no larger coastal sage scrub plant community or habitat area was identified. The banks of the Quincy channel are located outside the Project's limits of development, and as such, the existing coastal sage scrub plants would not be subject to disturbance due to Project development.

CDFG and Corps jurisdictional areas, including CDFG riparian habitat exist on-site within the Quincy Channel, and off-site within the existing drainage channel adjacent to Redlands Boulevard. Potential impacts to these riparian habitat areas are discussed below.

Potential On-site Impacts

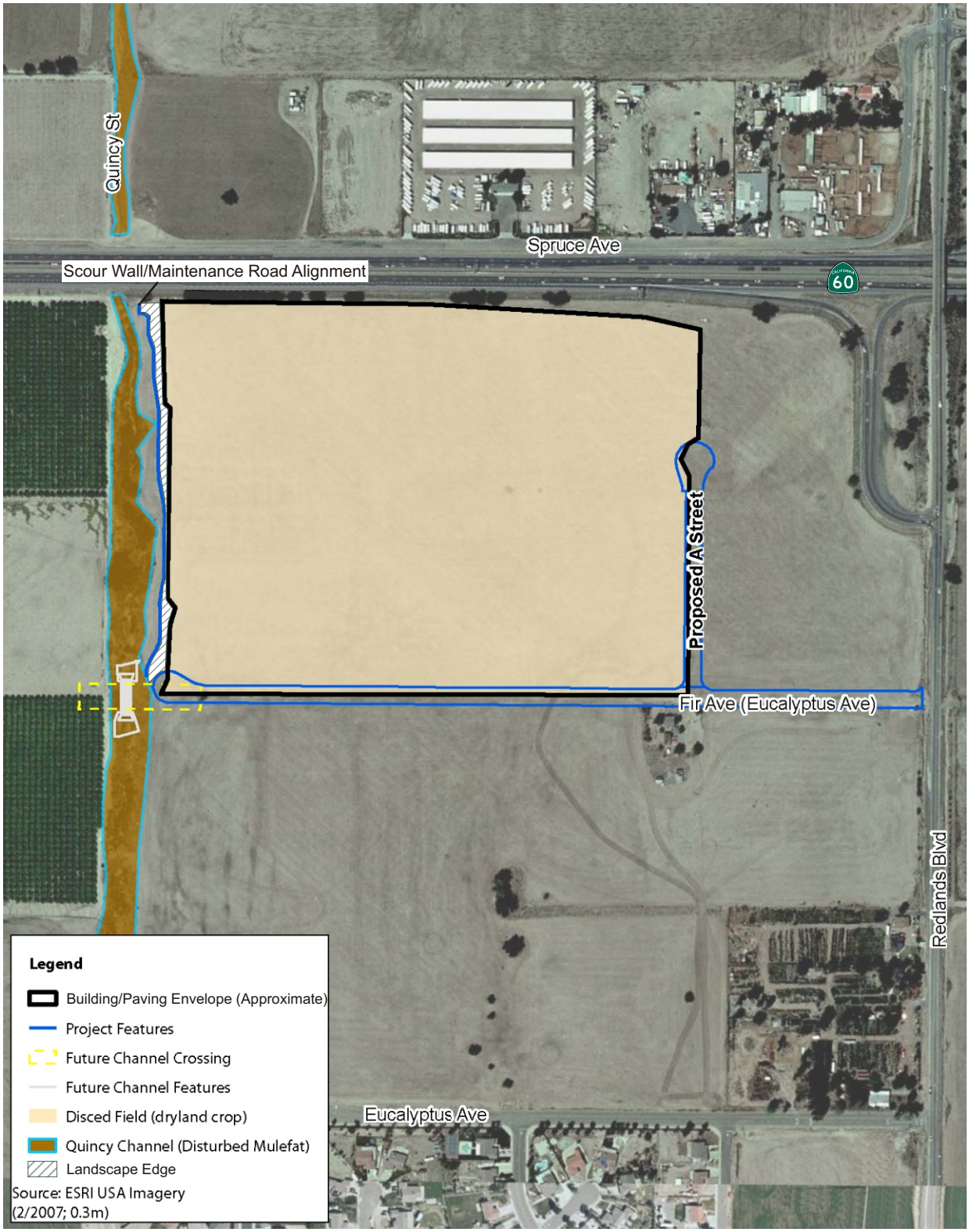
The proposed warehouse facilities and supporting parking areas will be implemented within the area generally circumscribed by the Building/Paving Envelope as delineated

at Figure 4.8-2. The developed site Building/Paving Envelope generally encompasses structures and improved paved surfaces proposed by the Project.

Landscaped areas will be provided along the westerly edge of proposed warehouse uses and paved areas, extending generally to a proposed protective scour wall to be constructed between the formally developed site and the adjacent Quincy Channel. Approximate alignment of this scour wall is also indicated at Figure 4.8-2. A maintenance road will be provided along the easterly edge of the scour wall, and Westerly of the scour wall, a buffer area averaging in width from approximately 50 feet to 150 feet will be established, providing separation between the developed site and the adjacent Quincy Channel. This physical separation between the developed site and the Channel habitat areas minimizes or precludes direct impacts to the Channel and its associated vegetation communities and special status plant species. Please refer also to Figure 4.8-1, which identifies potential areas of on- and off-site disturbance.

While the developed site avoids impacts to the Quincy Channel, as identified in the EIR Jurisdictional Delineation (presented at EIR Appendix G), construction of the proposed scour wall will require temporary disturbance of approximately 0.003 acre (22 lineal feet) of mulefat vegetated riparian habitat, a CDFG jurisdictional area. No Corps or RWQCB jurisdictional areas within the Quincy Channel would be affected by the Project.[2]

[2] The EIR Jurisdictional Delineation also acknowledges jurisdictional impacts and associated mitigation and permitting requirements associated with the future bridge crossing of Fir (Eucalyptus) Avenue at the Quincy Channel, located southwesterly adjacent to the Project site. This bridge crossing, to be implemented by the City or others at a future date as a part of areawide circulation system improvements, will permanently impact an estimated 0.47 acres of CDFG jurisdictional areas, with temporary impacts to an additional 0.06 acres of CDFG jurisdictional area. Affected CDFG jurisdictional areas encompass ACOE and RWQCB jurisdictional areas. These are not Project-related impacts, but are however considered in this EIR and CEQA within the context of cumulative impacts. Please refer also to EIR Section 5.1.1.8, Cumulative Biological Resources impacts.



Source: ICF Jones & Stokes

Figure 4.8-2
Project Site Features

Potential Off-Site Impacts

In order to implement the Project, certain off-site circulation and utilities infrastructure improvements would be required to ensure functional, safe, and efficient operations of the Project. As illustrated in the preceding Figure 4.8-1, and discussed in greater detail within the Hydrology and Water Quality section of this Draft EIR, the Area Drainage Plan "Line D-3" improvements to be constructed within the Fir (future Eucalyptus) Avenue alignment will connect to a planned outlet at Redlands Boulevard. Energy dissipating rip-rap will be placed along the westerly edge of Redlands Boulevard in order to manage future storm-related drainage in this area. Disturbance within the public right-of-way could extend as far as 500 feet to the south (downstream) of the proposed storm drain outlet at the intersection of Fir (future Eucalyptus) Avenue and Redlands Boulevard.

Currently, the drainage channel adjacent to Redlands Boulevard consists of a five (5) foot wide steep-sided channel with a sandy substrate. The Biological Survey of Off-Site Areas describes the channel as follows.

> The western bank was dirt and the eastern bank (adjacent the road) was of concrete, but in places the concrete has broken off and fallen into the channel. The channel is ephemeral and was dry at the time of the field survey. The channel was devoid of vegetation and the banks supported a sparse cover of the non-native weed summer mustard (*Hirschfeldia incana*) and some non-native grasses (*Bromes* spp.). The channel ends upstream before the ramp to SR-60 where it enters an underground concrete culvert. At the channel, the off-site area extends upstream of Fir Avenue for 210 feet and downstream of Fir Avenue for approximately 500 feet.
>
> The channel is highly disturbed, un-vegetated and of very low value to native plants or animals. Nevertheless, the channel is jurisdictional under the U.S. Army Corps of Engineers, the California Department of Fish and Game, the California Regional Water Quality Control Board and the MSHCP

Riverine/Riparian Habitat (as defined under Section 6.1.2 of the MSHCP) programs.

Construction of Project-related drainage improvements are not likely to affect the entire area adjacent to Redlands Boulevard that has been identified as jurisdictional. Under a maximum potential impact scenario, construction of off-site improvements could result in permanent disturbance and alteration of approximately 0.08 acres (710 lineal feet of 5-foot wide channel, or a total of 3,550 square feet) of un-vegetated riparian habitat. This is acknowledged as a potentially significant Project impact.

Summary

Based on the preceding discussions, the Project's potential to impact to jurisdictional areas is considered potentially significant due to temporary disturbance of 0.003 acres of jurisdictional areas as a result of on-site activities, and permanent disturbance of approximately 0.08 acres of jurisdictional areas that will occur during construction of off-site improvements. Potential direct impacts to all other sensitive vegetation communities, including vernal pool habitat, and/or special status plant species would not occur and is less-than-significant.

Special Status Plant Species

Southern California black walnut is a covered species under the MSHCP, and as such, Development Mitigation Fees paid by the Project Applicant would be sufficient to mitigate potential impacts to the species. However, because the walnut plants occur in the Quincy Channel, which is outside the Project's impact area, no incidental "take" of this species would occur.

No other special status plant species were identified at the Project site. Due to lack of appropriate habitat, current and historic site disturbances, absence of historic site records, and absence of the species during current surveys, the Project Biological Resources Assessment indicates that, with the exception of the Southern California black walnut, no special status plant species have the potential to occur on-site.

In addition to the preceding considerations, it is further recognized that indirect impacts to proximate candidate, sensitive, or special status plant species could occur through introduction of invasive plant species as a result of Project implementation.

Level of Significance: Potentially Significant (potential direct temporary impacts to 0.003 acres, (22 lineal feet) of mulefat vegetated riparian habitat; potential direct permanent impact to 0.08 acres of un-vegetated riparian habitat; and potential indirect impacts through potential introduction of invasive plant species).

Mitigation Measures:

4.8.1 *Prior to the issuance of a grading permit, a "no touch" area shall be staked along the westerly limit of Project development as defined by the alignment of the scour wall proposed along the Quincy Channel. Importantly, the westerly limits of development shall be established so as to preclude potential permanent impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Prior to the issuance of a grading permit, a City-approved Project biologist shall be retained to initiate and supervise monitoring of construction activities to ensure protection and preservation of adjacent Channel areas.*

4.8.2 *Prior to issuance of a grading permit, the proposed scour wall to be located between the developed Project site and the Quincy Channel shall be shown on the grading plans. Alignment of the scour wall shall be field-determined and physically delineated by the Project biologist in consultation with the City. Importantly, the scour wall alignment shall be established so as to preclude potential permanent impacts to CDFG and/or Corps Jurisdictional Areas within the westerly adjacent Quincy Channel. Ongoing monitoring of construction activities shall be maintained throughout implementation of the scour wall to ensure protection and preservation of adjacent Channel areas.*

4.8.3 *Prior to issuance of a building permit, landscape and irrigation plans shall be approved which demonstrate that no invasive, non-native plants will be planted or seeded within 150 feet of the avoided riparian habitat along the Quincy Channel.*

4.8.4 Prior to the issuance of <u>any</u> grading permits and prior to any physical disturbance of any jurisdictional areas, 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 the Community Development Department - Planning Division and the Public Works Department - Land Development Division.

4.8.5 Prior to issuance of a grading permit, the Applicant shall develop and implement a Habitat Mitigation and Monitoring Plan (HMMP) to restore impacted riparian (mulefat) habitat. Prior to implementation, the HMMP shall be reviewed and approved by the CDFG. If in its final design, the CDFG-approved HMMP involves use or restoration of USACE or RWQCB jurisdictional areas, USACE and/or RWQCB approval shall also be obtained. The HMMP shall, at a minimum, meet the following requirements:

- *A habitat replacement and/or enhancement ratio of at least 1:1 for temporary impact;*
- *A success criterion of at least 80 percent cover of native riparian vegetation for replaced habitat; and*
- *Additional requirements, including a 3-year establishment period for the replacement habitat, regular trash removal, and regular maintenance and monitoring activities to ensure the success of the mitigation plan.*

Wildlife

The following discussions address potential impacts to common wildlife, as well as specific impacts to protected species including nesting birds, the burrowing owl, and the Stephens' kangaroo rat.

Common Wildlife Species

The primary impacts of the Project on common wildlife species/resources are the removal and disruption of habitat and the loss and displacement of wildlife, resulting in a potentially less diverse and less abundant local faunal population. Adverse significant impacts to wildlife are generally associated with the degree of habitat loss and fragmentation from the standpoint of physical character, quality, diversity, and abundance of vegetation. Implementation of the Project would result in the loss of ruderal agricultural land. The removal of this habitat would potentially impact common wildlife species. However, these impacts would not be expected to reduce general wildlife populations below self-sustaining levels within the region, given the large blocks of contiguous preserved open space in Riverside County associated with the MSHCP. Impacts to common wildlife species would not represent a significant impact when evaluated in the context of the substantial areas of open space preserved in Riverside County under the MSHCP.

Nesting Birds

Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act. In addition, nests and eggs are protected under Fish and Game Code Section 3503. Project implementation must be accomplished in a manner that avoids impacts to active nests during the breeding season. This can be accomplished through a variety of means, including restricting brush and tree removal to periods outside of the avian nesting season (February 15 to July 15) or through performance of nesting bird surveys prior to clearing, when clearing occurs during the nesting season. Implementation of Mitigation Measure 4.8.6, presented subsequently within this Section, would ensure that the Project's potential to impact nesting birds is reduced to a less-than-significant level.

Burrowing Owl *(Athene cunicularia)*

Although no evidence of burrowing owl was observed during Project-related site surveys, this sensitive species does have the potential to occur on-site. The Project area is located within the MSHCP burrowing owl survey area. Focused burrowing owl surveys are required during the owl breeding season (April through August), pursuant to Section 6.3.2 of the MSHCP. Should owls be identified on-site, then the requirements

of the MSHCP related to burrowing owls would be implemented. In addition, Mitigation Measure 4.8.7, presented subsequently within this Section, would ensure that a pre-construction survey be conducted to document the location of any occupied burrows on-site. With the implementation of this mitigation measure, as well as compliance with the requirements of the MSHCP, the Project's potential to impact burrowing owls is reduced to a less-than-significant level.

Stephens' kangaroo rat

Stephens' kangaroo rat (SKR) have some potential to occur on-site. Stephens' kangaroo rats occur in non-native grassland, sparse scrub and disturbed areas, and such habitats are found on-site. Focused SKR trapping surveys were not conducted on-site to confirm presence/absence status. To assure that the analysis presents the most conservative approach, Stephens' kangaroo rat are assumed to occupy the site.

The Project site is located within the Western Riverside County Habitat Conservation Plan for the Stephens' Kangaroo Rat, which allows for incidental take of Stephens' Kangaroo Rat for projects located within the Plan area. The Plan and associated County of Riverside Ordinance No. 663.10 (Stephens' Kangaroo Rat Mitigation Fee Ordinance) require that impacts to Stephens' kangaroo rat be mitigated by (1) on-site mitigation through the reservation or addition of lands included within or immediately adjacent to a potential habitat reserve site, or (2) payment of the Mitigation Fee or (3) any combination of (1) and (2) consistent with the intent and purpose of Ordinance No. 663.10. Impact fee payment is considered appropriate for the Project. With payment of the appropriate mitigation fee, which is collected by the City as a standard part of the development application process, potential impacts to Stephens' kangaroo rat would be less-than-significant.

Other Special Status Wildlife Species

Apart from burrowing owl and Stephens' kangaroo rat, which are addressed above, no other special status wildlife species were detected at the Westridge Commerce Center Project site, and all other species are presumed absent from the site.

Level of Significance: Potentially Significant.

Mitigation Measures:

4.8.6 *If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season (February 15 – July 31), all suitable habitat will be thoroughly surveyed within 72 hours prior to clearing for the presence of nesting birds by a qualified Project biologist. The Project biologist shall be retained by the Applicant and vetted by the City. The survey results shall be submitted by the Project applicant to the Planning Division. If any active nests are detected, the area shall be flagged and mapped on the construction plans along with a minimum 50-foot buffer and up to 300 feet for raptors, with the final buffer distance to be determined by the qualified biologist. The buffer area shall be avoided until the nesting cycle is complete or it is determined that the nest has failed. In addition, the biologist will be present on the site to monitor the vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.*

4.8.7 *Within 30 days of site clearing activities, a pre-construction burrowing owl survey shall be conducted to document the presence/absence of any occupied owl burrows. Any owls present shall be passively or actively relocated following CDFG approved protocols, and with CDFG permission, prior to commencement of clearing. The survey shall be submitted to the Planning Division prior to issuance of a grading permit.*

Level of Significance After Mitigation: Less-Than-Significant.

Potential Impact: 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.

Impact Analysis: The Quincy Channel, an ephemeral drainage, runs along the western edge of the Project site. To the north of the Project site, the channel crosses under the SR-60 freeway, which provides a triple-culvert with five-foot diameter openings. To the south, the channel continues beyond the property boundaries, where concrete channel walls have been constructed adjacent to the recently developed residential properties. As summarized previously in this Section and presented in detail in the Project Jurisdictional Delineation, construction of the Project's proposed scour wall in the westerly portion of the Project site, adjacent to the Quincy Channel, will result in the temporary disturbance of an estimated 0.003 acres (22 lineal feet) of vegetated mulefat riparian habitat/CDFG jurisdictional areas. This is a potentially significant impact.

The Project will have no direct impacts to any 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**.** Potential indirect impacts may occur to proximate sensitive natural communities should invasive plant species be introduced to the area through Project implementation. This is a potentially significant impact.

Level of Significance: Potentially Significant.

Mitigation Measures: Please refer to Mitigation Measures 4.8.1 through 4.8.5.

Level of Significance After Mitigation: Less-Than-Significant.

Potential Impact: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact Analysis: As previously discussed, the Quincy Channel, an ephemeral drainage, runs along the western edge of the Project site. In addition, an existing off-site drainage channel, on the west side of Redlands Boulevard, could be affected by the construction of Project-related drainage improvements. While each of these channels contain Corps and CDFG jurisdictional areas, no federally protected wetlands, as defined by Section 404 of the Clean Water Act, exist in the Project area. Nor does the Project propose uses or facilities that would otherwise substantively and adversely affect Section 404 federally protected wetlands.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact Analysis: Wildlife corridors are areas which animals can use to move from one patch of suitable habitat to another. These areas would be expected to have the least habitat fragmentation relative to surrounding areas. A wildlife corridor establishes connectivity for animals to move, live, reproduce and respond to functional ecological processes during the course of a year to several years.

Wildlife crossings are generally small, narrow wildlife corridors that allow wildlife to pass through an obstacle or barrier such as a roadway to reach another patch of habitat. Wildlife crossings are manmade and include culverts, drainage pipes, underpasses, tunnels, and, more recently, crossings created specifically for wildlife movement over or under highways.

Both wildlife crossings and wildlife corridors function to prevent habitat fragmentation that would result in the loss of species that require large contiguous expanses of unbroken habitat and/or that occur in low densities.

Linkages are areas that provide for long term movement or interaction of wildlife to maintain natural evolutionary and ecological patterns. Linkages are fundamental for gene flow and large scale ecological processes. These areas are usually defined by the zones of "least resistance" for the genes of a given species to move or "flow" between core reserve populations.

During preparation of the MSHCP, wildlife corridors and habitat linkages throughout western Riverside County were analyzed extensively. No MSHCP wildlife habitat linkages or movement corridors were identified at the Project site. Nor does the Project propose facilities or activities that would substantively and adversely affect any offsite designated wildlife habitat linkage or movement corridor. Based on the preceding discussion, impacts to wildlife corridors, habitat linkages, or wildlife nursery sites that would occur as a result of the proposed Project are determined to be less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

No local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, have been identified as applicable to the Project. No impacts will occur in this regard.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact Analysis: As previously discussed, the City of Moreno Valley is a participating agency in the Western Riverside County Multiple-Species Habitat Conservation Plan (MSHCP). As such, only projects consistent with the MSHCP will be developed within the City. The Project Biological Resources Assessment includes a discussion of MSHCP compliance, and determines that the Project "is in full compliance with the Western Riverside County MSHCP, assuming the focused burrowing owl surveys are conducted in spring 2009." These surveys were conducted in July 2009, and found no burrowing owls or evidence of their occupation on-site. This species has not been recorded within the Project area in the past and is presumed absent from the site. As such, the Project is in compliance with the MSHCP.

Additionally, the Project is consistent with the Habitat Conservation Plan for the Stephens' Kangaroo Rat, which allows for incidental take of Stephens' Kangaroo Rat for projects located within the plan area. The Habitat Conservation Plan and the County of Riverside Ordinance No. 663.10 (Stephens' Kangaroo Rat Mitigation Fee Ordinance) require that impacts to Stephens' kangaroo rat be mitigated by (1) on-site mitigation through the reservation or addition of lands included within or immediately adjacent to a potential habitat reserve site, or (2) payment of the Mitigation Fee or (3) any combination of (1) and (2) consistent with the intent and purpose of Ordinance No. 663.10. Federal, State and county agencies shall review each development proposal to determine the most appropriate mitigation. With payment of the appropriate mitigation fee, which the City requires as a standard procedure during the processing of development applications, any potential impacts to Stephens' kangaroo rat would be less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

4.9 AESTHETICS

4.9 AESTHETICS

Abstract

This Section identifies and addresses potential aesthetic impacts that may result from implementation of the proposed development. Specifically, the analysis presented here examines whether the Project would:

- *Have a substantial adverse effect on a scenic vista;*
- *Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway;*
- *Substantially degrade the existing visual character or quality of the site and its surroundings; or*
- *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*

As supported by the analysis presented in this Section, the Project would obstruct views of off-site scenic resources, and would therefore have a substantial adverse effect on a scenic vista. This is a significant and unavoidable impact. All other potential aesthetic impacts of the Project have been determined less-than-significant.

4.9.1 INTRODUCTION

Potential aesthetic impacts of the Project are primarily related to potential effects of the Project on sensitive or protected visual resources, and visual impacts of the Project site as perceived from adjacent properties and roadways. Potential aesthetic impacts of the Project, including its consistency with applicable City design and development standards, are the focal issues considered within this assessment.

4.9.2 SETTING

The proposed Westridge Commerce Center Project area comprises approximately 55 acres, located within the eastern portion of the City of Moreno Valley. The Project site is currently vacant, consisting of undeveloped former agricultural land. Vegetation within the Project site consists primarily of nonnative, ruderal varieties. The site currently has a relatively gentle, north-to-south downward trending slope, with a difference in elevation of approximately 30 feet from the northerly property line adjacent to SR-60, to the southerly property line adjacent to Fir (future Eucalyptus) Avenue.

Based on historic data, the Project's Phase I Environmental Assessment indicates that the site has been used for agriculture, including orchards and dryland crops, since at least 1938; however, it is not currently under cultivation. The site has been designated for business park/light industrial uses by the City's General Plan since 2006.

A single residence, along with vacant RA-2 zoned land, is located to the south of the Project site, across Fir (future Eucalyptus) Avenue. Vacant parcels designated for future commercial uses are located immediately east of the Project site. Beyond these, east of Redlands Boulevard, a warehouse-distribution project (Highland Fairview Corporate Park) was recently approved. This development will realize approximately 2.6 million square feet of light industrial uses, to be developed in phases, on approximately 158 acres south of SR-60 between Redlands Boulevard and Theodore Street. To the north, the Project site is bounded by SR-60 and Caltrans right-of-way. To the west, beyond the Quincy Channel, development of another warehouse/distribution use which would require a zone change to Light Industrial is proposed, and is currently under review by

the City. The existing zoning to the west includes a mix of single-family, multiple-family, and business park zones.

Potential aesthetic concerns include views of the Project site as perceived from adjacent land uses and roadways. In this regard, the site is located adjacent to SR-60, which is designated as a local scenic road:

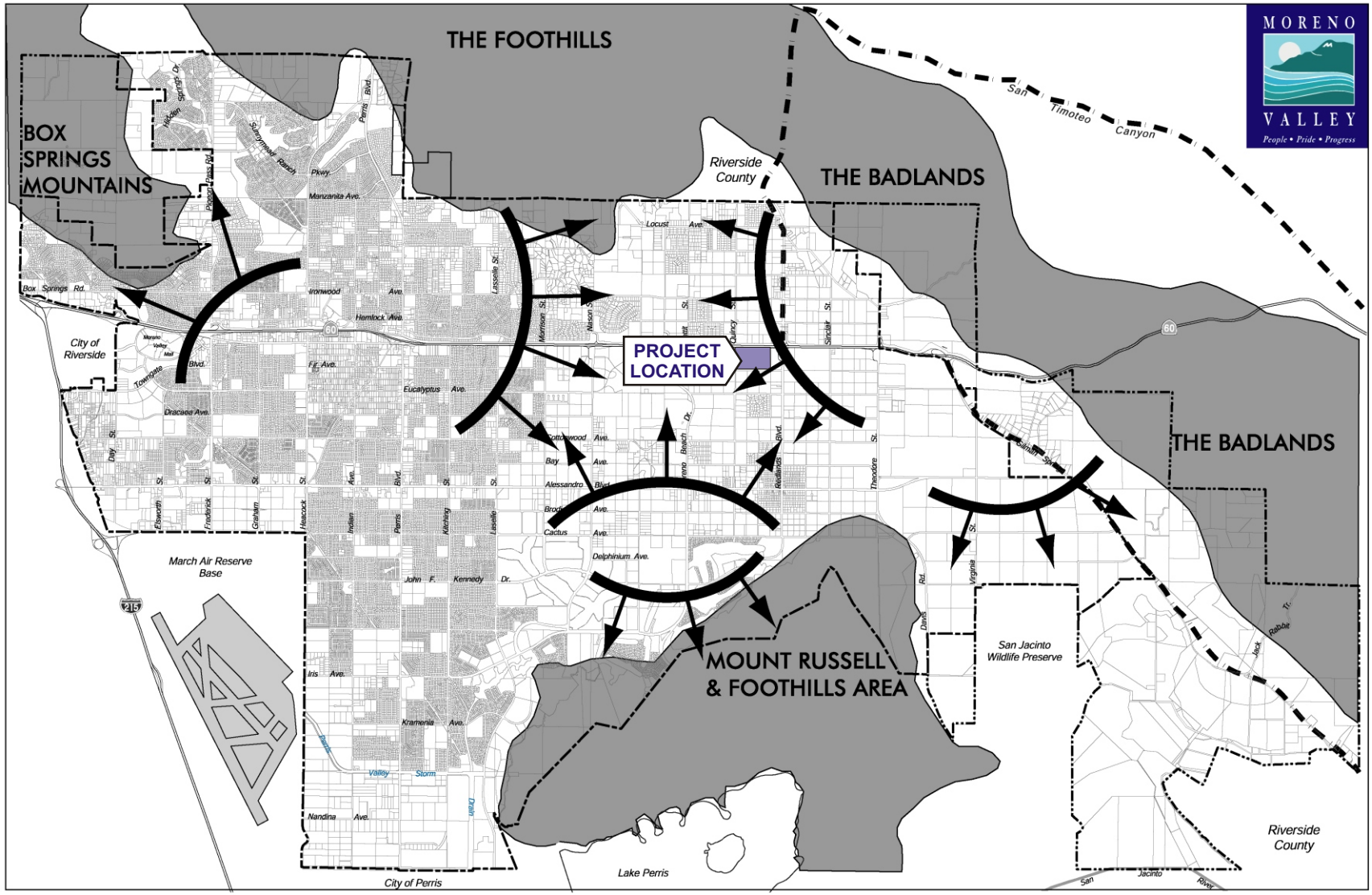
> [General Plan Policy] 7.7.4 Gilman Springs Road, Moreno Beach Drive, and State Route 60 shall be designated as local scenic roads.[1]

General Plan Final EIR Figure 5.11-1, "Major Scenic Resources," reproduced in this Draft EIR as Figure 4.9-1, indicates the Project site is located along the SR-60 scenic corridor. The Badlands area, located approximately one mile to the north, and the Mount Russell foothills and associated rock outcroppings, located approximately two miles southerly of the site, are considered major scenic resources in the area. Development of the site has the potential to obstruct views of these resources as seen from SR-60. The Project will therefore be evaluated for consistency with applicable standards for scenic resources and view corridors.

4.9.3 EXISTING AESTHETIC POLICIES AND REGULATIONS

Following are summary descriptions of design and aesthetic policies and regulations applicable to the Project. In many instances, compliance with existing policies and regulations eliminates, or substantially reduces, potential aesthetic and environmental effects. Existing policies and regulations, to some extent, also indicate community and regional values and prerogatives relative to aesthetic concerns.

[1] City of Moreno Valley General Plan Chapter 9, Goals and Objectives, Page 9-38.



Source: City of Moreno Valley, Moreno Valley General Plan Final Program EIR, July 2006.

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Figure 4.9-1
Major Scenic Resources

4.9.3.1 City of Moreno Valley General Plan

The City of Moreno Valley General Plan Community Development Element establishes Land Use designations for all properties within the City boundaries. General Plan Land Use designations control the character and intensities of City land uses. All proposed development projects are required to comply with applicable goals, policies, and standards articulated for each of the General Plan Land Use designations, or must provide for amendment of the General Plan to accommodate proposed uses differing from the adopted Land Use designation.

The Project site is designated by the City General Plan as Business Park/Light Industrial, which allows the warehouse distribution uses proposed by the Project Applicant. General Plan (Community Development Element) Objectives and Policies generally addressing design and aesthetic considerations are indicated at Table 4.9-1. A summary of the Project's consistency is also provided.

Table 4.9-1
City of Moreno Valley General Plan Consistency

Policy 2.5.3 Screen manufacturing and industrial uses where necessary to reduce glare, noise, dust, vibrations and unsightly views.	***Consistent.*** *The Project's loading doors would be screened from view with masonry walls to the north and south, pursuant to City standards. Additionally, a 250-foot landscaped setback is provided at the Project's southerly boundary to accommodate onsite drainage facilities. This setback area will serve as a buffer between the Project and future residential uses that may occur on the parcel(s) located south of the site.*
Objective 2.10 Ensure that all development within the City of Moreno Valley is of high quality, yields a pleasant living and working environment for existing and future residents, and attracts business as the result of consistent exemplary design.	***Consistent.*** *The Project has been designed to ensure that, subject to the City's approval, a high quality, visually appealing development is implemented.*

Table 4.9-1
City of Moreno Valley General Plan Consistency

Policy 2.10.1 Encourage a design theme for each new development that is compatible with surrounding existing and planned developments.	***Consistent.*** *Based on review of the Draft EIR for the Highland Fairview development to the east (available through the City of Moreno Valley Planning Department), the Westridge Commerce Center appears similar in design, although smaller in scale (the Project would result in a single building with a maximum height of approximately 41 feet, and a building façade of 1,500 feet adjacent to SR-60, compared to the Highland Fairview Corporate Project's multiple buildings, the largest of which would range in height from 47 to 53 feet with a building façade of approximately 3,600 feet along SR-60). Both the Highland Fairview Corporate Park and the Westridge Project are planned to be approximately 25 feet below the grade of the SR-60 upon completion. An approximately 250-foot setback area at the Project site's southern boundary will serve as a buffer between the Project and future residential uses that may occur on the parcel(s) located south of the site.*
Policy 2.10.2 Screen trash storage and loading areas, ground and roof mounted mechanical equipment, and outdoor storage areas from public view as appropriate.	***Consistent.*** *The Project will be subject to all relevant City requirements in regard to the screening of equipment and facilities on the site including, but not limited to, industrial design requirements and standards identified under Municipal Code Section 9.05.040, "Industrial Site Development Standards."*
Policy 2.10.3 Require exterior elevations of buildings to have architectural treatments that enhance their appearance. a. A design theme, with compatible materials and styles should be evident within a development project; b. Secondary accent materials, colors and lighting should be used to highlight building features; c. Variations in roofline and setbacks (projections and recesses) should be used to break up the building mass; d. Industrial buildings shall include architectural treatments on visible façades that are aesthetically pleasing.	***Consistent.*** *As identified in Figures 3.5-2 and 3.5-3 (included in the Project Description of this Draft EIR), the Project has identified thematic exterior materials and colors, as well as architectural treatments that include linear geometric patterning and window-like glass accents to enhance the appearance of buildings. Variations in the proposed Project's roofline and building façades are also illustrated in Figure 3.5-3.*
Policy 2.10.4 Landscaping and open spaces should be provided as an integral part of project design to enhance building design, public views, and interior spaces; provide buffers and transitions as needed; and facilitate energy and resource conservation.	***Consistent.*** *As discussed in this Section, the Project incorporates landscaping throughout the site, including extensive landscaped detention and water infiltration areas at the site's southern edge, providing a buffer between Project facilities and adjacent properties.*

Table 4.9-1
City of Moreno Valley General Plan Consistency

Policy 2.10.5 Development projects adjacent to freeways shall provide landscaped buffer strips along the ultimate freeway right-of-way.	***Consistent.*** *Subject to coordination with Caltrans and City requirements, the Project will be responsible for landscaping within the adjacent SR-60 freeway right-of-way.*
Policy 2.10.6 Buildings should be designed with a plan for adequate signage. Signs should be highly compatible with the building and site design relative to size, color, material, and placement.	***Consistent.*** *Signs for the Project will be designed and implemented consistent with Zoning Code Section 9.12, "Sign Regulations." The Project Sign Program will provide detailed guidelines and requirements for facility and informational signs and other graphic displays within the Project area. Subject to the City's standard design review process, the Sign Program will be submitted for review prior to the issuance of building permits.*
Policy 2.10.7 On-site lighting should not cause nuisance levels of light or glare on adjacent properties.	***Consistent.*** *As discussed subsequently within this Section, Project lighting will not result in light overspill or glare affecting adjacent properties.*
Policy 2.10.8 Lighting should improve the visual identification of structures. Within commercial areas, lighting should also help create a festive atmosphere by outlining buildings and encouraging nighttime use of areas by pedestrians.	***Consistent.*** *The Project will implement industrial and utilitarian lighting designs consistent with the proposed use. In order to preclude or reduce potential adverse effects of light and glare, the minimum levels of exterior lighting necessary for pedestrian safety and security will be provided. Project lighting shall not exceed City standards.*
Policy 2.10.9 Fences and walls should incorporate landscape elements and changes in materials or texture to deter graffiti and add visual interest.	***Consistent.*** *The Preliminary Landscape Plan (included at EIR Section 3.0, Project Description) specifies vines to be planted on walls and fences, which will act to deter graffiti while providing visual interest. Subject to established City's design review processes, all proposed landscaping, along with recommended wall and/or fence treatments, would require review and approval prior to the issuance of building permits.*
Policy 2.10.11 Screen and buffer nonresidential projects from adjacent residential property and other sensitive land uses when necessary to mitigate noise, glare and other adverse effects on adjacent uses.	***Consistent.*** *The Project provides a substantial buffer between Project facilities and adjacent residential properties to the south, by locating landscaped detention and water infiltration areas at the site's southern edge, adjacent to Fir (future Eucalyptus) Avenue.*

Source: City of Moreno Valley General Plan, Community Development Element

In summary, the Project is consistent with the General Plan Objectives and Policies listed at Table 4.9-1, or can be feasibly implemented consistent with them. Application of the identified Objectives and Policies is realized through the City's development review processes.

4.9.3.2 City of Moreno Valley Municipal Code

City Municipal Code Title 9, "Planning and Zoning," provides zoning definitions and performance standards for all land uses within the City. The Project site is currently zoned for Business Park (BP) uses. However, as noted in the discussion of Land Use and Planning (EIR Section 4.1), to allow for the proposed light industrial/distribution warehouse uses configured in a single structure greater than 50,000 square feet, a zone change is requested by the Project, re-designating the subject site Light Industrial (LI).

Other than building size limitations, design standards articulated for the BP zoning designation differ from the proposed LI zoning designation in that the BP zoning designation by establishing a reduced minimum lot size (one-acre BP; five acres LI) and reduced minimum lot dimensions (200 feet by 200 feet BP; 300 feet by 300 feet LI) [City of Moreno Valley Municipal Code Chapter 9.05, Industrial Standards, section 9.05.040 Industrial Site Development Standards, Table 9.05.040-8]. Other than these noted differing requirements, City Industrial Standards would apply equitably to the BP and/or LI zoning designation. Special standards noted below would apply if industrial districts or uses abut residentially-zoned properties; such is the case with the Project.

If the proposed zone change to Light Industrial is approved, Municipal Zoning Code Chapter 9.05, Industrial Districts, would govern the design standards and development criteria directing the design, appearance, and operation of the Project. More specifically, Code Section 9.05.040, B., "Special Site Development Standards," provides the following specific requirements which are directly applicable to the Project.

1. When any industrial district abuts a property in any residential district, a minimum building setback equal to the building height, but not less than of twenty (20) feet shall be required from such residential district. Further, the ten (10) feet of such setback nearest the district boundary line shall be landscaped.

2. Where off-street parking areas in industrial districts are visible from any street, screening in the form of a landscaped earthen berm, shrubs, or decorative wall three feet in height shall be erected between the required landscape area and the parking area.

3. In all industrial districts, required front building setback areas shall be landscaped. The landscaping shall consist predominantly of plant materials except for necessary walks and drives.

4. Except as otherwise permitted, a street side building setback area in any industrial district shall be used only for landscaping, pedestrian walkways, driveways or off-street parking. Where off-street parking in any industrial district is located within building setback areas, a minimum landscaped area ten (10) feet in depth shall be provided between the property line and parking area, with an additional minimum landscaped area ten (10) feet in depth required between the parking area and the building.

5. Except as otherwise permitted, required rear and interior side building setback areas in any industrial district shall be used only for landscaping, pedestrian walkways, driveways, off-street parking or loading, recreational activities or facilities, and similar accessory activities.

6. Parking for each use shall comply with the requirements of Chapter 9.11 and this section [of the Municipal Code].

7. The land uses planned for each development shall be specified on the approved site plans. No use shall be established unless the development where it is located has adequate parking facilities to accommodate such use and any planned uses that share parking facilities with such use. [City of Moreno Valley Municipal Code Chapter 9.05, Industrial Standards, section 9.05.040 Industrial Site Development Standards]

4.9.4 STANDARDS OF SIGNIFICANCE

Appendix G of the *CEQA Guidelines*, as applied by the City of Moreno Valley, indicates a project will normally have a significant effect related to aesthetics if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Any of the above effects would be considered potentially significant aesthetic impacts.

4.9.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

Potential Impact: ***Have a substantial adverse effect on a scenic vista.***

Impact Analysis: As noted previously in this Section, the Project site lies within an established view corridor adjacent to the SR-60. SR-60 has been locally designated in the Moreno Valley General Plan as a scenic route. Visual changes that could result from Project development would be subject to established City industrial site development standards, which generally require development along scenic roadways to be visually attractive while minimizing obstruction of distant vistas. As discussed below, the Project incorporates site design and architectural elements that act to reduce its potential visual impacts and maintain views of off-site scenic resources.

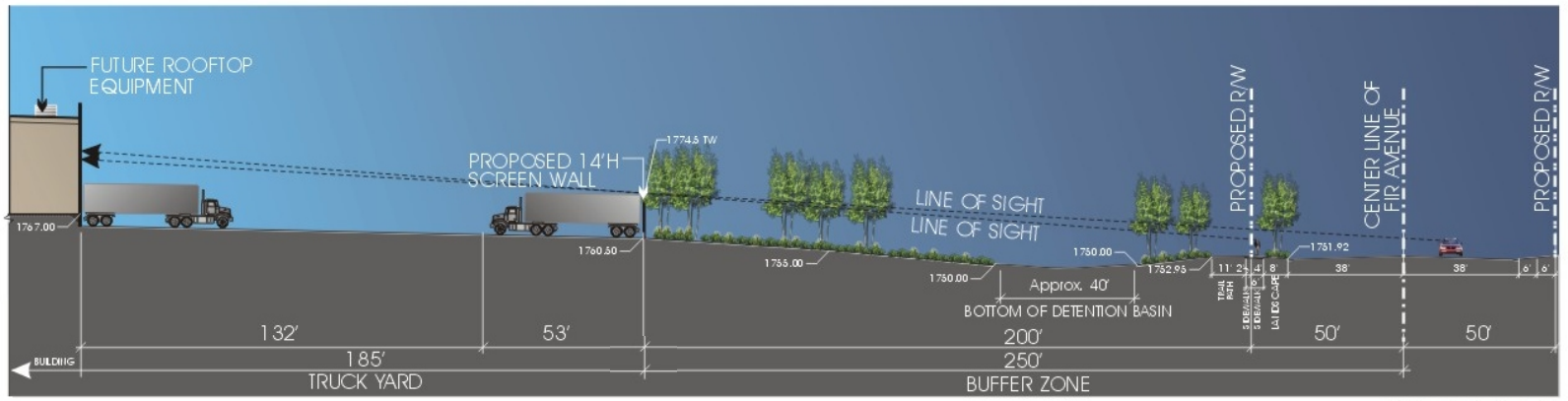
The Project proposes a single large structure (more than 970,000 square feet), that would alter and or/obstruct views through the currently undeveloped Project area. View

obstruction will be limited to some extent by engineering and grading requirements that will establish the Project's building pad considerably below the grade of the adjacent SR-60. The following Figures 4.9-2 and 4.9-3 present "Line of Sight" illustrations. As shown in Section D (on Figure 4.9-3), the Project's building foundation is planned to be located approximately 25 feet lower in elevation than the existing highway.

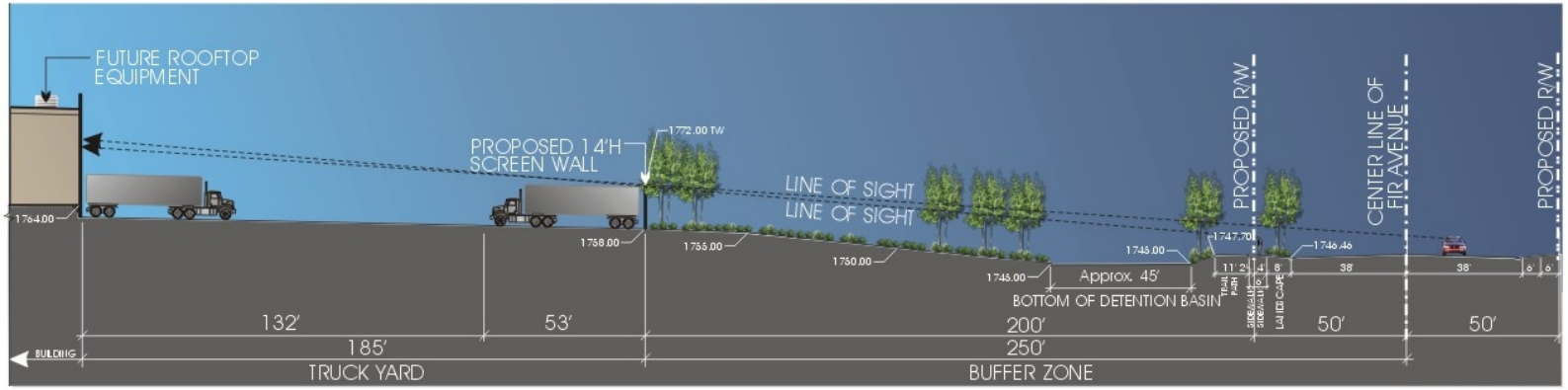
Figures 4.9-4 through 4.9-8 present visual simulations from different vantage points within the Project vicinity, providing a comparison of scenic view corridors with and without the proposed development in place.

Notwithstanding the proposed depressed building pad area, as illustrated in Figures 4.9-4 through 4.9-8, the Project will nonetheless interrupt the expansive views of open space and mountains from SR-60, Redlands Boulevard, Fir (future Eucalyptus) Avenue, and other areas surrounding the Project site. The building will be visible from higher elevations to the north, east, and south, and the rooftop of the building may be visible at a distance from higher elevations.

The Project's intent is to create a regional-serving warehouse/logistics facility. In order to minimize the viewshed impacts of the Project, the building height or overall scale would need to be substantially reduced. Reducing the height of the building is considered infeasible, since the facility's height is largely dictated by the logistics use, and the need to provide standard "dock-high" bays for the loading and unloading of trucks. Similarly, the proposed Project intends to serve a market need for users that demand a large, integrated facility. As such, the concept of substantially reducing the size of the building, or creating multiple buildings in lieu of one single building would compromise a basic objective of the Project. These concepts are further considered within the discussion of Alternatives in this Draft EIR (Section 5.2).



SECTION A



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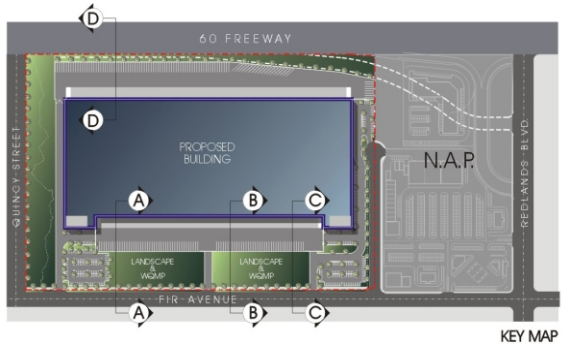

KEY MAP

Source: HPA, Inc.

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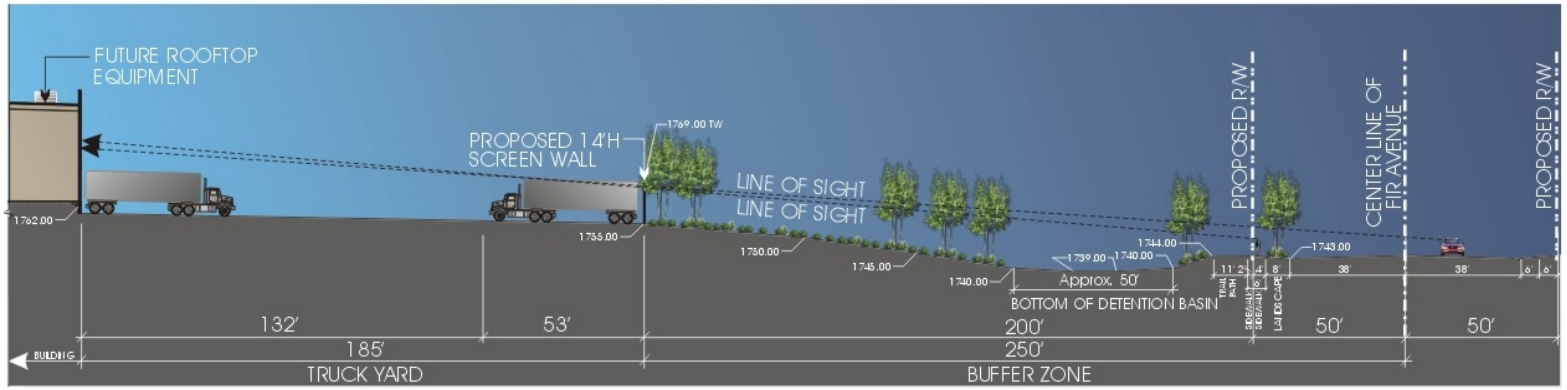
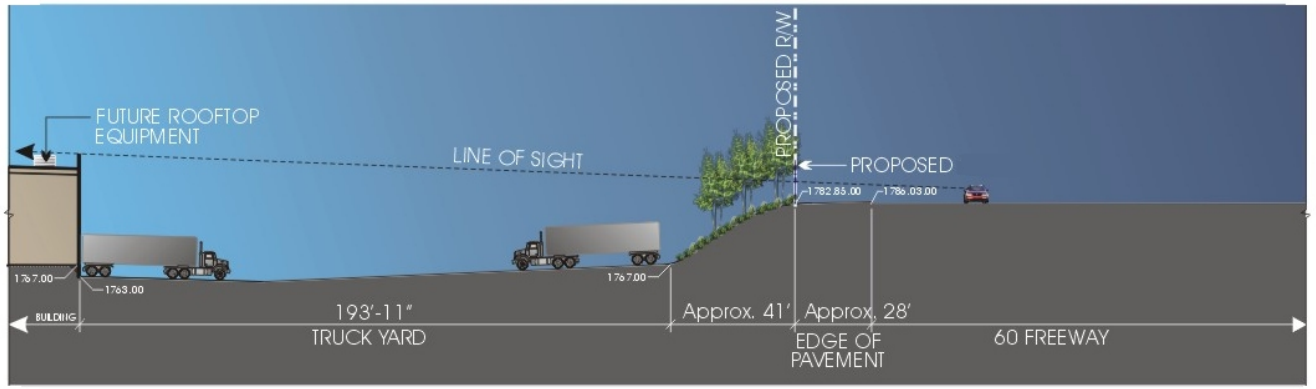
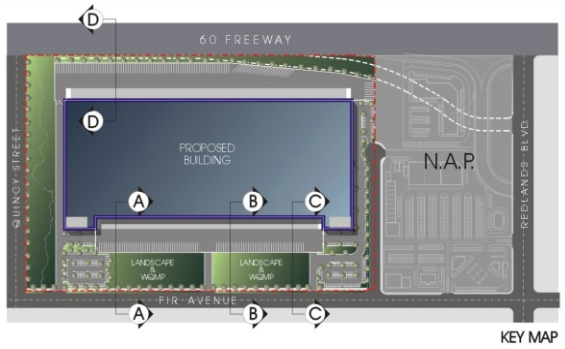
Figure 4.9-2
Line of Sight Illustration



SECTION C



SECTION D



Source: HPA, Inc.

Figure 4.9-3
Line of Sight Illustration

Existing Condition

Project Buildout Condition
View is to the southwest from the north end of the Redlands Boulevard overpass.

Source: Urban Crossroads

Figure 4.9-4
Visual Simulations, Pre- and Post-Development

Existing Condition

Project Buildout Condition
View is to the east/southeast from the eastbound SR-60 shoulder.

Source: HPA Associates; Applied Planning, Inc.

Figure 4.9-5
Visual Simulations, Pre- and Post-Development

Existing Condition

Project Buildout Condition
View is to the south/southwest from the westbound SR-60 shoulder.

Source: HPA Associates; Applied Planning, Inc.

Figure 4.9-6
Visual Simulations, Pre- and Post-Development

Existing Condition

Project Buildout Condition
View is to the north/northeast from the Quincy Channel at Fir (future Eucalyptus) Avenue.

Source: HPA Associates; Applied Planning, Inc.

Figure 4.9-7
Visual Simulations, Pre- and Post-Development

Existing Condition

Project Buildout Condition
View is to the south from Ironwood Avenue, approx. 2,400 feet west of Redlands Blvd.

Source: HPA Associates; Applied Planning, Inc.

Figure 4.9-8
Visual Simulations, Pre- and Post-Development

Project landscaping, when mature, will serve to screen or "soften" views of the proposed Project, particularly along Fir (future Eucalyptus) Avenue and from SR-60. Nonetheless, views from major roadways and surrounding areas within the Project vicinity will be restricted or altered, and impacts to scenic vistas are considered significant. No feasible mitigation measures have been identified which would reduce this loss of viewshed. ***Based on the preceding, the Project will have a substantial adverse effect on scenic vistas. This is a significant and unavoidable impact.***

Level of Significance: ***Significant and Unavoidable.***

Potential Impact: ***Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway.***

Impact Analysis: The Project site is comprised of vacant disturbed property and does not contain designated scenic resources. No rock outcroppings or historic buildings are located onsite. Although the City's General Plan designates SR-60 as a local scenic road, this highway is not included in the California Department of Transportation's list of Officially Designated Scenic Highways.[2]

The Project will replace the existing, mature pine trees along its northerly boundary (adjacent to SR-60) with a double-row of new trees, in order to visually screen the Project from the view of freeway travelers. Pursuant to the City's criteria for the removal of mature trees, at least three new trees will be planted in the place of each mature tree that is removed. New trees will be drought-resistant, and will be planted and irrigated in coordination with Caltrans and City requirements.

Based on the preceding, the potential for the Project to substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway is less-than-significant.

[2] *California Scenic Highway Mapping System* (http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm), accessed April 8, 2010.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: ***Substantially degrade the existing visual character or quality of the site and its surroundings.***

Impact Analysis: The proposed alteration of the Project site from its current undeveloped state to light industrial development will represent a noticeable change in baseline visual characteristics. Determinations of visual character and quality are inherently subjective by nature. As such, the proposed change in aesthetic and visual characteristics of the Project area are qualitatively evaluated in this discussion.

It is further noted that development of the subject site with business park and/or light industrial uses reflects buildout of the area anticipated under the General Plan, resulting in substantial visual change of the area, whether under the Project, or some other unspecified development proposal. In this broader context, the City General Plan Final Program EIR (General Plan EIR) evaluated transition of vacant/agricultural lands to a developed state, and concluded that with implementation of General Plan Policies and Objectives (restated as General Plan EIR mitigation measures), and compliance with Municipal Code requirements, all potential aesthetic impacts pursuant to implementation of the General Plan would be less-than-significant.[3] In terms of its potential to degrade the existing visual character or quality of the site and its surroundings, the Project complies with all applicable General Plan Policies, General Plan Objectives, and Municipal Code requirements.

The Project proposes the construction of a single large structure (more than 970,000 square feet), with a maximum height of approximately 41 feet, in the currently undeveloped Project area. The Project's building pad would be placed approximately 25 feet below the grade of the adjacent SR-60. Nonetheless, the building façade facing

[3] City of Moreno Valley General Plan Final Program EIR, July 2006, Pages 5.11-5, 5.11-6.

SR-60 to the north, and Fir (future Eucalyptus) Avenue to the south, would be approximately 1,500 feet in length.

In order to ensure visually acceptable and compatible development, and subject to the proposed change of zone from Business Park to Light Industrial, the Project will be designed and constructed consistent with applicable Light Industrial design and performance standards articulated at Municipal Code Chapter 9.05, Industrial Districts. To these ends, the Project site plan, landscaping, and architectural concepts provided at EIR Section 3.0, Project Description demonstrate consistency with Municipal Code Section 9.05.040, B., Special Site Development Standards, cited previously in this Section.

Notwithstanding potential General Plan buildout development scenarios, the site's current Business Park zoning designation is intended in part to control certain visual aspects of the site as developed. More specifically, individual building of greater than 50,000 square feet uses are not permitted under the site's current Business Park zoning designation. Accordingly, to allow for the Project, a zone change from Business Park to Light Industrial is proposed. The Light Industrial zoning designation would allow for the single large (>900,000 square feet) distribution warehouse use proposed by the Project.

Supporting the proposed zone change, and as one of the Project's requested discretionary approvals, the Municipal Code would be amended to include specific regulatory language recognizing the potential for adjacency of light industrial and residential uses to result in potentially adverse impacts at proximate residential properties. The proposed Code Amendment would mandate minimum separation/buffer requirements (250 feet) between proposed light industrial uses and residentially-zoned properties. In addition to reducing potential air quality and noise impacts, this required setback would tend to diminish visual impacts of the Project as seen from southerly vantages and while increasing the extent of potential view sheds.

Please refer also to the description of discretionary actions requested by the Project (EIR Section 3.0, Project Description); and the discussion of potential land use impacts presented at EIR Section 4.1, "Land Use and Planning."

Properties to the south of Fir (future Eucalyptus) Avenue are currently zoned for large-lot residential uses. To provide a visual transition and buffer between southerly adjacent properties and the Project site, the Project incorporates a substantial landscaped setback along its southerly boundary (please refer to EIR Section 3.0, Project Description, Figure 3.5-1, Site Plan Concept). This setback area extends approximately 250 feet northerly from the southerly Project boundary, continuing to the 14-foot high masonry screenwall which defines the Project's southerly loading area boundary. This wall will be planted with vines on the public-facing sides to provide a landscape screen and deter graffiti.

As supported by the preceding discussions, and with implementation of the Project's design features, the Project's potential to substantially degrade the existing visual character or quality of the site and its surroundings is less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

Potential Impact: ***Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.***

Impact Analysis: Onsite lighting, including parking lot and loading dock lighting, will be required to comply with all applicable sections of the City's zoning ordinance, including but not limited to the following.

Moreno Valley Municipal Code Section 9.08.100 Lighting.

A. All outdoor lighting associated with nonresidential uses shall be shielded and directed away from surrounding residential uses. Such lighting shall not exceed one-half footcandle, minimum maintained of illumination beyond the property containing the nonresidential use, and shall not blink, flash, oscillate or be of unusually high intensity or brightness.

B. All parking lots or structures providing more than five spaces for use by the general public and their pedestrian links shall be provided with a minimum coverage of one footcandle of light with a maximum of eight footcandles on the parking or walkway surface from dusk until dawn, unless otherwise approved, for visibility and security over the entire parking surface. Wiring shall be underground unless existing overhead lines can serve the need without any additional overhead lines. Each parking area of five or more spaces existing prior to the effective date of the ordinance codified in this chapter which is enlarged, constructed, altered or changed from its previous configuration shall be subject to these illumination requirements.

C. Use of the following forms of outdoor lighting shall be prohibited between midnight and dawn:

1. The operation of searchlights for advertising purposes; and

2. The illumination of outdoor public recreational facilities, unless a specific recreational activity requiring the lighting is already in progress. Security lighting shall be provided.

D. Overhead roof lighting is prohibited.

E. Outdoor lighting within residential areas, except for street lighting, shall be on poles or other supports not exceeding twelve (12) feet in height. Such

lighting shall be designed to project downward and shall not create glare on adjacent properties.

F. All exterior commercial doors during the hours of darkness shall be illuminated with one footcandle, minimum maintained of light on the surface.

G. Aisles, passageways and recesses related to and within a building complex, during the hours of darkness, shall be illuminated to one-half footcandle, minimum maintained on the surface.

H. All lighting shall be enclosed in vandal-resistant fixtures.

I. General Guidelines.

1. Lighting shall be adequate to help ensure a safe environment, but not to cause excessive glare or intense light.

2. For safety, identification and convenience, the entrances of building and parking areas shall be illuminated. All illumination of streets, parking areas and other project areas shall provide a variety of light quality and intensity, emphasizing areas of high vehicular and pedestrian activity with increased light intensity.

3. All exterior lighting shall be shielded to prevent spillover onto adjacent properties.

4. Industrial and manufacturing developments shall provide adequate lighting for safe and secure on-site parking, loading, storage, receiving and pedestrian areas.

The proposed site plan and architectural concepts, and design standards provided at EIR Section 3.0, Project Description, demonstrate compliance with and/or feasible accommodation of the above requirements and guidelines. All lighting elements proposed by the Project in its final design state are subject to review and approval by the City. The City General Plan EIR evaluated potential light and glare impacts resulting from General Plan implementation, and concluded that with compliance with Municipal Code requirements, all potential light and glare impacts pursuant to implementation of the General Plan would be less-than-significant.[4] Based on mandated compliance with the above-cited Municipal Code requirements as verified by the City through established design review processes, the potential for the Project to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area is less-than-significant.

Level of Significance: Less-Than-Significant.

Mitigation Measures: Not Applicable.

[4] City of Moreno Valley General Plan Final Program EIR, July 2006, Pages 5.11-5, 5.11-6.

5.0 OTHER CEQA CONSIDERATIONS

5.0 OTHER CEQA CONSIDERATIONS

This Section of the EIR addresses other environmental considerations and topics mandated under the *CEQA Guidelines*. These topics include Cumulative Impacts, Alternatives to the Project, Growth Inducement, Significant and Unavoidable Environmental Effects of the Project, and Significant and Irreversible Environmental Changes that may occur as a result of the Project.

5.1 CUMULATIVE IMPACT ANALYSIS

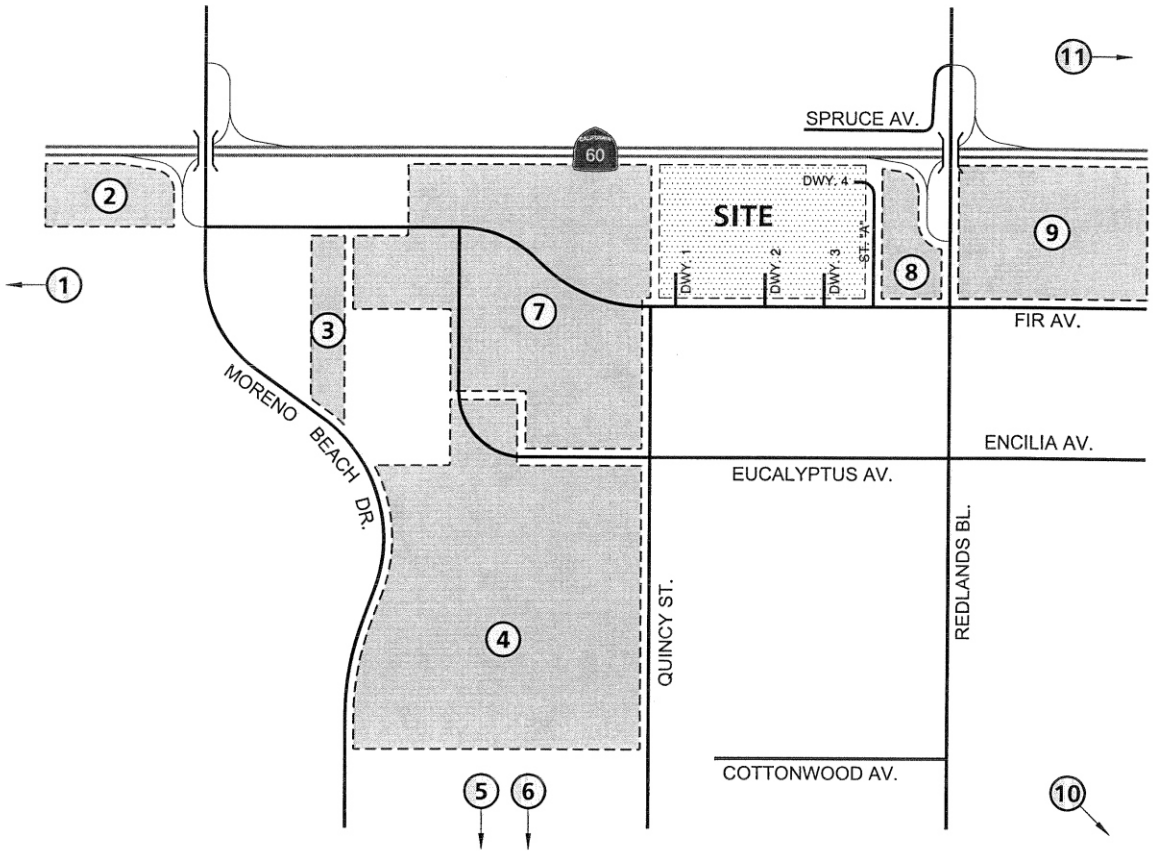
CEQA requires that an EIR identify any significant cumulative impacts associated with a project [Guidelines, Section 15130 (a)]. When potential cumulative impacts are not deemed significant, the document should explain the basis for that conclusion. "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." [CEQA Guidelines, Section 15355 (a l)]. Thus, a legally adequate cumulative impact analysis is an analysis of a particular project viewed over time and in conjunction with other related past, present and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand. CEQA notes that the discussion of cumulative impacts should be guided by standards of practicality and reasonableness [Guidelines, Section 15130 (b)]. Only those projects whose impacts might compound or interrelate with those of the project under consideration require evaluation. CEQA does not require as much detail in the analysis of cumulative environmental impacts as must be provided for the project alone.

Potential cumulative impacts of the Project are considered in the context of known or probable development proposals, as well as anticipated generalized ambient growth of the region. As identified at Table 5.1-1, and illustrated in Figure 5.1-1, a number of current or anticipated "related projects" have been identified within the cumulative scope of the Westridge Commerce Center Project. Related projects have been identified in consultation and coordination with the Lead Agency.

Table 5.1-1
Summary of Cumulative Development

Area / Description	Description	Units/Square Footage
1. Southeast corner of Nason Street / SR-60	Commercial Retail	80,000 SF
2. Southwest corner of Moreno Beach Drive / SR-60	Commercial Retail	85,267 SF
3. Moreno Beach Drive / Auto Mall Drive	Community Commercial, Planning Area C of the Auto Mall Specific Plan	304,500 SF
4. Northeast corner of Moreno Beach Drive / Cottonwood Avenue	Single Family Detached Residential	262 DU
	Apartments	216 DU
5. Lowe's Shopping Center	Commercial Retail	176,200 SF
6. PA 06-0162	Pharmacy with Drive-Through Window	14,800 SF
7. ProLogis	Warehousing	328,944 SF
	High-Cube Warehousing	1,915,475 SF
8. P06-158 (Gascon)	Commercial/Retail	116,363 SF
9. Highland Fairview Corporate Park	Logistics	2,410,000 SF
	Retail/Outlet Center	10,000 SF
	Community Commercial	200,000 SF
10. PA 04-0204/0205/0206	Single Family Detached Residential	252 DU
11. Quail Ranch	Single Family Detached Residential	1,251 DU
	18-hole Golf Course	n/a

Source: *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads, Inc.), May 20, 2010 (revised).



LEGEND:

1. = SHOPPING CENTER SEC OF NASON / SR-60
2. = SHOPPING CENTER SWC OF MORENO BEACH / SR-60
3. = COMMUNITY COMMERCIAL @ MORENO BEACH / AUTO MALL
4. = RESIDENTIAL NEC OF MORENO BEACH / COTTONWOOD
5. = LOWE'S SHOPPING CENTER
6. = PA 06-0162
7. = PROLOGIS
8. = PA 07-0068 (GASCON)
9. = HIGHLAND FAIRVIEW CORPORATE PARK
10. = PA 04-0204 / 0205 / 0206
11. = QUAIL RANCH

N

NOT TO SCALE

Source: Urban Crossroads

applied planning inc

Figure 5.1-1
Cumulative Development Location Map

In addition to the above-identified related projects, the cumulative impacts analysis assumes development of the area in a manner consistent with the City of Moreno Valley General Plan, and reflecting the anticipated growth of the region. The analysis of cumulative impacts considers potentially significant impacts that could be considered cumulatively considerable when viewed in the context of known related projects and generalized ambient growth of the City and region.

Consistent with the EIR and Initial Study topical issues, the cumulative impacts analysis considers the following environmental topics:

- Land Use and Planning;
- Traffic and Circulation;
- Air Quality;
- Noise;
- Water Supply;
- Hydrology and Water Quality;
- Cultural Resources;
- Biological Resources; and
- Aesthetics.

It should be noted that, with the exception of specific Project-related traffic, air quality, noise and aesthetic impacts, which are forecast to remain significant and unavoidable even after application of all feasible mitigation, implementation of the mitigation measures identified in this Draft EIR (found in Table 1.10-1) would reduce impacts to a level that is considered less-than-significant.

5.1.1 DISCUSSION OF CUMULATIVE IMPACTS

Potential cumulative impacts for each topic of environmental concern considered in this EIR and associated Initial Study are discussed below. Assessments of potential cumulative impacts are based on development scenarios and growth projections presented in the City's General Plan, related analyses of cumulative impacts presented in the General Plan EIR, as well as potential cumulative effects of the previously-identified related projects.

5.1.1.1 Cumulative Impacts Related to Land Use and Planning

Implementation of the Westridge Commerce Center Project would result in the introduction of a new industrial use in an area of the City that has, until recently, been largely undeveloped. It is acknowledged that development of the Project would result in a permanent change to the perceived rural character of the Project area. Nonetheless, the Project is consistent with business park and light industrial land uses permitted by the site's existing General Plan designation. That is, the Project site is designated as "Business Park/Light Industrial" under the City's General Plan Community Development Element Land Use Map (Moreno Valley General Plan, Page 2-4), and is anticipated to develop with business park, light industrial, or similar uses. To specifically allow for the Project, a Zone Change from "Business Park to Light Industrial is proposed. As discussed below, the Zone requested by the Project is consistent with the underlying General Plan Land Use designation and would not result in individually or cumulatively adverse land uses impacts.

Although the majority of the Project vicinity is currently undeveloped and/or agricultural in character, the City's General Plan has established a pattern of planned business park/light industrial uses along the southerly SR-60 frontage. More specifically, Business Park/Light Industrial Land Uses have been designated on the Moreno Valley General Plan Land Use Map along the south side of SR-60 extending from Petit Street, approximately one-half mile to the west of the Project site, continuing to Gilman Springs Road, approximately 1.7 miles to the east. General Plan Business Park/Light Industrial Land Uses then continue approximately 1.7 miles southerly along

Gilman Springs Road to just past Alessandro Boulevard, along the City's easterly corporate boundary. The Project site's frontage along SR-60 represents an approximately one-third mile component of the almost continuous 4.4 mile "edge" of parcels bordering SR-60 that are designated for Business Park/Light Industrial uses in the Moreno Valley General Plan.

The Project proposes a change of zone from Business Park to Light Industrial, and the City General Plan envisions and allows for extensive implementation of either or both types of land uses along the southerly edge of SR-60 as it traverses the City. While both types of uses (business park and/or light industrial, including distribution warehouse uses) are provided for under the General Plan, the site's current Business Park zoning designation does not permit these uses within single structures of more than 50,000 square feet. The Light Industrial zone designation requested by the Applicant does permit single structures of more than 50,000 square feet. The impetus of the zone change requested by the Project Applicant is to therefore to allow for construction of a single warehouse use greater than 50,000 square feet in size.

Key to compatibility of the Project's proposed Light Industrial zoning with adjacent residentially zoned land uses is design, implementation, and operation of the Project in a manner consistent with the high performance standards required of uses proposed within the City's Light Industrial zone district. Supporting the proposed zone change, and codifying design solutions proposed by the Project, a Municipal Code Amendment is also proposed. The proposed Municipal Code Amendment requires a minimum separation of 250 feet between light industrial uses and residentially-zoned properties. This 250 foot minimum separation shall be increased as required to fully mitigate any potentially significant health risks and/or potentially significant operational noise impacts at adjacent residential properties. In addition to reducing potential air quality and noise impacts, this required setback would diminish visual impacts of the Project as seen from southerly vantages, while increasing the arc of potential view sheds.

With approval of requested discretionary actions, potential Project-related land use impacts related to zoning consistency are determined individually to be less-than-significant.

As discussed in this EIR, the Project is further determined to be consistent with applicable areawide and regional plans, including the Riverside County-Multiple Species Habitat Conservation Plan (MSHCP); Southern California Association of Governments (SCAG) Regional Comprehensive Plan (RCP) and SCAG Regional Transportation Plan (RTP); Santa Ana Regional Water Quality Control Board-Basin Water Quality Plan (SARWQCB-Basin Plan); and South Coast Air Quality Management District-Air Quality Management Plan (SCAQMD-AQMP). In this regard, the Project will not discernibly nor cumulatively result in adverse impacts related to implementation of the identified regional plans.

As supported by the preceding discussion, the Project's potential contribution to cumulative land use impacts is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

5.1.1.2 Cumulative Impacts Related to Traffic and Circulation

Project-Specific Impacts Are Reduced To Levels That Are Less-Than-Significant

Project-specific traffic impacts are addressed through implementation of on-site improvements and mitigation to be completed prior to issuance of the first Certificate of Occupancy for the Project. As components of the Project reflected in the EIR Project Description (EIR Section 3.0), and prior to issuance of the first Certificate of Occupancy, the Project Applicant will construct the following improvements:

- Fir (future Eucalyptus) Avenue will be constructed to its ultimate half-section width (one-half of 104-foot right-of-way section improvements pursuant to City Standard No. 104B) as an arterial roadway from the westerly Project boundary, extending to Redlands Boulevard to the east. At the westerly terminus of Fir

(future Eucalyptus) Avenue full cul-de-sac improvements will be provided to allow for vehicle turnaround.

- The proposed public street (Street "A") at the Project's easterly boundary will be constructed to its ultimate half-section width (one-half of 78-foot right-of-way section improvements pursuant to City Standard No. 106) as an industrial collector roadway from the proposed northern terminus of the road to Fir Avenue (future Eucalyptus Avenue) in conjunction with development. Full improvements will be provided at the cul-de-sac "bulb" to allow for vehicle turnaround.

- Driveway access to Fir Avenue (future Eucalyptus Avenue) and future Street "A" will be provided consistent with City design standards.

- Consistent with the City of Moreno Valley Master Plan of Trails, a proposed trail is shown along the Project frontage on the north side of Fir (future Eucalyptus) Avenue which will join with the proposed future trail on Redlands Boulevard. Pursuant to the City of Moreno Valley Bikeway Plan, a Class I bikeway is planned on the east side of Redlands Boulevard within the vicinity of the Project.

Additionally, as provided for under Mitigation Measures 4.2.1 and 4.2.2 (see EIR at Section 4.2, "Traffic and Circulation"), prior to issuance of the first Certificate of Occupancy, necessary signalization improvements at the SR-60 Redlands Boulevard westbound ramps will be provided; and signalization and turn lane improvements will be provided at the intersection of Fir Avenue (future Eucalyptus Avenue) at Redlands Boulevard consistent with City standards and requirements.

Cumulative Traffic Impacts are Considered Significant Pending Completion of Planned/Programmed Areawide Improvements

As further discussed at EIR Section 4.2, under Opening Year Cumulative conditions and General Plan Buildout conditions, traffic generated by the Project, in combination with traffic resulting from area-wide development and "related projects" will result in potential LOS deficiencies at certain Study Area intersections and roadway segments, summarized below.

Intersections

More specifically, under Opening Year Cumulative conditions, Project traffic will incrementally contribute to cumulatively significant traffic impacts at the following locations:

- Moreno Beach Drive at SR-60 Eastbound Ramps;
- Redlands Boulevard at SR-60 Westbound Ramps;
- Redlands Boulevard at SR-60 Eastbound Ramps;
- Redlands Boulevard at Fir (future Eucalyptus) Avenue; and
- Quincy Street at Fir (future Eucalyptus) Avenue (new intersection).

As discussed herein, area-serving traffic improvements are funded by fees collected and allocated under established programs [the Traffic Uniform Mitigation Fee (TUMF) Program; City of Moreno Valley Development Impact Fee (DIF) Program] and Project-specific fair-share participation, which collectively provide for construction of necessary traffic improvements within the Study Area. To mitigate incremental contributions to cumulative traffic impacts affecting off-site roadways and intersections within the Study Area, the Project Applicant will pay requisite fees toward the construction of necessary improvements. Notwithstanding, payment of traffic impact fees does not ensure timely completion of traffic improvements necessary to mitigate potentially significant cumulative traffic impacts affecting the Study Area. In these instances, while Project traffic impacts would not be individually significant, they would be cumulatively significant. ***On this basis, pending completion of required improvements,***

the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting the following intersections are therefore considered cumulatively significant and unavoidable:

- ***Moreno Beach Drive at SR-60 Eastbound Ramps;***
- ***Redlands Boulevard at SR-60 Westbound Ramps;***
- ***Redlands Boulevard at SR-60 Eastbound Ramps;***
- ***Redlands Boulevard at Fir (future Eucalyptus) Avenue; and***
- ***Quincy Street at Fir (future Eucalyptus) Avenue (new intersection).***

Similarly, pending completion of required improvements, the Project's incremental contributions to General Plan Buildout traffic impacts at or affecting the following intersections are considered cumulatively significant and unavoidable:

- ***Moreno Beach Drive at SR-60 Eastbound Ramps;***
- ***Redlands Boulevard at SR-60 Westbound Ramps;***
- ***Redlands Boulevard at SR-60 Eastbound Ramps;***
- ***Redlands Boulevard at Fir (future Eucalyptus) Avenue;***
- ***Quincy Street at Fir (future Eucalyptus) Avenue (new intersection);***
- ***Moreno Beach Drive at Fir (future Eucalyptus) Avenue (new intersection);***
- ***Redlands Boulevard at Eucalyptus (future Encilia) Avenue (new intersection); and***
- ***Redlands Boulevard at Cottonwood Avenue (new intersection).***

Roadway Segments

As discussed at EIR Section 4.2, the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting the following roadway segments are considered cumulatively significant and unavoidable:

- Redlands Boulevard from north of the SR-60 Westbound ramps to south of Eucalyptus (future Encilia) Avenue;

- Quincy Street south of Fir (future Eucalyptus) Avenue (future street); and

- Fir (future Eucalyptus) Avenue from the Auto Mall to the east continuing to the Project's westerly boundary, and Fir (future Eucalyptus) Avenue east of Redlands Boulevard (future street).

Freeway Mainline

In regard to mainline segments of the SR-60, as discussed at EIR Section 4.2, levels of service in both the eastbound and westbound directions between Theodore Street and Moreno Beach Drive are projected to exceed performance thresholds during peak hours under General Plan buildout conditions with and without the Project.

While it is foreseeable that improvements to SR-60 in the Project vicinity will be completed prior to General Plan Buildout, because timely completion of these improvements cannot be definitively assured, the addition of Project traffic to these deficient segments would be an individually and cumulatively significant impact.

On the basis of the preceding discussion, the Project's potential contribution to cumulative traffic/circulation impacts would be considerable, and the cumulative effects of the Project on the following Study Area mainline segments under General Plan Buildout conditions are determined to be significant:

- ***SR-60 Westbound, west of Moreno Beach Drive;***
- ***SR-60 Westbound, between Moreno Beach Drive and Redlands Boulevard;***
- ***SR-60 Westbound, east of Redlands Boulevard;***
- ***SR-60 Eastbound, west of Moreno Beach Drive;***
- ***SR-60 Eastbound, between Moreno Beach Drive and Redlands Boulevard; and***
- ***SR-60 Eastbound, east of Redlands Boulevard.***

All other potential cumulative impacts of the Project, at or affecting Study Area intersections and roadway segments, are less-than-significant, or are less-than-significant as mitigated.

As discussed in EIR Section 3.0, "Project Description," emergency access to the Project site and vicinity would be unimpaired by Project development. Therefore, the Project's potential contribution to cumulative emergency access impacts is not considerable, and the cumulative effects of the Project with regard to emergency access are determined to be less-than-significant.

5.1.1.3 Cumulative Impacts Related to Air Quality

Construction-Source Pollutant Emissions

EIR Section 4.3, "Air Quality," and EIR Appendix C address potential air quality impacts of the Project. As discussed, even after compliance with all rules and regulations, Project-related construction activities will temporarily result in exceedances of applicable SCAQMD regional thresholds for VOC and NOx. Further, construction activities will temporarily result in LST exceedances for PM_{10} (at receptors located 71 meters [233 feet] or nearer to construction activity) and $PM_{2.5}$ (at receptors located 35 meters [115 feet] or nearer to construction activity). After the application of all feasible mitigation measures, construction emissions will still exceed applicable thresholds for fugitive dust and are determined to be significant. ***On this basis, for the duration of Project construction, VOC, NOx, PM_{10} and $PM_{2.5}$ emissions exceedances resulting from Project-related construction activities are determined to be individually significant and cumulatively considerable. Additionally, Project construction-related LST exceedances for PM_{10} and $PM_{2.5}$ emissions will temporarily expose sensitive receptors to a substantial increase of these pollutants.***

Even after compliance with all rules and regulations, and the application of proposed mitigation measures, operations of the Project will result in long-term emissions of volatile organic compounds (VOC) and oxides of nitrogen (NOx) that will exceed

applicable SCAQMD regional thresholds. The Project's operational VOC and NOx emissions are therefore determined to be significant, long-term air quality impacts that would violate an air quality standard (SCAQMD VOC and NOx regional emissions threshold exceedances). Cumulative impacts are similarly considered to be significant. ***VOC and NOx emissions exceedances resulting from long-term operations of the Project are therefore determined to be individually significant and cumulatively considerable.***

Moreover, the Project site is located within non-attainment areas for ozone and $PM_{10}/PM_{2.5}$. ***For the duration of construction activities, construction-source VOC and NOx regional threshold exceedances will result in a cumulatively considerable net increase of these pollutants (VOC and NOx are ozone precursors) within the encompassing ozone non-attainment area. Additionally, construction-source LST exceedances for $PM_{10}/PM_{2.5}$ are considered to result in a cumulatively considerable net increase of these pollutants within the encompassing $PM_{10}/PM_{2.5}$ non-attainment area non-attainment area.***

In that the Project will generate long-term emissions the ozone precursors VOC and NOx in excess of the SCAQMD regional thresholds, the Project will contribute considerably to cumulatively significant ozone air quality impacts within an ozone non-attainment area. ***On this basis, Project operational exceedances of VOC and NOx emissions thresholds will result in a cumulatively considerable net increase of these pollutants within the encompassing ozone non-attainment area.***

In regard to the emission of greenhouse gases, the Project's Climate Change Analysis indicated that with the implementation of all Project design features and mitigation measures, greenhouse gas emissions would be reduced, and that the Project is consistent with state strategies to reduce greenhouse gases, including the California Air Resources Board (CARB) Scoping Plan's recommended measures, and the greenhouse gas emission reduction strategies set forth in the 2006 Climate Action Team (CAT)

report. Therefore, the Project would not hinder or delay implementation of AB 32. On this basis, the Project's individual impact on climate change is less-than-significant.

Concerning a cumulative-level analysis, it is acknowledged that climate change is a global issue and the contribution of each greenhouse gas generated by the Project may have a cumulative effect. A qualitative assessment of the Project's impacts based upon consistency with the CARB Scoping Plan and the 2006 CAT Report supports the conclusion that the Project's greenhouse gas emissions are not cumulatively considerable.

5.1.1.4 Cumulative Impacts Related to Noise

The cumulative impact area for noise considerations is generally defined as surrounding properties that could receive Project-generated noise (either construction or operational), and would also include roadway corridors affected by Project-related traffic and associated vehicular noise. Potential noise impacts of the Project are discussed at EIR Section 4.4, "Noise," and EIR Appendix D. As discussed within the EIR, even after compliance with regulations and application of mitigation measures, the Project's construction-source noise levels received at the residential properties located nearest to the Project site will represent a substantial temporary periodic increase in ambient noise conditions compared to conditions without the Project. ***As such, construction noise impacts affecting this adjacent existing residence are recognized as significant. Cumulative noise impacts for the duration of construction activities are also recognized as significant.*** It is further recognized, however, that individual and cumulative construction noise impacts will be temporary and transient, and will dissipate entirely at the conclusion of construction activities.

The Project's operational noise levels are determined to be less-than-significant, and there are no known potentially significant off-site noise sources that would interact with, or compound noise generated by Project operations, and so be determined to be cumulatively significant.

Cumulative noise impacts resulting from areawide traffic growth under General Plan buildout conditions are presented at Table 5.1-2. Cumulative effects are demonstrated by comparing Opening Year (2013) noise levels without the Project to those with the Project under General Plan buildout conditions. As indicated at Table 5.1-2, and as discussed in Draft EIR Section 4.4, noise levels under the General Plan buildout condition are expected to remain largely the same with or without the Project. In some cases, however, traffic-related noise decreases with the Project. The reason for this decrease is that General Plan buildout conditions without the Project assume Business Park/Light Industrial uses on-site, consistent with the City's General Plan Land Use designation for the site.

Table 5.1-2
Existing and Future General Plan Buildout Noise Impacts

Street – Segment	Noise Levels in dBA CNEL					
	Opening Year No Project	Opening Year With Project	General Plan Buildout No Project	General Plan Buildout With Project	Maximum Cumulative Increase	Maximum Increase Due To Project
Cottonwood Ave. West of Redlands Boulevard	55.7	55.7	63.0	63.0	7.3	0.0
Eucalyptus (future Encilia) Ave. West of Redlands Blvd.	51.3	51.7	61.1	61.1	9.8	0.4
Fir (future Eucalyptus) Ave. East of Redlands Blvd.	63.7	63.8	64.2	64.2	0.5	0.1
Fir (future Eucalyptus) Ave. East of Quincy Ave.	59.9	61.2	62.6	62.9	3.0	1.3
Fir (future Eucalyptus) Ave. East of Street "A"	61.9	62.9	63.9	64.0	2.1	1.0
Fir (future Eucalyptus) Ave. West of Quincy St.	59.5	59.9	61.7	60.6	1.8	0.4
Fir (future Eucalyptus) Ave. East of Moreno Beach Dr.	63.8	64.0	65.0	64.8	1.0	0.2
Moreno Beach Drive North of SR-60 Westbound On-Ramp	61.7	61.8	66.8	66.8	5.1	0.1
Moreno Beach Drive South of Eucalyptus Ave.	68.3	68.3	70.3	70.3	2.0	0.0

Table 5.1-2
Existing and Future General Plan Buildout Noise Impacts

Street – Segment	Noise Levels in dBA CNEL					
	Opening Year No Project	Opening Year With Project	General Plan Buildout No Project	General Plan Buildout With Project	Maximum Cumulative Increase	Maximum Increase Due To Project
Moreno Beach Drive South of SR-60 Westbound On-Ramp	68.0	68.1	72.7	72.7	4.7	0.1
Quincy Street South of Eucalyptus Ave.	50.3	50.3	51.1	51.1	0.8	0.0
Redlands Blvd. North of SR-60 Westbound On-Ramp	67.0	67.1	69.5	69.5	2.5	0.1
Redlands Blvd. South of Cottonwood Ave.	65.7	65.7	67.2	67.2	1.5	0.0
Redlands Blvd. South of Eucalyptus (future) Encilia Ave.	66.0	66.0	67.0	67.0	1.0	0.0
Redlands Blvd. South of Fir (future Eucalyptus) Ave.	66.1	66.2	68.2	68.1	2.0	0.1
Redlands Blvd. South of SR-60 Eastbound Off-Ramp	68.9	69.3	69.5	69.3	0.4	0.4
Redlands Blvd. South of SR-60 Westbound On-Ramp	68.2	68.4	69.1	69.1	0.9	0.2
SR-60 West of Moreno Beach Drive	83.8	83.9	86.7	86.7	2.9	0.1
SR-60 East of Moreno Beach Drive	83.0	83.0	86.6	86.6	3.6	0.0
SR-60 East of Redlands Blvd.	82.1	82.1	86.3	86.3	4.2	0.0

Source: *Westridge Commerce Center Noise Analysis, City of Moreno Valley, California* (Urban Crossroads, Inc.) May 17, 2010.

Alternatively, General Plan buildout conditions with the Project assume logistics uses on the Project site, which is more consistent with the Project's proposed warehouse/distribution operations. Logistics uses generate fewer daily and peak hour trips than Business Park/Light Industrial uses within the City's traffic model. As such, traffic forecasts for General Plan buildout conditions without the Project are higher in some areas than the volumes for General Plan buildout conditions with the Project.

As also indicated at Table 5.1-2, due to cumulative effects, an increase in noise levels of up to 9.5 dB is anticipated along existing roadways. However, the Project-related increment in vehicular source noise increases is, at most, 1.3 dB. As discussed at Draft EIR Section 4.4, outside of controlled laboratory conditions, increases of less than 3.0 dB are considered inaudible, and would be indiscernible over time.

It is further noted that cumulative vehicular noise increases are anticipated to occur due to long-term areawide traffic growth, and these noise increases would occur irrespective of the Project. As indicated at Table 5.1-2, the Project will not discernibly contribute to future noise levels along Project-area roadways. Moreover, any potential future noise impacts that would potentially affect land uses along the City's roadways would be mitigated on a development-specific basis, consistent with the City's Development Code and Building Code requirements.

As such, the Project's potential contribution to long-term cumulative impacts in regard to noise is not considerable, and the long-term cumulative effects of the Project are determined to be less-than-significant.

5.1.1.5 Cumulative Impacts Related to Water Supply

As discussed in Draft EIR Section 4.5, potential cumulative impacts attributable to water demands of the Project are adequately planned and provided for under local and regional water management plans. The Project, in combination with current and anticipated future uses can be adequately served by existing and proposed water sources, with neither Project-related, nor cumulatively adverse impacts on the availability or reliability of water supplies, including groundwater. Based on the preceding discussion, the Project's potential contribution to cumulative impacts in regard to water supply is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

5.1.1.6 Cumulative Impacts Related to Hydrology and Water Quality

Potential hydrology and water quality impacts of the Project are addressed in EIR Section 4.6, "Hydrology and Water Quality." As discussed in the EIR, Project-related storm water management will be realized through a system of on-site detention basins and controlled release of storm waters to existing and proposed drainage facilities. Consistent with Riverside County Flood Control & Water Conservation District (RCFCWCD) requirements, metered release of storm water discharges from the developed Project site will not exceed pre-development flows from the subject property. On this basis, Project-related storm water volumes and discharge rates will not be discernibly different than existing conditions. The Project's potential contribution to cumulative storm water management systems or carrying capacities is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

Further, as required by the City of Moreno Valley, Riverside County, and the Regional Water Quality Management Board, a Project-specific SWPPP will be developed and implemented by the Project. The SWPPP is specifically required to identify and address potential effects of the Project's construction-related storm water discharges. The SWPPP is complemented by a mandated WQMP which addresses potential effects of post-construction/operational storm water discharges. The SWPPP and WQMP will identify potential Project sources of storm water runoff contamination and the measures (BMPs) that will be implemented as a means of avoiding or minimizing potential storm water pollution. Such BMPs as may be required by the City, County, and RWQCB will be incorporated in the SWPPP/WQMP and subsequently implemented by the Project. An approved SWPPP/WQMP must be filed with the City, County, State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board prior to the initiation of construction activities. The SWPPP and WQMP are also required to incorporate monitoring components.

Based on the preceding, the Project's potential contribution to storm water pollutants, or the Project's potential to otherwise adversely affect water quality, is not considerable, and the cumulative impacts of the Project are less-than-significant.

5.1.1.7 Cumulative Impacts Related to Cultural Resources

As discussed in Draft EIR Section 4.7, potential impacts to cultural resources are determined to be less-than-significant as mitigated. Mitigation measures specifically provide for cultural resources monitoring during construction activities, and address the potential discovery of as-yet-unknown paleontological, archaeological, or historic resources that may exist within the Project site. The identified mitigation measures further ensure that any such finds are appropriately identified, catalogued, and protected/curated as applicable.

The cumulative impact area for prehistoric, archaeological, and historic resources is the Perris Plain/Perris Valley area (including the Cities of Moreno Valley and Perris, and surrounding unincorporated communities). Impacts to any cultural resources within the Perris Plain/Perris Valley area would be site-specific. In the event that similar resources are encountered at any other project sites, specific mitigation measures would be applied before development could proceed.

Each development proposal within the cumulative impact area is required to provide appropriate mitigation during landform modification activities (as is the case for the Project). In this manner, cumulative impacts to cultural resources are reduced to levels that are less-than-significant. Pursuant to the provisions of CEQA, each development project within the cumulative impact area that requires a discretionary action by a public agency will be assessed for its potential impacts on cultural resources. It can be reasonably expected that appropriate mitigation will also be required of other projects.

Based on the preceding discussion, the Project's potential contribution to cumulative impacts on cultural resources is not considerable, and the cumulative effects of the Project are less-than-significant.

5.1.1.8 Cumulative Impacts Related to Biological Resources

The cumulative impact areas for biological resources are generally defined by available habitat, species' range(s), physical constraints, and other limiting factors as discussed within the Project Biological Resources Assessment, Draft EIR Appendix G. As discussed at Draft EIR Section 4.8, more than ninety percent of the potential habitat areas within the Project site are severely disturbed as a result of historic agricultural activities. Approximately 2.4 acres on the site's westerly edge, adjacent to the Quincy Channel, contains a sensitive riparian area. This portion of the site will be protected from development by means of a buffer area, averaging in width from approximately 50 feet to 150 feet, which will provide separation between the developed site and the adjacent Quincy Channel.

This physical separation between the developed site and the Channel habitat areas minimizes or precludes direct impacts to the Channel and its associated vegetation communities and special status plant species. The Jurisdictional Delineation prepared for the Project (provided in Draft EIR Appendix G) indicates that 0.89 acre of Corps/RWQCB jurisdictional areas and 6.41 acres of CDFG jurisdictional areas are located within the study area. Project operations will not affect these areas. However, construction of the proposed scour wall will require temporary disturbance of approximately 0.003 acre (22 lineal feet) of mulefat vegetated riparian habitat, a CDFG jurisdictional area.

An additional off-site jurisdictional area that could be affected by the construction of Project-related drainage improvements is located within the existing drainage channel adjacent to the west side of Redlands Boulevard, extending north of the Fir (future Eucalyptus) Avenue alignment for approximately 210 feet, and south for approximately 500 feet. Construction of Project-related drainage improvements are not likely to affect the entire area adjacent to Redlands Boulevard that has been identified as jurisdictional. The channel paralleling Redlands Boulevard is jurisdictional under the U.S. Army Corps of Engineers, the California Department of Fish and Game, the California Regional Water Quality Control Board and the MSHCP Riverine/Riparian Habitat

programs. Consultation and permits from these agencies will be required prior to any disturbance of this channel. In order to ensure that the Project provides the maximum protection to potential riparian habitat, disturbance of approximately 0.08 acres (710 lineal feet of 5-foot wide channel, or a total of 3,550 square feet) of un-vegetated riparian habitat is acknowledged as a potentially significant Project impact.

One sensitive plant, the Southern California black walnut, was identified as present onsite. This species is covered under the MSHCP, and as such, Development Mitigation Fees paid by the Project applicant would be sufficient to mitigate potential impacts to the species. However, because the walnut plants occur in the Quincy Channel, which is outside the Project's impact area, no incidental "take" of this species would occur. No other special status plant species were identified at the Project site. Due to lack of appropriate habitat, current and historic site disturbances, absence of historic site records, and absence of the species during current surveys, the Project Biological Resources report indicates that, with the exception of the Southern California black walnut, no special status plant species have the potential to occur onsite.

Two sensitive wildlife species, the Burrowing owl, and the Stephens' Kangaroo Rat (SKR) are determined to have the potential to occur within the Project site. The Project site is located within the Western Riverside County Habitat Conservation Plan for the Stephens' Kangaroo Rat, which allows for incidental take of Stephens' Kangaroo Rat for projects located within the Plan area. With payment of the appropriate mitigation fee, which is collected by the City as a standard part of the development application process, potential impacts to Stephens' kangaroo rat would be less-than-significant. Participation in this mitigation fee program will also reduce the Project's potential incremental contributions to cumulative biological resources impacts within the region. Mitigation measures included in the Draft EIR require pre-construction presence/absence surveys to be conducted in order to determine the current status of burrowing owls and whether any active owl burrows are located within the Project site. If burrowing owls or burrows are found, a Mitigation Plan must be developed in consultation with CDFG and all construction activities must be conducted outside an

established buffer zone to avoid any disturbance to the owls. On this basis, loss of owl habitat resulting from Project implementation is considered less-than-significant, and will not result in potentially significant impacts to the owl. Mitigation included in the Draft EIR also addresses potential impacts to migratory birds which may be nesting within the Project site at the time of Project construction. Specifically, provisions of the Migratory Bird Treaty Act (MBTA) and corollary CDFG requirements prohibit the disturbance of nesting birds, and require protection and/or avoidance of active nests.

Mitigation proposed in the Draft EIR reduces potential impacts to biological resources to levels that are less-than-significant. In this regard, mitigation of Project-specific biological resources impacts will also reduce the Project's potential incremental contributions to cumulative biological resources impacts within the region.

To the extent that each development proposal within the cumulative impact area(s) provides appropriate mitigation, cumulative impacts to biological resources are reduced to levels that are less-than-significant. Pursuant to the provisions of CEQA, each development project within the cumulative impact area that requires a discretionary action by a public agency will be assessed for its potential impacts on biological resources. Appropriate biological resources mitigation will also be required of other projects within the cumulative impact area(s).

In this regard, it is noted that the ultimate design of Fir (future Eucalyptus) Avenue includes the construction of a crossing to span Quincy Channel. This future channel crossing is not considered a component of the proposed project and is contingent on vicinity development, which may occur in the next several years. The future construction of a channel crossing could result in permanent and temporary impacts on Quincy Channel. These potential impacts are identified within Section 5.2.2 of the Jurisdictional Delineation Report in Draft EIR Appendix G. Because the future extension of Fir (future Eucalyptus) Avenue to the west across Quincy Channel is not a part of the proposed Project, the future crossing activities will require separate regulatory permits and approvals as well as specific mitigation for impacts, similar to the mitigation included in this EIR. It is further noted, however, that the ultimate

extension of Eucalyptus Avenue, including the construction of a Quincy Channel crossing, is included in the City's General Plan Circulation Element, and as such, has been considered as a part of the City's General Plan EIR. Cumulative Project impacts are not affected by the extension of Fir (future Eucalyptus) Avenue or the construction of a Quincy Channel crossing.

With the application of the mitigation measures identified in Draft EIR Section 4.8, the Project's potential contribution to cumulative impacts in regard to biological resources is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

5.1.1.9 Cumulative Impacts Related to Aesthetics

As presented in EIR Section 4.9, "Aesthetics," new industrial uses proposed by the Project will substantially alter the existing visual sense of the subject property, which is currently a vacant site. Although no designated scenic resources (such as trees, rock outcroppings, or historic buildings) are located within or adjacent to the Project site, the Moreno Valley General Plan Policy 7.7.4 designates SR-60 as a scenic road, and includes the Project site within an identified view corridor adjacent to SR-60.

This view corridor (illustrated in Draft EIR Figure 4.9-1) includes distant views of the Reche Mountains to the north, and the Russell Mountains to the south, along with near views of Moreno Peak, located to the southwest of the Project site.

Although the majority of the Project vicinity is currently undeveloped and/or agricultural in character, the City's General Plan has established a pattern of planned business park/light industrial uses along the southerly SR-60 frontage. More specifically, Business Park/Light Industrial Land Uses have been designated on the Moreno Valley General Plan Land Use Map along the south side of SR-60 extending from Petit Street, approximately one-half mile to the west of the Project site, continuing to Gilman Springs Road, approximately 1.7 miles to the east. General Plan Business Park/Light Industrial Land Uses then continue approximately 1.7 miles southerly along Gilman Springs Road to just past Alessandro Boulevard, along the City's easterly

corporate boundary. The Project site's frontage along SR-60 represents an approximately one-third mile component of the almost continuous 4.4 mile "edge" of parcels bordering SR-60 that are designated for Business Park/Light Industrial uses in the Moreno Valley General Plan.

The Project proposes a change of zone from Business Park to Light Industrial, and the City General Plan envisions and allows for extensive implementation of either or both types of land uses along the southerly edge of SR-60 as it traverses the City. While both types of uses (business park and/or light industrial, including distribution warehouse uses) are provided for under the General Plan, the site's current Business Park zoning designation does not permit these uses within single structures of more than 50,000 square feet. The Light Industrial zone designation requested by the Applicant does permit single structures of more than 50,000 square feet. The impetus of the zone change requested by the Project Applicant is to therefore to allow for construction of a single warehouse use greater than 50,000 square feet in size.

Key to compatibility of the Project's proposed Light Industrial zoning with adjacent residentially zoned land uses is design, implementation, and operation of the Project in a manner consistent with the high performance standards required of uses proposed within the City's Light Industrial zone district. Supporting the proposed zone change, and codifying design solutions proposed the Project, a Municipal Code Amendment is also proposed. The proposed Municipal Code Amendment requires a minimum separation of 250 feet between light industrial uses and residentially-zoned properties. This 250 foot minimum separation shall be increased as required to fully mitigate any potentially significant health risks and/or potentially significant operational noise impacts at adjacent residential properties. In addition to reducing potential air quality and noise impacts, this required setback would tend to diminish visual impacts of the Project as seen from southerly vantages and while increasing the extent of potential viewsheds.

It is also recognized that the Project buildings and supporting site facilities are subject to design and development requirements identified in Municipal Zoning Code Section

9.05.040, Industrial Site Development Standards, and any additional design/ development guidelines such as may be identified under the Project Conditions of Approval. Compliance with Zoning Code requirements and Conditions of Approval is monitored and implemented under established City design/development review processes, acting to ensure that the Project is designed and constructed in a manner that is contextually and visually acceptable. On this basis, the Project's potential to substantially degrade the existing visual character or quality of the site is determined to be less-than-significant.

Municipal Zoning Code requirements and Project Conditions of Approval/EIR mitigation measures will also ensure that all light sources, including street lights, parking lot lights and security lights, will be designed and installed in a manner that ensures the Project does not create light or glare impacts. As such, the Project's potential light/glare impacts are determined to be less-than-significant.

It is recognized however, that the Project will restrict or interrupt both near and distant views in the Project area, and in combination with other vicinity development, will cumulatively result in a substantial adverse effect on scenic views in the Project area. ***The cumulative effects of the Project in regard to scenic vistas are determined to be significant.***

5.2 ALTERNATIVES ANALYSIS

Pursuant to *CEQA Guidelines* §15126.6, an EIR must describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain the Project objectives, but would avoid or substantially lessen any of the significant environmental effects of the proposal. As further presented in the *CEQA Guidelines,* an EIR need not consider every conceivable alternative, but rather, the discussion of alternatives and their relative merits and impacts should be provided in a manner that fosters informed decision-making and public participation. To this end, the *CEQA Guidelines* indicate that the range of alternatives selected for examination in an EIR should be governed by "rule of reason," and requires the EIR to set forth only those

alternatives necessary to permit an informed decision. Consistent with the provisions of the *CEQA Guidelines*, the following analysis presents alternatives to the Project that would potentially lessen its environmental effects while allowing for attainment of Project Objectives. The Project will result in, or contribute to significant impacts summarized at Table 5.2-1.

Table 5.2-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
Traffic	
	The Project will construct, or pay required fees toward, completion of all necessary Study Area circulation system improvements. At the significantly-impacted locations noted below, the Project cannot feasibly construct the required improvements, and/or payment of fees will not assure their timely completion. **Project-Specific Significant Impacts** All Project-specific traffic impacts are less-than-significant, or are mitigated to levels that are less-than significant through application of the EIR Mitigation Measures. **Cumulatively Significant Impacts** **Opening Year Cumulative Conditions:** Pending completion of required improvements, the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting the following intersections are considered cumulatively significant and unavoidable: • Moreno Beach Drive at SR-60 Eastbound Ramps; • Redlands Boulevard at SR-60 Westbound Ramps; • Redlands Boulevard at SR-60 Eastbound Ramps • Redlands Boulevard at Fir (future Eucalyptus) Avenue; and • Quincy Street at Fir (future Eucalyptus) Avenue (new intersection). Pending completion of required improvements, the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting the following roadway segments are considered cumulatively significant and unavoidable: • Redlands Boulevard from north of the SR-60 Westbound ramps to south of Eucalyptus (future Encilia) Avenue; • Quincy Street south of Fir (future Eucalyptus) Avenue (future street); and Fir (future Eucalyptus) Avenue from west of Quincy Street and east of Redlands Boulevard (future street).

Table 5.2-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
Traffic (cont'd)	**Cumulatively Significant Impacts (cont'd)**
	General Plan Buildout Conditions: Pending completion of required improvements, the Project's incremental contributions to General Plan Buildout traffic impacts at or affecting the following intersections are therefore considered cumulatively significant and unavoidable: • Moreno Beach Drive at SR-60 Eastbound Ramps; • Redlands Boulevard at SR-60 Westbound Ramps; • Redlands Boulevard at SR-60 Eastbound Ramps; • Redlands Boulevard at Fir (future Eucalyptus) Avenue; • Quincy Street at Fir (future Eucalyptus) Avenue (new intersection); • Moreno Beach Drive at Fir (future Eucalyptus) Avenue (new intersection); • Redlands Boulevard at Eucalyptus (future Encilia) Avenue (new intersection); and • Redlands Boulevard at Cottonwood Avenue (new intersection). The Project will also contribute additional traffic to Study Area freeway mainline segments that under General Plan Buildout Conditions (with or without the Project) are projected to operate under deficient (LOS "F") conditions. While it is foreseeable that improvements to SR-60 in the Project vicinity will be completed prior to General Plan Buildout, because timely completion of these improvements cannot be definitively assured, the contribution of additional Project traffic to pre-existing freeway mainline segment deficiencies is recognized as cumulatively significant and unavoidable impact.

Table 5.2-1 Summary of Significant and Unavoidable Impacts	
Environmental Consideration	**Comments**
Air Quality	
	Project-Specific Significant Impacts **Construction-Related Pollutant Emissions Exceedances** Even after compliance with South Coast Air Quality Management District (SCAQMD) rules and regulations, and the application of EIR mitigation measures, construction-related pollutant emissions would exceed applicable SCAQMD regional emission thresholds for VOC and NOx. These impacts are considered to be individually significant. Construction-source emissions will also exceed applicable localized significance thresholds (LSTs) for PM_{10} and $PM_{2.5}$ concentrations, and as such would expose sensitive receptor land uses to substantial pollutant concentrations on a temporary basis. LST exceedances would be limited to the immediate Project vicinity (extending no further than 71 meters, or 233 feet, from the Project site boundaries) and at present would affect only the residence located at 28855 Fir Avenue. Nonetheless, LST exceedances impacts are recognized as individually significant. **Project-Specific Significant Impacts** **Construction-Related Pollutant Emissions Exceedances** Even after compliance with South Coast Air Quality Management District (SCAQMD) rules and regulations, and the application of EIR mitigation measures, construction-related pollutant emissions would exceed applicable SCAQMD regional emission thresholds for VOC and NOx. These impacts are considered to be individually significant. Construction-source emissions will also exceed applicable localized significance thresholds (LSTs) for PM_{10} and $PM_{2.5}$ concentrations, and as such would expose sensitive receptor land uses to substantial pollutant concentrations on a temporary basis. LST exceedances would be limited to the immediate Project vicinity (extending no further than 71 meters, or 233 feet, from the Project site boundaries) and at present would affect only the residence located at 28855 Fir Avenue. Nonetheless, LST exceedances impacts are recognized as individually significant. **Operational Pollutant Emissions Exceedances** Even after compliance with South Coast Air Quality Management District (SCAQMD) rules and regulations, and the application of EIR mitigation measures, operational pollutant emissions would exceed applicable SCAQMD regional emission thresholds for VOC and NOx. These impacts are therefore considered to be individually significant. It is noted however, that the Project land use and proposed development are consistent with development and associated air pollutant emissions impacts reflected in and anticipated by the applicable Air Quality Management Plan (AQMP).

Table 5.2-1 Summary of Significant and Unavoidable Impacts	
Environmental Consideration	**Comments**
Air Quality (cont'd)	
	<u>Cumulatively Significant Impacts</u> **Construction-Related Pollutant Emissions Exceedances** Above-noted Project-specific construction-related pollutant emissions exceedances are also considered cumulatively significant. **Operational Pollutant Emissions Exceedances** Above-noted Project-specific operational pollutant emissions exceedances are also considered cumulatively significant. **Non-Attainment Area Impacts** Project exceedances of regional emissions thresholds for VOC, and NOx (ozone precursors), in combination with VOC, and NOx emissions generated by other sources affecting regional non-attainment areas, will result in a cumulatively considerable net increase in VOC, and NOx emissions within the non-attainment areas. This is considered a cumulatively significant impact. As above, it is noted that the Project land use and proposed development are consistent with development and associated air pollutant emissions impacts reflected in and anticipated by the applicable Air Quality Management Plan (AQMP).
NOISE	
	<u>Project-Specific Significant Impacts</u> **Temporary Construction Impacts** The EIR's noise analysis indicates that construction-related noise may temporarily and intermittently exceed the City's thresholds of significance at residential receptors in the Project vicinity. This is considered a significant Project-specific noise impact. **<u>Cumulatively Significant Impacts</u>** Construction noise impacts when considered with ambient noise conditions would be cumulatively considerable and significant for the duration of Project construction.
AESTHETICS	
	<u>Project-Specific Significant Impacts</u> **Change to Scenic Vistas** Construction of the proposed Project would result in interrupted or obstructed views of off-site scenic areas. This is recognized as a significant and unavoidable aesthetic impact. **<u>Cumulatively Significant Impacts</u>** The Project will restrict or interrupt both near and distant views in the Project area, and in combination with other vicinity development, will cumulatively result in a substantial adverse effect on scenic views in the Project area. The cumulative effects of the Project in regard to scenic vistas are determined to be significant.

All other potential Project impacts are determined to be either less-than-significant, or less-than-significant after mitigation. As previously detailed within Section 3.0, "Project Description" of this Draft EIR, the Objectives of the Project are as follows:

- Transition the existing site into a productive use;
- Develop a project that is sensitive to the surrounding land uses;
- Provide jobs-producing, light industrial uses to the City of Moreno Valley and local community;
- Capitalize on the site's regional freeway access; and
- Increase economic benefits to the City of Moreno Valley through increased tax generation and job creation.

In light of the Project's significant impacts and stated objectives, supporting reasoning behind the selection of alternatives is presented together with a summary description of each alternative. The merits of the selected alternatives compared with the Project are described and evaluated. Additionally, the rationale underlying the rejection of certain alternatives, including an alternative site for the Project, is discussed.

While CEQA indicates that socioeconomic effects are not appropriate as a lone determinant in selection of an alternative, they are important considerations for decision-makers.

5.2.1 Description of Alternatives

Descriptions and the rationale for Alternatives to the Project considered in this EIR are presented below.

5.2.1.1 No Project Alternatives

The *CEQA Guidelines* specifically require that the Draft EIR include in its evaluation a No Project Alternative. At the direction of the City of Moreno Valley, two (2) different "No Project" scenarios have been evaluated. The first, referred to as the No Project/No Build Alternative, assumes the site would remain in its current undeveloped state. The

second, referred to as the No Project/Existing Zoning Alternative, makes a reasoned assessment as to the future development of the subject site should the Project under consideration not be developed. Both "No Project" Alternatives are discussed below.

No Project/No Build Alternative

The Project site is currently a vacant property, which has historically accommodated a variety of dryland farming activities. Under the No Project/No Build Alternative (referred to hereafter as simply the No Build Alternative), the site would not be developed consistent with its "Business Park" General Plan land use designation and would remain in its current undeveloped state. Few, if any, environmental conditions would be affected.

No Project/Existing Zoning Alternative

Land use decisions in the vicinity of the subject site have made possible the transition of nearby, previously undeveloped/agricultural properties into substantial light industrial land uses, e.g., the recently approved Highland Fairview Corporate Park to the east. Continuing long-term vacancy of the subject property is considered unlikely in the context of the site's Business Park/Light Industrial General Plan Land Use designation and Business Park Zoning designation; buildout of the subject property with Business Park/Light Industrial uses anticipated under the General Plan; and continuing proximate development of light industrial/distribution warehouse facilities. If not replaced by development pursuant to the Project, the site would likely transition to some other higher-order use considered desirable to the City.

Based on the preceding, the No Project/Existing Zoning Alternative (referred to hereafter as simply the No Project Alternative) describes the environmental conditions that will occur if the subject site is developed consistent with Business Park/Light Industrial uses envisioned under the City's General Plan Buildout scenario. Further, to allow for quantified comparison of potential traffic impacts and related vehicular-source air quality and noise impacts, the No Project Alternative assumes the site is

developed consistent with assumptions employed in the City's General Plan Buildout traffic modeling.

In this regard, for Traffic Analysis Zone (TAZ) 209 encompassing the Project site, the General Plan Buildout traffic model reflects development of the subject site with Business Park/Light Industrial uses, and projects approximately 4.18 times the trip generation for TAZ 209 than would otherwise be generated by logistics/distribution warehouse uses such as those proposed under the Project.[1] The No Project Alternative considered herein approximates trip generation for the subject site under the General Plan Buildout Scenario at four (4) times that of the Project.

The City Municipal Code Section 9.05.040, "Industrial site development standards," does not specify a maximum development intensity for the Business Park zoning designation, provided that other site design guidelines (e.g., setbacks, building heights, parking provisions, landscaping) are met. The City General Plan at Page 9-7 states that for the Business Park/Industrial land use, ". . . [t]he zoning regulations shall identify the particular uses permitted on each parcel of land. Development intensity should not exceed a Floor Area Ratio of 1.00 and the average floor area ratio should be significantly less." The City Municipal Code at "Permitted Uses Table 9.02.020-1" identifies that single buildings of greater than 50,000 square feet are not permitted in the Business Park zone district.

For the purposes of this analysis, no specific development intensity is assumed for business park uses implemented under the No Project Alternative. However, it is assumed that the site is developed consistent with design and performance standards applicable to the City's Business Park zoning district.

[1] Urban Crossroads, Feb 2010. This is confirmed by proportional trip generation rates specifically reflected in the Project TIA (2,930 daily trips PCE, 3.12 trips/thousand square feet) vis-à-vis trip generation rates reflected in *Trip Generation, 7th Edition (ITE)* for Business Park uses. That is, for ITE Land Use Code 770, "Business Park" the trip generation rate is estimated at 12.76 trips daily per thousand square feet, or approximately 4.09 times that generated by the Project.

5.2.1.2 Reduced Intensity Alternative

The Reduced Intensity Alternative considered here assumes the same general land use type as the Project, but at a development intensity scoped to reduce or eliminate one or more of the Project's otherwise significant impacts. More specifically, the Reduced Intensity Alternative has been designed to reduce the extent of regional threshold exceedances based on operational emissions that would otherwise result from the Project. In that the same type of development is proposed, most if not all the Project Objectives would be achieved to a certain extent.

In this regard, the Air Quality Analysis prepared for the Project identified regionally significant operational air quality exceedances for VOC and NOx. More specifically, even with application of mitigation, the Project operational VOC exceedance is approximately 1.27 times greater than the applicable SCAQMD regional threshold. And even with application of mitigation, the Project's operational NOx exceedance is approximately 15 times greater than the applicable SCAQMD regional threshold. Operational emissions for both VOC and NOx are predominantly mobile source-generated, and are proportional to trip generation. Within a given land use type, trip generation is largely a function of development scope. As such, a reduction in Project VOC and NOx emissions could be achieved through a reduction in Project scope and resultant reduction in trip generation.

While it is not considered feasible to reduce the Project to 1/15th (0.06) its original scope and thereby achieve the applicable SCAQMD regional threshold for NOx, it is reasonable to evaluate a reduced development intensity that is approximately 73 percent of the Project intensity, that would allow for achievement of the applicable SCAQMD regional threshold for VOC. An Alternative developed to achieve the previously-cited SCAQMD VOC emissions threshold would therefore require a minimum 27 percent reduction in development intensity when compared to the Project. This reduction in development intensity would provide decision-makers with a recognizably differentiated alternative to the Project which would result in comparative reductions in environmental impacts.

As a practical application, and to provide for ready visualization of the Reduced Intensity Alternative, this Alternative is assumed to provide for construction of a warehouse approximately 73 percent the size of the proposed Project, with an increased landscape buffer between the Quincy Channel to the west and residential parcels to the south. On this basis, the Reduced Intensity Alternative would result in an approximate 27 percent reduction in development intensity when compared to the Project, and would therefore achieve the target VOC emissions threshold. It is also noted that in achieving the threshold for VOC emissions, the Reduced Intensity Alternative would also provide for reductions in operational NOx emissions. Operational-source NOx emissions threshold exceedances would, however, remain significant.

Based on its overall reduced trip generation characteristics, the Reduced Intensity Alternative would also reduce the Project's incremental contributions to significant traffic impacts projected to occur within the Study Area. In this regard, the Reduced Intensity Alternative would diminish, but not completely avoid Project-specific impacts anticipated at SR-60/Redlands Boulevard under Opening Year conditions. That is, like the Project, the Reduced Intensity Alternative would contribute greater than 50 peak hour trips to the already deficient conditions projected at SR-60/Redlands Boulevard. Further, with or without the Project, cumulative impacts within the Study Area would remain significant pending completion of required improvements. The Reduced Intensity Alternative would also tend to ameliorate impacts to scenic resources, however impacts would remain significant. Other long-term environmental effects considered in this EIR (i.e., Land Use, Noise, Hydrology and Water Quality, Water Supply, Biological Resources, and Cultural Resources) though found to be less-than-significant, would be further diminished under the Reduced Intensity Alternative.

5.2.2 Alternatives Considered and Rejected

5.2.2.1 Extended Construction Alternative Considered and Rejected

Based on practical and economic concerns, it is assumed that building areas within the Project site will be mass-graded, and that construction of the Project will be completed within the quickest possible time frame. This is based largely on the expense and logistics of transporting heavy equipment to the Project site, equipment operating costs, weather concerns, critical path scheduling, and general costs associated with Project implementation.

As presented in the Project air quality analysis, estimated construction grading emissions based on a typical construction schedule would result in localized PM_{10} and $PM_{2.5}$ emissions (24-hour concentrations) that would exceed applicable SCAQMD localized significance thresholds (LSTs) by factors of approximately 3.8 and 1.2 respectively. These LST exceedances would be limited to the immediate Project vicinity and at present would affect only the residence located at 28855 Fir Avenue. Additionally, construction-source noise is projected to temporarily and intermittently affect proximate off-site residential land uses receptors.

In order to achieve the SCAQMD $PM_{10}/PM_{2.5}$ emissions LSTs and in order to reduce construction equipment noise impacts, only limited grading could occur during a given time frame, or only certain types or amounts of construction equipment could be used concurrently. For example, achieving the PM_{10} emissions LST would require that the area disturbed by grading activities be reduced by approximately 74 percent (a ratio of 1.0/3.8) each day. If considered in terms of construction scheduling requirements, this would in essence extend the duration and costs associated with site grading by a factor of 3.8., and the construction schedule would thus be 3.8 times longer than proposed. Achieving the $PM_{2.5}$ emissions LST would also result in an extended construction schedule, though to a lesser degree, requiring that the area disturbed by grading activities be reduced by approximately 17 percent each day.

In realizing SCAQMD thresholds for PM_{10} and $PM_{2.5}$ in this manner, general disturbance in the Project area would be prolonged, including but not limited to: extended periods of increased noise levels; prolonged generation of fugitive dust; and additional periods of potential traffic disturbances due to construction equipment transport to and from the Project site. As such, although SCAQMD LST thresholds may be achieved, potentially adverse environmental trade-offs would tend to negate any benefits realized. It is further noted that the calculated $PM_{10}/PM_{2.5}$ LST exceedances and construction-source noise impacts are temporary and transient in nature; would at present affect a single residential receptor. Moreover, construction-source emissions and construction-source noise would not result in any long-term adverse effects at any receptor land uses. For these reasons, an alternative based on a scenario developed specifically to achieve SCAQMD LST construction emissions thresholds and construction-source noise thresholds was not further considered. It is noted however, that the Reduced Intensity Alternative considered herein may reduce the overall duration of construction activities, and therefore reduce the duration of construction source noise and construction-source emissions. However, in that the peak levels of activity would be approximately the same under either of these development scenarios, significant temporary LST and construction noise impacts would persist under both.

5.2.2.2 Multiple-Building Design Alternative Considered and Rejected

In order to potentially avoid or reduce view obstruction/view interruption resulting from the large consolidated warehouse structure proposed under the Project, an alternative site design employing multiple smaller structures of 50,000 square feet (per the site's current Business Park zoning requirements) was considered. However, the intent of the Project is to achieve full utility of the available site while providing region-serving logistic warehouse facilities. Feasibility and function of the proposed regional warehouse is dependent on its size and configuration, allowing for centralized and consolidated storage and transfer of large (numerically and dimensionally) inventories serving smaller local and end-use facilities. Division of the proposed building into substantively smaller components (50,000 square feet maximum buildings) is not practically or economically feasible.

Moreover, such division of the Project would act to unnecessarily duplicate or expand serving utilities, would result in multiple and redundant internal operations (e.g., inter-site transfer of inventories), would restrict flexibility of warehouse operations and use of warehouse space; and may necessitate additional access to adjacent roadways in order to serve the individual buildings, with potentially increased circulation/access impacts. Lastly, it is noted that the Project design is typical of other regional distribution warehouses implemented within the City, surrounding Riverside County, and throughout southern California. That is not to say that other configurations are not possible, only that empirical evidence indicates that the Project design is an established functional and efficient format for regional distribution warehouse facilities. For these reasons, an alternative based on a compartmentalized building design scenario resulting in multiple smaller buildings was not further considered.

5.2.2.3 Alternative Sites Considered and Rejected

Consideration has been given to the identification of potential alternative sites, in response to public comments received during the Project scoping period (please refer to Draft EIR Appendix A). As stated in *Guidelines* Section 15126.6 (f)(1)(2)(A), the "key question and first step in [the] analysis [of alternative locations] is whether any of the significant effects of the project would be avoided or substantially lessened by putting the Project in another location." Only locations that would avoid or substantially lessen significant effects of the Project need be considered for inclusion in the Draft EIR.

Individually and cumulatively significant impacts resulting from project implementation and operations are summarized previously at Table 5.2-1. As discussed in the body of the Draft EIR and summarized previously, the Project will result in the following significant impacts:

- Individually and cumulatively significant traffic impacts;
- Construction-source pollutant emissions exceedances (local and regional) and related cumulative air quality impacts;
- Long-term regional operational air pollutant emissions exceedances, and related cumulative air quality impacts;

- Temporary construction-source noise impacts, also considered to be cumulatively significant for the duration of construction activities; and
- Individually and cumulatively significant impacts on views.

All other potential Project impacts are determined to be either less-than-significant, or less-than-significant after mitigation. The Alternative Site should therefore avoid or reduce the severity of the identified significant traffic, air quality, noise, or aesthetic impacts.

Potential Alternative Sites

Consistent with the Project Objectives, any potential Alternative Site should be located within the City of Moreno Valley; should be provided proximate regional freeway access and local access; should facilitate transition of vacant properties to productive uses; while facilitating development that is sensitive to surrounding uses. An alternative site should also be supported by available or anticipated utilities infrastructure.

Based on the above general considerations, an evaluation was developed in regard to potential impacts resulting from the Project if it were located at a suitable Alternative Site. In this regard, an Alternative Site within the City would be considered generally viable if it were located along a regional freeway transportation corridor or at a regional transportation hub; was also locally accessible; was underutilized and currently available; could be developed and operated in a manner that was compatible with other proximate land uses; and was provided, or could feasibly be provided, adequate serving utilities infrastructure. Also supporting location of the Project elsewhere, an Alternative Site should have an appropriate size and configuration (approximately 50 acres and roughly rectangular); and either exhibit appropriate General Plan and Zoning designations or could be feasibly so-designated.

In terms of satisfying the above-noted basic site criteria, the City's Planning Department suggested consideration of the following listed potential alternative sites. These sites are currently vacant and are zoned for industrial use within the Moreno Valley Industrial Area Specific Plan (SP-208). Locations of these sites are indicated at Figure 5.2-1.

Source: Google Earth; Applied Planning, Inc.

Figure 5.2-1
Alternative Sites 1 through 4 Location Map

- Alternative Site 1: 70 acres located between Perris Boulevard and Grove View Road, and south of Indian Avenue to the southern City limits (APNs 316-210-071, -073, -075 and -076);

- Alternative Site 2: 92 acres located between Heacock Street and Indian Street, south of Cardinal Avenue and north of San Michele Road (APNs 316-180-010, 316-170-001, -002, -004, -006, -007, -008, -010, -013, and -014);

- Alternative Site 3: 72 acres located west of Indian Street between Iris Avenue and Krameria Avenue (APNs 316-020-002, -003, -004, -005, -012, -013, -014, -015, -016, -017, -018 and -019); and

- Alternative Site 4: Approximately 69 acres located at the southeast corner of Heacock Street and Iris Avenue (APNs 316-020-001, -006, -007, -028, and -010).

Each of the four sites noted above meets the general requirements of the Project. That is each is currently vacant; is more than 50 acres in size and of a roughly rectangular configuration; is zoned for industrial use; and is served adequately by nearby utilities and infrastructure. Further, as shown in Figure 5.2-1, Alternative Sites 1 through 4 are proximate to the I-215 regional transportation corridor, and are also locally accessible.

Notwithstanding, these sites are all currently unavailable. That is, Alternative Site 1 currently has applications under review for a 1.6 million square foot warehouse distribution facility, while development plans have been submitted and approved for sites 2, 3 and 4. Table 5.2-2 provides additional detail in regard to these planned or approved developments.

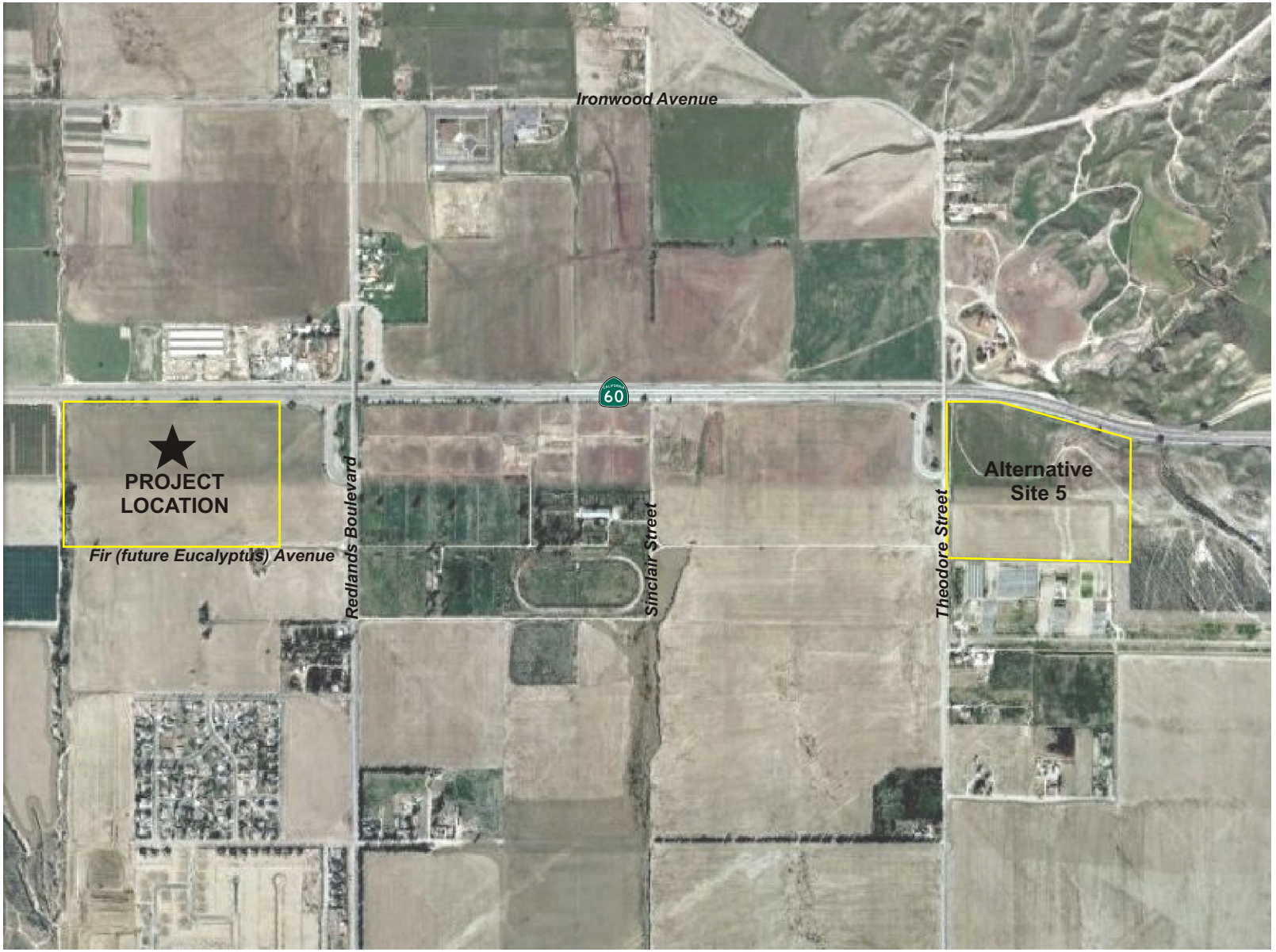
The California Legislature has defined "feasible," for purposes of CEQA review, as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." The sites listed and described at Table 5.2-2 cannot be reasonably acquired or controlled by the Applicant, and are therefore determined to be infeasible. CEQA Guidelines Section 15126.6(a) notes that "An EIR is not required to consider alternatives which are infeasible." Because Alternative Sites 1 through 4 are unavailable and therefore infeasible, their specific attributes are not evaluated further as part of this analysis.

Table 5.2-2
Alternative Site Development Plans in Progress

Site	Description	Total Area	Development Status
1	Single warehouse distribution facility	1,616,133 s.f.	Applications under review by City
2	Three warehouse distribution buildings	2,057,400 s.f.	Approved by Planning Commission
3	Two warehouse distribution buildings	1,475,725 s.f.	Approved by City Council
4	Four warehouse distribution buildings	1,484,407 s.f.	Approved by City Council

Source: City of Moreno Valley Planning Department, April 2010.

Other potentially suitable and available properties are located easterly of the current Project site, along the SR-60 corridor. For the purposes of the Alternative Site analysis, the vacant property located southeasterly of the intersection of SR-60 at Theodore Street was selected for analysis, and is identified as Alternative Site 5 (shown in Figure 5.2-2). This property exhibits an appropriate Business Park/Light Industrial General Plan Land Use designation; is of adequate size and is appropriately configured; and is provided access to regional and local roadways. Utilities and services are generally available to the site. The site appears to be available for purchase; however, it is not currently controlled by the Project Applicant, and a zone change from "Business Park" to "Light Industrial," would be required, similar to the change of zone requested by the Project.



Source: Google Earth; Applied Planning, Inc.

applied planning inc

Figure 5.2-2
Alternative Site 5 Location Map

Although development of the Project on Alternative Site 5 could achieve the Project's objectives, none of the Project's potentially significant impacts would be avoided or substantially reduced. As noted previously in this Section, these include individually and cumulatively significant traffic impacts, local and regional construction-source and operational pollutant emissions exceedances, temporary construction-source noise impacts, and viewshed impacts.

In regard to traffic-related impacts, although the distribution of trips on the local roadway system would likely be altered, trip generation would be the same at an Alternative Site as it would for the Project. Further, in that the circulation system proximate to the Alternative Site 5 is relatively undeveloped, localized and areawide intersection and roadway segment impacts would occur similar to those resulting from the Project. Further, additional traffic approximately equal to the Project would be contributed to adjacent Caltrans facilities resulting in comparable ramp and freeway mainline impacts.

In regard to potential air quality impacts, at Alternative Site 5, depending on the ultimate location and configuration of facilities, the temporary construction-source LST exceedances could may be reduced in comparison to the Project, in that there are no known adjacent occupied sensitive receptors (assumes orientation of facilities as close as possible to SR-60 and no requirements for off-site improvements). Notwithstanding, currently undeveloped (R3) Suburban Residential land uses exist southwesterly of the Alternative Site, and scattered residences exist southerly of Alternative Site 5, across Eucalyptus Street. These residential land uses could be temporarily affected by Project construction-source emissions similar to the Project. Construction-source regional emissions threshold exceedances and cumulative impacts are a Basin-wide concern, and impacts would be the same whether development occurred at the Project site or at the Alternative Site.

At this alternative site, construction noise could also affect proximate residential land uses, and (similar to the Project) would be considered a temporary and intermittent significant impact. And finally, in regard to viewshed impacts, the Project's single large

consolidated warehouse use could interrupt or obstruct views of off-site scenic resources along the SR-60 corridor, which is recognized a significant impact on the Project site. Viewshed impacts at the Alternative Site would be comparable to the Project based on construction of a single consolidated warehouse structure and the site's location proximate to the SR-60 scenic resources corridor. Because Alternative Site 5 would not result in the avoidance or substantive reduction of Project related impacts, this Alternative Site was also rejected from further consideration.

5.2.3 Comparative Impacts of Evaluated Alternatives

For each environmental topic addressed in the Draft EIR, the following discussions present a narrative assessment of comparative impacts. The environmental impacts of each of the considered Alternatives are described relative to the identified impacts of the Project. As a subset of the Alternatives comparison, relative attainment of the Project Objectives is also presented.

As indicated in the following discussions, under the No Build Alternative, the Project site would remain in its undeveloped state, and few (if any) environmental concerns would be created and/or impacted. However, employment and economic benefits otherwise accruing to the City and region would not be realized.

The No Project Alternative would likely increase the extent and/or intensity of significant air quality and traffic and impacts otherwise occurring under the Project. The No Project Alternative may however, reduce or avoid significant aesthetic impacts occurring under the Project. The Project Objectives would be achieved under the No Project Alternative. This alternative would result in similar job creation (887 jobs[2]) when compared to the Project (900 jobs[3]).

[2] Based on one (1) job per 300 square feet of development, Riverside County General Plan Appendix E, Buildout Assumptions and Methodology, Page 6, Commercial Office employment multiplier.

[3] Based on one (1) job per 1,030 square feet of development, Riverside County General Plan Appendix E, Buildout Assumptions and Methodology, Page 6, Light Industrial employment multiplier.

The Reduced Intensity Alternative would diminish the extent of significant traffic, air quality, noise, and aesthetic impacts otherwise occurring under the Project. However these impacts would remain significant. The Reduced Intensity Alternative would achieve the Project Objectives, with substantially curtailed jobs (approximately 664 jobs, based on a 27 percent reduction in size), tax and related economic benefits to the City and the region. Diminished development potentials under this Alternative would likely not be economically viable to the Applicant, and as such, might not be pursued.

5.2.3.1 Comparative Land Use Impacts

In order to implement the Project, while precluding or reducing potential land use impacts, the following discretionary actions, permits, and consultation are necessary:

Lead Agency Discretionary Actions and Permits

- **Certification of the EIR.** The proposed development is a Project under CEQA, and may result in significant environmental impacts. Lead Agency certification of the Project EIR is required;

- **A zone change from Business Park to Light Industrial.** The proposed zone change will allow for construction and operation of the Project's distribution warehouse uses as configured;

- **Amendment to Municipal Code Section 9.05.020 B [Light Industrial Districts],** to provide objective standards for the development of Light Industrial uses adjacent to residentially-zoned property to ensure the protection of the health, safety and welfare of future residents;

- **Parcel Map Approval** to consolidate and reconfigure existing parcels defining the Project site, and to provide necessary easements and dedications;

- **Development Plan Review** as required under the City of Moreno Valley Municipal Code Section 9.02.030 [Development Review Process], et al.

- **Construction, grading, and encroachment permits** allowing implementation of the Project facilities within City of Moreno Valley jurisdictional areas;

- **Vacation and/or dedication of public rights-of-way and easements** as elements of the proposed parcel map, or independent of the map. Rights-of-way and easements will provide public access, and ensure appropriate alignment of and access to infrastructure and utilities.

Responsible and Trustee Agency Discretionary Actions, Permits, and Consultation

- **Permitting and Consultation through the California Department of Fish and Game (CDFG**), to include:

  - **Lake and Streambed Alteration Agreement (LSA)** addressing potential CDFG jurisdictional area impacts resulting from the Project; and
  - **Consultation** regarding the possible relocation of resident burrowing owls (if burrowing owls are determined to be present on the subject site during required pre-construction surveys);

- **CWA Section 404 and Army Corps of Engineers (ACOE) permitting** may also be required should the Project riparian habitat mitigation plan involve or require use of off-site federal jurisdictional areas.

- **Permitting required by/through CWA Section 401 and the Santa Ana Regional Water Quality Control Board (SARWQCB)** pursuant to requirements of the National Pollutant Discharge Elimination System (NPDES) Permit;

- **Permitting required by/through the South Coast Air Quality Management District (SCAQMD)** for certain equipment to be temporarily employed within the Project during construction, and/or permanently installed and used over the life of the Project; and

- **Permitting by/through the California Department of Transportation (Caltrans**) for improvements within or that may affect Caltrans rights-of-way.

Approval of the requested actions, together with Project compliance with requirements incorporated therein, will reduce potential land use impacts of the Project below levels of significance.

No Build Alternative

The No Build Alternative assumes the site is not developed consistent with its "Business Park" General Plan designation and remains in its current undeveloped state as fallow land.

The No Build Alternative would not require discretionary actions or mitigation measures necessary to preclude or reduce potential land use impacts. Implementation of the No Build Alternative would not require a Zone Change as requested under the Project. Potential land use impacts of the No Build Alternative would be reduced when compared to the Project.

No Project Alternative

The No Project Alternative assumes development of the subject site consistent with the existing Zoning Designation of "Business Park." For the purposes of this analysis, development intensity is assumed to be approximately the same as the Project, though under the Business Park designation, a variety of compatible uses could be constructed. For illustrative and comparative purposes, the No Project Alternative considered herein assumes that the Project site is developed with a mix of compatible limited support commercial, office, research and development, and light industrial uses.

It is assumed that, like the Project, the No Project Alternative would incorporate all other actions and mitigation measures necessary to preclude or reduce potential land use impacts. Implementation of the No Project Alternative would not require a Zone Change as requested under the Project. In this sense, potential land use impacts of the No Project Alternative would be reduced when compared to the Project.

Reduced Intensity Alternative

Implementation of the Reduced Intensity Alternative assumes that the intensity of the Project would be reduced by approximately 27 percent. This reduction would result in an approximately 684,200 square-foot industrial development within the approximately 55-acre site. In this regard, more than one-third of the subject site would remain vacant, which may not be considered the "highest and best use" for this property. As with the Project, the Reduced Intensity Alternative would require a zone change to Light Industrial. It is assumed that, like the Project, the Reduced Intensity Alternative would incorporate all other actions and mitigation measures necessary to preclude or reduce potential land use impacts. Potential land use impacts of the Reduced Intensity Alternative would be comparable to the Project.

Comparative Land Use Impacts Summary

Under all of the considered Alternatives or the Project, potential land use impacts are determined to be less-than-significant. Under the No Build Alternative, no discretionary action or zone change would be required. Under the No Project Alternative a zone change would not be required. Other necessary actions would be comparable to the Project. Under the Reduced Intensity Alternative, necessary actions, including a zone change from "Business Park" to "Light Industrial," would be similar to those requested by the Project. Total development within the subject property would be discernibly reduced (by approximately 27 percent) under the Reduced Intensity Alternative.

5.2.3.2 Comparative Traffic/Transportation Impacts

As discussed in EIR Section 4.2, "Traffic and Circulation" at full buildout, implementation of the Project would result in an increase of approximately 2,930 new trips (PCE) on the Study Area roadway system. Of these additional trips, 191 would occur during the morning peak-hour period, and 225 would occur during the evening peak-hour period.

Improvements required of the Project, together with implementation of programmed areawide traffic improvements, to which the Project is a participatory contributor, will ultimately provide adequate Level-of-Service (LOS) conditions along potentially affected Study Area roadway segments and at Study Area intersections. Project traffic impacts affecting freeway mainline segments within the Study Area are projected to be cumulatively significant under General Plan Buildout conditions. In this regard, the Project would contribute additional traffic to pre-existing deficiencies along freeway mainline segments, and these deficiencies would occur with or without the Project.

No Build Alternative

Under the No Build Alternative, the Project site would not generate any additional traffic. No mitigation would be required. However, improvements implemented by the Project would also not be realized. Specifically, portions of Fir (future Eucalyptus) Avenue would not be improved, and the traffic signals at the SR-60 westbound ramp and at Redlands Boulevard/Fir (future Eucalyptus) Avenue would not be installed. Additionally, significant freeway mainline traffic impacts under General Plan Buildout conditions would persist with or without implementation of the No Build Alternative.

No Project Alternative

The No Project Alternative assumes development of the site consistent with General Plan Buildout conditions. As noted previously, the City's traffic modeling for General Plan Buildout yields proportional daily trip generation of approximately four (4) times greater than would be generated by the Project. Proportional increases in AM and PM peak hour trip generation could also be expected. It is also noted that under the No

Project Alternative, ultimately feasible development intensities and related trip generation for the site may be restricted based on the current Business Park zoning designation which limits individual buildings to a maximum of 50,000 square feet each. Notwithstanding, trip generation for the site fully developed with Business Park uses would exceed trip generation under the Project.

Reduced Intensity Alternative

The Reduced Intensity Alternative would realize approximately 684,200 square feet of distribution warehouse facilities within the subject site. Trip Generation under the Reduced Intensity Alternative represents a reduction of approximately 27 percent in daily trips compared to the Project, with a similar reduction in peak-hour trips. Table 5.2-3 provides trip generation estimates for this Alternative.

Table 5.2-3
Reduced Intensity Alternative Trip Generation

Land Use/ITE Code	Size	Average Daily Traffic	AM Peak-hour Trips			PM Peak-hour Trips		
			In	Out	Total	In	Out	Total
Distribution Warehouse/NA[1]	684,200 SF	2,139	76	63	139	63	101	164

[1] **Source:** Based on high-cube warehousing trip generation factors from *Westridge Commerce Center Traffic Impact Analysis* (Urban Crossroads, Inc.) May 20, 2010 (revised).

Comparative Traffic Impacts Summary

No traffic impacts would occur as a result of the No Build Alternative. However, improvements implemented by the Project would not be realized and significant freeway mainline traffic impacts under General Plan Buildout conditions would persist with or without implementation of the No Build Alternative.

Potential traffic impacts could be substantively increased under the No Project Alternative, and when compared to the Project, would likely require additional mitigation and increased fair share fee payments. Significant freeway mainline traffic

impacts under General Plan Buildout conditions would persist, and due to increased traffic generation under the No Project Alternative, would likely be exacerbated.

Based on projected decreases in daily and peak-hour trip generation, area-wide traffic impacts under the Reduced Intensity Alternative would likely be decreased compared to the Project. The extent of area-wide traffic improvements and required traffic impact mitigation would also likely decrease under this Alternative. Significant freeway mainline traffic impacts under General Plan Buildout conditions would persist with or without development under the Reduced Intensity Alternative. This Alternative would contribute additional traffic, though less than the Project, affecting pre-existing significant freeway mainline traffic impacts.

5.2.3.3 Comparative Air Quality Impacts

Future development of the site as proposed under the Project would result in increased local and regional air pollutant emissions. Project-related construction emissions as well as operational emissions, including greenhouse gas emissions, from motor vehicles and area sources, would be generated. As presented at EIR Section 4.3, "Air Quality," certain short-term, construction-related air quality impacts (local and regional SCAQMD threshold exceedances), as well as certain emission levels resulting from long-term operations of the Project (regional SCAQMD threshold exceedances), would be considered significant. Cumulative air quality impacts are also determined to be significant, and include considerably significant contributions to $PM_{10}/PM_{2.5}$ and ozone non-attainment conditions. No feasible mitigation has been identified that would reduce these impacts below significance thresholds. On this basis, Project-specific construction and operational, and associated cumulative air emissions impacts are determined to be significant.

Construction-Related Emissions

No Build Alternative

No construction-related emissions would occur under the No Build Alternative. The local and regional SCAQMD threshold exceedances resulting from construction under the Project would be avoided under the No Build Alternative.

No Project Alternative

Construction-related emissions under the No Project Scenario would be similar to the Project in that the site would require preparation prior to new construction, and a similar scope of facilities would be implemented. Given the similarity in scope and type of construction processes, it is likely that such construction emissions would not be substantively greater, or otherwise substantively different than those anticipated under the Project. As with the Project, construction-related emissions impacts (LST exceedances, regional threshold exceedances, and cumulative impacts) would likely be significant and unavoidable.

Reduced Intensity Alternative

Under the Reduced Intensity Alternative, the duration of construction-related emissions may be reduced in that this Alternative, assuming a reduced scale of development is implemented, could be constructed within a shorter time frame. However, the maximum construction emissions levels would likely be comparable to the Project, in that the similar increments of daily site disturbance and phased construction would occur. Moreover, the types of equipment and construction activities would be substantively the same as under the Project. Because the total area to be developed is less under this Alternative than under the Project (684,200 square feet versus the Project's approximately 937,260 square feet), construction vehicle and equipment emissions may be reduced when compared to Project construction activities. However, construction-source LST exceedances, regional threshold exceedances, and related cumulative impacts would likely still occur.

Operational Emissions

The Project significant operational air quality impacts consist of exceedances of SCAQMD regional thresholds for VOC and NOx emissions. More than 99 percent of the Project's operational air pollutant emissions (total pollutants by weight) are generated by mobile sources (vehicles) as opposed to area sources (e.g., building HVAC systems, site maintenance activities). With respect to proportional VOC and NOx operational emissions sources, vehicular sources account for approximately 91.6 percent of Project operational VOC emissions, and virtually 100 percent of NOx emissions.

No Build Alternative

No operational emissions would occur under the No Build Alternative. The regional SCAQMD threshold exceedances resulting from operations under the Project would be avoided under the No Build Alternative.

No Project Alternative

The No-Project Alternative would generate up to an estimated four (4) times the vehicular traffic generated by the Project. Comparable increases in mobile source pollutant emissions would be expected. However, the vehicle mix under the No Project Alterative would likely reflect incrementally decreased heavy truck traffic, with related decreases in diesel particulate emissions when compared to the Project. Other individual pollutant profiles would likely be unaffected or would proportionally increase compared to the Project. Significant VOC and NOx emissions thresholds exceedances occurring under the Project would persist, and exceedances would be incrementally greater under the No Project Alternative.

Reduced Intensity Alternative

Compared to the Project, the Reduced Intensity Alternative was specifically developed to achieve at least a 27 percent reduction in operational VOC emissions and thereby realize the SCAQMD operational emissions regional threshold for VOC.

Table 5.2-5 provides comparison of operational emissions under the Reduced Intensity Alternative and the Project. There would be no substantive qualitative or quantitative differences in area source emissions generated by the Project and the other considered Alternatives, and area emissions are assumed to be approximately equal in all cases.

As presented at Table 5.2-5, the Reduced Intensity Alternative would avoid the VOC emissions threshold exceedances otherwise occurring under the Project, and would result in generally lower emissions levels under all criteria pollutant categories. NOx threshold exceedances that would occur under the Project would also occur under the Reduced Intensity Alternative, but the degree of exceedance would be decreased.

Table 5.2-4
Comparative Operational Air Pollutant Emissions (lbs./day)

Pollutants	VOC	NOx	CO	SOx	PM10	PM2.5
Project						
Area Sources	5.54	0.64	2.09	0	0.01	0.01
Mobile Sources	64.24	818.29	449.58	1.46	139.21	45.70
Total Project	**69.78**	**818.93**	**451.67**	**1.46**	**139.22**	**45.71**
Reduced Intensity Alt.						
Area Sources	5.54	0.64	2.09	0	0.01	0.01
Mobile Sources	46.90	597.82	328.19	1.07	101.63	33.36
Total Reduced Intensity Alt.	52.44	598.46	330.28	1.07	101.64	33.37
SCAQMD Regional Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Threshold Exceeded?						
Project	**YES**	**YES**	No	No	No	No
Reduced Intensity Alternative	No	**YES**	No	No	No	No

Notes:
1 Air Quality Modeling, EIR Appendix C.
2 Maximum winter/summer emissions for each pollutant are reported.

Greenhouse Gas Emissions Summary

Under the No Build Alternative, the site would remain in its current state and no new greenhouse gas emissions would be created. Although trip generation (the primary source of a land use project's emissions) would vary substantially between No-Project and Reduced Intensity alternatives, development under either of these alternatives would likely result in a redistribution of existing mobile emissions, rather than the generation of new vehicle trip emissions. Construction and operational emissions would be limited through mandated compliance with applicable greenhouse gas reduction strategies similar to those discussed in this EIR. As such, potential greenhouse gas emission impacts would likely be considered less-than-significant under any of the considered alternatives.

Comparative Air Quality Impacts Summary

Construction-related air emissions impacts of the Project for the criteria pollutants VOC and NOx are regionally significant. Construction-related air emissions impacts of PM_{10} and $PM_{2.5}$ would exceed applicable LSTs. Project-related operational emissions of VOC and NOx are regionally significant. Construction-source and/or operational-source threshold exceedances for VOC, NOx, PM_{10} and $PM_{2.5}$ emissions are also cumulatively considerable and significant. All other construction-source and operational-source air pollutant emissions are less-than-significant or can be mitigated to levels that are less-than-significant.

Under the No Project Alternative construction-source emissions would be similar to, but no greater than, those of the Project. Regionally significant impacts for construction-source VOC and NOx emissions, and LST exceedances for PM_{10} and $PM_{2.5}$ emissions would persist. The No Project Alternative would generate increased operational-source pollutants when compared to the Project. Greenhouse gas emissions under this alternative would be similar to those of the Project. Construction-source and/or operational-source threshold exceedances for VOC, NOx, PM_{10} and $PM_{2.5}$ emissions, and related contributions to cumulative impacts for these pollutants, would be significant and would be incrementally greater than impacts resulting from the Project.

The duration of construction-source emissions may be diminished under the Reduced Intensity Alternative, however peak air pollutant emissions levels would be comparable to the Project. Regionally significant impacts for construction-source VOC and NOx emissions, and LST exceedances for PM_{10} and $PM_{2.5}$ emissions would persist. The Reduced Intensity Alternative would achieve the SCAQMD operational emissions regional threshold for VOC and would tend to generally reduce all air pollutant emissions otherwise generated by the Project. Regional thresholds for NOx emissions would still be exceeded under the Reduced Intensity Alternative. Incremental contributions to cumulative air quality impacts, including greenhouse gas emissions impacts, would be diminished under the Reduced Intensity Alternative. However, construction and/or operational exceedances for VOC, NOx, PM_{10} and $PM_{2.5}$ emissions at the project level would also be considered cumulatively considerable and significant.

5.2.3.4 Comparative Noise Impacts

Construction Noise

Under the Project, construction noise would likely affect proximate residential land uses, and would be considered a temporary and intermittent significant impact. Construction-source noise levels would tend to diminish as construction progresses and heavy equipment operations within the site, and particularly at the site boundaries, is concluded. It also recognized that any construction-related noise would be appropriately regulated by established City ordinances so as to be reduced to the extent feasible.

No Build Alternative

Under the No Build Alternative, the current noise environment would remain unchanged. Construction noise would not occur and mitigation would not be required.

No Project Alternative

The intensity of development assumed for the No Project Alternative is similar to that of the Project, therefore construction noise impacts are considered equal to the Project.

Reduced Intensity Alternative

Given that the level of construction activity under the Reduced Intensity Alternative would be reduced, this Alternative may yield some reduction in the level and duration of construction noise otherwise resulting from the Project.

Operational Noise

No Build Alternative

Under the No Build Alternative, operational noise would not occur. The noise environment would remain unchanged from its existing state.

No Project Alternative

Mobile-source operational noise levels (traffic noise) would likely increase under the No Project Alternative based on increased trip generation under this Alternative. As with the Project, it is considered unlikely that sensitive receptors would be affected by potential vehicular noise levels because of the receptor's physical separation from roadways and/or presence of intervening noise-attenuating walls.

Reduced Intensity Alternative

Under the Reduced Intensity Alternative, traffic volumes would be decreased when compared to the Project, with correlating decreases in vehicular noise. The Reduced Intensity Alternative would further reduce operational noise impacts of the Project.

Comparative Noise Impacts Summary

Significant noise impacts would not occur under the No Build Alternative. Construction noise impacts under the No-Project and Reduced Intensity Alternatives would be temporarily significant, similar to the Project. Due to increased vehicular-source noise, operational noise impacts under the No Project Alternative may increase compared to the Project, but would likely remain less-than-significant. In contrast, the Reduced Intensity Alternative would tend to reduce operational noise impacts of the Project by

reducing Project-related traffic. Less-than-significant operational noise impacts of the Project would be further diminished under the Reduced Intensity Alternative.

5.2.3.5 Comparative Water Supply Impacts

As discussed at EIR Section 5.6, subject to conditions stipulated in the Project Water Supply Assessment (WSA, EIR Appendix F) and reflected in the EIR mitigation measures, water demands of the Project can be met consistent with the requirements of SB 610 and SB 221, and with no adverse effects on water supplies or water resources, including groundwater. The Project will therefore not result in any significant water supply impacts.

No Build Alternative

The No Build Alternative would not increase the water demands of the site. No adverse effects on water supplies or water resources would result under the No Build Alternative. Water lines would not be extended to the site.

No Project Alternative

Water demands resulting from development of the No Project Alternative are assumed and accounted for in the Metropolitan Water District (MWD) Regional Urban Water Management Plan (RUWMP), and Eastern Municipal Water District (EMWD, Eastern) Urban Water Management Plan (UWMP). That is, the No Project Alternative reflects currently assumed water demands based on City General Plan Buildout and reflected in the RUWMP and UWMP.

Reduced Intensity Alternative

The Reduced Intensity Alternative reflects development intensities and inferred water demands that would be less-intense than the Project. Total water demand may be incrementally reduced under this alternative.

Comparative Water Supply Impacts Summary

Under any of the Alternatives (except No Build), a site and use-specific Water Supply Assessment would be required to document demands and ensure that appropriate water storage and delivery systems are in place to serve the development(s). Water supply impacts under the Project or any of the considered alternatives would be less-than-significant based on compliance with any stipulated WSA conditions.

5.2.3.6 Comparative Hydrology/Water Quality Impacts

No Build Alternative

Under the No Build Alternative, existing drainage patterns would remain unchanged and the site would continue to drain to the drainage ditch along the west side of Redlands Boulevard south of Fir (future Eucalyptus) Avenue. No changes to the quality or quantity of drainage discharge would occur. Similarly, the areawide drainage improvements proposed under the Project would not be installed, including the scour wall along the Quincy Channel.

No Project Alternative

As with the Project, localized drainage system improvements would likely be required in order to accommodate the developed land uses under the No Project Alternative. The extent of improvements would be dependent on site-specific conditions. Similar to the Project, it is anticipated that storm water management systems could be constructed and/or modified so as to preclude potentially significant hydrology/water quality impacts. Also as with the Project, the quality and quantity of drainage discharge resulting from implementation of the land uses under this alternative are governed by fixed NPDES permitting requirements as well as applicable policies of the Riverside County Flood Control District and California Regional Water Quality Control Board. As such, the quality and quantity of drainage discharge resulting from development of the site under the No Project Alternative would not be significantly different than discharge quantities and qualities resulting from implementation of the Project.

Reduced Intensity Alternative

Any decrease in overall site development realized under the Reduced Intensity Alternative would likely reduce the extent of impermeable surfaces within the subject site, with corollary reductions in developed storm water runoff. This could relieve certain detention/retention requirements required of the Project, and/or alter certain design and drainage elements, with no discernible effect on the amount or quality of storm water exiting the Project site.

Comparative Hydrology Impacts Summary

Potential hydrology and water quality impacts of the Project are determined to be less-than-significant based on implementation of on-site storm water management systems, modification and connection of adjoining storm drainage facilities, and compliance with an approved SWPPP/WQMP. Similar design elements and SWPPP/WQMP compliance attributes would also be realized under any of the considered Alternatives (except No Build). Total developed runoff under the Reduced Intensity Alternative would likely require less extensive storm water detention areas than would otherwise be required under the Project.

5.2.3.7 Comparative Cultural Resources Impacts

No Build Alternative

No site disturbance would occur under the No Build Alternative, avoiding any potential impacts to cultural resources.

No Project Alternative

Under this alternative, the extent of disturbance, and therefore potential impacts, would be similar to the Project.

Reduced Intensity Alternative

Although development under this alternative would be less intense, the area of disturbance, and therefore potential impacts, would be similar to the Project.

Comparative Cultural Resources Summary

Under the Project or the considered Alternatives (except no Build), potential impacts to cultural resources are appropriately addressed through identification, protection, preservation, and cataloguing of potentially significant cultural resources as required under state law, City Policies, and reflected in the EIR mitigation measures.

5.2.3.8 Comparative Biological Resources Impacts

As discussed at EIR Section 4.8, the burrowing owl and Stephens' Kangaroo Rat (SKR) are the only special-status wildlife species known to occur on the proposed site. Migratory birds are also considered to use the Project site. With regard to special status plant species and vegetation, CDFG and ACOE jurisdictional areas and associated mulefat habitat area exist in the Quincy Channel (Channel), westerly of the limits of development delineated for the Project. The Southern California black walnut also exists within the Channel, beyond the limits of Project development. With application of proposed mitigation measures, potential impacts to burrowing owl, SKR, migratory birds, special status plant species and jurisdictional areas are less-than-significant.

No Build Alternative

The Project site is dominated by disked fallow agricultural land, and contains two semi-natural vegetation communities: riparian and ruderal agricultural land. Under the No Build Alternative, current on-site conditions would remain unchanged and no impacts would occur.

No Project Alternative

Potential impacts in regard to biological resources, inclusive of jurisdictional areas, would be comparable to the Project under the No Project Alternative in that development activity would generally potentially affect the same locale and resources.

Reduced Intensity Alternative

Despite the reduced scale of this alternative, the area of disturbance would be similar to the Project. As such, potential impacts in regard to biological resources would be comparable to the Project.

Comparative Biological Impacts Summary

Under the Project or any of the considered alternatives (except No Build), potential impacts to protected species would be mitigated pursuant to requirements of the MSHCP, California Department of Fish & Game (CDFG) (and if necessary, the Army Corps of Engineers should habitat replacement mitigation involve off-site ACOE jurisdictional areas.) The Project and the considered Alternatives are also required to comply with provisions of the Migratory Bird Treaty Act (MBTA). The MBTA serves to protect any migratory birds and their nests which may be present within the subject site. Potential impacts relative to biological resources would be similar to the Project or under the other Alternatives considered in this assessment. Under the Project or any of the considered Alternatives, potential impacts to biological resources would be less-than-significant as mitigated.

5.2.3.9 Comparative Aesthetics Light/Glare Impacts

Under the Project, visual attributes of the subject site would be substantially altered as existing vacant properties are replaced by new development. However, this visual change although substantial, is not considered to be visually intrusive nor adverse. That is, development realized under the Project is consistent with the ongoing transition of the subject site and vicinity properties to business park/light industrial uses, as is anticipated under the City General Plan. Further, all development within the subject site will comply with applicable Municipal Zoning Code design requirements and standards, thereby promoting visually acceptable and compatible development of the subject site. Compliance with Municipal Zoning Code industrial design requirements and development standards is reflected in the current Project concept plans, and will be ultimately realized in refined final planning and construction documents as approved by the City through established site plan, design review, and building permit review

processes. Similar requirements and standards would be generally applicable to any of the considered Alternatives.

Potential light and glare impacts of the Project are generally addressed through site/facility lighting concepts and building designs, also subject to review and approval by the City. Specific light/glare impacts of Project including overspill of construction lighting onto area roadways and potential structural glare effects are addressed through any City Conditions of Approval specifying requirements beyond those articulated by code or regulation.

No Build Alternative

Under the No Build Alternative, visual attributes of the site will remain in their current state. No aesthetic, light, or glare impacts would occur.

No Project Alternative

Potential impacts to viewsheds may be reduced under the No Project Alternative in that the site's Business Park zoning designation limits maximum individual building areas to 50,000 square feet, vis-à-vis the 937,260 square foot warehouse proposed under the Project. The 50,000 square foot limitation on individual building sizes would allow for configurations of the developed site providing additional or varied viewsheds through the Project site to off-site scenic resources.

Reduced Intensity Alternative

Viewshed impacts may be incrementally reduced under the Reduced Intensity Alternative in that the total building area (though still configured as a single structure) would be reduced when compared to the Project. Additionally, under the Reduced Intensity Alternative the extent of development would be reduced, which may reduce potential effects of surface light and glare impacts, further reducing potential light/glare impacts of the Project, which are less-than-significant as mitigated.

Comparative Aesthetics Light/Glare Impacts Summary

Based on compliance with City Municipal Zoning Code requirements, Project Conditions of Approval, and application of mitigation measures, potential aesthetic and light/glare impacts of the Project site design and architecture, and visual impacts of similar attributes of any of the considered Alternatives would be less-than-significant. The No Project Alternative and/or Reduced Intensity Alternative may reduce significant viewshed impacts otherwise occurring under the Project. The extent of development under the Reduced Intensity Alternative would be diminished, and would likely reduce the amount of building area and potentially reflective and glare producing surfaces.

5.2.3.10 Comparative Attainment of Project Objectives

The stated Project Objectives, (see Project Description, EIR Section 3.0) are as follows:

- Transition the existing site into a productive land use, consistent with the long-range vision for the property, as designated within the City's General Plan;
- Develop a Project that is sensitive to the surrounding land uses;
- Provide jobs-producing, light industrial uses to the City of Moreno Valley and local community;
- Capitalize on the site's regional freeway access; and
- Increase economic benefits to the City of Moreno Valley through increased tax generation and job creation.

Under the No Build Alternative, the subject site would remain in its current undeveloped state and none of the Project Objectives would be achieved.

Business Park/Light Industrial uses that could be implemented under the No Project Alternative could substantially achieve the Project's development objectives for the site. Like the Project, it is anticipated that new development under the No Project Alternative would be designed and implemented so as to be compatible with neighboring land uses. The No Project Alternative would effectively capitalize on the site's regional freeway accessibility and visibility. New jobs, including light industrial,

office, limited support commercial, or research and development employment opportunities would be created by the No Project Alternative. Based on the likely mix of uses realized, the extent of light industrial uses implemented would be proportionally reduced when compared to the Project. This Alternative would also provide additional tax revenues available to the City. On the basis of the preceding discussion, the No Project Alternative would substantively realize the stated Project Objectives, though the extent of industrial uses realized would be reduced when compared to the Project.

The Reduced Intensity Alternative would also realize the stated Project Objectives. However, because the scale of the development would be diminished under this Alternative, the resulting generation of sales tax, the number of jobs created, and potential second tier economic benefits to the City and region (e.g. wholesale/retail support sales; temporary and long-term construction jobs, and facilities maintenance employment opportunities) would likely be reduced when compared to the Project.

5.2.4 Comparison of Alternatives

The *CEQA Guidelines* require that the environmentally superior alternative (other than the No Project Alternatives) be identified among the Project and other Alternatives considered in an EIR. Based on comparative reductions in traffic generation, and associated reductions in noise and air emissions, and generally reduced scale, among the Alternatives considered, the Reduced Intensity Alternative would result in the greatest reduction in environmental effects, and is thus considered the environmentally superior alternative.

Notwithstanding, the scope and total capabilities of development would be substantively reduced under the Reduced Intensity Alternative. The resulting diminishment of the Project Objectives, to include substantive reduction in economic benefits to the City and region, and limited jobs creation would act to substantially reduce the feasibility of this Alternative. Further, the reduction in scope under the Reduced Intensity Alternative would be economically unviable to the Applicant, and would not be pursued.

5.3 GROWTH-INDUCING IMPACTS OF THE PROPOSED ACTION

5.3.1 Overview

The California Environmental Quality Act (*CEQA*) requires a discussion of the ways in which a project could be growth-inducing. (Pub. Resources Code, § 21100, subd. (b)(5); *CEQA Guidelines*, §§ 15126, subd. (d), 15126.2, subd (d).) The *CEQA Guidelines* identify a project as growth-inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. New employees from commercial or industrial development and new population from residential development represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area. Under *CEQA*, growth inducement is not considered necessarily detrimental, beneficial, or of little significance to the environment.

A project could indirectly induce growth or create a potential for growth by reducing or removing barriers to development, or by creating a condition that attracts additional population or new economic activity. However, substantive growth can only happen through capital investment in new economic opportunities by the private or public sectors. Economic investment in an area can also secondarily induce growth by creating development pressures affecting other local properties. These pressures act to structure the local politics of growth and the local jurisdiction's posture on growth management and land use policies. The land use policies of local municipalities and counties regulate growth at the local level.

Impacts related to growth inducement would also be realized if a project provides infrastructure or service capacity which accommodates growth beyond the levels required for the development under consideration and currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide

needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

5.3.2 Direct Growth-Inducing Effects

The Project does not propose creation of housing. As such, new residential uses leading to additional population growth will not occur. Creation of new jobs is also a potential direct growth-inducing effect. The extent to which new jobs created by a project are filled by existing residents tends to reduce any growth-inducing effect of a project.

The Project would result in the creation of new light industrial/distribution warehouse uses. However, additional employment opportunities (an estimated 900 jobs)[4] which may be created by the Project fall well within the aggregate employment projections for the City and region as reflected in adopted growth forecasts developed by Southern California Association of Governments (SCAG), which in turn are based on local General Plan growth forecasts. More specifically, SCAG employment projections indicate that employment within the City will essentially double between the years 2010 and 2030, increasing from 39,225 jobs to 80,667 jobs.[5] Jobs created by the Project are one component of this anticipated increase in employment. Temporary construction employment associated with the Project is not expected to have a significant growth-inducing effect.

As previously discussed at Draft EIR Section 4.1, "Land Use and Planning," the City of Moreno Valley is projected to be "jobs poor and housing rich" through at least 2015. That is, the ratio of employment to households is projected at less than 1.0, indicating a number of persons not actively employed and or/commuting beyond the City limits to their place(s) of employment. As also discussed in Section 4.1, (please refer to Table

[4] Based on approximately one (1) job per 1,030 square feet of development, per Riverside County General Plan Appendix E, Buildout Assumptions and Methodology, Page 6, Light Industrial employment multiplier.

[5] Source: SCAG Adopted 2008 RTP Growth Forecast by City, <http://www.scag.ca.gov/forecast/adoptedgrowth.htm>, retrieved November 4, 2009.

4.1-3) incremental job creation is anticipated within the City from 2010 through 2035. Employment opportunities arising from the Project represent a portion of this anticipated increase in local jobs, tending to bring the City closer to a balanced jobs/housing condition.

Based on the preceding discussion, it is unlikely that the Project would directly result in any significant population growth, and would not result in population growth for the City beyond that reflected in adopted growth forecasts. The Project, in combination with other planned or anticipated projects in the area, would contribute to the substantial cumulative growth projected for the region over the next 20 years.

5.3.3 Indirect Growth-Inducing Effects

Investment in the Project would have local and regional economic impacts which may result in indirect growth-inducing effects. The Project's potential economic benefits could indirectly result in employment growth in the region. This growth, in combination with other anticipated employment growth in the region, could indirectly result in population growth and an increased demand for housing. Such growth has a variety of potential effects on the physical environment, including but not limited to, effects on air quality, ambient noise levels, traffic impacts, and water quality. It is not anticipated that the additional employment opportunities created by the Project would be substantial enough to produce noticeable population growth within the City and region. Further, the City of Moreno Valley General Plan envisions eventual urbanization of the Project site and surrounding properties. Nonetheless, the Project, in combination with other planned or anticipated projects in the area, would contribute to employment and population growth which, regionally, are anticipated to be substantial.

Development of the Project as envisioned will entail upgrade of infrastructure in the immediate Project vicinity, including abutting roadways, the local water distribution and sewer collection systems, and storm drainage conveyance facilities. Infrastructure improvements necessitated by the implementation of the Project may facilitate and encourage development of nearby properties. The City will review all proposed

development to ensure compatibility with evolving City and regional land use plans acting to reduce or avoid potentially adverse effects of growth.

5.4 SIGNIFICANT ENVIRONMENTAL EFFECTS

An EIR must identify any significant environmental effects that would result from the Project. (Pub. Resources Code, §21100, subd. (b)(2)(B).) Significant environmental impacts of the Project are summarized at Table 5.4-1.

Table 5.4-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
TRAFFIC	
	The Project will construct, or pay required fees toward, completion of all necessary Study Area circulation system improvements. At the significantly-impacted locations noted below, the Project cannot feasibly construct the required improvements, and/or payment of fees will not assure their timely completion. **Project-Specific Significant Impacts** All Project-specific traffic impacts are less-than-significant, or are mitigated to levels that are less-than significant through application of the EIR Mitigation Measures. **Cumulatively Significant Impacts** **Opening Year Cumulative Conditions:** Pending completion of required improvements, the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting the following intersections are considered cumulatively significant and unavoidable: • Moreno Beach Drive at SR-60 Eastbound Ramps; • Redlands Boulevard at SR-60 Westbound Ramps; • Redlands Boulevard at SR-60 Eastbound Ramps • Redlands Boulevard at Fir (future Eucalyptus) Avenue; and • Quincy Street at Fir (future Eucalyptus) Avenue (new intersection).

Table 5.4-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
TRAFFIC (CONT'D)	**Cumulatively Significant Impacts (cont'd)**
	Pending completion of required improvements, the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting the following roadway segments are considered cumulatively significant and unavoidable: • Redlands Boulevard from north of the SR-60 Westbound ramps to south of Eucalyptus (future Encilia) Avenue; • Quincy Street south of Fir (future Eucalyptus) Avenue (future street); and • Fir (future Eucalyptus) Avenue from west of Quincy Street and east of Redlands Boulevard (future street). • **General Plan Buildout Conditions:** Pending completion of required improvements, the Project's incremental contributions to General Plan Buildout traffic impacts at or affecting the following intersections are therefore considered cumulatively significant and unavoidable: • Moreno Beach Drive at SR-60 Eastbound Ramps; • Redlands Boulevard at SR-60 Westbound Ramps; • Redlands Boulevard at SR-60 Eastbound Ramps; • Redlands Boulevard at Fir (future Eucalyptus) Avenue; • Quincy Street at Fir (future Eucalyptus) Avenue (new intersection); • Moreno Beach Drive at Fir (future Eucalyptus) Avenue (new intersection); • Redlands Boulevard at Eucalyptus (future Encilia) Avenue (new intersection); and • Redlands Boulevard at Cottonwood Avenue (new intersection). The Project will also contribute additional traffic to Study Area freeway mainline segments that under General Plan Buildout Conditions (with or without the Project) are projected to operate under deficient (LOS "F") conditions. While it is foreseeable that improvements to SR-60 in the Project vicinity will be completed prior to General Plan Buildout, because timely completion of these improvements cannot be definitively assured, the contribution of additional Project traffic to pre-existing freeway mainline segment deficiencies is recognized as cumulatively significant and unavoidable impact.

Table 5.4-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
AIR QUALITY	
	Project-Specific Significant Impacts **Construction-Related Pollutant Emissions Exceedances** Even after compliance with South Coast Air Quality Management District (SCAQMD) rules and regulations, and the application of EIR mitigation measures, construction-related pollutant emissions would exceed applicable SCAQMD regional emission thresholds for VOC and NOx. These impacts are individually significant. Construction-source emissions will also exceed applicable localized significance thresholds (LSTs) for PM_{10} and $PM_{2.5}$ concentrations, and as such would expose sensitive receptor land uses to substantial pollutant concentrations on a temporary basis. LST exceedances would be limited to the immediate Project vicinity (extending no further than 71 meters, or 233 feet, from the Project site boundaries) and at present would affect only the residence located at 28855 Fir Avenue. Nonetheless, LST exceedances impacts are recognized as individually significant. **Operational Pollutant Emissions Exceedances** Even after compliance with South Coast Air Quality Management District (SCAQMD) rules and regulations, and the application of EIR mitigation measures, operational pollutant emissions would exceed applicable SCAQMD regional emission thresholds for VOC and NOx. These impacts are therefore considered to be individually significant. It is noted however, that the Project land use and proposed development are consistent with development and associated air pollutant emissions impacts reflected in and anticipated by the applicable Air Quality Management Plan (AQMP). **Cumulatively Significant Impacts** **Construction-Related Pollutant Emissions Exceedances** Above-noted Project-specific construction-related pollutant emissions exceedances are also considered cumulatively significant. **Operational Pollutant Emissions Exceedances** Above-noted Project-specific operational pollutant emissions exceedances are also considered cumulatively significant. **Non-Attainment Area Impacts** Project exceedances of regional emissions thresholds for VOC, and NOx (ozone precursors), in combination with VOC, and NOx emissions generated by other sources affecting regional non-attainment areas, will result in a cumulatively considerable net increase in VOC, and NOx emissions within the non-attainment areas. This is considered a cumulatively significant impact. As above, it is noted that the Project land use and proposed development are consistent with development and associated air pollutant emissions impacts reflected in and anticipated by the applicable Air Quality Management Plan (AQMP).

Table 5.4-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
NOISE	
	Project-Specific Significant Impacts **Temporary Construction Impacts** The EIR's noise analysis indicates that construction-related noise may temporarily and intermittently exceed the City's thresholds of significance at residential receptors in the Project vicinity. This is considered a significant Project-specific temporary and transient noise impact. **Cumulatively Significant Impacts** Construction noise impacts when considered with ambient noise conditions would be cumulatively considerable and significant for the duration of Project construction.
AESTHETICS	
	Project-Specific Significant Impacts **Change to Scenic Vistas** Construction of the proposed Project would result in interrupted or obstructed views of off-site scenic areas. This is recognized as a significant and unavoidable aesthetic impact. **Cumulatively Significant Impacts** The Project will restrict or interrupt both near and distant views in the Project area, and in combination with other vicinity development, will cumulatively result in a substantial adverse effect on scenic views in the Project area. The cumulative effects of the Project in regard to scenic vistas are determined to be significant.

5.4.2 Other Environmental Concerns

All other potential environmental impacts of the Project are determined to be less-than-significant, or can be successfully reduced below significance thresholds through compliance with established regulations, conformance with the Project Conditions of Approval, and/or application of the mitigation measures presented in this EIR.

5.5 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The *Guidelines* § § 15126, subd. (c), 15126.2, subd. (c), 15127, require that for certain types or categories of projects, an EIR must address significant irreversible environmental changes that would occur should the Project be implemented. As presented at *Guidelines* §15127, the topic of Significant Irreversible Environmental Changes need be addressed in EIRs prepared in connection with any of the following activities:

> (a) The adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency;
>
> (b) The adoption by a local agency formation commission of a resolution making determinations; or
>
> (c) A project which will be subject to the requirements for preparing of an environmental impact statement pursuant to the requirements of the National Environmental Policy Act of 1969, 42 U.S.C. 4321-4347.

The Project qualifies under *Guidelines* §15127 (a) in that a zone change is required in order to implement the Project. As such, this EIR analysis addresses any significant irreversible environmental changes which would be involved in the proposed action should it be implemented [*Guidelines*, Sections 15126(e) and 15127]. An impact would fall into this category if:

- A project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses;
- A project involves uses in which irreversible damage could result from any potential environmental incidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project results in wasteful use of energy).

With regard to the above considerations, various natural resources, in the form of construction materials and energy resources, will be used in the construction of the Project, but their use is not expected to result in shortfalls in the availability of these resources.

The Project presents no significant possibility of irreversible environmental damage "from any potential environmental incidents associated with the project." The Project does not propose facilities or uses that would result in potentially significant environmental incidents. Moreover, all feasible mitigation is incorporated in the Project to reduce its potential environmental effects. As discussed herein, the Project will not result in or cause unwarranted or wasteful use of resources, including energy.

5.6 ENERGY CONSERVATION

5.6.1 Overview

Consistent with CEQA Guidelines Appendix F, this Section of the EIR addresses the potential for the Project to result in the inefficient, wasteful, or unnecessary consumption of energy. For new development such as that proposed by the Westridge Commerce Center Project, compliance with California Title 24 energy efficiency requirements is considered demonstrable evidence of a project's efficient use of energy. As discussed below, the Project will surpass incumbent and applicable Title 24 Energy Efficiency Standards, and will provide and promote energy efficiencies beyond those required under other applicable state or federal standards and regulations. On this basis, the potential for the Project to result in the inefficient, wasteful or unnecessary consumption of energy is determined to be less-than-significant.

5.6.2 Background and Introduction

In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs; license thermal power plants of 50 megawatts or larger; develop energy technologies and renewable energy resources;

plan for and direct state responses to energy emergencies; and, perhaps most importantly, to promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards.

Germane to the Westridge Commerce Center Project and this EIR, AB 1575 also amended Public Resources Code Section 21100(b) (3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. To this end, the State Resources Agency created Appendix F to the *CEQA Guidelines (Guidelines)*. Advisory guidance presented in Appendix F to the *Guidelines* assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy.

5.6.3 Federal and State Regulatory Setting

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 are three federal agencies with substantial influence over energy policies and programs. On the state level, the California Public Utilities Commission (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. Project consistency with applicable federal and state regulations is also presented.

5.6.3.1 Federal Energy Policy and Conservation Act

The Federal Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the U.S. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the United States Department of Transportation, is responsible for establishing additional vehicle standards and for revising existing standards. *Vehicles accessing the Project site are subject to provisions of the Federal Energy Policy and Conservation*

Act (Act). The Project is therefore determined to be consistent with, and will not otherwise interfere with, nor obstruct implementation of the Act.

5.6.3.2 Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (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. *Transportation and access to the Project site is provided primarily by the local and regional roadway systems. The Project will not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA.*

5.6.3.3 The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (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. *The industrial land use proposed by the Project is located proximate to existing and proposed major roadways. This site selection for the Project facilitates access to the site, acts to reduce vehicle miles traveled, and takes advantage of existing infrastructure systems. The Project therefore supports the planning processes emphasized under TEA-21. The Project is therefore determined*

to be consistent with, and will not otherwise interfere with, nor obstruct implementation of TEA-21.

5.6.3.4 The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was signed into law on August 10, 2005. With overall funding authorization totaling $244.1 billion, SAFETEA-LU represents the largest surface transportation investment in our Nation's history. The two landmark bills that brought surface transportation into the 21st century - ISTEA and TEA-21 - shaped the highway program to meet the Nation's changing transportation needs. SAFETEA-LU addresses many of the challenges facing our transportation system today, such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment. Furthermore, it promotes more efficient and effective surface transportation programs by focusing on transportation issues of national importance, while giving State and local transportation decision-makers more flexibility to solve transportation problems in their communities. *The Project site is located proximate to existing and proposed major roadways. Transportation and access to the Project site is provided primarily by the local and regional roadway systems, taking advantage of existing infrastructure systems. The Project is consistent with, and will not interfere with, nor obstruct, efforts and actions that may be realized pursuant to SAFETEA-LU.*

5.6.3.5 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 a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access. As

noted above, the industrial land uses proposed by the Project are located proximate to existing and proposed major roadways. This site selection for the Project facilitates access to the site, acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, and is determined to be consistent with, and will not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.

5.6.3.6 California Code Title 24, Part 6, Energy Efficiency Standards

California Code Title 24, Part 6 (also referred to as the California Energy Code), was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. According to the CEC, since the energy efficiency standards went into effect in 1978, it is estimated that California's building efficiency standards (along with those for energy efficient appliances) have saved more than $56 billion in electricity and natural gas costs. The CEC further estimates that by 2013, residential and nonresidential consumers will realize an additional $23 billion in energy savings.

The CEC adopted new standards on April 23, 2008. All projects that apply for a building permit on or after January 1, 2010 must meet the 2008 standards. The 2008 Energy Efficiency Standards in their entirety may be reviewed at http://www.energy.ca.gov/title24/. The 2008 Energy Efficiency Standards may also be reviewed at the Energy Efficiency Division, California Energy Commission, 1516 Ninth Street, MS-29, Sacramento, CA 95814-5512. The Project will be designed, constructed and operated so as to achieve a minimum of 20 percent benefit in energy efficiencies beyond incumbent Title 24 Energy Efficiency Standards. On this basis, the Project is determined to be consistent with, and will not interfere with, nor otherwise obstruct implementation of Title 24 Energy Efficiency Standards.

5.6.4 PROJECT ENERGY CONSERVATION ANALYSIS

As is the case with other uniform building codes, Title 24, Part 6 is designed to provide certainty and consistency of design standards throughout the state, and concurrently ensure efficient use of energy. For new development projects, adherence to Title 24 Energy Efficiency Standards is deemed sufficient evidence to conclude that the project under consideration will not result in, nor cause, inefficient, wasteful, or unnecessary consumption of energy. Conversely, development projects that demonstrably cannot, or will not, comply with Title 24 Energy Efficiency Standards and requirements would be considered to result in potentially significant impacts related to energy use and energy consumption.

5.6.4.1 Leadership in Energy and Environmental Design (LEED) Criteria Compliance

As a means of achieving the Project's energy conservation target, the design of the Westridge Commerce Center Project facilitates development reflecting criteria established under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, a program developed by the United States Green Building Council. This program includes a rating system that can be applied to new construction projects such as that considered here. The LEED criteria for New Construction and Major Renovations (LEED-NC) include a rating system with performance goals in five environmental categories: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, and Indoor Environmental Quality. Additionally, a sixth category, Innovation & Design Process, addresses those environmental issues not included in the other categories. It is recognized that not all LEED performance standards are applicable or appropriate for the Project, and that different standards may be utilized for different aspects of the Project. However, the Project as a whole will be developed to provide for future LEED certification, and in so doing supports the requirements for the Project to achieve increased energy efficiencies (20 percent minimum) beyond incumbent Title 24 energy efficiency standards. More specifically, as provided for in the EIR mitigation measures, buildings shall surpass incumbent California Title 24 Energy Efficiency performance standards by a minimum of 20

percent for water heating and space heating and cooling. Verification of increased energy efficiencies shall be documented in Title 24 Compliance Reports provided by the Applicant, and reviewed and approved by the City prior to the issuance of the first building permit. Any combination of the following design features may be used to achieve targeted performance standards, provided that the total increase in efficiency meets or exceeds 20 percent. Project LEED certification also supports and demonstrates compliance with other applicable state and federal energy standards.

- Increase in insulation such that heat transfer and thermal bridging is minimized;
- Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption;
- Incorporate dual-paned or other energy efficient windows;
- Incorporate energy-efficient space heating and cooling equipment;
- Interior and exterior energy efficient lighting which exceeds the California Title 24 Energy Efficiency performance standards will be installed, as deemed acceptable by the City of Moreno Valley. Automatic devices to turn off lights when they are not needed will be implemented.
- To the extent that they are compatible with landscaping guidelines established by the City of Moreno Valley, shade producing trees, particularly those that shade buildings and paved surfaces such as streets and parking lots and buildings will be planted at the Project site.
- Paint and surface color palette for the Project will emphasize light and off-white colors which will reflect heat away from the buildings.
- All buildings will be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design.

6.0 ACRONYMS AND ABBREVIATIONS

6.0 ACRONYMS AND ABBREVIATIONS

ACOE	Army Corps of Engineers
ADP	Area Drainage Plan
ADT	Average Daily Traffic
AQMP	Air Quality Management Plan
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CGV	Compass Growth Visioning
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon monoxide
CPUC	California Public Utilities Commission
CRA	Colorado River Aqueduct
CVP	Central Valley Project

CWA	Federal Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBESP	Determination of Biologically Equivalent or Superior Preservation
DIF	Development Impact Fee
DPM	Diesel Particulate Matter
DU	dwelling unit
DWR	Department of Water Resources
EIR	Environmental Impact Report
EMWD	Eastern Municipal Water District
EO	Executive Order
EPA	U.S. Environmental Protection Agency
eps	emission performance standard
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
g/m3	micrograms per cubic meter
GCC	Global Climate Change
GPC	General Plan Cumulative
gpd	gallons per day
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HMMP	Habitat Mitigation & Monitoring Plan
IS	Initial Study
ITE	Institute of Transportation Engineers
LEED	Leadership in Energy and Environmental Design
Leq	equivalent noise level
LOS	Level(s) of Service
LST	localized significance thresholds

MBTA	Migratory Bird Treaty Act
mph	miles per hour
MPO	metropolitan planning organizations
MSHCP	Multiple Species Habitat Conservation Plan
MSL	mean sea level
MWD	Metropolitan Water District
NAAQS	National Ambient Air Quality Standards
NAIOP	National Association of Industrial and Office Properties
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NOP	Notice of Preparation
NOx	Nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
OPR	Office of Planning and Research
Pb	Lead
PCE	passenger car equivalent
$PM_{2.5}$	Particulate Matter 2.5 microns or less in diameter
PM_{10}	Particulate Matter 10 microns or less in diameter
POS	Plan of Service
ppm	parts per million
PVRWRF	Perris Valley Regional Water Reclamation Facility
RCA	Regional Conservation Authority
RCFCWCD	Riverside County Flood Control & Water Conservation District
RCTC	Riverside County Transportation Commission
ROG	reactive organic gases
RTA	Riverside Transit Agency
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RUWMP	Regional Urban Water Management Plan
RWQCB	Regional Water Quality Control Board
RWRF	Regional Water Reclamation Facilities

SARWQCB	Santa Ana Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCH	State Clearinghouse
SIP	State Implementation Plan
SOx	Sulfur oxides
SRRE	Source Reduction and Recycling Element
SWC	State Water Contractors
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TIA	Traffic Impact Analysis
TUMF	Transportation Uniform Mitigation Fee
UBC	Uniform Building Code
UMWP	Urban Water Management Plan
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Council of Governments
WSA	Water Supply Assessment

7.0 REFERENCES

7.0 REFERENCES

PERSONS AND ORGANIZATIONS CONSULTED

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APPENDICES

Please refer to accompanying CD-ROM

PLANNING COMMISSION
STAFF REPORT

Case: PA13-0027 – Housing Element Update

Date: January 16, 2014

Applicant: City of Moreno Valley

Representative: Planning Division

Location: City-wide

Proposal: General Plan Amendment to update the City of Moreno Valley's Housing Element.

Recommendation: Approval

SUMMARY

The City of Moreno Valley proposes to amend the existing General Plan to replace the City's current adopted Housing Element with an updated Housing Element, in order to comply with State Law (California Government Code Article 10.6 of the Government Code).

PROJECT DESCRIPTION

The Housing Element is one of seven mandatory elements (per state law) of the General Plan. The purpose of the Housing Element is to identify and analyze existing and projected housing needs in an effort to preserve, improve and develop housing for all economic segments of the community in accordance with state law. All cities and counties in California are required to update General Plan Housing Elements on a regular basis and to submit the updated Element to the California Department of Housing and Community Development (HCD) for review and certification. As a jurisdiction of the Southern California Association of Governments (SCAG) region, the City of Moreno Valley is required to adopt its Housing Element by February 15, 2014 for the 2014-2021 planning period ("5th cycle").

Staff began work in late 2012 to update the Housing Element to address these requirements. The goal of the Housing Element is to promote effective development within the City and satisfy the City's Regional Housing Need Allocation (RHNA) obligation of 6,129 residential units during the 2014-2021 planning period for the Southern California Association of Governments (SCAG) region.

The City of Moreno Valley held a public review meeting at the September 26, 2013 Planning Commission meeting. The public review provided the opportunity to gain public input regarding the Housing Element before the draft was submitted to the State Department of Housing and Community Development (HCD). The draft element was subsequently submitted to the HCD in October 2013 for review.

BACKGROUND

The Housing Element is part of the City's General Plan, which sets forth guiding policies for future development. The requirement for each city to adopt a General Plan is contained in State law (California Government Code Sec. 65300 et seq.), which also lays out specific requirements for each element. The Housing Element provides an overarching statement of City policies and programs to maintain and improve existing housing, and also accommodate the City's fair share of population growth needs. Among the requirements in State law for Housing Elements are the following:

- Ensure adequate sites for new housing for persons of all income levels;
- Encourage and facilitate the development of affordable housing;
- Conserve and improve the existing affordable housing stock;
- Analyze and remove governmental constraints on new housing development;
- Promote equal housing opportunities; and
- Preserve assisted housing.

As part of the Housing Element, cities are required to address local housing needs, including housing affordable to seniors, families and workers. The Regional Housing Needs Assessment (RHNA) is the process established in State law by which new housing needs are determined for the State.

Prior to each planning cycle, the total new housing need for each region of California is determined by HCD. Total housing need is based on the latest forecast of economic and demographic trends. Riverside County is within the Southern California Association of Governments (SCAG) region. During 2010-2012, SCAG prepared the RHNA for the 5th cycle. Table 1 shows SCAG's adopted RHNA allocation for Moreno Valley for the new planning period.

Table 1: City of Moreno Valley, RHNA 2014-2021

Moreno Valley Regional Housing Needs Allocation 2014-2021		
Income Category	**Units**	**Percent**
Very Low-Income	1,500	24.3%
Low-Income	993	16.5%
Moderate-Income	1,112	18.1%
Above Moderate-Income	2,584	41.1%
Total Construction Need	**6,169**	**100%**

The RHNA is a tool that quantifies a City's anticipated needs for housing; and the City is responsible to determine how those needs are met. As stated in Table 1, for the 5th RHNA cycle, Moreno Valley is required to demonstrate that suitable sites are available to accommodate 6,169 new housing units. It is important to note that the RHNA establishes a planning target, not a development mandate. Housing development, especially affordable housing, is dependent on many factors that cities do not control, therefore State law holds cities responsible for establishing land use plans and development regulations that enable a variety of housing types to be built commensurate with the level of need identified in the RHNA. The Residential 30 (R30) rezoning of 146.19 acres that was adopted as part of the 4th Housing Element update and approved by the City Council on May 30, 2013, provides sufficient sites to accommodate the City's assigned share of regional need for the new planning period (5th Cycle), and no additional zoning amendments are necessary.

PROPOSED 2014-2021 HOUSING ELEMENT

No major changes to Housing Element law have occurred since the previous planning period, and therefore the 5th cycle Housing Element (Attachment 3) reflects a continuation of many of the policies of the current Housing Element.

Proposed revisions are summarized by chapter as follows:
Chapter I (Introduction) includes an overview of the element, describes data sources and a summary of public participation process.

Chapter II (Housing Plan) is a completely new section that includes goals, policies, and programs related to housing. The policies are established to guide the development, redevelopment and preservation of a balanced inventory of housing to meet the needs of present and future residents of the City.

Chapter III (Quantified Objectives) is also a new section. The State Housing Law requires that each jurisdiction establish the number of housing units that will be constructed, rehabilitated, and preserved over the planning period. The Quantified Objectives for the Housing Element reflect the planning period from January 1, 2014 to October 31, 2021.

Chapter IV (Housing Needs Assessment) has been extensively revised to reflect the recent demographic data, trends and special housing needs. Most of the demographic information is based on the 2010 Census or the American Community Survey. This chapter also includes the new Regional Housing Needs Assessment, which describes housing growth needs for the new planning period.

Chapter V (Housing Constraints) as required under state law contains an analysis of potential and actual market, governmental, and environmental constraints to the production, maintenance, and improvement of housing for persons of all income levels, including persons with disabilities.

Chapter VI (Housing Resources) summarizes the land, financial, and administrative resources available for the development and preservation of housing in Moreno Valley. The analysis includes an evaluation of the availability of land resources for future housing development; the City's ability to satisfy its share of the region's future housing needs, the financial resources available to support housing activities, and the administrative resources available to assist in implementing the City's housing programs and policies.

Chapter VII (Progress Report) reviews the previous Housing Element's goals, policies, and implementation actions that were to be implemented during the previous planning period.

ENVIRONMENTAL

Pursuant to the California Environmental Quality Act (CEQA), environmental review of the proposed General Plan Amendment (update to the Housing Element) has been conducted, and it has been determined that the proposed amendment is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3). The amendment is covered by the general rule which exempts activities that can be seen with certainty to have no possibility for causing a significant effect on the environment.

NOTIFICATION

A 1/8 page public notice was published in the local newspaper, the Press Enterprise, on January 5, 2014. The notice is also posted on the City's website.

STAFF RECOMMENDATION

APPROVE Resolution No. 2014-01 and thereby RECOMMEND that the City Council:

1. **RECOGNIZE** that this item is exempt from the provisions of the California Environmental Quality Act (CEQA), as a Class 32 Categorical Exemption, CEQA Guidelines, Section 15061(b)(3), which states the general rule is that CEQA applies only to projects which have the potential for causing a significant effect on the environment and

2. **APPROVE** PA13-0027 (General Plan Amendment) based on the findings contained in the resolution.

Prepared by:

Claudia Manrique
Associate Planner

Approved by:

Chris Ormsby, AICP
Interim Planning Official

ATTACHMENTS:

1. Public Hearing Notice
2. Resolution 2014-01 with the 2014-2021 Housing Element attached as Exhibit A.

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PLANNING COMMISSION RESOLUTION NO. 2014-01

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY RECOMMENDING THAT THE CITY COUNCIL APPROVE APPLICATION NO. PA13-0027 CITY OF MORENO VALLEY GENERAL PLAN HOUSING ELEMENT UPDATE (2014-2021).

WHEREAS, State law requires cities and counties to prepare and adopt a General Plan to guide the future development of a city or county; and

WHEREAS, a General Plan must contain certain elements, including a Housing Element which sets forth goals, policies and programs to encourage the development of housing for all income groups and persons with special needs; and

WHEREAS, State law requires that cities and counties comprehensively update their General Plan Housing Element every five years to ensure their plans can accommodate future demand for housing; and

WHEREAS, between October 2013 and January 2014, the 2014-2021 Housing Element Update was reviewed by the California Department of Housing and Community Development (HCD); each time staff incorporated HCD's comments into the subsequent drafts until the HCD certified the final Housing Element; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

WHEREAS, the City conducted an environmental analysis on the proposed Housing Element update per the requirements of the California Environmental Quality Act; said analysis concluded that the proposal is exempt under CEQA guidelines in that this activity is covered by the general rule that CEQA only applies to projects that have the potential for causing a significant impact on the environment as defined in Section 15061(b)(3); and

NOW, THEREFORE, BE IT RESOLVED, it is hereby found, determined and resolved by the Planning Commission of the City of Moreno Valley as follows:

A. This Planning Commission hereby specifically finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the above-referenced meeting, including written and oral staff reports, and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. **Conformance with General Plan Policies –** The proposed general plan amendment is consistent with the General Plan, and its goals, objectives, policies and programs.

   FACT: The General Plan Amendment will allow the Housing Element of the General Plan to be amended consistent with State law. The Housing Element is part of the City's General Plan, which sets forth guiding policies for future development. The requirement for each city

to adopt a General Plan is contained in California Government Code Section 65300 et seq., which also lays out specific requirements for each element. The Housing Element provides an overarching statement of City policies and programs to maintain and improve existing housing, and also accommodate the City's fair share of population growth needs. Among the requirements in California Government Code Section 65580 et seq. for Housing Elements are the following:

- Ensure adequate sites for new housing for persons of all income levels;
- Encourage and facilitate the development of affordable housing;
- Conserve and improve the existing affordable housing stock;
- Analyze and remove governmental constraints on new housing development;
- Promote equal housing opportunities; and
- Preserve assisted housing.

The 2014-2021 Housing Element meets each of the aforementioned requirements and, therefore, would be consistent with State law.

2. **Health, Safety and Welfare –** The proposed general plan amendment will not be detrimental to the public health, safety or welfare.

   FACT: The 2014-2021 Housing Element does not propose any new policies or programs that would change any land use or portend new development that was not already considered in the Moreno Valley General Plan.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY RECOMMENDS** that the City Council:

1. **RECOGNIZE** that this item is exempt from the provisions of the California Environmental Quality Act (CEQA), as a Class 32 Categorical Exemption, CEQA Guidelines, Section 15061(b)(3), which states the general rule is that CEQA applies only to projects which have the potential for causing a significant effect on the environment and

2. **APPROVE** PA13-0027 (General Plan Amendment) based on the findings contained in the Resolution.

APPROVED this 16th day of January, 2014.

_____
Mary E. Van Natta
Chair, Planning Commission

ATTEST:

_____
Chris Ormsby, Interim Planning Official
Secretary to the Planning Commission

APPROVED AS TO FORM:

_____
City Attorney

ATTACHED:

CITY OF MORENO VALLEY
HOUSING ELEMENT
2014-2021

City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA. 92552-0805

January 2014

Exhibit A

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Vacant Land Inventory – Manufactured Home Sites	#6
Vacant Land Inventory – Transitional Housing Sites	#7
Vacant Land Inventory – Homeless Shelter Sites	#8
Vacant Land Inventory – Homeless Shelter Sites (SP 208)	#9
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Maps of Rezoned High Density Sites-Calculations 3 ,4 and 5	Exhibits C,D, and E

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I. Introduction

Vision

A City that provides safe and decent housing opportunities for all its residents, offering a range of housing options to accommodate the diverse needs of the community.

The Housing Element is a component of the General Plan which assesses the housing needs of all economic segments of the City of Moreno Valley. In addition, the Housing Element defines the goals and policies that will guide the City's approach to resolving those needs and recommends a set of programs that would implement policies over the next few years.

State law requires that all cities adopt a Housing Element and describe in detail the necessary contents of the housing element. This Housing Element responds to those requirements, and responds to the special characteristics of the City's housing environment. This Housing Element incorporates the most current data and information readily available at the time of writing. It also includes an evaluation of the Housing Element adopted in 2011, an assessment of the current and potential housing actions, and an assessment of resources of the private sector and all levels of the public sector.

This Moreno Valley Housing Element is prepared for the 2014-2021 update cycle for jurisdictions in the Southern California Association of Governments (SCAG) region.

A. Purpose and Content

The Housing Element of the General Plan is designed to provide the City with a coordinated and comprehensive strategy for promoting the production of safe, decent, and affordable housing within the community. A priority of both State and local governments, Government Code Section 65580 states the intent of creating housing elements:

> *The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order.*

Per State Law, the Housing Element has two main purposes:

- To provide an assessment of both current and future housing needs and constraints in meeting these needs; and
- To provide a strategy that establishes housing goals, policies, and programs.

The Housing Element is an eight-year plan for the 2014-2021 period and serves as an integrated part of the General Plan, but is updated more frequently to ensure its relevancy and accuracy. The Housing Element identifies strategies and programs that focus on:

- Matching housing supply with need;

- Maximizing housing choice throughout the community;
- Assisting in the provision of affordable housing choice;
- Removing government and other constraints to housing investment; and
- Promoting fair and equal housing opportunities.

The Housing Element consists of the following major components:

- A profile and analysis of the City's demographics, housing characteristics, and existing and future housing needs.
- An analysis of constraints to housing production and maintenance. Constraints include potential market, governmental, and environmental limitations to meeting the City's identified housing needs.
- An overview of resources available to further housing production and maintenance.
- Resources include land available for new construction, opportunities for rehabilitation and revitalization, and financial and administrative resources available for implementing housing programs. In addition, this section also examines opportunities for energy conservation.
- An assessment of housing accomplishments during the previous Housing Element period, 2008-2014.
- A statement of the Housing Plan to address the City's identified housing needs, including a formulation of housing goals, policies, and programs.

Community Profile

The City of Moreno Valley is located in northwestern Riverside County, approximately 52 miles east of downtown Los Angeles, and 42 miles west of Palm Springs. The City is located near the eastern edge of the Los Angeles metropolitan area. Moreno Valley is situated along two major freeways. The Moreno Valley Freeway (State Route 60) connects directly to downtown Los Angeles and the regional freeway system. State Route 60 connects to Orange County via the Riverside Freeway (State Route 91). To the east, State Route 60 connects with Interstate 10, running to Palm Springs, Phoenix, and beyond. Interstate 215 runs by the westerly city limits, and is an important north-south link from San Diego through western Riverside and San Bernardino counties and beyond.

Moreno Valley is characterized by a beautiful valley bounded by mountains and hills on three sides. The city limits are bounded on the north by the Box Springs Mountains. The gullied hills of the Badlands lie to the east. The mountains of the Lake Perris Recreation Area, the floodplain of Mystic Lake and the San Jacinto Wildlife Area and level terrain in the City of Perris are located to the south. Gently sloping terrain lies west of the city limits within March Air Reserve Base, the City of Riverside and the County of Riverside.

To understand the current land use and development patterns that exist in Moreno Valley, it is important to understand the general history of the settlement of the area. Early settlers traveled through the area from northern Mexico to various mission settlements along a trail charted by Juan Bautista de Anza in 1774. The trail passed through the San Jacinto Valley, the Perris

Valley and southwest Moreno Valley. Moreno Valley and the rest of California became part of the United States in 1850. The Moreno Valley area began to develop in the late 1880's with the establishment of the Alessandro and Moreno settlements.

The City of Moreno Valley was incorporated on December 3, 1984 and thereafter the population soared, reaching 118,779 in 1990. For part of that period it was the fastest growing city in the country. Moreno Valley is the second largest city in Riverside County with a population of 193,365 in the year 2010 according to the US Census.

Today, Moreno Valley is very typical of other suburban communities in terms of the distribution and range of land use in the community. Moreno Valley offers a mix of housing types. Single-family homes make up about 75 percent of the housing stock and the multi-family share is about 25 percent.

To avoid serving simply as bedroom communities for adjacent countries, Riverside County jurisdictions, including Moreno Valley, are working to attract new businesses to provide employment opportunities for local residents. This also helps promote a more balanced jobs/housing ratio, reduces the need for long commutes and improves the local air quality and quality of life in general.

B. Summary

The 2011 housing element (2008-2014 planning period) consisted of a series of ongoing and new programs that implemented the City's housing element goals. The City of Moreno Valley's housing goals were classified into five areas of focus:

- Preservation and revitalization of existing neighborhoods.
- Creation of housing opportunities for special needs populations.
- Creation of rental housing for low and very low income households.
- Creation of housing opportunities for low and moderate income first time home buyers.
- Increase of energy conservation measures.

Under the goal of neighborhood preservation and revitalization, the City provided a series of highly successful programs that included annual neighborhood clean ups throughout the city, home improvement loan and grant programs, as well as focused neighborhood beautification grant programs. Additionally, the City of Moreno Valley takes a proactive role in its code enforcement activities in CDBG target areas. Often, code officers are the point of contact for referrals to the City's rehabilitation programs. Neighborhood revitalization programs also included the Targeted Neighborhood Program, which assisted in establishing owner's associations in order to address issues in smaller rental developments and maintain an important part of the privately owned, affordable multiple family rental housing stock.

The goal of creating housing opportunities for special needs populations in the past primarily focused on senior populations and transitional housing. In the 2008-2014 element this goal had

been expanded to include Agency funding of rental units affordable to formerly homeless, mentally ill adults, as well as developmentally and physically disabled adults and seniors. On May 28, 2013, the City Council amended the Moreno Valley Industrial Area Specific Plan (SP 208) to include Emergency Shelters as a permitted use. Zoning regulations contained in Title 9 of the City of Moreno Valley Municipal Code were also amended to include Single Room Occupancy Units (SRO) zones in the multiple family and specified commercial zones as well as adopting Reasonable Accommodation Procedures. Although Moreno Valley is no longer an agricultural community, pursuant to State law, the element also required an amendment to the Municipal Code to include currently permitting, by right, farm worker housing in all multiple family zones. The May 2013 amendments provided the necessary consistency with the City of Moreno Valley's certified 2008-2014 Housing Element.

The goal of creating rental housing for low and very low income households consists of a continuation of programs that in the past have created in excess of 600 permanently affordable rental units. The most ambitious program in the 2011 Housing Element (2008-2014 planning period), with the goal of creating rental housing for low and very low income households, was the rezoning of 142 acres to Residential 30 (R30) (approved by City Council on April 23, 2013).

To accommodate the 2008-2014 regional housing need of 1,806 Very Low-Income Units and 1,239 Low-Income Units (total of affordable units = 3,045), the City rezoned 142 acres of vacant and underutilized sites to R30 with a minimum density of 24 units per acre. The rezoned sites are identified by Assessor Parcel Number (APN) in Attachment #. The sites are appropriately sized to accommodate higher density developments, and will allow owner-occupied and rental multifamily residential uses without a conditional use permit (CUP), which is not required in Moreno Valley for multiple family housing, or other discretionary action pursuant to Government Code Section 65583.2 (h) and (i). As part of the rezoning program, the City has rezoned 8.75 acres of Agency owned land at Day and Alessandro, which in the past has been proposed to be used for a 225 unit affordable housing development with a day care facility. Additionally, the Agency provided financing for projects such as Perris Isle Senior Apartments, Rancho Dorado family housing, Atwood Gardens which includes units for developmentally disabled adults, Casitas Del Valle which consists of 40 units of affordable family housing.

In the sphere of creating affordable housing the City of Moreno Valley has a tradition of providing incentives for the development of housing to complement its provision of funds and land. The incentives include deferral of development impact fees for affordable housing until issuance of Certificate of Occupancy, lower development impact fees for affordable housing, and permit streamlining. Through the County of Riverside, waiver of Traffic Uniform Mitigation Fees (TUMF) for affordable housing; density bonus pursuant to the City's density bonus ordinance and a 100% density bonus for senior housing.

The City's goal of creating housing opportunities for low and moderate income first time home buyers consists of three programs. The first program provides down payment assistance to first time homebuyers in the form of a silent second. The second program targets households at 50% and 60% of median income through the City's partnership with Habitat for Humanity. The third is the Neighborhood Stabilization Program (NSP), which was established by HUD for the

purpose of stabilizing communities that have suffered from foreclosures and abandonment. Through the NSP program, the city was able to use funds to purchase and rehabilitate homes then resell them to individuals or families whose incomes do not exceed 50 percent of the area median income.

The goal of increasing energy conservation measures is being met by a series of programs that include adopting an ordinance to require all new and replacement roofing to utilize radiant barrier plywood; implementing the City's Residential Solar Initiative Program; and distributing free of charge compact fluorescent light bulbs.

C. New State Legislation

The Moreno Valley Housing Element was last updated in 2011 and is currently being updated for the years 2014 to 2021 as part of the new update cycle for jurisdictions within the SCAG (Southern California Association of Governments) region to allow for synchronization with the 2012-2035 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). The Element sets forth an 8-year strategy to address the City's identified housing needs, including specific implementing programs and activities.

Various amendments have been made to Housing Element law since adoption of the City's current Housing Element. These include:

- AB 162: Requires the City, upon adoption of the Housing Element, to identify specific flood hazard zones in the Land Use Element and specific floodwater and groundwater recharge areas in the Conservation and Safety Elements.
- SB 244: Requires the City, upon the adoption of a Housing Element, to update the Land Use Element to include data and analysis, goals, and implementation measures regarding unincorporated island, fringe, or legacy communities and their infrastructure needs.
- SB 812: In addition to the existing special needs groups, the City must include an analysis of the housing needs for persons with developmental disabilities.
- AB 1867: Under certain conditions, the City can now count multi-unit homeownership units that have been converted to affordable units toward their RHNA allocation.
- SB375 Implications: For jurisdictions that do not submit their adopted 2014-2021 housing element update within 120 days of the October 2013 deadline, their housing element updates revert to a four-year cycle.

The contents of this updated Housing Element comply with these amendments and all other requirements of Housing Element law.

D. Citizen's Participation

Citizen participation is one of the most important components of the Housing Element process. The City of Moreno Valley Community & Economic Development Department utilized the following strategy to solicit meaningful community input in preparing the City's 2014-2021 Housing Element.

Consolidated and Annual Action Plans

The U.S. Department of Housing and Urban Development (HUD) requires that grantee cities, such as Moreno Valley, prepare both a Consolidated Plan and an Annual Action Plan as a condition to receiving Federal funding under the Community Development Block Grant (CDBG) and HOME Investment Partnerships Program (HOME). The Consolidated Plan is a planning document that covers a five year period between July 1, 2013 and June 30, 2018, and establishes the City's strategies for addressing low and moderate income needs of the community, as defined by HUD regulations. As the above plans required much the same data/input as the Housing Element, the community outreach was combined. As the above plans required much the same data/input as the Housing Element, the community outreach was used to formulate Housing Element policies and programs.

Citizen participation for the development of the Consolidated Plan, the Annual Action Plan, and the Analysis of Impediments to Fair Housing (AI) was accomplished through a series of meetings, public notices and announcements. City staff conducted meetings with area residents, non-profit organizations and surrounding jurisdictions to solicit input on community needs. Two public meetings were conducted to determine community needs. In addition, several focused meetings with local agencies, surrounding jurisdictions and City committees were also conducted. Information and notification of these meetings was distributed through correspondence, flyers and public notices in the Press Enterprise Newspaper. The information compiled from the meetings was used in determining the needs in the community and the development of strategies as well as updating the Housing Element.

Fair housing workshops were held on October 29, 2012 and November 14, 2012. The first workshop was attended by residents and public service agencies. An overview of the scope of purpose of the AI was given to the attendees. Housing concerns mentioned at the workshop primarily pertained to the great need for rental assistance. On-site apartment resident managers were invited to the second focus group workshop. The Fair Housing Council distributed information on fair housing training to those in attendance. The main concern raised at the focus group workshop was reasonable accommodations, particularly the issue of reasonable accommodation requests to smoke marijuana and cultivate it on the site.

In addition, three public hearings were conducted to solicit input from the general public for the required reports. The first public hearing took place on December 11, 2012 and residents were given the opportunity to provide comments regarding priority needs in the community. A second public hearing was held on March 26, 2013 to discuss the proposed Consolidated Plan goals

and objectives and the proposed projects for the upcoming fiscal year. After receiving input from the community, the proposed Consolidated Plan was available for a 30-day public examination and comment period from March 15, 2013 through April 15, 2013. The Plan was available at four locations (Library, City Corporate Yard, City Hall and Senior Center) within the City. A final public hearing was conducted on May 23, 2013 after the close of the public review period. The final public hearing allowed the public an opportunity to comment on the proposed Consolidated Plan before adoption by the City Council.

Alessandro Boulevard Corridor Plan

In 2009 the City of Moreno Valley received a Compass Blueprint Strategy grant award from the Southern California Association of Governments (SCAG) to complete the "Alessandro Boulevard Corridor – Vision Plan". The "Alessandro Boulevard Corridor – Vision Plan" focused on long-term goals for the corridor related to land-use, transportation, and economic revitalization along Alessandro Boulevard, including ways to enhance the boulevard as a transit corridor for faster and more frequent bus service. The vision plan looked at socioeconomic trends, surrounding development patterns, and the type of development envisioned for Alessandro Boulevard Corridor and then evaluated these conditions and made a series of recommendations.

The development of the vision plan for the Alessandro Boulevard Corridor was a collaborative and participatory process. There were two public workshops held at the City Hall Council Chambers on April 22, 2010 and May 6, 2010. Participants were given the opportunity to voice their opinions on where to locate mixed use and/or higher density development along the corridor. There were also a series of meetings with community stakeholders at City Hall with the consultants and City Staff.

The key recommendations from the workshops and meetings were used to create a series of independent but related activity nodes. These activity nodes works in concert with Moreno Valley's existing activity nodes to provide a complete and strategically dispersed set of places aimed at either the regional, community or neighborhood level of activity. The following six nodes were defined in the Vision Plan for inclusion in the Mixed Use Districts Overlay:

- Alessandro Boulevard & Frederick Street (MUI)
- Alessandro Boulevard & Heacock Street (MUN)
- Alessandro Boulevard & Perris Boulevard (MUC)
- Alessandro Boulevard & Lasselle Street (MUN)
- Alessandro Boulevard & Nason Street (MUI)

The "Alessandro Boulevard Corridor – Vision Plan" workshops and meetings also supported the placement of the higher density Residential 30 (R30) housing as identified in the 2011 General Plan Housing Element. The four areas included:

- Area #1 - Alessandro Boulevard and Day Street,

- Area #2 - Alessandro Boulevard & Elsworth Street
- Area #3 - Alessandro Boulevard & Morrison Street
- Area #4 - Perris Boulevard & Iris Avenue

In 2011 the City of Moreno Valley received a Compass Blueprint Strategy grant award from the Southern California Association of Governments (SCAG) to complete the "Alessandro Boulevard Corridor Implementation Project". The goal of the "Alessandro Boulevard Corridor Demonstration Project – Phase I" was to identify opportunities for mixed use transit-oriented development along Alessandro Boulevard. With implementation of the Corridor Project, the City of Moreno Valley was able to provide additional Multiple Family housing in areas near existing or emerging employment and shopping centers along Alessandro Boulevard. The Residential 30 (R30) rezoned as part of the Alessandro Boulevard Corridor Project also allowed the City of Moreno Valley to meet its 2008-2014 State-mandated Regional Housing Needs Assessment (RHNA) numbers.

Two 1/8 page ads were published in the Press Enterprise and 1,167 notices were sent residents affected by the rezoning and Mixed Use Districts Overlay area (including a 300 foot buffer) for both the Planning Commission (March 14, 2013) and City Council (April 23, 2013) Public Hearings. There was also one public informational meeting held at the City Hall Council Chambers on March 7, 2013 and the information for this meeting was included on the Planning Commission Public Hearing notice. The three members of the public came to the informational meeting and were interested in either the proposed changes to their own property or had a neighboring parcel. No concerns were raised with the project at either the Planning Commission or City Council Public Hearings.

The rezoned sites are identified by Assessor Parcel Number (APN) in Attachment 4. The 146.19 acres rezoned to Residential 30 (R30) could potentially provide up to 4,385 units, if fully built out at the density of 30 units per acre. The Housing Element noted that based on historical development patterns, it will be assumed that the majority of sites would be developed at 80% of the maximum residential density, which would be 3,508 units.

The 2008-2014 RHNA required specific numbers of units based on income categories. The requirements were a total of 1,806 units in the "Very Low" category, and 1,239 units in the "Low" category for a total of 3,045 units. The rezoning of 146.19 acres to Residential 30 (R30) allowed the City of Moreno Valley to maintain its compliance with State housing element law.

Related Specific Plan & Code Amendments

The City of Moreno Valley amended the Moreno Valley Industrial Area Specific Plan (SP 208) and zoning regulations contained in Title 9 of the City of Moreno Valley Municipal Code to include Emergency Shelters, Farm Worker Housing, Single Room Occupancy Units (SRO) and Reasonable Accommodation Procedures. The amendments provided the necessary consistency with the City of Moreno Valley's certified Housing Element.

The specific plan and code amendments went to two public hearings and a 1/8 page advertisement was published in the Press Enterprise for each meeting. Planning Commission was held on April 25, 2013 and City Council was held on May 28, 2013. All the items are approved.

September 2013 Community Outreach & Planning Commission

The City of Moreno Valley held a joint public review meeting at the September 26, 2013 Planning Commission. The public review provided the opportunity to gain input regarding the Housing Element before the draft is submitted to the State Department of Housing and Community Development (HCD) for review and certification.

A 1/8 page advertisement was published in the Press Enterprise and the notice was posted online at the City's website as well. The three members of the public came to the meeting, with two of them speaking. The first speaker brought up the need for executive/upscale housing as well as the limitations placed on development in the Hillside Residential (HR) zoning districts. The second speaker questioned the previous public participation and pointed out some errors in the employment tables, which have been fixed. The Planning Commission also spoke regarding the potential for executive/upscale housing in the City and for the development of 55+ active adult living communities.

E. Consistency with State Planning Law

The Housing Element is one of the seven General Plan elements mandated by the State of California. Sections 65580 to 65590 of the California Government Code contain the legislative mandate for the Housing Element. State law requires that the City's Housing Element consist of "an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement and development of housing" (Section 65583). In addition, the Housing Element shall identify adequate sites for housing, including rental housing, factory-built housing, and mobile homes, and shall make adequate provision for the existing and projected needs of all economic segments of the community.

There is no single approved format for a Housing Element. Instead, State law defines components of issues that must be addressed. A Housing Element should clearly identify and address, at a minimum, each component listed below.

1. Review of existing Housing Element.
2. An assessment of existing and projected housing and employment trends to assess a locality's housing needs for all income levels.
3. An inventory of resources relevant to meeting housing needs.
4. An inventory of constraints relevant to the meeting of these needs.

5. A statement of the community's goals, quantified objectives, and policies relative to the maintenance, preservation, improvement, and development of housing.
6. A program that sets forth an eight-year schedule of actions the local government is undertaking or intends to undertake to implement the policies and achieve the goals and objectives of the Housing Element.

F. General Plan Consistency

The goals, policies, objectives and programs in the housing element for the planning period of 2014-2021, relate to and are consistent with all elements in the general plan. The City's housing element identifies programs and resources required for the preservation, improvement and development of housing to meet the existing and projected needs of its residents. As portions of the General Plan are amended in the future, the housing element will be reviewed to ensure internal consistency.

Relationship to Other General Plan Elements

The City of Moreno Valley's General Plan contains goals and policies for urban development, community design, housing, natural hazards, economic development, and public services and facilities.

The Land Use Element sets forth the amount and type of residential development permitted under the General Plan, thereby affecting housing opportunity in Moreno Valley. In addition, the Land Use Element contains policies directed at maintaining the existing housing stock, as well as ensuring the quality of new residential development. The Circulation Element contains policies to minimize roadway traffic into residential neighborhoods and the Noise Element sets forth policies to minimize the level of noise in neighborhoods. The Conservation and Open Space Element establishes development standards to minimize the impact of residential development on sensitive resources, such as hillside areas, ecological habitat, and scenic view sheds. Finally, the Safety Element sets forth policies to ensure the safety of the City's housing stock through such measures as code enforcement, and mitigation of environmental hazard (such as wildfires and flooding) as conditions to development.

The City must also ensure that adequate water and sewer services are available to accommodate the growth anticipated in the Housing Element. In the event of a shortage in water supply or sewage capacity, affordable housing will be given priority for allocation pursuant to SB 1087. Upon adoption of the Housing Element, the City will send a copy of the Housing Element to the various water and sewer service providers.

Goals and Policies

The Moreno Valley Housing Element includes the following goals:

- Maintain and enhance the quality of existing residential neighborhoods in Moreno Valley.

- Encourage adequate provision of a wide range of housing by location, type of unit, and price to meet the existing and future needs of Moreno Valley residents.
- Provide increased opportunities for home ownership.
- Provide housing support services to address the needs of the City's low and moderate income residents.
- Promote equal opportunity for all residents to reside in the housing of their choice.

II. Housing Plan

The Housing Plan includes goals, policies, and programs related to housing and are presented in this section. The policies are established to guide the development, redevelopment and preservation of a balanced inventory of housing to meet the needs of present and future residents of the City. It is a goal of the City to ensure that all residents have decent, safe, sanitary and affordable housing regardless of income. This statement guides the City's actions with respect to housing. The specific goals, policies and actions detailed in this section provide the framework for the City's overall housing program. Specific policies and actions included in this element are intended to provide a wide variety of programs and tools to implement the City's General Plan goals. Actual programs will be implemented at the discretion of the City in order to meet established objectives.

The goals and policies contained in the Housing Element address Moreno Valley's identified housing needs and are implemented through a series of actions and programs. Housing programs define the specific actions the City will take to achieve specific goals and policies. The action plan includes both programs currently in operation and new activities which have been added to address the City's unmet housing needs. It should be noted that the listing of a particular funding source of a particular program and/or action does not denote that it has been allocated or appropriated as a source of funding for such a program and/or action.

Housing Goal #1: ***Availability of a wide range of housing by location, type of unit, and price to meet the existing and future needs of Moreno Valley residents.***

Policy 1.1: Continue to support non-profit and for-profit organizations in their efforts to construct, acquire, and improve housing to accommodate households with lower and moderate incomes.

Policy 1.2: Promote development that provide a variety of housing types and densities based on the suitability of the land, including the availability of infrastructure, the provision of adequate services and recognition of environmental constraints.

Policy 1.3: Avoid concentrating housing constructed expressly for lower income households in any single portion of any neighborhood.

Policy 1.4: Locate higher density residential development in close proximity to employment and shopping.

Policy 1.5: Promote construction of units consistent with the new construction needs identified in the Regional Housing Needs Assessment (RHNA).

Actions and Programs

Action 1.1	Review and update the General Plan periodically (if an update is needed) to ensure that growth trends are addressed. *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund*
Action 1.2	Encourage variety of housing development through various Overlay zone alternatives (Senior Housing, Planned Development, Mixed Use) or with the density bonus incentives. *Responsible Agency: City of Moreno Valley Planning Division and Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund* *Objective: Target 1 mixed-use project over the planning period.*
Action 1.3	The Moreno Valley Housing Authority will utilize available funding, HOME, CDBG, etc. allocations to provide the following incentives which may be applied to an affordable housing project: 1) Lease or purchase of City owned property at low rates; 2) Provision of off-site improvements. *Responsible Agency: Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: CDBG, HOME, General Fund*
Action 1.4	Encourage a mixture of diverse housing types and densities in new developments, guided by specific plans and the Mixed Use Overlay District, around Sunnymead and Alessandro Boulevards and throughout the City. Focus development activity within the Village Specific Plan (SP 204) area to suitably zoned underutilized land and the potential for mixed-use projects exists for the development of affordable housing. *Responsible Agency: City of Moreno Valley Planning Division and Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund, Moreno Valley Housing Authority* *Objective: Target 1 mixed-use project over the planning period.*
Action 1.5	Support the use of innovative building techniques and construction materials for residential development, such as energy efficient buildings that utilize solar panels and sustainable building materials that are recyclable. *Responsible Agency: City of Moreno Valley Planning Division and Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021 (latest grant funded through December 2014)* *Potential Funding Source: General Fund, Grants* *Objective: Using SC Edison grants to develop innovative development standards for energy conservation.*
Action 1.6	Work with Habitat for Humanity to utilize vacant Housing Authority owned infill

	lots for single-family development to provide housing for lower income families and individuals. *Responsible Agency: City of Moreno Valley Planning Division, Business Support & Neighborhood Programs Division and Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: CDBG& NSP 3 funds for acquisition of property to be rehabilitated and sold* *Objective: Approval of 8 unit Tract Map and building 8 units in the planning period. Tentative Tract map for project was approved at Planning Commission in on December 12, 2013. Building of units to begin in Fall 2014.*
Action 1.7	Continue to track affordable housing units City-wide. This includes monitoring the method by which units remain affordable to lower-income households (i.e. covenants, deed restrictions, loans, etc.). Responsible Agency: City of Moreno Valley Business Support & Neighborhood Programs Division and Moreno Valley Housing Authority Timeframe: Ongoing 2014-2021 Potential Funding Source: General Fund
Action 1.8	The Planning Division will utilize design, development, processing and streamlining incentives, such as reductions in parking requirements, and other standards, to encourage residential uses and to promote more intense residential development in the Mixed Use Districts Overlay and Residential 30 (R30) areas. Information on these financial and regulatory incentives will be made available on the City's website and in public places at City Hall. *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: Ongoing 2014-2021* *Potential Funding Sources: General Fund, Tax Credits, HOME funds, CDBG, CHFA funds, HUD, Local Lenders* *Objective: Promote development of one mixed use project for lower and moderate-income households*
Action 1.9	Establish parking standards for senior and affordable housing developments that are located in proximity to transit stops. *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: Adopt by end of 2014* *Potential Funding Source: General Fund* *Objective: To promote high density housing near transportation opportunities. Promote development of one senior and affordable housing development over the planning period.*
Action 1.10	To encourage the development of affordable residential and mixed-use projects, the City will offer incentives such as a reduction in development standards (i.e. lot size and parking requirements) and with assistance from the Moreno Valley Housing Authority, subsidize a portion of development costs to encourage lot consolidation and to promote more intense residential and mixed-use development on vacant and underutilized sites within the Village Specific Plan (SP 204) area. While the City is more than able to accommodate the remaining RHNA allocation for the planning period on sites larger than one

	acre, this program allows for the City to begin planning for the future by encouraging property owners to consolidate adjacent properties to develop larger projects. *Responsible Agency: The City of Moreno Valley Planning Division and Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund*

Housing Goal #2: ***Promote and preserve suitable and affordable housing for persons with special needs, including lower income households, large families, single parent households, the disabled, senior citizens and shelter for the homeless.***

Policy 2.1: Encourage the development of residential units which are accessible to persons with disabilities or are adaptable for conversion to residential use by persons with disabilities.

Policy 2.2: Work with non-profit agencies and private sector developers to encourage the development of senior housing.

Policy 2.3: Provide access to emergency shelter with emergency support for City residents, including disadvantaged groups.

Policy 2.4: Support innovative public, private and non-profit efforts in the development of affordable housing, particularly for the special needs groups.

Policy 2.5: Encourage the development of rental units with three or more bedrooms to provide affordable housing for large families.

Policy 2.6: Adopt a density bonus ordinance in compliance with Government Code Section 65915 and develop an outreach program to ensure its successful implementation.

Actions and Programs

Action 2.1	Utilize resources such as HOME funds, California Housing Finance Agency single-family and multiple-family programs, HUD Section 208/811 loans, and HOPE II and III Homeownership programs to stimulate private developer and non-profit entity efforts in the development and financing of housing for lower and moderate-income households. *Responsible Agency: Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: HOME funds, CDBG, CHFA funds, HUD, Local Lenders*
Action 2.2	The Moreno Valley Housing Authority should facilitate discussions between developers and local banks to meet their obligations pursuant to the California

	Community Reinvestment Act (CCRA) providing favorable financing to developers involved in projects designed to provide lower and moderate-income housing opportunities. *Responsible Agency: Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021*
Action 2.3	Consider pursuing a program through the Moreno Valley Housing Authority, if funding is available, or through interested certified Community Housing Development Organization's (CHDO) and/or non-profit organizations, to purchase affordability covenants on existing multiple-family units, subject to restrictions that the affordability covenants would be in effect for not less than 30 years, and that at least 20 percent of the units would be affordable to extremely low- and very low-income households. *Responsible Agency: Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: Moreno Valley Housing Authority, CDBG, HOME, Bond Financing* *Objective: Target one project of a minimum of 40 units for extremely-low and very-low incomes.*
Action 2.4	To comply with Senate Bill 2, the City has amended the Moreno Valley Industrial Area Plan (SP 208) to permit emergency shelters by right in the Industrial Support Area without a conditional use permit or other discretionary permit. The City will continue to monitor the inventory of sites appropriate to accommodate emergency shelters and will work with appropriate organizations to ensure the needs of the homeless population whenever possible. *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: 2014-2021* *Potential Funding Source: General Fund, Emergency Shelter Grant Funds* *Objective: Yearly review of inventory sites in the Moreno Valley Industrial Area Plan (SP 208)*
Action 2.5	The City will maintain a list of mortgage lenders participating in the California Housing Finance Agency (CHFA) program and refer the program to builders or corporations interested in developing housing in the City. *Responsible Agency: Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021*
Action 2.6	Continue cooperation with the Riverside County Housing Authority to provide Section 8 rental assistance and work with property owners to encourage expansion of rental projects participating in the program. *Responsible Agency: Moreno Valley Housing Authority and Riverside County Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: Riverside County Housing Authority, HUD Section 8*
Action 2.7	Provide incentives for development of lower income housing through the density bonus program. Actively promote its use in conjunction with mixed-use projects in the Mixed Use Districts Overlay, for senior housing, and within multiple-family

	zones. *Responsible Agency: City of Moreno Valley Planning Division and Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund, Tax Credits* *Objective: Target 1 mixed-use project over the planning period.*
Action 2.8	Continue to support the City's effort of encouraging multiple-family developments with affordability covenants on units through offering development incentives. These incentives could include reduction in development standards, and expedited permit processing. *Responsible Agency: Moreno Valley Housing Authority* *Timeframe: 2014-2021* *Potential Funding Source: CDBG, HOME funds, Bond Financing* Potential Funding Source: General Fund *Objective: Target 1 mixed-use project over the planning period.*
Action 2.9	Pursuant to Government Code Section 65583, the City of Moreno Valley is obligated to remove potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels and for persons with disabilities. To address the needs of this population, the City amended the Zoning Code to adopt formal reasonable accommodation procedures. Reasonable accommodation provides a basis for residents with disabilities to request flexibility in the application of land use and zoning regulations or, in some instances, even a waiver of certain restrictions or requirements from the local government to ensure equal access to housing opportunities. The City will provide information regarding the City's reasonable accommodation ordinance and make information on the program more widely available to residents. *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: 2014-2021* *Potential Funding Source: General Fund, HUD Section 202/811 funds*
Action 2.10	Prioritize resources such as HOME funds, California Housing Finance Agency single-family and multiple-family programs, HUD Section 208/811 loans for the development of rental projects that provide units with two or three bedrooms. *Responsible Agency: Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: CHFA funds, HUD loans, HOPE funds, HOME funds* *Objective: Promote the development of 20 rental units with two or three bedrooms*
Action 2.11	The City will adopt a density bonus ordinance in compliance with Government Code Section 65915. *Responsible Agency: Planning Division* *Timing: Adopt by end of 2014* *Funding: General Fund* *Objective: To promote the financial feasibility of development affordable to lower-income households utilizing density bonuses and incentives and concessions.*

Housing Goal #3: ***Removal or mitigation of constraints to the maintenance, improvement and development of affordable housing, where appropriate and legally possible.***

Policy 3.1: When feasible, consider reducing, waiving, or deferring development fees to facilitate the provision of affordable housing.

Policy 3.2: Periodically review and revise City development standards to facilitate quality housing that is affordable to lower and moderate income households.

Policy 3.3: Monitor all regulations, ordinances, departmental processing procedures and fees related to the rehabilitation and/or construction of dwelling units to assess their impact on housing costs.

Policy 3.4 Ensure that water and sewer providers are aware of the City's intentions for residential development throughout the City.

Actions and Programs

Action 3.1	The City shall expedite and prioritize development processing time of applications for new construction or rehabilitation of housing for lower and moderate-income households and seniors (Previously referred to as Program 8.16). Expedited permit processing would allow complete development applications to be reviewed at an accelerated rate by City Staff in order to ensure that permit processing times do not create a potential constraint on the development of affordable units by adding to the overall cost of the project. *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund*
Action 3.2	To accommodate the needs of extremely low-income households and households with special needs and comply with Senate Bill 2, the City amended Zoning Code Section 9.09.190 to include Single room occupancy (SRO) facilities. Residential 30 (R30), the Mixed Use District Overlay and Community Commercial (CC)allow Single Room Occupancy (SRO) housing as a permitted use without a conditional use permit or other discretionary permit. The City will continue to monitor the inventory of sites appropriate to accommodate single-room occupancy units and will work with the appropriate organizations to ensure the needs of extremely low-income residents are met. *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: 2014-2021* *Potential Funding Source: General Fund* *Objective: Yearly review of site inventory.*
Action 3.3	Continue to permit manufactured housing on permanent foundations in residential zones subject to compatibility criteria (manufactured housing is

	subject to the same design review criteria as custom or tract homes). *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: Ongoing 2014-2021*
Action 3.4	In accordance with Government Code Section 65589.7 as revised in 2005, immediately following City Council adoption, the City must deliver a copy of the 2014-2021 Housing Element to all public agencies or private entities that provide water or sewer services to properties within the City of Moreno Valley. *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: By March 1, 2014* *Potential Funding Source: General Fund*
Action 4.4	Administer contract with fair housing agency (Previously referred to as Program 8.7). These services provide educating households on their rights and responsibilities and assist residents with fair housing issues. *Responsible Agency: City of Moreno Valley Business Support & Neighborhood Programs Division* *Timeframe: 2014-2021* *Potential Funding Source: General Fund* *Objective: To assist 2,500 households during the planning cycle of 2014-2021.*
Action 4.5	Maintain Development Impact Fees (DIF) at a lower level for affordable units (Previously referred to as Program 8.15). The City offers 25% reduction in the Development Impact Fees (DIF) for affordable housing developments. *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: Ongoing* *Potential Funding Source: General Fund* *Objective: 600 affordable units over the planning cycle.*
Action 4.6	Defer Development Impact Fee for affordable units, until issuance of Certificate of Occupancy (Previously referred to as Program 8.14). *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: Ongoing* *Potential Funding Source: General Fund* *Objective: 600 affordable units over the planning cycle.*
Action 4.7	Waive Traffic Uniform Mitigation Fee (TUMF) for affordable units (Previously referred to as Program 8.17). *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: Ongoing* *Potential Funding Source: General Fund* *Objective: 600 affordable units over the planning cycle.*
Action 4.8	Apply for grant funds to upgrade water infrastructure in the Box Springs Municipal Water Company (BSMWC) service area (Previously referred to as Program 8.22). *Responsible Agency: City of Moreno Valley Planning Division and Business Support & Neighborhood Programs Division*

	Timeframe: Ongoing *Potential Funding Source: Grants* *Objective: The City will continue to research grant opportunities.*

Housing Goal #4: *Provide increased opportunities for homeownership.*

Policy 4.1: Pursue a variety of private, local, state and federal assistance options to support development or purchase of housing within the income limits of lower income households.

Actions and Programs

Action 4.1	Continue to provide favorable home purchasing options to lower and moderate-income households, when funds are available, through the County of Riverside's First Time Homebuyers Down Payment Assistance Program and homeownership assistance with the County Mortgage Credit Certificate (MCC) program. *Responsible Agency: County of Riverside Housing Authority and Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: County of Riverside Economic Development Department*
Action 4.2	Continue to work with Habitat for Humanity in the development of single-family homes for lower income families. *Responsible Agency: Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: HOME Funds* *Objective: Approval of 8 unit Tract Map and building 8 units in the planning period. Tentative Tract map was approved at Planning Commission on December 12, 2013. Building of units to begin in Fall 2014.*
Action 4.3	The Moreno Valley Housing Authority shall provide support to the California Housing Finance Agency (CHFA) program, which supports construction of new owner-occupied units in conjunction with non-profit organizations and/or private developers through advertisement and referral to the program. *Responsible Agency: Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: HOME Funds, CHFA Funds*
Action 4.4	The City shall establish relationships with local lenders, developers and other constituencies such as realtors, and non-profit organizations through community outreach workshops that emphasize specific ideas, issues, and expectations for future development in Moreno Valley. *Responsible Agency: Moreno Valley Housing Authority*

	Timeframe: Ongoing 2014-2021 *Potential Funding Source: General Fund*
Action 4.5	Provide funds for Homebuyer Assistance Program (HAP) silent seconds. Work with approved lenders that have HAP experience. The goal of the program is to provide homeownership for low and moderate income families (Previously referred to as Program 8.10). *Responsible Agency: City of Moreno Valley Business Support & Neighborhood Programs Division* *Timeframe: 2014-2021* *Potential Funding Source: CDBG funds* *Objective: Target of 15 units during the planning cycle of 2014-2021.*

Housing Goal #5: ***Enhance the quality of existing residential neighborhoods in Moreno Valley, through maintenance and preservation, while minimizing displacement impacts.***

Policy 5.1: Through the Neighborhood Stabilization Program the City will preserve property values, correct housing deficiencies, bring substandard units into compliance with City codes, and improve overall housing conditions in Moreno Valley.

Policy 5.2: Promote increased awareness among property owners and residents of the importance of property maintenance to long term housing quality.

Policy 5.3: Encourage compatible design of new residential units to minimize the impact of intensified reuse of residential land on existing residential development.

Policy 5.4: Preserve units affordable to lower and moderate-income households which are "at-risk" of converting to market rate through County, State, and Federal funding mechanisms.

Actions and Programs

Action 5.1	Maintain code compliance to ensure building safety and integrity of residential neighborhoods. Enforce the building code through issuance of a permit prior to construction, repair, addition to, or relocation of any residential structure. *Responsible Agency: City of Moreno Valley Planning Division and Building Division* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund*
Action 5.2	Monitor the substandard dwellings which cannot be economically repaired and remove when necessary and feasible. *Responsible Agency: Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund* *Objective: Target of 3 units during the planning period.*

Action 5.3	Administer a program to provide grant funds for neighborhood beautification in targeted neighborhoods (Previously referred to as Program 8.3). *Responsible Agency: City of Moreno Valley Business Support & Neighborhood Programs Division* *Timeframe: 2014-2021* *Potential Funding Source: CDBG funds* *Objective: Target of 3 units per year during the planning cycle of 2014-2021.*
Action 5.4	Receive and approve applications for Mobile Home Grant Program (the goal of the program is to correct substandard living conditions for very low-income owner-occupants). Market program via City Links newsletter. Continue to distribute program material to mobile home parks (Previously referred to as Program 8.4). *Responsible Agency: City of Moreno Valley Business Support & Neighborhood Programs Division and Habitat for Humanity* *Timeframe: 2014-2021* *Potential Funding Source: CDBG funds* *Objective: Target of 3 mobile homes per year during the planning cycle of 2014-2021.*
Action 5.5	Provide enhanced code compliance services in the CDBG target areas. Fund 5,000 hours of code enforcement in the CDBG target areas (Previously referred to as Program 8.5). *Responsible Agency: City of Moreno Valley Business Support & Neighborhood Programs Division and Code and Neighborhood Services Division.* *Timeframe: 2014-2021* *Potential Funding Source: CDBG funds* *Objective: Target is to fund 5,000 hours of code enforcement over the next planning cycle of 2014-2021.*
Action 5.6	Conduct five (5) annual neighborhood clean-ups, improving the living environment of residents. Provide bins for trash disposal. *Responsible Agency: City of Moreno Valley Business Support & Neighborhood Programs Division and Code and Neighborhood Services Division.* *Timeframe: 2014-2021* *Potential Funding Source: CDBG funds* *Objective: Target of 5 clean ups per year during the planning cycle of 2014-2021.*

Housing Goal #6: ***Encourage energy conservation activities in all neighborhoods.***

Policy 6.1: Comply with all adopted federal and state actions to promote energy conservation.

Policy 6.2: Promote development of public policies and regulations that achieve a high level of energy conservation in new and rehabilitated housing units.

Policy 6.3: Promote the proposed Sustainable Community section in the Conservation Element of the General Plan.

Actions and Programs

Action 6.1	Encourage maximum utilization of Federal, State, and local government programs, such as the County of Riverside Home Weatherization Program and Western Riverside Council of Governments HERO program, and assist homeowners in providing energy conservation measures. *Responsible Agency: Moreno Valley Housing Authority* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: County of Riverside*
Action 6.2	Maintain and distribute literature on energy conservation, including solar power, additional insulation, and subsidies available from utility companies, and encourage homeowners and landlords to incorporate these features into construction and remodeling projects. *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund*
Action 6.3	Facilitate sustainable development in the City by enforcing the goals, policies, and implementation measures established in the proposed Sustainable Community section in the Conservation Element. *Responsible Agency: City of Moreno Valley Planning Division and Building Division* *Timeframe: Ongoing 2014-2021*
Action 6.4	The City shall implement its local action plan for reduction of greenhouse gas emissions. *Responsible Agency: City of Moreno Valley Planning Division* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund*
Action 6.5	Implement residential Solar Initiative Program to MV Utility customers (Previously referred to as Program 8.31). Literature for the public on energy saving programs offered by local utility companies are available in City Hall offices and on the City's website. *Responsible Agency: City of Moreno Valley Planning Division and Moreno Valley Utilities* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund* *Objective: The City will continue to encourage homeowners and landlords to incorporate energy conservation within construction and remodeling projects.*
Action 6.6	Market energy efficiency program for residents of MV Utility area (Previously referred to as Program 8.34). The City has energy efficiency information

	posted on its website and information regarding various programs is mailed out to MV Utility customers in their bills. *Responsible Agency: City of Moreno Valley Planning Division and Moreno Valley Utilities* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund*

Housing Goal #7: ***Equal housing opportunity for all residents of Moreno Valley, regardless of race, religion, sex, marital status, ancestry, national origin, color, or handicap.***

Policy 7.1: Encourage and support the enforcement of laws and regulations prohibiting discrimination in lending practices and in the sale of housing.

Actions and Programs

Action 7.1	The City, in conjunction with the Riverside County Fair Housing Council, shall support efforts dedicated to working towards the elimination of the discrimination of housing by actively pursuing any complaints of housing discrimination within the City. Information detailing fair housing practices will be made available at City Hall and on the City's website. Additionally, the City will participate with the Riverside County Fair Housing Council to conduct workshops and seminars about landlord and tenant responsibilities and rights (Previously referred to as Program 8.7). *Responsible Agency: City of Moreno Valley Business Support & Neighborhood Programs Division and Riverside County Fair Housing Council* *Timeframe: Ongoing 2014-2021* *Potential Funding Source: CDBG* *Objective: To assist 2,500 households during the planning cycle of 2014-2021.*
Action 7.2	The housing needs of persons with developmental disabilities are typically not addressed by Title 24 Regulations, and requires in addition to basic affordability, slight modifications to existing units, and in some instances, a varying range of supportive housing facilities. To accommodate residents with developmental disabilities, the City will seek State and Federal monies, as funding becomes available, in support of housing construction and rehabilitation targeted for persons with developmental disabilities. Moreno Valley will also provide regulatory incentives, such as expedited permit processing, and fee waivers and deferrals, to projects targeted for persons with developmental disabilities. To further facilitate the development of units to accommodate persons with developmental disabilities, the City shall reach out to developers of supportive housing to encourage development of projects targeted for special needs groups. Finally, as housing is developed or identified, Moreno Valley will work with the Inland Regional Center to implement an outreach program informing families within the City of housing and services available for persons with developmental disabilities. Information will be made available on the City's website.

	Responsible Agency: City of Moreno Valley Business Support & Neighborhood Programs Division *Timeframe: Ongoing 2014-2021* *Potential Funding Source: General Fund*

III. Quantified Objectives

State Housing Law requires that each jurisdiction establish the number of housing units that will be constructed, rehabilitated, and preserved over the planning period. The Quantified Objectives for the Housing Element reflect the planning period from January 1, 2014 to October 31, 2021. The Regional Housing Needs Assessment (RHNA) is mandated by State Housing Law as part of the period process of updating local housing elements of the General Plan. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods. The current planning period is from January 1, 2014 to October 31, 2021. Communities use the RHNA in land use planning, prioritizing local resource allocation, and in deciding how to address identified existing and future housing needs resulting from population, employment, and household growth. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and sub-region can grow in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and addresses social equity and fair share housing needs.

The RHNA consists of two measurements of housing need: existing and future needs.

1. Existing Needs: The existing needs assessment simply examines key variables from the most recent Census to measure ways in which the housing market is not meeting the needs of current residents. These variables include the number of low-income households paying more than 30% of their income for housing, as well as severe overcrowding, farmworker needs, and housing preservation needs.

2. Future Needs: The future need for housing is determined primarily by the forecasted growth of housing in a community. Each new household, created by a child moving out of a parent's home, by a family moving to a community for employment, and so forth, creates the need for a housing unit. The anticipated housing needed for new households is then adjusted to account for an ideal level of vacancy units.

It is important to note that while the Quantified Objectives of the RHNA are required to be part of the Housing Element and the City will strive to obtain these objectives, Moreno Valley cannot guarantee that these needs will be met given the limited financial and staff resources, and the gap in affordability of housing resources and incomes. Satisfaction of the City's regional housing needs will partially depend on the cooperation of private funding sources and resources of the State, federal and county programs that are used to support the needs of the extremely low-, very low-, low-, and moderate-income households. Additionally, outside economic forces heavily influence the housing market. State law recognizes that a locality may not be able to accommodate its regional fair share housing need.

Table III-I shows the City's total quantified objectives for the 2014-2021 Housing Element cycle. The Quantified Objectives assume optimum conditions for the production of housing. However, environmental, physical and market conditions influences the timing, type and cost of housing

production in a community. Below is an estimate quantified objectives for the number of housing units, broken down by income category, over the 2014-2021 planning period.

Table III-1 2014-2021 Quantified Objectivities for the City of Moreno Valley

Income Category	New Construction [(a)]	Rehabilitation [(b)]	Conservation/ Preservation [(c)]
Extremely Low	750	8	--
Very-Low	750	8	--
Low	993		--
Moderate	1,112	10	--
Above Moderate	2,564		--
TOTALS	6,169	26	0

Notes:
(a) Construction objectives represent the City's remaining RHNA.
(b) The Moreno Valley Housing Authority may utilize available funding, HOME, CDBG, NSP, etc allocations to provide funding during the planning period will be used to fund projects that improve and maintain the quality of the City's housing stock and residential infrastructure. The rehabilitation objective is consistent with Action 1.3 of the City's Housing Plan.
(c) The City has no potentially at-risk units.

IV. Housing Needs Assessment

This section of the Housing Element examines general population and household characteristics and trends, such as age, race, and ethnicity, employment, household composition and size, household income, and special needs. Characteristics of the existing housing stock (e.g. number of units and type, tenure, age and condition, costs) are also addressed.

Data Sources and Methodology

In preparing the Housing Element, various sources of information are consulted. The 2010 Census provides the basis for population and household characteristics. However, the 2010 Census no longer contains detailed information on households, income and housing characteristics. Therefore, several sources are used to supplement the 2010 Census, including the following:

- 2007-11 American Community Survey by the Census Bureau
- 2005-09 American Community Survey by the Census Bureau
- HUD CHAS data
- California Department of Finance (DOF)
- California Employment Development Department (EDD)
- Population and demographic data updated by the State Department of Finance
- City of Moreno Valley Consolidated Plan 2013-2018
- City of Moreno Valley Annual Action Plan
- Housing market information, such as home sales and rents, from Dataquick and Realtytrack, among other sources
- Labor statistics from California Employment Development Department

A. Population Trends and Demographic Characteristics

The City strives to achieve a balanced housing stock that meets the varied needs of all income segments of the community. To understand the City's housing needs, the nature of the existing housing stock and the housing market are comprehensively evaluated. This section of the Housing Element discusses the major components of housing needs in Moreno Valley, including population, household, economic and housing stock characteristics. Each of these components is presented in a regional context, and where relevant, in the context of other nearby communities. This assessment serves as the basis for identifying the appropriate goals, policies, and programs for the City to implement during the 2014-2021 Housing Element cycle.

Population Trends

Understanding the characteristics of a population is vital in the process of planning for the future needs of a community. Population characteristics affect the type and amount of housing needs in a community. Issues such as population growth, race/ethnicity, age, and employment trends are factors that combine to influence the type of housing needed and the ability to afford housing. The following section describes and analyzes the various population characteristics and trends that affect housing needs.

Population Growth

The Census reported that Moreno Valley's population rose from 118,779 in 1990 to 193,365 in 2010 (Table 8-1). The SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy Growth Forecast (Adopted by SCAG Regional Council on April 4, 2012) estimates that the Moreno Valley population will reach 213,700 in 2020. The 2010 population represents a 36% increase in population in the ten years since 2000. In 2000 the population was 142,379. In the ten years between 1990 and 2000, the city's population increased 20% with the city gaining 23,602 residents. Riverside County has grown more rapidly than Moreno Valley, with population increasing 31% between 1990 and 2000 and 43% between 2000 and 2010.

Table 8-1 City of Moreno Valley and Riverside County Population Growth (1990-2020)

Jurisdictions	Population				Percent Change	
	1990	2000	2010	2020*	1990-2000	2000-2010
Moreno Valley	118,779	142,381	193,365	213,700	20%	36%
Riverside County	1,170,413	1,535,125	2,189,641	2,488,600	31%	43%

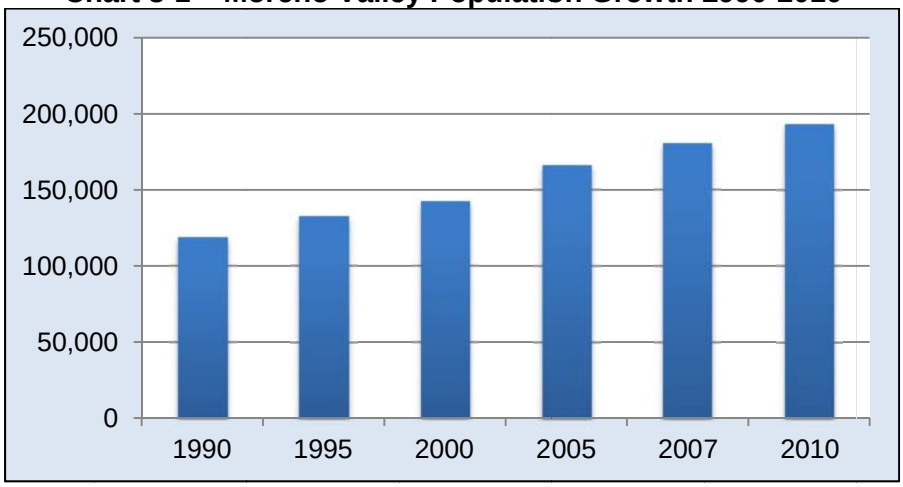
* Represents an estimate from the SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy Growth Forecast.

Sources: Bureau of the Census (1990-2010) and SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy Growth Forecast.

Unlike the growth between 1980 and 1990, when the city gained 90,650 residents, recent growth has been moderate, as reflected in Chart 8-1. However, Moreno Valley continues to be among the fastest growing Inland Empire cities. Between 2000 and 2006, Moreno Valley was the sixth fastest growing city in the Inland Empire.

With continued pressure for housing opportunities to support the local, as well as the larger regional employment base, the high rate of residential development is anticipated to continue in the Western Riverside area during the next decade. The Community Development – Land Use Element of the Moreno Valley General Plan estimates that by build out of the Plan, the population of Moreno Valley will have increased to more than 304,000 persons, an increase of over 36%. This ultimate build out will most likely not occur until after the next 20 to 30 years.

Chart 8-1 Moreno Valley Population Growth 1990-2010



Age Characteristics

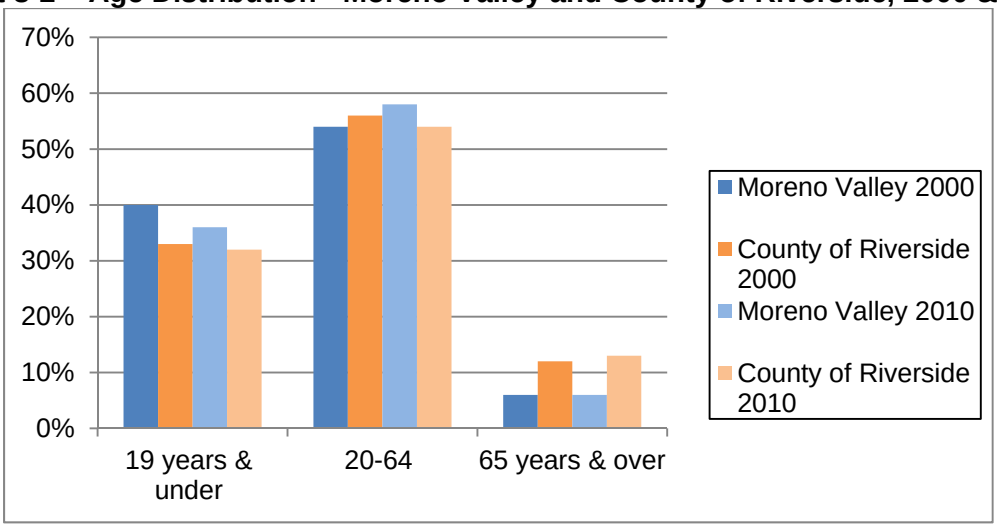
A community's current and future housing needs are determined in part by the age characteristics of residents. Typically, each age group has distinct lifestyles, family types and sizes, ability to earn incomes, and therefore, housing preferences. As people move through each stage of life, housing needs and preferences change. Traditional assumptions are that the young adult population (20 to 34 years old) tends to favor apartments, low to moderate cost townhomes/condominiums, and smaller single-family units. The adult population (35 to 64 years old) represents the major market for moderate to relatively high cost condominiums and single-family homes. The senior population (65 years and older) tends to generate demand for low to moderate cost apartments and condominiums, group quarters, and mobile homes. In order to create a balanced community, it is important to provide housing options that suit the needs of various age groups.

Historically, Moreno Valley's population has been young. Young adults ages 20-29 comprise 15.9% of Moreno Valley's population, making up the third largest age group in the city. In 2000, the median age for a Moreno Valley resident was 27.1 years. In 2010, the median age of a Moreno Valley resident was just slightly higher at 28.6 years.

In 2010, the largest age group in Moreno Valley consisted of persons aged 10-19 years of age (19.3%) as shown in Chart 8-2. The 10-19 year old age group is larger in Moreno Valley than in the County of Riverside as a whole (16.6%). The second largest age group was 0-9 year olds (16.9%). The greater proportion of children in the Moreno Valley population mirrors the large number of families living in Moreno Valley.

Only 14.5% of Moreno Valley's population was over 55 year old in 2010. By comparison, 21.7% of the County of Riverside population was over 55 years of age in the same year. Persons 65 and older made up 6% of Moreno Valley's population in 2010, while this age group comprised 12% of the population in the County of Riverside. Accordingly, Moreno Valley is a community of young families.

Chart 8-2 Age Distribution - Moreno Valley and County of Riverside, 2000 & 2010



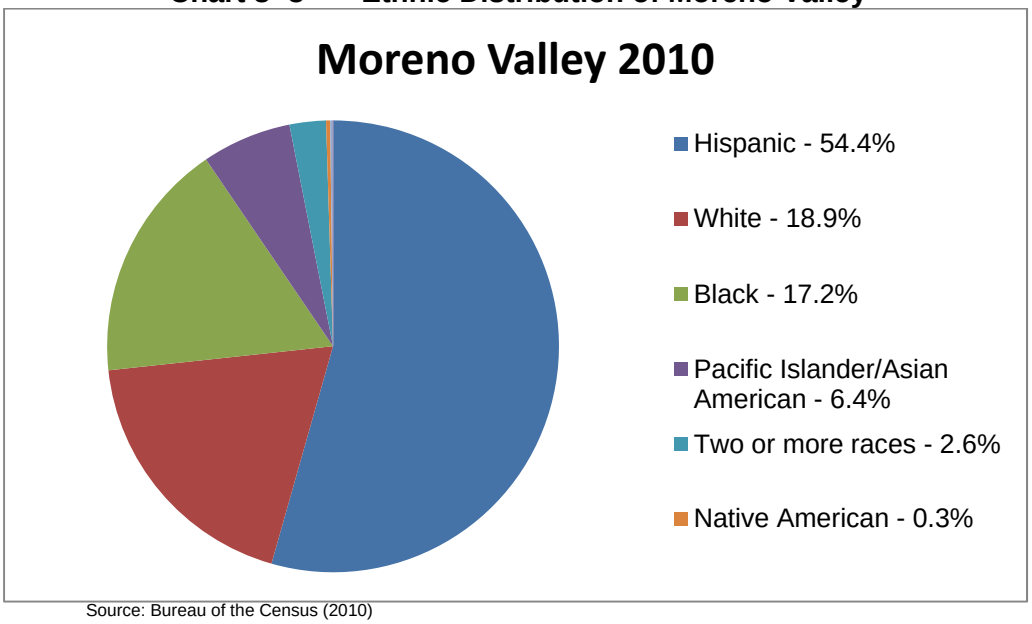
Source: Bureau of the Census (2000-2010)

Race/Ethnicity Characteristics

Moreno Valley is a very diverse community. In 2010, the city's largest ethnic group was Hispanic. This ethnic group made up 54.4% of the population as noted in Chart 8-3. The population diversity in Moreno Valley reflects the demographic changes that have taken place in Southern California over the past twenty years. Unlike older cities, Moreno Valley is fortunate to have ethnically diverse neighborhoods throughout the City.

According to the 2010 Census, roughly 54.4 percent of Moreno Valley residents were Hispanic, 18.9 percent White, 17.2 percent Black, 6.4 percent Asian & Pacific Islander, 0.3 percent American Indian and Alaskan Natives, and 0.2 percent other races (Table 8-2). Moreno Valley has a higher proportion of Hispanic and Black residents compared to the County of Riverside as a whole. Asian/Pacific Islander, Native American and Others' numbers are similar to the County of Riverside. In general, Hispanic and Asian households exhibit a greater propensity for living in extended families or other household arrangements than the majority White population. Communities with larger proportions of Hispanic and Asian households tend to have larger average household sizes.

Chart 8- 3 Ethnic Distribution of Moreno Valley



Source: Bureau of the Census (2010)

Table 8-2 Ethnic Distribution, 2010 Moreno Valley & Riverside County

Ethnicity	Moreno Valley	Percent	Riverside County	Percent
White	36,573	18.9%	869,068	39.7%
Hispanic	105,169	54.4%	995,257	45.5%
Black	33,195	17.2%	130,823	6%
Asian & Pacific	12,413	6.4%	131,770	6.1%
Native American	573	0.3%	10,931	0.5%
Two or more	5,054	2.6%	48,110	2%
Other	388	0.2%	3,682	0.2%
Total Population	193,365	100%	2,189,641	100%

Source: Bureau of the Census (2010)

Employment Characteristics

Employment has an important impact on housing needs. Incomes associated with different jobs and the number of workers in a household determines the type and size of housing a household can afford. In some cases, the types of jobs themselves can affect housing needs and demand (such as in communities with military installations, college campuses, and large amounts of seasonal agriculture). Employment growth typically leads to strong housing demand, while the reverse is true when employment contracts.

Occupation and Labor Participation

Although Moreno Valley has a population of 193,365 residents, its job base is relatively small. Moreno Valley's small economy is in part due to its relative young age as a city, having only been incorporated as a city in 1984. It is also in part due to the rapid expansion of its housing market without the foresight to adequately plan for and attract job generating industries. Consequently, Moreno Valley has a small base of office employment and a small base of manufacturing and distribution employment.

According to the 2007-2011 American Community Survey 5-Year Estimates, 89,903 Moreno Valley residents were in the civilian labor force, representing a labor participation rate of approximately 64.5% (The labor force includes employed and unemployed persons aged 16 years and above). As shown in Table 8-3, residents were employed in three major occupation categories: sales/office, managerial/professional, and service positions. The first two categories tend to provide higher pay jobs, but service occupations tend to be lower pay. According to the California Employment Development Department, Moreno Valley's unemployment rate in March 2012 was 14.2%, somewhat higher than the county wide rate of 12.3%.

Table 8-3
Employment of Residents by Occupation

Occupation	Number of Jobs	% of Total
Management, business, science, and arts occupations	18,439	24.5%
Service occupations	13,446	17.9%
Sales and office occupations	21,180	28.1%
Natural resources, construction, and maintenance occupations	9,535	12.7%
Production, transportation, and material moving occupations	12,696	16.9%
Total	75,296	100%

Source: U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates for "Moreno Valley city, California"

Employment Growth

Moreno Valley has a diverse business and job base that includes manufacturing, as well as nonmanufacturing businesses including retail, and support services. According to SCAG's May 2013 "Profile of the City of Moreno Valley", principal manufacturing jobs include those employed in food, apparel, machinery, computer and electronic product, and transportation equipment. The City of Moreno Valley's Business Support and Neighborhood Services Division have listed the following Top 5 Employers in Moreno Valley as listed in Table 8-4.

Table 8-4
Moreno Valley's Top 5 Employers in 2012

Employer	Number of Employees
Moreno Valley Unified School District	3,366
Riverside County Regional Medical	2,600
Ross Dress for Less/dd's Discount	1,708
Moreno Valley mall (excludes major tenants	1,365
Kaiser Permanente Community Hospital/Office	944
City of Moreno Valley	728

Source: City of Moreno Valley's Business Support and Neighborhood Services Division

As stated above, Moreno Valley has a very low jobs-to-housing ratio. The City will likely consider undertaking future planning efforts to achieve an improved jobs-housing balance. The City is currently working on an SR-60 Corridor Study to examine the highest and best uses for specific land areas easterly of Moreno Beach Boulevard to the city limits. These future planning efforts could include the consideration of future proposals to re-designate areas south of SR 60 and east of Redlands Boulevard to the City's eastern border to jobs-producing commercial and/or industrial-type uses.

The City of Moreno Valley is active in attracting and retaining businesses within the community to provide local employment opportunities for city residents. The Community & Economic Development Department continues to focus on economic development and redevelopment within the community, facilitating the relocation of new businesses into the community and providing assistance to those existing businesses that are already located within Moreno Valley. The City has also developed an Economic Development Action Plan.

B. Household Characteristics

The Census defines a household as all persons who occupy a housing unit, which may include single persons living alone, families related through marriage or blood and unrelated individuals living together. Persons living in retirement or convalescent homes, dormitories or other group living situations are not considered households. Household type and size, income levels, the presence of special needs populations, and other household characteristics determine the type

of housing needed by residents, their preferences, and their ability to obtain housing that meets their needs. For example, single person households, typified by seniors or young adults, tend to reside in apartment units or smaller single family homes. Families typically prefer and occupy single-family homes. This section details the various household characteristics affecting housing needs.

Household Type and Size

According to the 2010 Census, there were 686,260 households (i.e., occupied housing units) in Riverside County. Of these, 51,592 households, or approximately seven and half percent, were residing in Moreno Valley. In 2000 the Census reported the average family size as 3.86 and the average household size as 3.61 for Moreno Valley. By 2010, the numbers went slightly up to an average family size of 3.99 and the average household size of 3.74 persons. The slight increase in the average household and family size is consistent with the city's predominant make-up as a city of families with children. In the 2010 Census, 84% of Moreno Valley's 51,592 households were classified as family households (Table 8-5).

Moreno Valley households are distinguished from other Southern California households by the prevalence of married couples with minor children. The largest segment of Moreno Valley's households 31.4%, were married with minor children at home. In comparing Moreno Valley to Riverside, San Bernardino, Los Angeles, Orange and San Diego counties, Moreno Valley consistently had a higher proportion of married couples with children (see Table 8-5). In 2010 married couples, with or without children, made up 56.2% of Moreno Valley's households. This proportion was higher than those in other Southern California communities, as noted in table 8-3. The largest number of Moreno Valley households, were married couples who had minor children at home, (31.4%). This number is well above those found in San Bernardino County (27.1%), Los Angeles (22.3%), Orange (26.1%) and San Diego (22.6%), as noted in Table 8-5.

In addition, 11% of Moreno Valley's households were female led households with children under 18 (see Table 8-5). The proportion of such households was higher in Moreno Valley than other Southern California communities. This higher proportion could be a reflection of the relative affordability of housing in Moreno Valley that could be a draw for female-led households.

Household size is an important indicator for identifying sources of population growth as well as overcrowding. A community's average household size may decline when the population is aging or increase when the number of families with children increases. As depicted in Table 8-6, the average household size increased by approximately 9% in Moreno Valley during the period of 1990-2010. Countywide, average household size increased at nearly the same rate or 10% over the last twenty years. The increase in household size is consistent with the increase in elementary school age children in Moreno Valley and the need for housing that meets the needs of younger families with children. The 2010 Census estimates that the average household size in Moreno Valley was 3.74.

Table 8-5 Household Characteristics - Moreno Valley & Southern California, 2010

Household Type	Moreno Valley	Riverside County	San Bernardino County	Los Angeles County	Orange County	San Diego County
Married couple, children under 18	31.4%	27%	27.1%	22.3%	26.1%	22.6%
Married couple, alone	24.8%	27.8%	26.4%	23.4%	28.1%	26.3%
Male, children under 18	4.3%	3.2%	3.7%	2.8%	2.3%	2.4%
Male, no children home	3.8%	3%	3.6%	3.9%	3.2%	2.8%
Female, children under 18	11%	7.3%	8.9%	7.4%	5.4%	6.3%
Female, no children home	8.4%	6%	7.3%	7.9%	6.2%	5.8%
Non-family group	16.3%	25.6%	23.1%	32.3%	28.6%	33.7%
TOTAL	100%	100%	100%	100%	100%	100%
Total Households	**511,592**	**686,260**	**611,618**	**3,241,204**	**992,781**	**1,086,865**

Table 8-6 Average Number of Persons per Household, 1990, 2000 & 2010

Jurisdiction	Average Persons/Household			% Change	
	1990	2000	2010	1990-2000	2000-2010
Moreno Valley	3.40	3.61	3.74	6.2%	3.6%
Riverside County	2.85	2.98	3.14	4.6%	5.3%

Household Income Level

Household income is a primary factor affecting housing needs in a community – the ability of residents to afford housing is directly related to household income. According to the 2010 Census, the median household income in Moreno Valley was $48,907, which is $8,861 less than the County of Riverside's median income of $57,768. Table 8-7 compares the Household Income Distribution for Moreno Valley in 2000 and 2010.

The income earned by a household is an important indicator of the household's ability to acquire adequate housing. While upper income households have more discretionary income to spend on housing, lower- and moderate-income households are more limited in the range of housing that they can afford. Typically, as household income decreases, the incidence of overpayment and overcrowding increases.

The following income categories are used in Housing Element analyses:

- **Extremely low income households** earn 30% or less of the Area (County of Riverside) Median Income (AMI), adjusted for household size;
- **Very low income households** earn between 31% and 50% of the AMI, adjusted for household size;
- **Low income households** earn between 51% and 80% of the AMI, adjusted for household size;
- **Moderate income households** earn between 81% and 100% of the AMI, adjusted for household size; and,
- **Above moderate income households** earn over 100% of the AMI, adjusted for household size.

Table 8-7 City of Moreno Valley
Household Income Distribution: 2000 and 2010

Household Income	2000	Percent	2010	Percent
Less than $10,000	2,550	6.5%	2,838	5.5%
$10,000 to $14,999	1,805	4.6%	3,199	6.2%
$15,000 to $24,999	4,590	11.7%	5,778	11.2%
$25,000 to $34,999	4,551	11.6%	6,294	12.2%
$35,000 to $49,999	7,257	18.5%	8,100	15.7%
$50,000 to $74,999	9,337	23.8%	10,318	20.0%
$75,000 to $99,999	5,257	13.4%	7,171	13.9%
$100,000 to $149,999	3,099	7.9%	5,314	10.3%
$150,000 to $199,999	510	1.3%	1,857	3.6%
$200,000 or more	275	0.7%	722	1.4%
Total	39,229	100.0%	51,592	100.0%

Note: Occasionally, the tables will have slightly different counts of the number of households because for some the source is SF 1 (complete count) while for others it may be SF 3 (sample). Source: Census 2000 Summary File 3 (SF3) Table P052: Household Income in 1999 and American Community Survey (ACS), 2010 1-Year Estimates, DP03, Selected Economic Characteristics, Income and Benefits (in 2010 Inflation-Adjusted Dollars)

To facilitate housing needs assessments for Community Planning and Development (CPD) documents, the U.S. Census Bureau prepared special tabulations for the Department of Housing and Urban Development (HUD). These income tabulations are referred to as the Comprehensive Housing Affordability Strategy (CHAS). The CHAS income distributions for Moreno Valley are presented in Table 8-8. A majority of owner households had incomes greater than 80% of the Area Median Income (i.e., moderate and above moderate for a total of 68%), while over 60% of renter households had incomes less than 80% (lower).

Table 8-8
City of Moreno Valley: Income Groups by Tenure, 2010

	Tenure					
Income Group	**Owner**	**Percent**	**Renter**	**Percent**	**All Households**	**Percent**
Extremely Low Income	2,137	6.4%	3,676	20.2%	5,813	11.3%
Very Low Income	2,838	8.5%	3,130	17.2%	5,968	11.6%
Low Income	5,643	16.9%	4,313	23.7%	9,956	19.3%
Moderate Income	3,907	11.7%	2,020	11.1%	5,927	11.5%
Above Moderate Income	18,868	56.5%	5,060	27.8%	23,928	46.3%
Total	33,393	100%		100%	51,592	100%
Percent	64.7%		35.3%		100%	

Sources: US Census Bureau, DP-1 Profile of General Population and Housing Characteristics: 2010, Housing Tenure for total owners and renters; ACS tenure/income group percentages applied to 2010 Census tenure distribution. U.S Department of Housing and Urban Development, 2005-2009 CHAS data for number and percentage of renter and owner households by income group.

Extremely Low Income Households

Following the passage of AB 2634 in 2006, state law requires quantification and analysis of existing and projected housing needs of extremely low-income (ELI) households. Extremely low-income is defined as less than 30% of area median income, adjusted for household size. The area median income in the County of Riverside is $57,768. For extremely-low-income households, this results in an income of $17,330 or less for a four-person household. Households with extremely low-incomes have a variety of housing situations and needs.

Existing Needs

In 2010, approximately 5,813 extremely-low-income households resided in Moreno Valley, representing 11.3% of the total households. About 75% of extremely-low-income households faced housing problems as defined as cost burden greater than 30% (2005-2009 CHAS). Additionally, 58% of extremely-low-income households paid more than 50% of their income toward housing costs.

Projected Needs

The projected housing need for extremely-low-income households is assumed to be 50% of the very-low-income regional housing need of 1,500 units. As a result, the City has a projected need for 750 new extremely-low-income units during the 2014-2021 planning period. The resources and programs to address this need are the same as for other lower-income housing in general, and are discussed elsewhere in the Housing Element. Because the needs of extremely-low-income households overlap extensively with other special needs groups, further analysis and resources for these households can be found in the Housing Needs Assessment/ Special Needs Populations and Housing Constraints/Provision sections of this Housing Element.

Overcrowding

Overcrowding is a measurement of the adequacy of housing units to accommodate residents. Overcrowding is determined by a standard based on the number of persons per room within a unit. The standard is established at one person per room or less. Housing units are considered slightly overcrowded when the occupancy per room is 1.01 to 1.50 persons per room. Units are considered severely overcrowded when occupancy per room is 1.51 persons or more. Overcrowding results from a lack of affordable housing and/or a lack of available housing units of adequate size.

Based by 2005-2009 CHAS data, there were a total of 2,360 renter households (under 100% AMI) who were classified as living in overcrowded conditions, or 9% of all renter households in Moreno Valley. Among owner households 1,825 were classified as living in overcrowded conditions or 7% of all households in the city. When renters and owners are combined, the total number of households (under 100% AMI) living in overcrowded conditions totaled 16% of all households. Single family households are most impacted by the problem of overcrowding (Table 8-9).

Table 8-9
Overcrowding (more than one person per room) – City of Moreno Valley

	Renter					Owner				
	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total
Single family households	660	320	605	190	1,775	180	395	400	215	1,190
Multiple, unrelated family households	60	75	215	165	515	60	185	275	115	635
Other, non-family households	20	25	25	0	70	0	0	0	0	0
Total need by income	740	420	845	355	2,360	240	580	675	330	1,825

Source: 2005-2009 CHAS

Overpayment

Overpayment for housing is the result of three market forces that conspire to make housing not affordable. The combination of low wages, inflated housing costs, and a diminished supply of affordable housing for the lowest income households results in a cost overpayment. This document details the significant affordability of Moreno Valley's housing stock, particularly in comparison to other communities in Southern California. However, overpayment for housing is a problem in all Southern California communities, in varying degrees, and is a formidable challenge for local communities to address.

State and federal standards consider a household as overpaying for housing if it spends more than 30% of its gross income on housing. Housing costs include rent and utilities paid by a renter household. Housing costs for owner households include mortgage payment, taxes, insurance, and utilities. Households at 30% to 80% of median income bear the disproportionate burden of housing overpayment.

A household spending more than it can afford for housing has less money available for other necessities and emergency expenditures. Very-low-income households overpaying for housing are more likely to be at risk of becoming homeless than other households. Renter-households overpay more often than owner-households because of their typically lower incomes. Compared to renters, overpayment by owners is less of a concern because homeowners have the option to refinance the mortgage, or to sell the house and move into rentals or buy a less expensive home.

Based on the data regarding cost burden, the predominant view is that renter households would have disproportionately higher rates of overpayment for housing. Yet, for renters, the data indicates that in Moreno Valley, renter households have greater choice and access to moderately more affordable housing.

Whereas, for owner households either their choices with regard to price were limited, as the price of homes was beginning to increase in 2000, and/or owners chose to buy more expensive houses, regardless of the cost burden. From a policy perspective, the City of Moreno Valley has been on the right path in focusing its affordable housing efforts in the rental market, thus providing greater choices for renter households to access affordable housing. Given the city's finite resources, alleviating the cost burden for owner households is not feasible. Although, it has been the City of Moreno Valley's policy to assist owner households by providing silent seconds for homes in a defined price range.

Based on the US Census Bureau's 2005-2009 American Community Survey, SCAG has compiled data on the number of households, by income category, that were overpaying for housing. Table 8-10 details the information for renter and owner households that overpay for rent or mortgages in Moreno Valley. There were a total of 4,825 renter households that were overpaying for rent, or 45.6% of all renter households (earning less than 29.9% of median income). The total for owner households was 15,545, or 32.9%.

The CHAS data in Table 8-11 shows the proportion of cost burdened renter households with incomes less than 30% of area median income was 33.3%, while 30.9% of those at 30%-50% of area median were cost burdened. In the next income range, 50%-80% of area median income, the percentage of overburdened renter households is slightly higher at 35%.

Table 8-10
Households by Owner/Renter Overpaying for Mortgage or Rent

	Tenure					
Income Group	**Owner**	**Percent**	**Renter**	**Percent**	**All Households**	**Percent**
Less than 10%	2,214	1.3%	197	6.5%	2411	5.0%
10% to 14.9%	2,116	3.7%	538	6.2%	2654	5.4%
15% to 19.9%	3,461	7.2%	1,057	10.2%	4518	9.3%
20% to 24.9%	4,024	10.0%	1,460	11.8%	5484	11.3%
25% to 29.9%	3,730	10.7%	1,573	10.9%	5303	10.9%
30% to 34.9%	3,424	10.0%	1,470	10.1%	4894	10.0%
35% to 39.9%	2,671	7.7%	1,132	7.8%	3803	7.8%
40% to 49.9%	4,410	11.7%	1,708	12.9%	6118	12.6%
50% or More	7,829	33.4%	4,894	23.0%	12,723	26.1%
Not Computed	188	4.1%	606	0.6%	794	1.6%
Total	34,067		14,635		48,702	
Percent		99.8%		100%		100%

Source: 2005-2009 American Community Survey and table created by SCAG - Local Housing Element Assistance: Existing Housing Needs Data Report for City of Moreno Valley

Table 8-11
Cost Burden >30% - Moreno Valley

Income Group	**Owner**	**Percent**	**Renter**	**Percent**	**All Households**	**Percent**
0-30% AMI	1894	22.2%	2510	33.3%	4404	27.5%
>30-50% AMI	2415	28.4%	2325	30.9%	4740	29.4%
>50-80% AMI	4210	49.4%	2694	35.8%	6904	43.1%
Total	8519	100%	7529	100%	16,048	100%

Source: 2005-2009 CHAS

Special Needs Populations

Certain segments of the population may have more difficulty in finding decent, affordable housing due to their special circumstances or needs. These “special needs” populations include elderly persons, farm workers, female headed households, persons with disabilities, large households, and the homeless. Many of these households also fall under the category of extremely-low-income.

A variety of City policies and programs described in the Housing Element address the needs of extremely-low-income households, including those in need of residential care facilities and persons with disabilities. However, it must be recognized than the development of new housing

for the lowest income groups typically requires large public subsidies, and the level of need is greater than can be met due to funding limitations, especially during these times of declining public revenues.

Elderly

The special needs of the elderly are often a function of lower fixed incomes and/or disabilities. Housing for the elderly often requires special attention in design to allow greater access and mobility. Housing located within vicinity of community facilities and public transportation also facilitates mobility of the elderly in the community.

According to the 2010 Census, Moreno Valley had 12,134 residents age 65 or older, representing 6% of the total population. In 2010, persons 85 and older (1,083 persons) comprised 8.9% of those aged 65 and older. The subset of persons aged 85 years is a generational group that is growing rapidly nationwide, as people live much longer. In Moreno Valley, this national trend is not yet evident because it is a relatively young community, dominated by younger families. However, as the city matures, the proportion of elderly will increase, as persons who are currently living in Moreno Valley may choose to age in place, or as children relocate aging parents closer to them, or as geriatric housing and health services become more prevalent in the community and surrounding areas.

In Moreno Valley, about 1,165 owner-households and 614 renter-households were headed by elderly persons in 2010. Many elderly owner households reside in mobile homes, which are among the lowest cost housing options in the City. In the same year, about 44% of the elderly residents were reported to have a disability, which may require special housing design.

Finally, many elderly live on fixed incomes and occupy older homes. These factors make paying for needed home repairs and maintenance difficult. While there are over 100 assisted units in Moreno Valley that target seniors and the mobility impaired, the high incidence of overpayment among elderly households suggests that more affordable senior housing is needed to meet current and future needs. The City's programs to increase senior affordable housing opportunities help to address this issue.

Farm Workers

According to the California Department of Housing and Community Development (HCD), there are no farm worker housing units in the City of Moreno Valley. Prior to 1950, the area that is now the City of Moreno Valley was primarily used for agricultural production. Land once utilized for farming has been developed. Farming is no longer a leading industry in the city and according to Table 8-12 only 125 persons living in Moreno Valley listed their occupation as "farm worker".

All affordable housing in the City of Moreno Valley is available to farm workers. Since all affordable housing units in the city are available to farm worker households, at this time it is not necessary for the City to segregate its limited housing funds to farm worker housing. However,

in May 2013 the City's CEDD amended Chapter 9 of the Development Code (specifically Chapter 9.09: Specific Use Development Standards) to permit, by right, farm worker housing in all multiple family residential zoning districts (R10, R15, R20, and R30), to more fully address the housing needs farm worker households.

Table 8-12 Workers by Place of Residence Having Farming Occupation from 2005-2009 American Community Survey

Occupation Listed as Farm Worker – Moreno Valley	
Male	**Female**
117	**8**

Source: 2005-2009 American Community Survey and table created by SCAG - Local Housing Element Assistance: Existing Housing Needs Data Report for City of Moreno Valley

Female Headed Households

Female-headed families with children often require special attention due to their needs for affordable childcare, health care, and housing assistance. Female-headed families with children tend to have lower incomes, thus limiting housing availability for this group. The number of female householders has increased steadily in Moreno Valley. However, recent Census data indicates that the proportion of female households with minor children has declined steadily during the past sixteen years. In 1990, the U.S. Census Bureau reported 3,679 female householders in Moreno Valley and 6,715 in 2000. According to the 2010 Census, there were 9,990 female householders in the city. The greatest growth in the number of female householders occurred between growth 1990 and 2000, with an 83% increase in the ten year span. The growth in the number of female householders between 2000 and 2010 equaled 49% or 34% less of an increase compared to the prior ten year span. Notwithstanding the growth in the total number of female headed householders, as a percentage of the total household population, the proportion of female householders has slightly increased between 2000 and 2010. In 2000 female householders made up 16% of all the households in Moreno Valley, while in 2010 they comprised 19% of the total household population.

The percentage growth in female householders between 2000 and 2010 was 49%. However, the proportion of female householders with minor children at home, decreased during the same time. While 79% (2,906) of all female householders in 1990 had minor children at home, in 2000, 68% (4,258) had minor children at home. Subsequently, by 2010, the proportion of female householders with minor children at home had declined yet again to 57% (5,687).

In 2005, male householders totaled 3,591 with 2,040 having minor children present in the home. In 2010, the US Census, reports 4,191 male householders, in Moreno Valley, with 2,218 having minor children in the home. As a percentage of the population, male householders made up 8% of the total households in 2005 and remained the same in 2010.

The housing needs of female householders are typically related to affordability and the need for adequate housing within the constraints of their low incomes. According to Moreno Valley's

2013-2018 Consolidated Plan, female households with children often confront bias in the rental market. Their access to decent housing also is made more difficult by poverty. Female heads of households both with and without children under 18 experience the highest poverty income rates. About 2,000 female householders with children live in poverty, or 36% of all such household types. Poverty among male householders has not been fully explored in the research materials and cannot be presumed to be equal to that of women female householders.

Persons with Disabilities

In 2010, approximately 15,500 Moreno Valley residents were recorded by the Census as having a disability. The elderly population in Moreno Valley has a higher incidence of disabilities, with approximately 44% of the population 65 and older reporting a disability in 2010. While the elderly population is relatively small (6.4%), the number is increasing and expected to continue doing so as the community matures, thus also increasing the population with disabilities.

Physical and mental disabilities can hinder a person's access to traditionally designed housing units (and other facilities) as well as potentially limit the ability to earn income. Housing that satisfies the design and locational requirements of disabled persons are limited in supply and often costly to provide.

Housing opportunities for disabled persons can be addressed through the provision of affordable, barrier-free housing. In addition to the development of new units, rehabilitation assistance can also be provided to disabled residents to make necessary improvements to remove architectural barriers of existing units. As noted in the Constraints section, the Housing Plan contains a commitment for the City to develop and adopt a procedure for providing reasonable accommodation for housing for persons with disabilities. The City revised its Municipal Code to include reasonable accommodation measures in May 2013.

Persons with Developmental Disabilities

Section 4512 of the California Welfare and Institutions Code defines a "Developmental disability" as a disability that originates before an individual attains age 18 years, continues, or can be expected to continue, indefinitely, and constitutes a substantial disability for that individual which includes mental retardation, cerebral palsy, epilepsy, and autism. This term also includes disabling conditions found to be closely related to mental retardation or to require treatment similar to that required for individuals with mental retardation, but shall not include other handicapping conditions that are solely physical in nature.

Many persons with developmental disabilities can live and work independently within a conventional housing environment. More severely disabled individuals require a group living environment where supervision is provided. The most severely affected individuals may require an institutional environment where medical attention and physical therapy are provided. Because developmental disabilities exist before adulthood, the first issue in supportive housing for persons with developmental disabilities is the transition from the person's living situation as a

child to an appropriate level of independence as an adult. The State Department of Developmental Services (DDS) currently provides community based services to approximately 243,000 persons with developmental disabilities and their families through a statewide system of 21 regional centers, four developmental centers, and two community-based facilities. The Inland Regional Center is one of 21 regional centers in the State of California that provides point of entry to services for people with developmental disabilities. The center is a private, non-profit community agency that contracts with local businesses to offer a wide range of services to individuals with developmental disabilities and their families.

Table 8-13 provides information from the Inland Regional Center of on the number of individuals with developmental disabilities in the City of Moreno Valley. In 2013, there were approximately 1,714 individuals (.89% of the total population in the 2010 US Census) actively utilizing services at the Inland Regional Center for a developmental disability.

Table 8-13: Residents with Developmental Disabilities by Age, For City of Moreno Valley

Zip Code Area	0-18	19-25	26-35	36-45	46-55	56-65	66-75	76-85	86+	Total
92551	109	57	33	18	22	10	6	1	0	256
92552	0	2	2	0	0	0	0	0	0	4
92553	277	110	106	80	86	43	11	2	2	717
92555	153	53	55	34	26	11	3	0	0	335
92557	163	76	60	31	27	24	15	6	0	402
Total	**702**	**298**	**256**	**163**	**161**	**88**	**35**	**9**	**2**	**1,714**

Source: Inland Regional Center, December 2013.

To assist in the provision of housing to meet the needs of persons living with a developmental disability, the City will implement programs to coordinate housing activities and outreach with the Inland Regional Center. Moreno Valley will also encourage housing developers to designate a portion of new affordable housing development for persons with disabilities, especially persons with developmental disabilities, and pursue funding sources designated for persons with special needs and disabilities.

Large Households

Large households are defined as those with five or more persons. A family household is defined as one in which one or more people living in the same household are related to the head of household by birth, marriage or adoption. The 1990 Census tallied 7,776 or 22% of the households in Moreno Valley as large households, with 3.4 persons per dwelling unit. The average household size increased slightly for Moreno Valley in 2000 according to the US Census to 3.6 persons and the average family size is 3.86 persons. Now the 2010 US Census has the average household size listed as 3.74 persons and the average family size at 3.99 persons.

The housing needs of large families are often related to affordability and adequacy. Finding an affordable housing unit that can adequately house a large family can be a challenge, given that larger families have to use a greater proportion of their income for non-housing needs (such as food, clothing, child care, etc.). In Moreno Valley, where the majority of the housing units are single-family units, larger families have a better chance of finding adequate housing. Since 1997, the City of Moreno Valley has made a concerted effort to provide affordable housing for large families by funding housing for large families by funding the construction of 424 three and four bedroom apartments, with fifty-five year affordability covenants, as noted in Table 8-14. In addition, the City has provided ownership housing for low-income, large families through its participation with Habitat for Humanity.

Table 8-14
Number of Affordable 3 & 4 Bedroom Apartments

Casitas Del Valle		Oakwood Apartments		Cottonwood Place		Bay Family		RHDC		Rancho Dorado		Grand Total
Unit Size	#	Unit Size	#	Unit Size	#	Unit Size	#	Unit Size	#	Unit Size	#	
Three	17	Three	92	Three	120	Three	30	Three	7	Three	60	326
Four	4	Four	68	Four	26	Four	0	Four	0	Four	0	98
Total	21	Total	160	Total	146	Total	30	Total	7	Total	60	424

Source: City of Moreno Valley, Business Support and Neighborhood Programs Division

Homeless

The homeless population refers to persons lacking consistent and adequate shelter. Homelessness is a continuing problem throughout California and urban areas nationwide. During the past two decades, an increasing number of single persons have remained homeless year after year and have become the most visible of all homeless persons. Other persons (particularly families) have experienced shorter periods of homelessness. However, they are often replaced by other families and individuals in a seemingly endless cycle of homelessness.

The City of Moreno Valley is a very active member of the Riverside Continuum of Care (CoC). The Riverside County Department of Public Social Services (DPSS) serves as the lead agency for the CoC. DPSS conducts a homeless census and survey biannually as part of the Continuum of Care planning process. The City of Moreno Valley has participated in all homeless census conducted by the County. The census consists of a one day "point in time" (PIT) of homeless persons countrywide during the last week of January. To gather more comprehensive data, DPSS also administers a survey during the 90 days following the census which provides information on household income, disability status, and serves to identify significance subpopulations. The results of the census and survey are published in a detailed report and made available to the public.

The most recent census/survey was conducted in 2011 and a detailed report, ***The 2011 Riverside County Homeless Survey***, can be obtained on the CoC's website at www.riversidehomeless.org. The 2011 PIT homeless count found a total of 6,203 homeless (sheltered and unsheltered) individuals throughout the county.

In 2011 there were a total of 237 homeless individuals counted in Moreno Valley. This number is significantly higher than the 2009 count, which showed 28 homeless individuals. Although the comparisons are provided to 2007 and 2009 data were available, due to differences in research methodologies, the 2007, 2009, and 2011 results are not directly comparable and are not recommended by the CoC for trending analysis. In January 2013 the City of Moreno Valley participated in another PIT and preliminary data shows that just over 40 homeless individuals were counted.

March Air Reserve Base Master Reuse Plan – Homeless Assistance Plan

The March Joint Powers Authority (JPA) is the planning agency charged with responsibility for the reuse of March ARB. The JPA has responsibility for preparation and implementation of the Master Reuse Plan. In conformance with the Steward B. McKinney Homeless Assistance Act of 1987, the Department of Defense included March AFB in a listing of available surplus properties in the Federal Register published in May of 1994. As a result of the publication and subsequent screening of the responses, several applicants and their proposed homeless assistance programs have been granted use of several buildings at March.

Table 8-15 lists the homeless programs/services available at March Air Reserve Base. Lutheran Social Services provides transitional shelter services for single women with children. Minimum stay is three months and the maximum is one year.

U.S. Vets provides transitional housing in a 120 bed facility. The program is structured as work re-entry for homeless veterans. Services include outreach and assessment, residential substance abuse treatment and senior and disable housing.

The Concerned Family provides a ninety day transitional program for homeless women with children. Services include case management and help securing permanent housing and employment, training in independent living skills.

Table 8-15 Existing Transitional Housing Units

Facility Name	Number of Units/Number of Beds	Service Population
Path of Life	54 units (dormitory style) = 142 beds	Women with children; men with children; families
Lutheran Social Services	22 one-bedroom apartments	Women with children
U.S. Vets	120 beds	Men
Total	**76 units / 262 beds**	

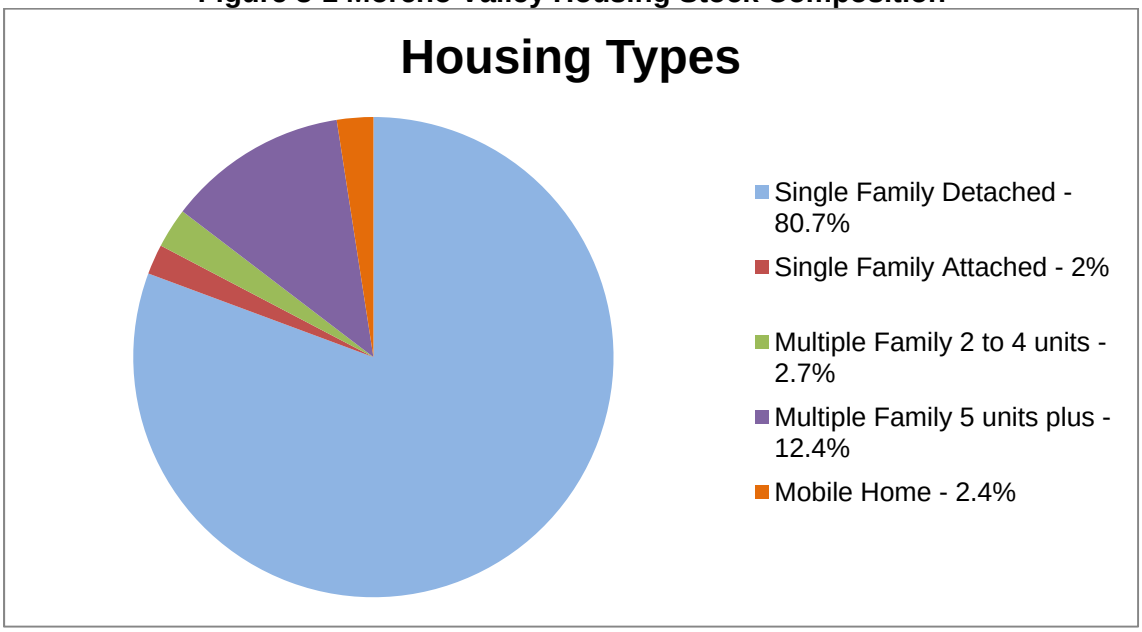
Source: Community & Economic Development Department - Neighborhood Preservation Division, CDBG grantee data, FY 2007-2008.

C. Housing Stock Characteristic

Housing Growth Trends

Between 2000 and 2010, the number of housing units in the City increased 25% from 41,430 to 55,559 total units according to the California Department of Finance. By 2012, the housing stock totaled 46,124 single family units, 8,296 multiple tenant units and there were 1,364 mobile homes, for a total of 55,784 units (Figure 8-1). Moreno Valley's housing stock is predominantly comprised of single family homes, with 82% of the housing stock, in 2012, being single family homes. In the Inland Empire, another city with a similarly large share of single family homes is Murrieta at 79%.

Figure 8-1 Moreno Valley Housing Stock Composition



Tenure and Vacancy Rates

Table # illustrates the tenure (owner vs. renter) of occupied housing in Moreno Valley according to the 2010 US Census. Table 8-16 shows that Moreno Valley has a homeownership rate that is similar to Riverside County. Correlating the high percentage of single-family homes that exist in Moreno Valley and the average proportion of renters in the City indicates that many single-family homes are used as rentals.

Table 8-16 Housing Tenure 2010

Jurisdiction	Occupied Dwelling Units				
	Owner Occupied	% of Total Occupied Units	Renter Occupied	% of Total Occupied Units	Total Occupied Units
Moreno Valley	33,393	65%	18,199	35%	51,592
Riverside County	462,212	67%	224,048	33%	686,260

Source: 2010 US Census Bureau

Vacancy rate is a measure of housing availability in a community. A vacancy rate of 5% generally indicates an adequate supply of housing with room for mobility. According to the 2010 US Census, the percentage of vacant housing units in Moreno Valley was 7% and 14% for the County of Riverside. As a standard, a vacancy rate lower than 6% indicates that the demand for housing is healthy, while a vacancy rate in excess of 10% is an indicator of oversupply in the housing market.

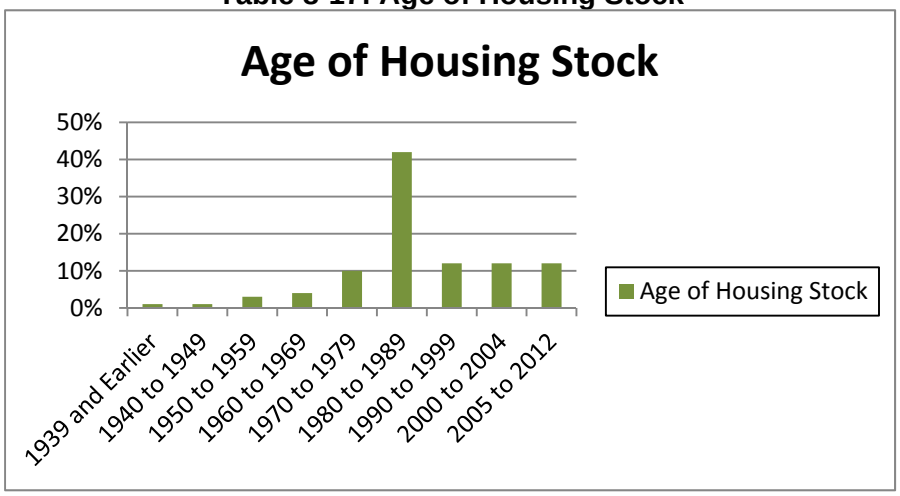
Age and Housing Stock Condition

The age of housing is commonly used as an indicator of need for major repairs. In general, housing units over 30 years old are likely to exhibit signs of rehabilitation needs, such as new roofing, foundation work, and or plumbing.

The housing stock in Moreno Valley is relatively new, with the majority of the housing built since 1980 (see Table 8-17). The age of housing stock reflects the local development history with 91% of the housing stock was built between the years 1970 to 2012.

According to the City's 2008-2014 Housing Element, between 1998 and 2007, twenty-nine single family homes were rehabilitated via the citywide Home Improvement Loan Program (HILP). Fifty-five multiple family units were rehabilitated under the Rental Rehabilitation Program. All of the single family homes rehabilitated were built between 1939 and 1970, while the multiple family units were built between 1960 and 1969.

Table 8-17: Age of Housing Stock



Source: Profile of the City of Moreno Valley from SCAG May 2013

Since the majority of the housing stock in Moreno Valley was built after 1980, and given that the units assisted by the City of Moreno Valley rehabilitation programs were built prior to 1970, it is reasonable to assume that a disproportionate number of units needing rehabilitation would be units built between 1940 and 1969. Units between 1940 and 1969 comprised approximately 7% of the housing stock in 2012. By comparison, based on the number of units rehabilitated by the citywide rehabilitation programs, a total of 84, which represents approximately .002% of the total housing stock in 2012, staff estimates that as many as ten times that number (or 840 units) require rehabilitation citywide. Since 91% of the City's housing stock was built since 1970, it is a fair assumption that no more than 2% of housing stock would be in need of rehabilitation. Units rehabilitated under the city programs were those of owners that were willing to rehabilitate their homes and had equity in their homes on which to borrow. Unfortunately, not all owners of units needing rehabilitation are willing to embark on a rehabilitation process or have the equity needed to borrow the required funds.

Based on information provided by the Building Division of the City of Moreno Valley, in the eight years between 1998 and 2006, a total 84 units have been demolished. Prior to 1998 records of demolitions were not maintained, but it is estimated that in the fourteen years between 1984 and 1998, approximately 100 units were demolished. Unit demolitions occur only when the structure in deemed unfit for human occupancy due to earthquake damage, fire, unsanitary conditions that are not remedied or obsolescence, which would include buildings without foundations or other structural problems. Approximately 262 homes were built prior to 1939. It is reasonable to assume that due to age many of the units needing replacement would disproportionately be among those units built in 1939 and earlier. However, given that in the twenty years that the city has been providing building and code services in the community .004% of the housing stock has required demolition, it is likely that within this planning cycle there will be not more demolitions than in the past eight years, or an average of eleven demolitions per year.

Based on discussions with the City's Code Enforcement Division, many of the houses in Moreno Valley that are dilapidated or have other property maintenance issues are located in the older, lower-income neighborhoods. Other code enforcement issues in Moreno Valley include weed abatement, which is concentrated on rental properties with absentee landlords, as well as property abandonment/foreclosure, which is an issue throughout the City. The Code Enforcement Division does have a Foreclosure Strike Team, which is funded through the City's CDBG Grant that Neighborhood Preservation receives annually from HUD. The purpose of the strike team is to clean up empty and neglected properties.

Due to staffing limitations a comprehensive housing conditions survey has not been done recently, and no specific information is available regarding the number of houses in need of rehabilitation or replacement. Due to budget constraints, it is not likely that the City will be able to conduct a comprehensive survey in the near future. To address this issue, the City may pursue grant funding for a housing conditions survey as part of the City's code enforcement and housing rehabilitation programs.

Housing Costs and Affordability

This section discusses current real estate market trends in Moreno Valley, both for sale and rental. It must be emphasized that real estate markets are cyclical, and in recent years a sharp downturn in sales volumes and property values has occurred in the Inland Empire (Riverside and San Bernardino Counties), in large part due to the "sub-prime" mortgage crisis. While such downturns result in lower prices and more affordable housing opportunities, the corresponding increase in foreclosure rates and softening job market, combined with the rapid escalation in gasoline prices, has hit Moreno Valley and other Riverside County communities particularly hard. In the first quarter of 2008, over 15,000 default notices were filed in Riverside County - second highest in the state after Los Angeles County (DataQuick Information Systems, 2008). The following discussion should be viewed in recognition of recent events, and with the understanding that market conditions will change over time.

Housing Affordability

Housing affordability is determined by the ratio of income to housing costs. According to the HCD guidelines for 2009, the area median income (AMI) for a family of four in Riverside County is $64,500. Based on state guidelines, income limits for a four-person family along with rents and estimated sales prices generally considered to be "affordable" are shown in Table 8-17.

An affordable housing payment is considered to be no more than 30% of a household's gross income. For rental units, this includes rent plus utilities. Assuming that a potential homebuyer within each income group has acceptable credit, a typical down payment (5% to 10%), and other housing expenses (taxes and insurance), the maximum affordable home price can be estimated for each income group, as seen in Table 8-17. Based on the current home prices described below, both low- and moderate-income households would generally be able to purchase a home with a sufficient number of bedrooms to avoid overcrowding. Very-low-income

households may be able to purchase a home, but it would most likely be a smaller, older unit or a condominium or mobile home.

Cost of Housing

The recent recession and economic downturn has had a marked impact on Moreno Valley's housing. The region has been burdened with an unusually high number of forced sales and foreclosures. This has affected both the ownership and rental markets. The over supply of homes on the market in recent years has driven down the median home value to a level not seen in the area for over a decade. However, market housing inventory and property values have begun to stabilize and in FY 2011/12 there was a small gain (since 2000) of 3.9% as reported by MDA Data Quick in 2012. With many foreclosed homes on the market at low values, cash investors are again purchasing large numbers of units as rentals. Between 2007 and 2012 there were a total of 13,034 foreclosures in the Moreno Valley. The percentage of homeowners in the City decreased from 71% in 2000 to 64.4% in 2012 with the percentage of renters increasing from 28.9% in 2000 to 35.6% in 2012. The rental market has generally been stable over the last several years due to owners who have lost their homes seeking rental units. Competition for ownership has spiked due to cash investors directly competing with homebuyers entering the market to purchase affordable units with currently very affordable mortgage interest rates.

Table 8-18 Income Categories and Affordable Housing Costs – Riverside County

2009 Area-wide Median Income = $64,500	Income Limits	Affordable Rent	Affordable Price (est.)
Extremely Low (<30% AMI)	$20,000	$500	--
Very Low (31-50% AMI)	$33,300	$833	$135,000
Low (51-80% AMI)	$53,300	$1,333	$220,000
Moderate (81-120% AMI)	$77,400	$1,935	$315,000
Above moderate (120%+ AMI)	$77,400+	$1,935+	$315,000+

Assumptions: --Based on a family of 4
-30% of gross income for rent or PITI
-5% down payment, 5% interest, 1.25% taxes & insurance
Source: Cal. HCD; J.H. Douglas & Associates

The "Local Housing Element Assistance: Existing Housing Needs Data Report" for Moreno Valley created by Southern California Association of Governments (based on 2005-2009) ACS data states that 62.8% (18,334 households) of renters and 53.8% (9204 households) of owners were paying over 30% of their income towards rent/mortgage and were therefore "cost burdened". In addition, ACS data indicates that approximately 77.5% of all market rate units in the city are unaffordable to Moreno Valley residents earning less than 100% of the area median income. The data indicates that a large percentage of households in Moreno Valley may need some form of affordable housing assistance or assistance with creating more income opportunities.

Units at Risk of Conversion

During the past thirty years, many affordable housing units were developed with low interest mortgages or rent subsidies, from the State or the Federal governments. In return, the owners were required to maintain rents affordable to low-income and very low-income households.

However, many of the mortgages allowed prepayments, or opt outs, of rent subsidy contracts that would allow an owner to charge market rents. Many of the assisted developments built in the last thirty years have had the option to prepay, and/or opt out of, affordability restrictions. The prospect has created considerable alarm, both on the part of tenants, as well as Congress and housing advocates. To avert mass displacement of low-income tenants, Congress passed the Low-Income Housing Preservation and Resident Homeownership Act (Title VI of the National Affordable Housing Act of 1990 (LIHPRHA). The objective of LIHPRHA is an extension of low-income use restrictions while offering owners alternative means of realizing a reasonable return on their investment.

In December of 1992, the City of Moreno Valley had a total of 1,286 units, in five developments, financed with proceeds from multiple family revenue bond issues. Pursuant to the regulatory agreements that govern the developments, 20% of the units had to be leased or made available for lease to lower income households. A total of 257 units were set aside in the five developments. However, only the Mountain View Apartments had a requirement, per its regulatory agreement, to maintain rents at levels affordable to lower income households.

However, the requirement expired in 1998 and the units converted to market rate at that time.

At this time, the City of Moreno Valley does not have units at risk of conversion. The rent restricted units that the city has funded through its Rental Rehabilitation Program are restricted for thirty years and still have between sixteen and twenty-two years left on their affordability terms. New construction projects have affordability covenants of 55 years.

D. Regional Housing Needs Assessment (RHNA)

California's Housing Element law requires that each city and county develop local housing programs designed to meet its "fair share" of existing and future housing needs for all income groups. This effort is coordinated by the jurisdiction's Council of Governments (Moreno Valley is in the Western Riverside Council of Governments) when preparing the state-mandated Housing Element of its General Plan. This "fair share" allocation concept seeks to ensure that each jurisdiction accepts the housing needs of not only its resident population, but for all households who might reasonably be expected to reside within the jurisdiction, particularly lower income households. This assumes the availability of a variety and choice of housing accommodations appropriate to their needs, as well as certain mobility among households within the regional market.

Overview of the SCAG Fair Share Allocation Process

The fair share allocation process begins with the State Department of Finance's projection of statewide housing demand for a five year period, which is then apportioned by the State Department of Housing and Community Development (HCD) among each of the State's official regions. The regions are represented by an agency typically termed a Council of Government (COG). In the six-county Southern California region, which includes Moreno Valley and all other incorporated cities and unincorporated areas of Riverside County, the agency responsible for assigning these fair share targets to each jurisdiction is the Southern California Association of Governments (SCAG). For Riverside County, in this RHNA Cycle, SCAG delegated the Riverside County regional share among its member jurisdictions to the Western Riverside Council of Governments (WRCOG).

A local jurisdiction's "fair share" of regional housing need is the number of additional dwelling units that will need to be constructed during a given eight-year planning period. SCAG estimates each jurisdiction's future housing need in terms of four factors:

1. The number of units needed to accommodate forecasted household growth;
2. The number of units needed to replace demolitions due to attrition in the housing stock (i.e., fire damage, obsolescence, redevelopment and conversions to non-housing uses);
3. Maintaining an ideal vacancy rate for a well-functioning housing market; and
4. An adjustment to avoid an over-concentration of lower-income households in any one jurisdiction.

The new construction need must be allocated to four household income categories used in Federal and State programs: Very Low; Low; Moderate; and Above Moderate-Income, defined operationally as households earning up to 50 percent, 80 percent, 120 percent, and more than 120 percent of the Riverside County median income, respectively. The allocations are further adjusted to avoid an over-concentration of lower income households in any one jurisdiction. The fair share allocation must also consider the existing "deficit" of housing resulting from lower income households that pay more than 30 percent of their incomes for housing costs. As discussed earlier, this is the threshold used by the Federal government to determine housing affordability.

The 2014-2021 Regional Housing Needs Allocation for the City of Moreno Valley is:

Table 8-19 City of Moreno Valley, RHNA 2014-2021

Moreno Valley Regional Housing Needs Allocation 2014-2021		
Income Category	**Units**	**Percent**
Very Low-Income	1,500	24.3%
Low-Income	993	16.5%
Moderate-Income	1,112	18.1%
Above Moderate-Income	2,584	41.1%
Total Construction Need	**6,169**	**100%**

Source: Southern California Association of Governments (SCAG) RHNA Final Allocation Plan- Planning Period January 1, 2014 – October 1, 2021

Thus, for the 2014-2021 planning period, Moreno Valley's "fair share" allocation is 6,169 units. According to Housing Element Law Section 65583, local agencies shall calculate the subset of very low-income households that qualify as extremely low-income households (30 percent or less of the Riverside County median income) by presuming that 50 percent of the very low-income households qualify as extremely low-income households. For the 2014-2021 planning period, the City was allocated 1,500 very low income units. If 50 percent of the very low allocation is calculated to accommodate extremely low income households, then the City must plan to accommodate 750 units for extremely low income households during the planning period. The Housing Element will describe policies and programs that the City will utilize to facilitate and encourage the development of housing appropriate for extremely low income households.

E. Opportunities for Energy Conservation

As cities construct housing to meet their growing populations, the consumption of energy becomes a significant issue. In urban areas, energy consumption is primary for transportation, lighting, water heating, and space heating and cooling. The high cost of energy demands that actions be taken to reduce or minimize the overall level of urban consumption.

Title 24, Building Energy Standards for Residential Development, establishes energy budgets or maximum energy use levels. The standards of Title 24 supersede local regulations, and State requirements mandate Title 24 through implementation by local jurisdictions. The City will continue strict enforcement of local and State energy regulations for new residential construction, and continue providing residents with information on energy efficiency.

The City's goal is to achieve maximum use of conservation measures and alternative, renewable energy sources in new and existing residences. By encouraging and assisting residents to utilize energy more efficiently, historical rates of consumption can be reduced, thereby mitigating the rising cost of supplying energy and need for new, costly energy supplies. Potentially, the social and economic hardships associated with any future rate increases and/or shortages of conventional energy sources will be minimized.

The City is planning on adding a Sustainable Community section to the Conservation Element of the General Plan by the end of 2014. The section is intended to protect the environment, improve quality of life, and promote sustainability through "green building" practices. Green building emphasizes natural resources conservation, energy conservation, and the reduction of environmentally harmful emissions through sustainable planning, design, and construction of residential, commercial, and industrial developments. The section will include building techniques to facilitate and preserve sustainable development in the City.

Utility providers also encourage and facilitate energy conservation and help residents minimize energy related expenses, Southern California Edison (SCE) and WRCOG both offer programs to qualifying residents of Moreno Valley. Southern California Edison (SCE) offers a variety of energy conservation services as part of its Customer Assistance Programs (CAP). The Energy Assistance Fund assists income-qualified residential customers facing financial hardship and manages their electricity bills during the months of February and March.

The WRCOG HERO Program offers $325 million in private financing to residential and commercial property owners for energy efficient and water conservation retrofits. Financing is paid back through an annual assessment on the property owner's property tax and in most cases, stays with the property upon sale. These services are designed to help low-income households, senior citizens, persons with permanent disabilities, and non-English speaking customers control their energy use. Furthermore, the 2007 Residential Multiple-Family Energy Efficiency Rebate Program offers property owners and managers incentives on a broad list of energy efficiency improvements in lighting, HVAC, insulation, and window categories. These improvements are to be used to retrofit existing multiple-family properties of two or more units.

Moreno Valley is also a member of the Western Riverside Energy Leader Partnership (WRELP) Program which is designed to assist local governments in leading their communities to increase energy efficiency, reduce greenhouse gas emissions, increase renewable energy usage, improve air quality, and ensure that their communities are more livable and sustainable. SCE funded the WRELP Program in November 2010 in the amount of $2.1 million. During the past year, WRCOG has been working with SCE staff to begin the projects it had outlined in its proposal. The funding is to be used to support the California Long-Term Energy Efficiency Strategic Plan (Plan) developed by the California Public Utilities Commission (CPUC) in 2008. The CPUC identified five strategic goals that local governments could undertake. For each goal, the CPUC identified specific strategies and developed specific tasks that are eligible for funding under this solicitation.

Additionally, the Southern California Gas Company offers various rebate programs for energy-efficient appliances to customers. The Gas Company also offers no-cost weatherization and furnace repair or replacement services for qualified limited-income customers. The Comprehensive Mobile Home Program provides qualifying mobile home customers with no-cost energy conservation evaluations, installations of low-flow showerheads and faucet aerators, and gas energy efficiency improvements, such as duct test and seal of HVAC systems. The Designed for Comfort program provides energy efficiency design assistance, training, and incentives for housing authorities, owners of multi-family affordable and supportive housing projects.

V. Housing Constraints

The provision of adequate and affordable housing can be constrained by a number of factors. This section assesses the various governmental, market, infrastructure and environmental factors that may serve as a potential constraint to housing development and improvement in Moreno Valley.

A. Market Constraints

Development and Financing Costs

Moreno Valley is fortunate in that the cost of vacant land for residential development is relatively affordable, especially when compared to the adjacent counties of Orange, Los Angeles, and San Diego. Land prices are highly variable and depend on the density of development allowed, whether the site has environmental constraints, and whether an existing use must be removed. Construction costs vary widely according to the type of development with multiple-family housing generally less expensive to construct than single-family homes. However, there is wide variation within each construction type, depending on the size of unit and the number and quality of amenities provided, such as fireplaces, swimming pools, and interior fixtures among others. The City has no influence over material and labor costs, and the building codes and development standards in Moreno Valley are not substantially different than most other cities in Riverside County.

A reduction in amenities and the quality of building materials (above a minimum acceptability for health, safety, and adequate performance) could result in lower sales prices. In addition, prefabricated factory-built housing may provide a lower-priced alternative by reducing construction and labor costs. Another factor related to construction costs is the number of units built at one time. As the number increases, overall costs generally decrease as builders can benefit from economies of scale.

Cost and Availability of Financing

Housing affordability is also largely determined by interest rates. First-time homebuyers are most impacted by financing requirements. Recently (2009-2012), mortgage interest rates for new home purchases are at historically low levels, which increases housing affordability. Although rates are currently low, they have started to increase slightly and can change significantly and impact the affordability of the housing stock. The recent economic crisis has also resulted in a tightening of lending standards, as compared to the “easy credit” practices in recent years. Thus, a critical factor in homeownership involves credit worthiness. Lenders consider a person’s debt-to-income ratio, cash available for down payment, and credit history when determining a loan amount. Many financial institutions are willing to significantly decrease down payment requirements and increase loan amounts to persons with good credit rating. Persons with poor credit ratings may be forced to accept a higher interest rate or a loan amount insufficient to purchase a house.

B. Governmental Constraints

Governmental regulations, while intentionally controlling the quality of development in the community can also, unintentionally, increase the cost of development and thus the cost of housing. These governmental constraints include land use controls, building codes and their enforcement, site improvements, fees and other exactions required of developers, and local development processing and permit procedures.

Land use controls may limit the amount or density of development, thus increasing the cost per unit. On-site and off-site improvements such as roads, traffic signals on adjacent streets, or sewer systems may increase an individual project's costs of development. Processing and permit requirements may delay construction, increasing financing and/or overhead costs of a development. The following describes potential governmental constraints, which may affect the supply and cost of housing in Moreno Valley.

Land Use Controls

The Land Use Element of the Moreno Valley General Plan and corresponding Zoning Ordinance provide for a range of residential types and densities dispersed throughout the City. The Land Use Element designates nearly 18,684 acres (65%) of the City's total land inventory for residential uses, including: single-family homes, multi-family units, and mobile homes. Residential densities allowed by the General Plan cover a wide spectrum, including the following categories:

- Rural Residential District (RR) - maximum of 0.5 units/ acre (with restrictions)
- Hillside Residential District (HR) - maximum of 0.5 units/ acre (with restrictions)
- Residential 1 District (R1) - maximum of 1 unit/ acre
- Residential 2 District (R2) - maximum of 2 units/ acre
- Residential Agriculture 2 District (RA2) - maximum of 2 units/ acre
- Residential 3 District (R3) - maximum of 3 units/ acre
- Residential 5 District (R5) - maximum of 5 units/ acre
- Residential 10 District (R10) - maximum of 10 units/ acre
- Residential Single-Family 10 District (RS10) - maximum of 10 units/ acre
- Residential 15 District (R15) - maximum of 15 units/ acre
- Residential 20 District (R20) - maximum of 20 units/ acre
- Residential 30 District (R30) - maximum of 30 units/ acre

In addition to these density provisions, the City has adopted a Mixed-Use Districts Overlay. Owners or developers of any property within any mixed-use overlay district may choose to develop in compliance with the standards and procedures in the Mixed-Use Districts Overlay that apply to the particular mixed-use overlay district in which the property is located. If the owners or developers choose not to develop a mixed-use project, the underlying zoning will be enforced. The intent of the Mixed-Use Overlay District is to permit a more efficient and aesthetic use of land through the arrangement of buildings not permitted through the strict application of

zoning. Providing such flexibility in development standards can result in lowering the cost of development.

Development Standards

Residential development standards are intended not only to protect public health and safety, also to promote the general welfare of the community by creating attractive, pleasant and convenient living conditions. It should be noted that Moreno Valley's density bonus program for affordable housing allows for the reduction of certain "quality of life" standards in conjunction with the development of affordable housing. The standards that could be reduced include lot size, lot dimensions, parking requirements and the size or interior amenities of the density bonus units. Additional requirements could be added to the list of standards that could be reduced as part of the density bonus program. They include the following: the number of parking spaces for units consisting of two or more bedrooms, the number of covered parking spaces per unit, and recreational vehicle parking requirements.

The residential development standards in Tables 8-20 through 8-22 do not represent a significant constraint on development of housing in the City. Multiple-family units can be constructed to a height of fifty feet or four stories and maximum site coverage of 50%.

The city has an adopted density bonus ordinance that allows developers to receive a 25% density bonus. Chapter 9.03.050 of the City's Municipal Code describes the density bonus program for affordable housing and what is required to achieve the bonus. In addition to the 25% density bonus, developers building housing for senior citizens may receive an additional 75% density bonus, resulting in a cumulative density bonus of 100%. When utilizing the density bonus, a developer may be eligible to receive a 50% reduction of city impact fees and parkland fees for units affordable to very low-income households and a 25% reduction for units affordable to lower-income households. The density bonus also allows developers of multi-family housing to reduce their parking by one-half of a space for each dwelling unit that is affordable to very low and lower-income households. The single-family residential development standards allow for lots of 4,500 square feet (RS10) that give developers the opportunity and flexibility to build affordable single- family housing. In certain specific plans, lots as small as 3,500 square feet are permitted. The low-density designations for single-family housing are located in the east end of the city where hillside development and an already established rural development pattern allows yet another type of housing choice.

Within specific plans there is a variety of zones that are unique to the specific plans. Basically the LD, MD, ML and other designated uses refer to low density and medium densities that mimic the R5 and RS-10 designation in the general plan.

In the Inland Empire, unlike other areas in Southern California, it is still feasible to provide adequate parking for multiple-family housing developments due to lower land costs.

Table 8-20 Single Family Residential Development Standards

Requirement	R1	R2	RA2	R3	R5	RS10
1. Maximum density (dwelling units per net acre)	1	2	2	3	5	10
2. Minimum lot size (sq. ft. net are)	40,000	20,000	20,000	10,000	7,200	4,500
3.Minimum lot width, in feet Cul-de-sac/knuckle lot frontage	150 35	100 35	100 35	90 35	70 35	45 45
4. Minimum lot depth, in feet	170	120	120	100	100	85
5. Minimum front yard setback a. Front-facing garages b. Buildings other than front-facing garages	25 n/a n/a	25 n/a n/a	25 n/a n/a	25 n/a n/a	20 n/a n/a	20 10 10
6. Minimum side yard setback, in feet a. Interior side yard b. Street side yard	* 20	* 20	* 20	* 15	** 15	*** 10
7. Minimum rear yard setback, in feet	40	35	35	30	15	10
8. Maximum lot coverage	25%	30%	30%	40%	40%	50%
9. Maximum building and structure height, in feet	Two stories not to exceed 35 feet.					
10. Minimum dwelling size (sq. ft.)	1,500	1,500	1,500	1,250	1,250	1,000
11. Minimum distance between buildings, in feet (including main dwelling units and accessory structures)	20	15	15	10	10	10
12. Floor area ratio a. One-story home b. Multi-story home	.25 .50	. .30 .60	.30 .60	.40 .70	.40 .70	.50 .75

*Combined interior side yard setbacks of twenty feet shall be provided with a minimum of five feet on one side.
** Combined interior side yard setbacks of fifteen feet shall be provided with a minimum of five feet on one side.
***Interior side yard setback of five feet, except with zero lot line developments, then other minimum side yard setback is ten feet.
Source: Moreno Valley Municipal Code, Chapter 9.03.040 Residential site development standards.

Table 8-21 Single Family Rural Residential Development Standards (Cont'd)

Requirement	Rural Residential	Hillside Residential
Slope Density Natural Area Relationship	Maximum density (du/ac) and the minimum percent of site to remain in a natural state shall be determined by a lope analysis.	Maximum density (du/ac) and the minimum percent of site to remain in a natural state shall be determined by a lope analysis.
Minimum Lot Size	Minimum lot size shall be one dwelling unit per 2.5 acres within a slope category of 10% or less unless determined to be reduced by an approve slope analysis. Based on a slope analysis, minimum lot size may be reduced to 20,000 SF. or the minimum lot size of the adjacent zone, whichever is greater.	Minimum lot size shall be one acre within a slope category of 10% or less unless determined to be reduced by an approved slope analysis. Based on a slope analysis, the lot size may be reduced to 10,000 SF. or the minimum lot size of the adjacent zone, whichever is greater.
Subdivision Design and Future Land Divisions	Subdivisions shall be compatible with the surrounding development pattern.	Subdivisions shall be compatible with the surrounding development pattern.
Building Height	Dwellings and other accessory structures shall not exceed 30 feet in overall height, provided that on slopes of less than 10%, the overall height shall not exceed 35 feet.	Dwellings and other accessory structures shall not exceed 30 feet in overall height, provided that on slopes of less than 10%, the overall height shall not exceed 35 feet.
Setback and other Site Development Criteria	On a lot under 40,000 SF the R2 district standards shall apply. On a lot 40,000 SF or greater, the R1 district standards shall apply.	On a lot less than 20,000 SF the R3 standards shall apply. On a lot between 20,000 SF to 40,000 SF the R2 standards shall apply. On a lot 40,000 SF or greater the R1 standards shall apply.

Table 8-22 Multiple–Family Residential Development Standards

Requirement	R10	R15	R20	R30
1. Minimum density (dwelling units/net acre)	10	15	20	30
2. Minimum lot size (net area in sq. ft.)	1 acre	1 acre	1 acre	1 acre
3. Minimum lot width in feet	200	200	200	200
4. Minimum lot depth in feet	175	175	175	175
5. Minimum front yard setback, in feet	20	25	30	30
6. Minimum side yard setback, in feet Interior side yard Street side yard	 10 20	 10 20	 10 20	 ** 20
7. Minimum rear yard setback, in feet.	15	20	25	**
8. Maximum lot coverage	40%	45%	50%	50%
9. Maximum building and structure height, in feet	50 feet			50 feet*
10. Minimum dwelling size (sq. ft.)	***			
11. Minimum distance between building, in feet (including main dwelling units and accessory structures)	20	20	20	20
12. Floor area ratio	.75	.75	.75	1.0

* In the R30 district, for a development of three acres or greater, up to 60 percent of the units may be in buildings with three or four stories, 50 feet maximum height subject to Planning Commission approval.
**R30 Interior Side Yard & Rear Setbacks are ten feet plus two feet for every 5 feet in height over 30 feet.
***Minimum dwelling sizes in multiple-family projects shall be as follows: 1 bedroom: 450 sq. ft.; 2 bedrooms: 800 sq. ft.; 3 bedrooms: 1,000 sq. ft.
Source: Moreno Valley Municipal Code, Chapter 9.03.040 Residential site development standard

Provision for a Variety of Housing Types

Housing Element law specifies that jurisdictions must identify adequate sites to be made available through appropriate zoning and development standards to encourage the development of various types of housing for all economic segments of the population. Table 8-23 summarizes the housing types permitted in each of Moreno Valley zones.

Table 8-23: Housing Types Permitted

Housing Types Permitted	Residential Zones												Mixed Use Overlay		
	HR	RR	R1	RA2	R2	R3	R5	RS10	R10	R15	R20	R30	MUN (9,11)	MUC (9,11)	MUI (8,10,11)
Single-Family	X	X	X	X	X	X	X	X							
Multiple-Family									X	X	X	X	X	X	X
Condominiums/ Townhouses									X	X	X	X	X	X	X
Second Units	X	X	X	X	X	X	X	X							
Mobile Home Parks	C	C	C	C	C	C	C	C	C	C	C	C			
Live/Work													X	X	X
Single Room Occupancy (SRO) *(also permitted by right in Community Commercial (CC) zoning district)*												C	C	C	C
Care Facilities (6 or fewer)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Care Facilities (7 or more)	C	C	C	C	C	C	C	C	C	C	C	C	C	C	X
Emergency Shelters	*Use is permitted in the Moreno Valley Industrial Area Plan (SP 208) and Public (P) Zoning District by right as well as certain Commercial, Office and Industrial Zoning Districts with a Conditional Use Permit (CUP).*														
Farmworker Housing									X	X	X	X			
Boarding and Rooming Houses									X	X	X	X	X	X	

X - Indicates stated use is permitted subject to district requirements.
C - Indicates stated use is allowed with a conditional use permit.

Multiple-Family Residential

The Moreno Valley Zoning Code expressly permits duplexes and multiple-family dwelling units in the R10, R15, R20 and R30 zoning districts. Section 9.03.020 - Residential development districts in the Zoning Code provides the following definitions for multiple-family:

- Residential 10 District (R10). The primary purpose of the R10 district is to provide for a variety of residential products and to encourage innovation in housing types with

enhanced amenities such as common open space and recreation areas. This district is intended as an area for development of attached residential dwelling units, as well as mobile home parks at a maximum allowable density of ten (10) dwelling units per net acre in accordance with the provisions outlined herein.

- Residential 15 District (R15). The primary purpose of the R15 district is to provide a broadened range of housing types for those not desiring detached dwellings on individual parcels, and with open space and recreational amenities not generally associated with typical suburban subdivisions. This district is intended as an area for development of attached residential dwelling units, as well as mobilehome parks, at a maximum allowable density of fifteen (15) DUs per net acre in accordance with the provisions outlined herein.

- Residential 20 District (R20). The primary purpose of the R20 district is to provide a broadened range of housing types in a more urban setting than is typically found within other areas of the city. This district is intended as an area for development of multifamily residential dwelling units, as well as mobile home parks, at a maximum allowable density of twenty (20) DUs per net acre in accordance with the provisions outlined herein.

- Residential 30 District (R30). The primary purpose of the R30 district is to provide a broadened range of housing types in an urban setting than is typically found within other areas of the city. This district is intended as an area for development of multifamily residential dwelling units at a maximum allowable density of thirty (30) DUs per net acre in accordance with the provisions outlined herein.

The dwelling types found in the multiple-family zoning districts include townhouses, condominiums, and apartments. Furthermore, various Specific Plans allow by right development of multiple-family residential apartment units; condominiums/town houses are permitted with the city's approval of a parcel or tract map. Moreno Valley's Specific Plans include (densities allowed):

- Specific Plan 209 – Auto Mall (R15=15)
- Specific Plan 193 – Moreno Valley Ranch (ML=8, M=13, MH=17 and H=20)
- Specific Plan – Towngate (M=10, MH=16, H=20)
- Specific Plan 204 – Village Plan (VCR=15, VOR=15 and VR=15)

Second Dwelling Units

The passage of AB 1866 (effective July 2003) now requires local governments to use a ministerial process for second dwelling unit applications for the purpose of facilitating production of affordable housing. AB 1866 does allow cities to impose development standards on second dwelling units addressing issues such as building size, parking, height, setbacks, and lot coverage.

Moreno Valley permits second dwelling units as an accessory use in residential zone districts with a minimum lot size of seven thousand two hundred (7,200) square feet. This includes all the single-family residential zoning districts except RS10.

The minimum size of the second dwelling unit is 450 square feet. The maximum square footage of a second dwelling unit shall be no greater than one thousand two hundred fifty (1,250) square feet, except when the primary dwelling unit is one thousand two hundred fifty (1,250) square feet or smaller. In that case, the second unit may exceed one thousand two hundred fifty (1,250) square feet subject to the minimum development standards for the zoning district. The second unit requires two covered parking spaces (garage or carport). All of the required parking spaces for the primary single-family dwelling and the second dwelling unit must be permanently reserved, maintained and used as accessible parking for vehicles. An existing garage shall not be converted to a second dwelling unit unless alternate covered parking is provided on the site that meets current zoning and building code requirements.

The City requires that either the primary single-family dwelling or the second dwelling unit be occupied by the owner of the lot. The property owner is required to enter into a restrictive covenant with the City recorded on the property to enforce these provisions.

Second dwelling units are subject to administrative review and approval by the Community & Economic Development Department. The majorities of second unit applications received by the City are either stand-alone detached structures or attached to the existing single-family home with a breeze way, if there are issues with an existing septic system (parcel is less than the minimum required one acre) and no connection to sewer available to the property.

Manufactured Housing

State law requires jurisdictions to permit manufactured housing in any residential district where single-family detached units are permitted subject to the same property development standards. The city's current policy is to evaluate all manufactured housing through its standard site plan review application process, providing for design review and project compliance with the applicable building development standards within the City's residential zones.

Single Room Occupancy (SRO)

Single room occupancy (SRO) facility means a structure consisting of six or more units, each of which is designed for occupancy by no more than two persons, which also has bathing facilities, that may or may not have partial kitchen facilities, and which is occupied as a primary residence by its occupants. An SRO unit usually is small, between 200 to 350 square feet. The definition of SRO does not include residential care homes, senior housing projects, rooming and boarding houses, hotels and motels, bed and breakfast lodging, extended care facilities or hospitals.

SROs can provide a valuable form of affordable private housing for lower- income individuals, seniors, and persons with disabilities. These units provide a valuable source of affordable housing and can serve as an entry point into the housing market for formerly homeless people. California State Senate Bill 2 (SB 2) clarified and strengthened Housing Element law to ensure local zoning ordinances would encourage and facilitate the development of SROs. Moreno Valley revised its Municipal Code in May 2013 to include SROs. These facilities are permitted in the Community Commercial (CC) zoning district by right. SROs are also permitted in the Mixed Use Districts Overlay and Residential 30 (R30) with a conditional use permit.

Housing for Persons with Disabilities

Community Care Facilities (CCFs) are licensed by the Community Care Licensing Division of the State Department of Social Services to provide 24-hour non-medical residential care to children and adults with developmental disabilities who are in need of personal services, supervision, and/or assistance essential for self-protection or sustaining the activities of daily living.

The Lanterman Developmental Disabilities Services Act and Community Care Facilities Act state that mentally, physically, developmentally disabled persons and children and adults who require supervised care are entitled to live in normal residential settings. To that end, State law requires that licensed family care homes, foster homes, and group homes serving six or fewer persons be treated like single-family homes and be allowed by right in all residential zones.

All single-family zoning districts permit community care facilities serving six or fewer persons in single-family homes. The Municipal Code does not subject such facilities to a use permit, building standard, or regulation not otherwise required of single-family homes in the same zone with the exception of spacing requirements between community care facilities. California State Law requires community care facilities to be a minimum of 300 feet apart for one another (H&S Code Section 1267.9).

The city's Municipal Code defines "family" as one or more individuals occupying a dwelling unit and living as a single household unit. This definition of family does not place limitations on the number of related and unrelated persons living together, and therefore does not constrain the provision of group housing.

Moreno Valley's Municipal Code (Chapter 9.09.160 - Residential Care Facilities) does specify provisions for community care facilities with six or more occupants. Residential care facilities for more than six residents are permitted in any residential district subject to a conditional use permit, the property development standards of the underlying district, and all applicable local, state and federal laws. Due to the unique nature of larger community care facilities, a conditional use permit will be used to ensure compatibility in the siting of these facilities, focusing on the use and not the characteristics of the users.

Reasonable Accommodation

Both the Federal Fair Housing Act and the California Fair Employment and Housing Act impose an affirmative duty on local governments to make reasonable accommodations in their zoning and other land use regulations as necessary to afford disabled persons an equal opportunity to use and enjoy a dwelling. For example, it may be a reasonable accommodation to allow covered ramps in the setbacks of properties that have already been developed to accommodate residents with mobility impairments.

Moreno Valley added reasonable accommodation procedures to Chapter 9.02 (Permits and Approvals) of the City's Municipal Code in May 2013. It is the purpose of this section to provide reasonable accommodations in the city's zoning and land use regulations, policies, and practices when needed to provide an individual with a disability an equal opportunity to use and enjoy a dwelling.

For new construction, the City's building code requires new housing to comply with the 1998 amendment to the Fair Housing Act, with multi-family development also subject to the Americans with Disabilities Act (ADA) standards. New apartment buildings are subject to requirements for unit "adaptability" on ground floor units. Adaptable units are built for easy conversion to disabled access, such as doorway and hallway widths, and added structural support in the bathroom to allow the addition of handrails.

Transitional and Supportive Housing and Emergency Shelters

Any existing single-family or multiple-family dwelling can be used as State licensed transitional or supportive housing, without any city licensing or permits. In addition, boarding and rooming houses can be operated in the multiple-family residential zones, without a conditional use permit. Transitional and supportive housing shall be considered a residential use and only subject to those restrictions that apply to other residential uses of the same type in the same zone.

Given the availability and number of housing units in Moreno Valley, it has never been necessary for a service provider to develop new housing for supportive housing. As a matter of fact, the City of Moreno Valley has one of the larger concentrations of supportive housing programs in Riverside County. The number of licensed group facilities, including group homes, small family homes, and adult residential facilities total 91 facilities. In addition, there are numerous churches and religious ministries that operate small supportive housing programs serving women and families out of single family homes.

California Health and Safety Code (Section 50801) defines an emergency shelter as "housing with minimal supportive services for homeless persons that is limited to occupancy of six months or less by a homeless person. No individual or household may be denied emergency shelter because of an inability to pay." Moreno Valley revised its Municipal Code in May 2013 to rename "Homeless Shelters" to "Emergency Shelters" as well as clarifying what zoning districts

permitted the use. Emergency Shelters are permitted in the Moreno Valley Industrial Area Plan (SP 208) and Public (P) Zoning District by right as well as Community Commercial (CC), Office Commercial (OC), Office (O), Industrial (I) and Business Park-Mixed Use (BPX) Zoning Districts with a Conditional Use Permit (CUP).

The City of Moreno Valley is a member of the Joint Powers Authority for March Reserve Base, it is a compelling assumption that most of the future transitional housing will be developed at March, where we currently have 76 units of transitional housing and 120 transitional beds.

It is most likely that emergency shelters would be developed at March Air Reserve Base. In contrast to financing the construction of a new shelter, or leasing a facility at market rate, March has existing dormitories that could be converted for shelter use, thus making the development of a shelter more financially feasible.

The development review process for an emergency shelter would be identical to the City's review process for all projects. Non-profit applicants would receive a 25% discount on the application fee for an emergency shelters application. The City of Moreno Valley does not restrict the siting of shelters beyond the requirement that shelters be located within the allowed land use designations. The business park-mixed use, office and commercial zones do not have density designations and thus multiple-family developments would not be permitted, instead dormitory style shelters would be permitted in these zones. However, the Village Office Residential designation does have a density, thus allowing for the development of multiple-family units for shelter use.

The conditional use permit issued by the City of Moreno Valley is valid for three years. A shelter facility must begin operation within three years of issuance of the conditional use permit, which can be extended further with an extension of time application. If the facility does not begin operation within the three years, and the application was not extended, a new application would be required.

A shelter must provide one parking space for every four beds. If ancillary services are to be provided at the shelter, such as free meals for persons not residing in the shelter, additional parking would be required. The shelter applicant could submit a parking study for comparable uses at a comparable facility in order to provide the City with examples of parking requirements.

All shelters would be required to develop their site in accordance with their approved plans, the Municipal Code, Landscape Development Guidelines and Specifications, and the General Plan. If the shelter application is for new construction, the time from application to issuance of the conditional use permit would be approximately six months.

However, if the application involves an existing building that would only require modifications and tenant improvements, the approval from time of application to the issuance of the Conditional Use Permit would be approximately three months. In general, the approval

timeframe for a shelter would be no longer than any other application. It is the City of Moreno Valley's conclusion that there are no significant constraints to the development of shelters in the city.

Farm Employee Housing

All affordable housing in the City of Moreno Valley is available to farm workers. Since all affordable housing units in the City are available to farm worker households, at this time, it is not necessary for the City to segregate its limited housing funds to farm worker housing. However, in May 2013 the City's Community & Economic Development Department amended Chapter 9 of the Municipal Code (specifically Chapter 9.09: Specific Use Development Standards) to permit, by right, farm worker housing in all multiple family residential zoning districts (R10, R15, R20, and R30), in order to more fully address the housing needs farm worker households.

Site Improvements

On/Off-Site Improvements Multiple-Family Development

Typical offsite improvements consist of street, storm drain, wet and dry utility improvements. Improvements are usually limited to project frontage limits with transitions to existing improvements as necessary. Development Impact Fee (DIF) credit is available for developers who construct qualifying DIF street and traffic signal improvements. The following summary is for typical multi-family developments.

Streets

Street improvements consist of, but are not limited to, pavement, base, curb, gutter, sidewalk, street lights, raised landscaped median as appropriate, to underground overhead utilities, driveway approaches. Often additional right-of-way dedication is required so that the street width conforms to the City's General Plan Circulation Element. The street width varies based on the street classification. A public sidewalk is always 6' wide, whether it is curb-adjacent or curb separated. Typically, projects are conditioned to construct half-width street improvements plus a travel lane on the other side of the street along the project frontage and any necessary transitions joining proposed to existing improvements.

Storm Drains

Drainage improvements may be required. The site is graded to drain toward the public right-of-way. If there is an existing downstream storm drain nearby, the project is required to construct a storm drain along project frontage and downstream to the existing storm drain terminus. Catch basins and storm drain laterals are required. By and large, parkway drains are the drains required to convey onsite runoff to public streets.

Water and Sewer

Eastern Municipal Water District is the city's primary water and sewer purveyor. Projects need to construct onsite water and sewer improvements, and when not pre-existing, offsite water and sewer improvements consistent with EMWD standards. Projects are required to construct water and sewer laterals along with proper connections. Valves, cleanouts, backflow prevention devices, fire hydrants, and sewer manholes are some appurtenances that are commonly associated with connections to existing water and sewer lines.

Onsite Improvements

Typical onsite improvements relevant to engineering consist of parking lot improvements, drainage facilities, and water quality treatment.

Parking lot improvements consist of, but are not limited to, pavement, base, curb, gutter, sidewalk, ribbon gutter, handicap access ramps, striping, and signage.

Onsite drainage facilities may consist of surface system facilities such as ribbon gutters and swales or subsurface system facilities such as inlets, drain pipes, underground storage.

Water quality treatment control best management practices (BMPs) should be factored into the design of the project. Depending on the identified pollutants of concern, treatment control BMPs may include infiltration basins, water quality basins, or bio swales.

On/Off Site Improvements Single Family Residential Development

The offsite improvements for single family residential development are similar to those for multi-family development. Onsite improvements that are different are listed below.

Many of Land Development's fees are based on valuation or earthwork volumes specifically plan check and inspection fees are based on a percentage of the engineer's cost estimate for offsite improvements and for onsite improvements, while grading plan check and inspection fees are based on earthwork volume cubic yards.

Typical onsite improvements relevant to engineering consist of drainage facilities and water quality treatment for single family residential lots. There may be other improvements associated with common areas. The items below are improvements specific to a lot. Except for improvements associated with common areas, if a residential tract has a common area, all other improvements would be considered offsite public improvements.

Development Fees

Development fees increased significantly after the passage of Proposition 13. Local governments have to balance the need for affordable housing with budgetary constraints and the need for services to be economically self-supporting. The City of Moreno Valley is sensitive to the needs of both the development community and its residents with respect to the impact development fees have on the cost of housing. As such, the City of Moreno Valley has taken steps to mitigate the impact of development fees on housing in the following actions:

- Froze impact fees for affordable housing developments at the rate in effect in December 2006.
- In coordination with Western Riverside Council of Governments (WRCOG), waived Traffic Uniform Mitigation Fee (TUMF) for all affordable housing developments per adopted fee ordinance.
- When utilizing the density bonus a developer may be eligible to receive a 50% reduction of city impact fees and parkland fees for units affordable to very low-income households and a 25% reduction for units affordable to lower-income households.
- Deferral of development impact fees for affordable units, until issuance of Certificate of Occupancy

However, fees on development are also levied by other agencies outside the control of the City of Moreno Valley. For example, while the City of Moreno Valley lowered its development fees, the school district increased its fees for all new residential construction. This increase had the effect of increasing the development fees overall. Nonetheless, fees levied by the city on affordable multiple-family developments are 72% lower than on market rate, multiple-family developments, primarily as a result of the City's action to freeze the fees for affordable developments.

City development fees are not a significant constraint to the development of affordable housing in Moreno Valley, but the increases in other agency controlled development fees can be a constraint on housing.

Table 8-24 City of Moreno Valley Development Fees

Fee Category	Fee Amount	
Planning and Application Fees	**Single-Family**	**Multifamily**
Plot Plan approval	$1,108	$11,637 + $42/unit[1]
Variance	Not typical	Not typical
Conditional Use Permit	Not applicable	Not applicable
General Plan Amendment	Not typical	Not typical
Zone Change	Not typical	Not typical
Site Plan Review	Included in Plot Plan	Included in Plot Plan
Architectural Review	Included in Plot Plan	Included in Plot Plan
Planned Unit Development	Not typical	Not typical
Specific Plan	Not applicable	Not applicable
Development Agreement	Not applicable	Not applicable
Other	Not applicable	Not applicable
Subdivision		
Certificate of Compliance	Not applicable	Not applicable
Lot Line Adjustment	Not typical	Not typical
Tentative Tract Map	$9,049+$116/lot[2]	$9,049+$116/lot[2]
Final Parcel Map (Land Development)	$3,860	$3,860 +$41/unit
Vesting Tentative Map	Not applicable	Not applicable
Other		
Environmental		
Environmental Review	$1054	$1054
Environmental Impact Report	Not typical	Not typical
Negative Declaration	Included in ER	Included in ER
Mitigated Negative Declaration	Not typical	Not typical
Other		

Table 8-24 City of Moreno Valley Development Fees (Cont'd)

Fee Category Impact	Fee Amount Single-Family	 Multifamily
Police	$ 464	$ 368
Fire	$ 650	$ 261
Parks	$ 5,167	$ 4,526
Water (EMWD)	$ 4,324[3]	$ 8,071[4]
Sewer (EMWD)	$ 6,727	$ 7,478
Solid Waste	Not applicable	Not applicable
Traffic - City	$ 5,622	$ 3,934
Flood (Riverside County) cost for subdivision	$ 1,757	$ 1,757
School Moreno Valley USD Val Verde USD	$4.02/s.f [5] $3.20/s.f[6]	$4.02/s.f $3.20/sf
Other City Facilities, including Library	$ 1,842	$ 1,196
Habitat – Regional (MSHCP)	$ 1,938	$ 1,008
Traffic – Regional (TUMF)	$8,873	$ 6,231
TOTAL	**$48,779**	**$53,689**

Source: Chris Ormsby, Planning Official, City of Moreno Valley Planning Department, August 12, 2013.
1 Note this is per unit cost and will vary based on the project size.
2 Note this is per lot cost and will vary based on the number of lots.
3 Of the noted total, $534 is per unit cost for meter installation and water and sewer development cost. Source: http://emwd.org/new_biz/construction_fee_res-div.html
4 Of the noted total, $829 is per unit cost for meter installation and water and sewer development cost. Source: http://emwd.org/new_biz/construction_fee_res-div.html
5 Source: Moreno Valley Unified School District's website: http://www.mvusd.net
6 Source: Val Verde Unified School District's website: www.valverde.edu
Note: The total under the multi-family category would be approximately 72% lower for affordable units, or approximately $34,170, since affordable units do not pay the regional traffic fee.

Local Processing and Permit Procedures

The processing time needed to obtain development permits and required approvals is commonly cited by the development community as a prime contributor to the high cost of housing. Depending on the magnitude and complexity of the development proposal, the time that elapses from application submittal to project approval may vary considerably. Factors that can affect the length of development review on a proposed project include: completeness of the development application submittal, responsiveness of developers to staff comments and requests for information, and level of environmental review under the California Environmental Quality Act (CEQA), requirement of rezoning or general plan amendment, or are subject to a public hearing before the Planning Commission or City Council.

Certainty and consistency in permit processing procedures and reasonable processing times is important to ensure that the development review/approval process does not discourage developers of housing or add excessive costs (including carrying costs on property) that would make the project economically infeasible. The City is committed to maintaining relatively short processing times. Total processing times vary by project, but most residential projects are approved within six months. Table 8-25 provides a detailed summary of the typical processing procedures and timelines of various types of projects in the City.

Table 8-25 Permit Processing Timelines

Type of Approval or Permit	Typical Processing Time
Administrative Plot Plan/No Notice	2 to 3 months
Conditional Use Permit	6 to 9 months
General Plan Amendment	6 to 9 months
Administrative Plot Plan/Notice	3 to 5 months
Design/Architectural Review	Included in project processing
Tentative Tract Maps	6 to 9 months
Tentative Parcel Maps	6 to 9 months
Initial Environmental Study	Included in project processing
Environmental Impact Report	9 to 12 months
Plot Plan/Hearing	6 to 9 Months

Source: Chris Ormsby, Planning Official, City of Moreno Valley Planning Department, August 13, 2013.

Single-Family

A single-family dwelling, on an existing parcel, is subject to a custom home review to ensure compliance with zoning regulations. Approval of a custom home review for a single-family dwelling is administrative. Staff involved in the approval process includes members of the Community & Economic Development Depart, Public Works Department and Fire Prevention Bureau. Processing time is approximately two to three months, but is highly dependent on the quality of the initial submittal.

If the proposed single-family project does not conform to the development regulations of the zone, it requires a discretionary action. An example of discretionary approval includes a major variance. Variances from the terms of the zoning regulations shall be granted only when special circumstances applicable to the property in question, including size, shape, topography, location or surroundings, the strict application of the zoning regulations deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification. Consequently, variances to a zoning regulation may be granted with respect to development standards such as, but not limited to, walls, fences, screening and landscaping, site area, width and depth, coverage, front, side and rear yards, height of structures, usable open space, and on-street and off-street parking and loading facilities. This type of project is considered by the Planning Commission. Approval is based on findings as outlined in the zoning regulations. Processing time for a Planning Commission hearing is approximately three months for small project.

The Community & Economic Development Director may grant an administrative variance for a single-family project where there is a justifiable cause or reason; provided, however, that it does not constitute a grant of special privilege inconsistent with the provisions and intentions of this title. A public hearing is not required for an administrative variance. Administrative variances are subject to the following limitations:

1. Fence Height. In any district, the maximum height of any fence, wall or equivalent screening may be increased by a maximum of one foot where the topography of sloping sites or a difference in grade between adjoining sites warrants an increase in height to maintain a level of privacy, or to maintain the effectiveness of screening, as would generally be provided by such fence, wall or screening.

2. Setbacks. In any residential district, the Community & Economic Development Director may decrease minimum setbacks by not more than ten (10) percent where the proposed setback area or yard is in character with the surrounding neighborhood, and where such decrease will not unreasonably affect contiguous sites.

3. Lot Coverage. In any residential district, the Community & Economic Development Director may increase the maximum allowable lot coverage by not more than ten (10) percent where such increase is necessary for significantly improved site planning or

architectural design, creation or maintenance of views or would otherwise facilitate highly desirable features or amenities, and where such increase will not unreasonably affect contiguous sites.

4. Height. In any district, the Community & Economic Development Director may authorize a ten (10) percent increase in the maximum allowable building height. Such increases may be approved only where necessary to accommodate architectural design, where scenic views or solar access on surrounding properties are not affected and where there is no increase in useable square footage of the proposed structure.

5. Decrease in Building Frontage Requirements. In any mixed-use overlay district, the Community & Economic Development Director may authorize up to a ten (10) percent decrease in the distance threshold established to specify the required percentage of a building frontage to be built to the build-to-zone, as indicated in Table 9.07.095-10, Mixed-Use Overlay District Development Standards [i.e., the distance threshold from street intersections for the purposes of calculating building frontage length may be reduced from three hundred (300) feet to two hundred seventy (270) feet]. The community development director is not authorized to reduce the percentage of the building frontage that is required to be built to the build-to-zone.

A single-family project, which includes a major subdivision, requires a public hearing and approval of the Planning Commission. The basis for approval is the City's subdivision regulations and the permitted density of the underlying zone. The length of time required to process a subdivision map is variable, based on the size and complexity of the project. In most cases, the approval process can be completed in 6 months to a year.

Multiple-Family

Multiple-family housing is subject to site plan and design review. The process is the same for all types of multiple-family projects, market rate or affordable. Staff involved in the review process includes members of Community & Economic Development Depart, Public Works Department and Fire Prevention Bureau. If the multiple-family housing is proposed as a condominium, the approval process also includes a subdivision map. Processing time is approximately six to nine months and the project is subject to review by the Planning Commission.

General Plan Amendment and/or Zone Change

A proposed housing project may include a general plan amendment and/or rezone. This type of approval is discretionary, requiring review by the Planning Commission, and approval by the City Council. Approval of a rezone or general plan amendment would depend on the applicant's ability to show that the proposal would further the City's established land use goals.

Permit Processing

The following is a summary of the approval process for a typical large single-family subdivision or multiple-family housing project:

1. Prepare and submit application. The applicant prepares plans, maps and other materials necessary to review the project and submits the application to the Planning Division.

2. Receive application. The Planning Division reviews the materials submitted as part of the application. If the submittal is complete, it is taken in and assigned to a planner.

3. Process application. The Planning Division processes the application in coordination with other departments and agencies as necessary. Processing normally includes:

a. The planner distributes copies of the proposed plans to affected agencies and departments and schedules the case for review at a meeting of the Project Review Staff Committee (PRSC). The PRSC consists of representatives from various City departments.

b. The planner reviews the proposed plans to determine if they meet the current rules, regulations and policies. The planner also prepares an Initial Study pursuant to the California Environmental Quality Act (CEQA). Depending upon the location and potential impacts of the project, additional environmental studies may be required. The information provided in the environmental studies may be necessary for the City to make the appropriate environmental determination: A Categorical Exemption, Negative Declaration, Mitigated Negative Declaration, or determine that an Environmental Impact Report must be prepared.

c. PRSC meets to determine if there are issues that need to be discussed with the applicant. If not, PRSC comments are mailed to the applicant. If there are issues to be discussed, the applicant is invited to meet with the PRSC. Some of the matters that are typically discussed at the PRSC meeting are required revisions to the proposed plans and the need for additional information or studies.

d. The applicant prepares the studies, if required, revises the proposed plans in accordance with the PRSC comments, and submits to the City for review. If the studies and plans are acceptable, each department submits its proposed conditions of approval to the planner.

e. The planner schedules the case for hearing before the Planning Commission. A notice of the Planning Commission hearing and the proposed environmental determination is then published in the local newspaper. Unless exempt under CEQA, a notice is published a minimum of 20 days in advance of the hearing for a typical multiple-family project, which corresponds to the minimum public review period for a Negative Declaration as required by CEQA. An exempt project would require a 10 day notice. The planner then mails notice of the hearing to property owners within 300 feet of the project and also posts a public notice sign on the project site.

f. The planner prepares a Planning Commission Staff Report describing the staff recommendation and proposed conditions of approval. The report is sent to the Planning Commission and the applicant in advance of the public hearing.

4. Conduct public hearing. A public hearing is held before the Planning Commission. The applicant and the public are invited to testify before the Commission. The Commission's decision includes acting on the environmental determination as well as the project itself. Any party can appeal the decision of the Planning Commission within 15 working days after the decision (10 days for decisions under the Subdivision Map Act). A $750.00 fee is paid to the City to file an appeal. The appeal hearing, which is publicly noticed, is held before the City Council. The appeal hearing takes place approximately 30 days after the filing of the appeal.

The entire process is generally completed within six to nine months. Processing time can be longer for housing projects accompanied by a zone change or general plan amendment that must be approved by the City Council. Cases that must go to the City Council would require an additional 30 days.

Delays in processing applications for residential development can add to housing costs. The length of time is primarily a function of the complexity of the issues, modification of project design if needed, and preparation of studies to meet State and Federal environmental requirements, and efforts to address concerns brought up by neighbors. In addition, elimination

of the public hearings would not exempt the City from public noticing requirements specified in CEQA. On the other hand, it would have the undesirable effect of decreasing the opportunity for members of the public to hear and provide testimony on proposals that affect their neighborhoods and communities.

Design Requirements

The following describes the types of design requirements imposed on multiple-family development and the impact of those requirements on the cost and supply of housing affordable to lower-income households. However, the design guidelines do not pose a significant constraint on the development of housing in Moreno Valley.

In the city's Municipal Code, the General Multiple-Family Design Guidelines are noted as follows:

1. Opposing garages or carports should be turned to avoid the monotony of alley-like parking corridors.

2. Parking areas should be staggered and landscaped to add visual interest, and opportunities for accent treatments.

3. Parking spaces within multifamily areas shall be located within two hundred fifty (250) feet of the dwellings they serve.

4. Multifamily parking lots shall be limited to two double aisles of cars to help reduce expanses of paving. Parking lots shall provide openings in curbs to convey surface drainage into landscape areas for water quality, retention and absorption.

5. Open parking areas should be clustered and treated as landscaped plazas and courts.

6. Landscaping shall be used around the perimeter of the lot, as well as within the lot, reducing paved area and providing for a more pedestrian oriented site.

7. No more than four units for a two-story structure should be served by one entry.

8. Each multiple-family unit shall have at least one hundred and fifty (150) square feet of private open space per downstairs unit and a minimum of one hundred (100) square feet of private open space per upstairs unit. Private open space may consist of a fenced yard area, patio or balcony. Fenced yards and patios shall have a minimum dimension of at least eight feet. Balconies shall be at least five feet deep.

9. Common open space at a minimum of three hundred (300) square feet per each residential dwelling in the project is required.

10. Individual units should have a porch or porch-like space at the front door.

11. Trash enclosures shall be located to provide a maximum walking distance of two hundred fifty (250) feet from the units they serve.

12. Trash enclosures shall include solid roofs and be designed to be compatible with the project's architecture.

13. Trash enclosures shall not be located on dead end drive aisles, unless adequate turnaround is provided for collection vehicles.

14. There shall be at least one double-bin trash enclosure for every forty-eight (48) residential units.

15. Mail boxes should be located at various places on the site and treated to match the building's architecture, avoiding the institutional and monumental "gang box" appearance, while conforming to post office guidelines.

16. Drive aisles should be curved and should incorporate landscaping and paving treatments to reduce vehicle speed. Landscaping treatments may include pinched planters and a mix of canopy and vertical trees. Paving treatments may include interlocking paver bands or etchings across drives. Speed bumps or Botts' dots are not an acceptable alternative.

17. Freestanding structures, like gazebos or pergolas, should be located to define activity areas at pathway intersections or in secluded landscape areas.

18. Drive aisles shall be at least twenty-four (24) feet wide for two-way traffic and shall be at least twenty (20) feet wide for one-way traffic.

19. Buffer setbacks and landscaping shall be provided along all property lines. Buffers may also be appropriate within the complex, separating recreational areas from units and limiting lines of sight between balconies and into parking areas.

20. Multiple-family projects warrant special design considerations, including:

a. Intimate, shaded outdoor seating areas;
b. A network of pathways, providing interesting walking experiences;
c. Gentle slopes for outdoor pathways and ramps to entry doors and between floors;
d. Convenient and attractive access to transit, including portecocheres, information kiosks, seating areas and water elements;
e. Security;
f. Direct ambulance access (senior housing projects);
g. Parking close to units;
h. Elevators (senior housing projects).

21. Buildings shall provide for a variety of colors and architectural features to break up the massing of buildings and provide visual interest.

22. Multiple-family units shall be clustered to minimize grading and to help maintain the natural landscape.

23. Multiple-family projects shall be designed for the needs of the intended residents. For example, children's needs would require open space, tot lots, handrails, and enclosed yards on ground floor units. Disabled or elderly needs would require ramps, parking close to units, minimal and gradual elevation changes, and elevators.

24. Architectural features should be used to increase privacy from nearby units and common or public spaces.

25. Roof forms should be mixed and combined to vary the perception of building height, to differentiate units and to add interest to building mass. The long, straight roofline of a single gable is not permitted.

26. A diagram of the complex showing the location of the viewer and the building designations shall be positioned at each visitor entrance of a multiple-family development.

There are a variety of design requirements imposed on multiple-family development that can affect the cost of housing development. The design guidelines are intended to promote quality site planning and architecture without restricting innovation or creativity. The design guidelines do not pose a constraint on the development of housing in the City of Moreno Valley but represent city policy with respect to the quality of design expected for all projects within the city.

Parking and open space requirements probably have the greatest potential effect on the cost of housing. The land the must be devoted to parking and open space constrains the amount of land available for housing. In some cases, this could make it more difficult to achieve the highest residential densities allowed under zoning regulations.

Open Space Requirements

The Municipal Code requires a minimum amount of common and private open space for multi-family development. Common open space must total a minimum of 33% of each development. This area includes the required setbacks, common recreation facilities and other common open space areas. In addition, each dwelling unit should have at least 100 square feet of private open space such as a private patio for ground floor units or a balcony for units above the ground floor.

Parking Requirements

Parking requirements can have a potential impact on the supply and cost of housing, which could result in a constraint on housing development. In the case of multiple family housing, the land dedicated for parking, constrains the amount of land available to building housing units. This could make it more difficult to achieve the highest allowable residential densities. For example, a building might have to be three stories instead of two stories to provide area for the

required number of parking spaces. It is less of a constraint for affordable housing because affordable developments have reduced parking standards. The requirement for covered parking may also be a constraint, because garages or carports add to the cost of housing development.

With respect to single-family developments, a two-car garage is required for each single-family residence. Two covered parking spaces (either carports or garages) are required for second units. One uncovered parking space is required for second units. This requirement has not impacted our ability to meet allowed densities.

With respect to multiple-family developments, Moreno Valley reduced its parking requirements in recognition of the potential constraint that parking could have on housing development. The parking standards within the Moreno Valley Ranch Specific Plan were reduced in November of 2003. The citywide parking standards for multiple-family housing were last modified in May 2013 with the addition of the Mixed Use Districts Overlay to the City's Municipal Code.

The adjustments noted in Table 8-26 (located on the following page) substantially reduced the potential constraint that parking requirements might have placed on housing development in Moreno Valley. Except for sites with unique topographic or site configurations (utility easements, more than two street frontages), projects have been generally approved at or near the maximum allowed density.

Design requirements are necessary to ensure that all housing developments in Moreno Valley remain safe, convenient and decent places to live for years to come regardless of the income level of the residents. These are not considered serious constraints on housing development. Reductions to the design standards could be used as incentives for eligible housing projects under density bonus law. Incentives are available to projects with specified percentages of units reserved for seniors or lower income households.

Table 8-26 Parking Requirements

Use	Requirement	Covered Parking	Notes
Residential Uses			
Single-family	2/unit	Within an enclosed garage	
Second units	2/unit	Carport or garage	
Duplex	2/unit	Within an enclosed garage	
3 or more units: Studio 1 bedroom 2 bedrooms 3+ bedrooms	 1.25/unit 1.5/unit 2.0/unit 2.5/unit	 1 covered/unit 1 covered/unit 1 covered/unit 2 covered/unit	Guest parking is required for all units at 0.25 spaces/unit. Guest parking is included in the minimum required parking standard.
Senior housing: Studio 1 bedroom 2+ bedrooms	 1.0/unit 1.25/unit 1.5/unit	 1 covered/unit 1 covered/unit 1 covered/unit	Guest parking is required for all units at 0.25 spaces/unit. Guest parking is included in the minimum required parking standard. Alternate parking requirements may be permitted subject to approval of a parking study.
Mobile home parks	2.5/unit		Tandem spaces may be used to meet resident parking requirements.
Residential care homes	Parking requirements shall be determined by the community & economic development director subject to an approved parking study.		

C. Environmental and Infrastructure Constraints

Natural landforms, hazards, or habitat can constrain residential development opportunities in a community. Portions of otherwise developable sites with steep or unstable slopes, soils that are susceptible to liquefaction or other geologic conditions, or contain sensitive habitat, could constrain development capacity. Another factor adding to the cost of new home construction is the cost of providing adequate infrastructure such as streets, curbs, gutter, sidewalks, water and sewer lines, and street lighting. The cost of these additions or improvements is borne by developers and then, to the extent possible, added to the cost of new housing units, impacting affordability. This section summarizes potential environmental and infrastructure constraints on residential development in Moreno Valley.

In the inventory, staff has identified a variety of "environmental constraints". These are graphically represented in Attachment #10, "Exception Areas" map. The constraints consist of site specific data from inclusion of sites in a specific plan, to the existence of fault zones in the east end of the city and along the badlands, to flood areas and water constraints for parcels in the Box Springs Mutual Water Company service area. Denoting a site's location in the redevelopment area allow staff to identify sites eligible for Agency assistance for the development of affordable housing. Also, knowing that a site is in a specific plan indicates that there exist unique development requirements for the site, such as zoning or development requirements. The sites inventoried are not impacted by earthquake faults that would restrict development, railroads, or March Air Reserve Base flight path.

The only environmental constraint affecting development is related to flood. The flood areas are shown in the blue overlay, in Attachment #10. In addition, the parcel inventory of vacant land lists each parcel in a flood area. If parcels are in flood zone X, the 500 year flood plain, they can be developed as long as the structures are outside the immediate overflow areas of the flood channels running adjacent to or near the sites. Flood depths for Zone A, the 100 year flood plain, are undetermined and would have to be determined by a surveyor prior to development. Once the depths are determined, building foundations would have to be raised and flood insurance would be required. However, if flood improvements are made to the area in which the parcels are located, prior to development, the flooding constraint will have been removed. However, at this time, no such improvements are planned either by Riverside County Flood Control or by the City of Moreno Valley. Yet, the number of parcels that are affected by flood constraints are few in relation to the total inventory, thus the impact of flood constraints is minimal.

All utilities, including gas, electric, water and sewer are available to the sites noted in the inventory. Southern California Edison service is available to all sites west of Lasselle Street. In 2005, the City of Moreno Valley established its own electric utility that will provide electrical services to properties east of Lasselle Street.

D. Other Constraints

Land Prices

The cost of land directly influences the cost of housing. In turn, land prices are determined by a number of factors, most important of which are land availability and permitted development density. As land becomes scarcer, the price for land increases. In terms of development density, land prices are positively correlated with the number of units permitted on each lot. Thus, a higher density lot may command a higher price than one designated for lower densities, but upon completion the developer may realize a higher profit margin based on a greater number of units sold.

Housing Market

In recent years, vacant residential land sales have increased due to the highly active Southern California housing market. Even in this market environment, there are significant differences in land prices in the region. In general, land prices in Riverside County are more affordable than the pricier Los Angeles and Orange County markets; in fact, the lack of inexpensive residential land in Los Angeles and Orange Counties was a major impetus for the development of the Inland Empire, including Moreno Valley and western Riverside County.

Within the Riverside County market, there are also significant differences in land prices. Master-planned communities in Temecula, Corona, and parts of the Coachella Valley have generally garnered higher residential land prices than more established communities in central, southern and parts of eastern Riverside County.

Although land prices remain a significant cost component of a new home, land prices in Moreno Valley do not significantly constrain the production of housing relative to surrounding jurisdictions. In fact, the land costs in Moreno Valley are more conducive to construction than other areas of Riverside County, and have contributed to the potential for single-family market rate units to be constructed which are generally affordable to moderate, and in some cases, lower income households.

Construction Costs

The cost of building materials for residential construction rose dramatically until 2008. However, according to the U.S. Department of Labor, the overall cost of residential construction materials rose by only 2 percent between 2011 and 2012, with steel costs increasing 0.4 percent and the cost of cement increasing 1.5 percent. With the slowdown in the real estate market from 2008 and 2012, the price of construction materials has shown a significant decrease from the 2006-2008 construction boom. The 2 percent increase in overall construction costs experienced over the past year is primarily due to increased labor costs.

The type of product largely determines the cost of construction. Over 40 percent of Moreno Valley's existing inventory was constructed prior to the 1980s. These older homes, in some cases, reflect a lesser degree of amenities (such as less square footage, or the provision of carports instead of a two car garage) than the more contemporary tract developments in newer parts of Riverside County. These older homes generally reflect a lower resale market price than newer products crafted with supplemental amenities and more technologically advanced materials. When considering the overall housing affordability in the Moreno Valley market, the purchase prices of these older homes are affordable even to residents in the very low-income category.

The cost of labor is based on a number of factors, including housing demand, the number of contractors in an area and the unionization of workers, but it is generally two to three times the cost of materials. Thus the cost of labor represents an estimated 17 percent to 20 percent of the cost of building a unit, which is a substantial portion of the overall cost of construction.

Prevailing wages may also be an additional constraint on construction costs. In the State of California, all public works projects must pay prevailing wages to all workers employed on the project. A public works project is any residential or commercial project that is funded through public funds, including federally funded or assisted residential projects controlled or carried out by an awarding body. The prevailing wage rate is the basic hourly rate paid on public works projects to a majority of workers engaged in a particular craft, classification, or type of work within the locality and in the nearest labor market area.

Twice a year, prevailing wage rates are determined by the director of the California Department of Industrial Relations. A prevailing wage ensures that the ability to get a public works contract is not based on paying lower wage rates than a competitor, and requires that all bidders use the same wage rates when bidding on a public works project. The California Department of Industrial Relations provides link to the current prevailing wages for a journeyman craft or classification for each county in California. Prevailing wages may constrain construction of affordable housing because they are often higher than normal wages.

Together, the cost of building materials and construction labor are the most significant cost components of developing residential units. In the current southern California market, construction costs are estimated to account for upwards of 50 percent of the sales price of a new home. Typical construction costs for high-density apartment (20 units per acre) developments run around $150,000 per unit including $10,000 per unit for structured parking. Hard construction costs for development of medium/high density (15 units per acre) condominiums over podium parking run approximately $200,000 per unit, including $35,000 per unit for the parking structure.

The data indicates that construction costs in the Moreno Valley vicinity can constitute approximately 40 percent of the cost of a single-family detached housing unit. These figures are even more noteworthy considering that the cost of raw land constitutes only four to 14 percent

of the cost of a housing unit. Typically, in the private sector market, the development of residential units is a business and investment venture. Therefore, developers seek the greatest return for their investment. As with most businesses, a constraining factor in the area of profitability continues to be the market place where developers sell their products. To a great extent, the market place sets the upper end of the profit margin with overhead costs for construction constituting the lower parameter of profit.

The construction cost of housing affects the affordability of new housing and can be a constraint to the creation of affordable housing in the City and greater Riverside County region. Particularly with the tightening of mortgage lending standards, homebuilders have slowed construction of new homes, which could potentially affect the provision of affordable housing. A reduction in construction costs can be brought about in several ways. One such method involves a reduction in amenities and quality of building materials in new homes (still above the minimum acceptability for health, safety and adequate performance), which may result in lower sales prices. State Housing Law provides that local building departments can authorize the use of lower cost materials and construction methods if the proposed design is found to be satisfactory and the materials or methods are at least equivalent to that prescribed by the applicable State building codes.

In addition, pre-fabricated, factory built housing may provide lower priced products by reducing labor and materials costs. As the number of units built in scale increases, savings in construction costs over the entire development can be realized, particularly when combined with density bonus provisions. The City may implement a variety of programs to write down land costs or provide other developer incentives such as flexibility in development standards to increase affordability, subject to the developer providing a percentage of units with affordability restrictions.

Financing

Mortgage interest rates have a large influence over the affordability of housing. Increases in interest rates decrease the number of persons able to afford a home purchase. Decreases in interest rates result in more potential homebuyers introduced into the market. National policies and economic conditions determine interest rates, and there is little that local governments can do to affect these rates. Jurisdictions can, however, “leverage” funds by offering interest rate write-downs to extend home purchase opportunities to lower income households. In addition, government insured loan programs may be available to reduce mortgage down payment requirements.

First time homebuyers are the most impacted by financing requirements. Mortgage interest rates for new home purchases are about 3.5 percent for a fixed rate-30 year loan in 2012. Lower initial rates may be available with Graduated Payment Mortgages (GPMs), Adjustable Rate Mortgages (ARM’s), and Buy- Down Mortgages. However, variable interest rate mortgages

on affordable homes may increase to the point that interest rates exceed the cost of living adjustments, which is a constraint on affordability. Although interest rates are currently low, they can change significantly and substantially impact the affordability of the housing stock.

Interest rates in 2012 are not a constraint to affordable housing; however more strict lending standards could pose a constraint to affordable housing. An increase of one percentage point can make a monthly payment out of reach for many lower income households. As such, financing for long term mortgages is generally available in Moreno Valley, subject to normal underwriting standards.

A more critical impediment to homeownership involves both the affordability of the housing stock and the ability of potential buyers to fulfill down payment requirements. Typically, conventional home loans will require 80 percent loan-to-value and represents the largest constraint to homebuyers. Other programs, such as those for first-time homebuyers, can find down payment requirements between 5 percent and 20 percent. However, more recent events in the housing market have made it more difficult for prospective home buyers to secure a home loan.

The year 2012 saw a record number of foreclosures in California. Information obtained online indicated that there were approximately 1,843 homes in Moreno Valley that were in foreclosure. Moreno Valley experienced the highest number of foreclosures compared to its neighboring cities. There were 842 in Perris, 794 foreclosures in Murrieta, 284 foreclosures in Bellflower, 371 foreclosures in Pico Rivera, and 354 foreclosures in San Jacinto. However, the number of foreclosure homes in Moreno Valley is significantly less than Riverside County as a whole, which experienced 16,476 foreclosures in 2012.

The greatest impediment to homeownership, however, is credit worthiness. According to the Federal Housing Authority, lenders consider a person's debt-to-income ratio, cash available for down payment, and credit history, when determining a maximum loan amount. Many financial institutions are willing to significantly decrease down payment requirements and increase loan amounts to persons with good credit rating. Individuals with a poor credit rating may only qualify for higher interest rates or a loan amount insufficient to purchase a house. Poor credit rating can be especially damaging to lower-income residents, who have fewer financial resources with which to qualify for a loan. The FHA is generally more flexible than conventional lenders in its qualifying guidelines and allows many residents to re-establish a good credit history.

Under the Home Mortgage Disclosure Act (HMDA), lending institutions are required to report lending activity by census tract. Analysis of available HMDA reports do not indicate documented cases of underserved lower income census tracts in the City. Table 8-27 presents the disposition of home purchase loan applications in 2011 by number of loans approved and loans denied. The data is for the Riverside-San Bernardino-Ontario MSA, which includes the City of Moreno Valley. The data includes purchases of one to four unit homes as well as manufactured homes. Over 80 percent of the loan applications were received from above moderate-income households (earning greater than 120 percent of Median Family Income [AMI]). Moderate

income households (80 to 120 percent of AMI) and lower-income households (less than 80 percent AMI) accounted for approximately 8 percent and 2 percent, respectively (please note that there is a slight margin of error in the percentage calculations because the sum of the total applications for each income category does not equal the actual total count). The overall loan origination rate was 60 percent and this rate decreased as income decreased. These rates can be expected to contract further as a recent national survey conducted by the Federal Reserve found that more than half of banks responding reported they had tightened their lending standards for sub-prime mortgages.

TABLE 8-27: DISPOSITION OF CONVENTIONAL HOME PURCHASE LOAN APPLICATIONS
RIVERSIDE-SAN BERNARDINO-ONTARIO MSA

	Loans Approved	Loans Denied	Loans Withdrawn/Incomplete
Number of Loan Applications	2,263	4,265	2,963
Percent of Total Applications	12.2%	22.4%	15.6%

Source: Home Mortgage Disclosure Act Data, 2011.Compiled by ESA.
Note: Approved loans include: loans originated and applications approved, but not accepted.

VI. Housing Resources

This section summarizes the land, financial, and administrative resources available for the development and preservation of housing in Moreno Valley. The analysis includes an evaluation of the availability of land resources for future housing development; the City's ability to satisfy its share of the region's future housing needs, the financial resources available to support housing activities, and the administrative resources available to assist in implementing the City's housing programs and policies.

A. Regional Housing Needs Assessment (RHNA)

Moreno Valley's Regional Housing Needs Allocation (RHNA) for the 2014-2021 planning period has been determined by SCAG to be 4,280 housing units, including 1,500 units for very low-income households, 993 units for low-income households, 1,112 units for moderate-income households, and 2,584 units for above moderate-income households (Table 8-28).[1]

Table 8-28 City of Moreno Valley, RHNA 2014-2021

Income Category	Units
Extremely Low-Income[2]	750
Very Low-Income	750
Low-Income	993
Moderate-Income	1,112
Above Moderate-Income	2,584
Total	**6,169**

Source: Southern California Association of Governments (SCAG) RHNA Final Allocation Plan-Planning Period January 1, 2014 – October 1, 2021

[1] In RHNA, there are rounding differences in some localities between the total housing need and the sum of the four income groups. In such cases, communities may choose which of the income categories it will adjust by one unit to maintain consistency with the approved total housing need. For Moreno Valley, the one unit difference has been allocated to the above moderate-income category.

[2] AB2634 mandates that localities calculate the subset of the very low-income regional need that constitutes the communities need for extremely low income housing. As an alternative to calculating the subset, local jurisdictions may assume that 50 percent of the very low income category is represented by households of extremely low income (less than 30 percent of the AMI).

Identifying Adequate Sites

State law requires that a community identify an adequate number of sites to accommodate and facilitate production of the City's regional share of housing. To determine whether the City has sufficient land to accommodate its share of regional housing needs for all income groups, the City must identify "adequate sites." Under State law (California Government Code section 65583.c.1), adequate sites are those with appropriate zoning and development standards, with services and facilities, needed to facilitate and encourage the development of a variety of housing for all income levels. Land considered suitable for residential development includes the following:

- Vacant residentially zoned sites;
- Vacant non-residentially zoned sites which allow residential uses (such as mixed-use);
- Underutilized residentially zoned sites that are capable of being developed at a higher density or with greater intensity; and
- Non-residential zoned sites that can be redeveloped for, and/or rezoned for, residential use (for example Office (O) and Office Commercial (OC) for Senior Housing).

An important component of the Moreno Valley Housing Element is the identification of remaining sites and future housing development opportunities in the 2014-2021 planning period. Moreno Valley has a sufficient amount of undeveloped land throughout the whole city. Opportunities for residential development in the City fall into one of three categories:

- Land within the Village Specific Plan (SP 204) Land Use Designation;
- Vacant land that is designated for residential use; and
- Underutilized residentially zoned sites where the current use of the property is less than the maximum density allowed by the General Plan designation.

Residential Sites Inventory and Analysis of Suitability and Availability

The maps identify sites that the City determined to be ideal for accommodating future housing, including affordable housing. Analyses based on potential environmental constraints, infrastructure, and realistic development capacity calculations are discussed. Estimates of potential capacity on the vacant or significantly underutilized land are based on a ratio of 80 percent, which was established in the City's General Plan as the average rate for residential development (not including a density bonus) to account for development standards such as lot coverage requirements, parking, setbacks, open space, infrastructure and public facilities. This rate has been applied in calculating the capacity for vacant and underutilized sites to ensure that it is consistent with projections contained in the General Plan.

Summary of Land Available

The City of Moreno Valley is committed to creating a long range and viable housing element that looks ahead to the ongoing housing needs of its residents. Moreno Valley is a growing community and has a sufficient amount of vacant and underutilized land to accommodate new development. As such, the element has identified sites that currently are vacant and appropriately zoned as well as sites that are appropriately zoned but underutilized. The element also includes an inventory of sites near job centers, with future economic development growth potential such as the Riverside Regional Medical Center and the sites along Alessandro and close to the recent industrial/commercial development along the I-215. The sites near the Regional Medical Center and I-215 have been rezoned to the higher multiple-family density of Residential 30 (R30) with the intentional plan of providing housing for persons working at the Regional Medical Center and ancillary medical services. Additionally, the element also includes sites for rezoning that are near commercial areas and arterials with public transportation in order to provide more pedestrian friendly areas with proximity to shopping, transportation and other services.

The vacant sites inventory meets the RHNA moderate and above moderate income housing need. However, there is still a RHNA balance of 1,860 units for low and very low income households, as identified in Table 8-29 (table above with projects listed). All pending and approved projects that are credited toward the RHNA have been removed from the inventory to preclude double counting.

In preparing the inventory of vacant sites, it became evident that there were no longer sufficient vacant sites with appropriate zoning to accommodate the balance of the RHNA for housing affordable to low and very low income households in the previous Housing Element Update (2011). As a result, planning staff rezoned a number of vacant parcels to Residential 30 (R30) to provide affordable housing opportunity through higher density in May 2013. A total of 146 acres was rezoned Residential 30 (R30). Based on historical development patterns, it was assumed that the majority of R30 sites would be developed at 80% of the maximum residential density or for a potential of 3,019 units for low and very low income households.

Attachment 1 “Housing Sites Inventory” is a graphic presentation of the entire inventory of sites for the City of Moreno Valley. As evidenced by Attachment 1, the City of Moreno Valley has met and far exceeded its RHNA goal and provided sufficient and appropriate sites for all income groups.

Inventory of Vacant Sites for Low and Very Low-income Housing

In the low and very low-income category, the Regional Housing Needs Allocation (RHNA) is 2,493 units. In undertaking the sites inventory, staff began by establishing the base calculation. The base calculation consists of all vacant parcels and underutilized sites that have potential to develop or redevelop, respectively, as housing affordable to low and very low-income households. The base is the total of calculations number 1 and 2 in Table 8-30 “Sites Inventory

Summary for All Income Groups" (located on the following page). As such, the base calculation plus all of the units that have been approved but not yet built with known affordability to very-low or low households , comprise the RHNA that can be accommodated in the City of Moreno Valley for low and very low income households, without rezoning.

Table 8-30 "Sites Inventory Summary for All Income Groups"

Calculation Number	Sites Inventory	Very Low & Low Units	Moderate Units	Above Moderate Units	Total
1	Units accommodated on vacant parcels	559	815		1,374
2	Units accommodated on parcels rezoned R30	3,019			3,019
3	Units accommodated on vacant parcels with zoning at 5.9 and >= 8 units per acre		7,057		7,057
4	Units accommodated on vacant parcels with zoning = 1-5 units per acre			7,905	7,905
5	Units that have been approved but not yet built with known affordability (Boulder Ridge Family Apartments)	141			141
Total Units Accommodated in Inventory		4,211	7,872	7,905	19,988

The Housing Sites Inventory Map (Attachment 1) is an overview map of all sites listed in Table 8-30. There is a series of maps showing the location of the vacant parcels referred to as "Calculation Areas #3, #4 and #5". All the vacant sites in Exhibits B, C, D and E are zoned for multiple-family housing with zoning densities at 30 units per acre.

Inventory of High Density Sites

The inventory of high density sites consists of three geographic areas, as shown on maps Exhibit B, C, D and E. For purposes of the RHNA, the potential units in the inventory of high density sites are designated affordable to low and very low-income households. In the inventory of high density sites, there are a total of 146 acres in 62 parcels. The total number of potential units is 3,019 at 80% of the zone capacity. The sites are appropriately sized to accommodate a minimum of sixteen units per site, and will allow owner-occupied and rental multiple-family residential uses without a conditional use permit (CUP), or other discretionary action pursuant to Government Code Section 65583.2 (h) and (i). In the City of Moreno Valley, a conditional use

permit (CUP) is not required for multiple-family housing. The proposed R30 zone will be exclusively residential.

The sites in Exhibit C consist in large part of current uses that are no longer viable or competitive with the new commercial development and has been rezoned Residential 30 (R30). The strip mall on Alessandro between Courage and Elsworth is a mixture of thrift stores, vacant storefronts, storage facilities, storefront churches and auto repair shops. Turnover in the strip mall is high given its age and lack of parking. There is potential for future redevelopment from commercial use to new residential, especially as the job corridor along the I-215 continues to develop.

All the areas chosen for zone change are on major streets, near shopping and employment. The sites in Exhibit D are within walking distance of the Riverside Regional Medical Center and the Moreno Valley Unified School District offices, both of which are large employers in the city. Shopping is also on Perris Boulevard, about a mile from the proposed sites. The sites in Exhibit E are across the street from a Fresh and Easy Market and adjacent to other shopping including a Home Depot and a proposed Super Wal-Mart. The sites in Exhibits B & C are within walking distance of Towngate Shopping Center and the Towngate Mall and less than half a mile from the I-215 job corridor. It was in the interest of equity and fairness that staff chose to designate areas outside the former redevelopment area for increase in density so higher densities would be distributed throughout the city (the sites were chosen during the 2008-2014 Housing Cycle).

Opportunities for Lot Consolidation

The City of Moreno Valley has a number of incentives in place to facilitate and encourage lot consolidation, especially of underutilized sites. Taken together the following incentives will constitute a Lot Consolidation Incentive Program that developers can utilize:

1. Deferral of development impact fees for affordable housing until issuance of Certificate of Occupancy.
2. Policy of keeping development impact fees at a lower level for affordable housing.
3. Permit streamlining.
4. Through the County of Riverside, Waiver of Traffic Uniform Mitigation Fees (TUMF) for affordable housing per the adopted ordinance.
5. Provide density bonus pursuant to the City's density bonus ordinance.
6. Provide a 100% density bonus for senior housing.
7. 10% reduction in required yards to accommodate density above 80% of the maximum allowed density.

Suitability Analysis of Sites with Water Constraints in Edgemont

Unfortunately, sites in the Edgemont area are sites with insufficient water infrastructure to support development at any level due to inadequate pressure for fire flows. Attachment #1 shows the Edgemont area which is demarcated by the City border on the west, Alessandro Avenue on the south, Frederick on the east, and Eucalyptus on the north. The site owned by the Moreno Valley Housing Authority at Day Street and Alessandro Boulevard, which was rezoned to Residential 30 (R30) and has been slated for a potential development of 255 affordable units, is a site that does not have water infrastructure to support development. However, since the site is adjacent to Eastern Municipal Water District (EMWD), the Moreno Valley Housing Authority has proposed to pay to run EMWD fire flow lines to the site and BSMWC will provide water for domestic use, and the constraint will have been removed. In addition, the site at Day Street & Alessandro Boulevard (Exhibit #B) can be developed by using EMWD fire flows. However, the balance of the underutilized sites in the Edgemont area that are served by BSMWC cannot be developed during this planning cycle.

In response to this constraint on development, the City of Moreno Valley has completed a water infrastructure analysis for the BSMWC service area to fully assess the infrastructure needs. However, the cost to remove the water constraint is currently estimated at $15 million and the City does not have the resources to remove the constraint.

The impact of infrastructure availability on proposed housing element programs is negligible. Developers have the option of connecting to the regional water district for sites at Elsworth Street and Alessandro Boulevard (Exhibit #C) and Morrison Street and Alessandro Boulevard (Exhibit #D). The regional water district has expressed a desire to provide hookups for projects along Alessandro Boulevard, which can access its water lines, and has provided water access to developers in the past. The private water district that currently provides water in the Edgemont area has expressed a willingness to work with the regional provider. In addition, the capital improvement plan includes $2.5 million from tax allocation bond (TABS) revenues for water infrastructure needs in Edgemont, which will help facilitate future development to areas north of the site at Day Street & Alessandro Boulevard (Exhibit #B).

Inventory of Moderate Income Housing Potential

The inventory of vacant moderate income sites tallied a total of 1,086 acres, suitable for the development of moderate income housing, in 189 parcels. The zoning designations vary from Residential 5 (R15) to multiple-family at a maximum density of 8 units per acre. The sites are located in areas where the predominant development has been for sale single family homes or upscale market rate apartments. The potential number of units that could possibly be built in this category, at an 80% build-out, is 7,785 units.

All the vacant sites in Exhibits A-1 through A-11 are zoned for multiple-family housing with zoning densities at 15 units per acre with the exception of the site on Exhibit A-3 (Residential 10 – 10 units per acre). This particular site is a 26 acre site, bounded by Dracaea Avenue on the north, Cottonwood on the south and Elsworth Street on the west. The site is sufficiently large to accommodate a large project and a proposed project can take advantage of the City's density bonus program. The four sites on Exhibit A-4 total 5.60 acres and are zoned Residential R15 (R15). These sites are located within walking distance of a large shopping center at State Highway 60 and Moreno Beach, as well as an existing multiple-family community at Moreno Beach and Trail Ridge Way, as well as employment opportunities at the Auto Mall on Moreno Beach. The sites in Exhibits A-5 through A-11 are infill sites within the Village at Sunnymead (SP 204). The sites are zoned R15 and the majority of the sites are adjacent to one or more vacant parcels, so lot consolidation can be achieved in order to facilitate the development of affordable housing, using the City's lot consolidation incentives.

The zoning designation of VR and VOR are unique to The Village at Sunnymead Specific Plan. The VR (Village Residential) designation allows multiple-family development at a maximum density of 15 units per acre. The VOR (Village Office Residential) allows mixed-used development of office and residential or single use development of either office or residential, with the residential at a density of 15 units per acre. In the inventory, it was assumed that 50% of the land with a VOR designation would develop as housing and all residential designations would build out at 80% of the maximum zone density.

In Moreno Valley, residential development is permitted in the O and OC (office and office commercial) designations. The only residential development allowed in the O and OC designations is senior housing. The City provides a 100% density bonus for the development of housing affordable to very low-income senior households. Senior housing projects can receive assistance facilitating the project and meeting State Redevelopment requirements through the City's Business and Neighborhood Services Division. However, only 33 acres of O and OC designated vacant land is located in the redevelopment area. Consequently, staff believes the acreage is insufficient to contribute to the housing inventory, since it is unlikely that all 33 acres would develop as affordable senior housing. Consequently, the unit capacity of the 33 acres was not included in the table.

Inventory of Above Moderate Income

Above moderate income households are households whose income exceeds 120 percent of area median income. The inventory of vacant above moderate income sites tallied a total of 4,735 acres suitable for the development of above moderate income housing, in 1,315 parcels. The zoning designations vary from Hillside Residential (HR) and Rural Residential (RR) to Residential 5 (R5). The sites are located in the less intensively developed areas of the City and in the hillside areas where densities are based on a percentage slope calculation. Accordingly, in the Rural Residential (RR) and Hillside Residential (HR) one unit for five acres has traditionally been utilized as an average density due to a wide range of slopes and a desire to

preserve the hillsides. The potential number of units that could be built in this category at an 80% build out is 7,905 units.

Areas of the City including the area of land located south of SR 60, east of Redlands Boulevard and extending to the City's eastern and southern borders may be targeted for future job-producing land uses. Any land use changes will not deter the City's efforts with RNHA obligations.

Mobile Home Parks

Zoning in the City of Moreno Valley allows mobile home parks in any residential zone with a conditional use permit. This allows for maximum design flexibility. There are no established standards for the design of mobile home spaces.

Currently, mobile home parks must be large enough to allow for professional management and a decent living environment and each mobile home park must include a minimum of 5 acres and recreational amenities for the tenants. It would not be financially advantageous to develop mobile home parks on land zoned for multiple-family housing since higher density could not be achieved given the single story nature of the units. Accordingly, it would not be financially feasible to develop mobile home parks in residential designations lower than Residential 5 (R5). In Table 8-31, a total of 33, R5 vacant sites, five acres and larger are adequate in both size and zoning for development of mobile home parks. It is important to note that the City of Moreno Valley does not have oversight of the operation of mobile home parks. The State Department of Housing and Community Development have oversight of all mobile home parks in the city.

Table 8-31 Sites Appropriately Zoned and Available For Mobile Home Parks

Zoning Designation	Density (Units/Acre)	Vacant Acres	Number of Units[2]	Number of Parcels 5 Acres and Larger
R5[4]	5	377[3]	156	33

[1] See attachment 5
[2] Units calculated at 80% of the total density capacity and reflect typical historical development patterns in the City.
[3] It is assumed that only 10% of all available acreage would develop as mobile homes.
[4] R-5 acreage contained in specific plans is not included. It is assumed that in specific plans, development of R5 acreage would follow the predominant development pattern.
All calculations are rounded

Manufactured Homes

Zoning in the City of Moreno Valley allows for the placement of manufactured homes on individual lots of 7,200 square feet or more in area. Manufactured homes on individual lots are subject to the same design guidelines as conventional homes. There has been some interest in providing manufactured housing on individual lots of less than 7,200 square feet in Moreno Valley. Based on the City's inventory of vacant sites, there is a total of 3,777 acres of

appropriately zoned land that could potentially develop as manufactured housing. However, it is assumed that no more than 10% of the available acreage would develop as manufactured housing, during the planning period, resulting in a possible 1,305 units (see Table 8-32). Vacant land in Specific Plans in which the predominant development is stick-built housing has not been included in the inventory since it is unlikely that manufactured housing would likely develop given the constraints of the Plan and the existing development pattern. Furthermore, whereas in the past some small subdivisions with manufactured homes have been built in the City, such type of subdivision has not been developed in the past twenty years. However, there has been some recent interest expressed by at least one developer in 2013.

Table 8-32 Sites Appropriately Zoned and Available For Manufactured Homes

Zoning Designation	Density (Units/Acre)	Vacant in Acres[3]	Number of Units[2]
Residential Single Family	5 and under	3,777	1,305

[1] See attachment 6
[2] Units are calculated at 80% of total density capacity and reflect typical historical development patterns in the City. In Hillside Residential (HR) and Rural Residential (RR), densities are based on the percentage slope calculation, with 1 unit for 5 acres utilized as an average density.
[3] It is assumed that 10% of all acreage could potentially be developed as manufactured housing.
[4]R-5 acreage in specific plans is not included as development of R5 acreage would follow the predominant development pattern.

Transitional Housing/ Supportive Housing and Emergency Shelters

Any existing single-family or multiple-family dwelling can be used as transitional or supportive housing, without any city licensing or permits. In addition, boarding and rooming houses can be operated in the multiple-family residential zones without a conditional use permit. Transitional and supportive housing will continue to be treated as residential uses pursuant to the requirements of SB2.

Given the availability and number of housing units in Moreno Valley, it has never been necessary for a service provider to develop new housing for supportive housing. As a matter of fact, the City of Moreno Valley has one of the larger concentrations of supportive housing programs in Riverside County. The number of licensed group facilities, including group homes, small family homes, and adult residential facilities total 108 facilities (Source website California Department of Social Services, Community Care Licensing Division: http://www.ccld.ca.gov/docs/ccld_search/ccld_search.aspx). In addition, there are numerous churches and religious ministries that operate small supportive housing programs serving women and families in single family homes.

The City of Moreno Valley General Plan allows emergency shelters with conditional use permits in the following zones: Community Commercial (CC), Office Commercial (OC), Office (O),

Public (P), Industrial (I), and Business Park-Mixed Use (BPX). Table 8-33 inventories all of the vacant land on which homeless shelters can be developed, with a conditional use permit. In total, the City of Moreno Valley has 684 vacant acres available for shelters with a conditional use permit.

Table 8-34 illustrates the opportunities available for transitional housing in the form of vacant land, appropriately zoned for homeless shelters. Notwithstanding, the 208 acres, appropriately zoned for transitional housing, it is the City's estimate that at maximum 1% of all possible units may be dedicated to transitional housing. Furthermore, because of the City of Moreno Valley's membership in the Joint Powers Authority for March Reserve Base, it is a compelling assumption that most of the future transitional housing will be developed at March, where we currently have 76 units of transitional housing and 120 transitional beds.

It is most likely that homeless shelters would be developed at March Air Reserve Base. In contrast to financing the construction of a new shelter, or leasing a facility at market rate, March has existing dormitories that could be converted for shelter use, thus making the development of a shelter more financially feasible.

The development review process for a homeless shelter would be identical to the City's review process. Non-profit applicants would receive a 25% reduction on the fee for a homeless application. The City of Moreno Valley does not restrict the siting of shelters beyond the requirement that shelters be located within the allowed land use designations (Commercial, Office and Industrial/Business Park). Shelter applications would be forwarded to the Moreno Valley Unified School District for review and comment. If the district had concerns regarding the proximity of a proposed shelter to schools, the location and/or hours of operation it could be necessary for a shelter to identify an alternate location or modify its hours of operation. As noted in Table 8-34, the business, office and commercial zones do not have density designations and thus multiple-family developments would not be permitted. Dormitory style shelters would be permitted in the zones. However, the Village Office Residential designation does have a density, thus allowing for the development of multiple-family units for shelter use.

The conditional use permit issued by the City of Moreno Valley is valid for three years. A shelter facility must begin operation within three years of issuance of the conditional use permit. If the facility does not begin operation within the three years, a new application would be required.

A shelter must provide one parking space for every four beds. If ancillary services are to be provided at the shelter, such as free meals for persons not residing in the shelter, additional parking would be required. The shelter applicant could submit a parking study for comparable uses at a comparable facility in order to provide the City with examples of parking requirements. Emergency shelters are a permitted use in the public zone. However, there are no longer publicly zoned sites in the city that are available and/or appropriate for housing and shelter uses. The City of Moreno Valley amended the Moreno Valley Industrial Area Specific Plan (SP 208) to add homeless shelters as a permitted use and adopt development standards for that

use in May 2013. There is a total of 447 vacant acres in 60 parcels in Specific Plan 208 (Table 8-35). An inventory of all the vacant sites in the specific plan is included in this document as Attachment #9.

All shelters would be required to develop their site in accordance with their approved plans, the Development Code, Landscape Development Guidelines and Specifications, and the General Plan. If the shelter application is for new construction, the time from application to issuance of the conditional use permit would be approximately six months.

However, if the application involved an existing building that would only require modifications and tenant improvements, the approval from time of application to the issuance of the Conditional Use Permit would be approximately three months. In general, the approval time frame for a shelter would be no longer than any other application. It is the City of Moreno Valley's conclusion that there are no significant constraints to the development of shelters in the city.

Table 8-33 Vacant Sites Zoned and Available for Transitional Housing

Zoning Designation	Density (Units/Acre)	Vacant in Acres[3]	Number of Units[2]
Multiple - family (R10-30)	10 and above	200	288

[1] See attachment 8
[2] Units are calculated at 80% of total density capacity and reflect typical historical development patterns in the City.
[3] It is assumed that 10% of all vacant acreage could potentially be developed as transitional housing.

Table 8-34 Vacant Sites Available for Homeless Shelters with Conditional Use Permit

Zoning Designation	Density (Units/Acre)	Vacant in Acres
Business Park[1]	*	71
Commercial	*	366
Office	*	220
Village Office Residential	92	6
Total		**663**

[1] BP does not have a density, but it has minimum development standards: Minimum site width 200'; minimum site depth 200'; minimum front building setback area 20'; minimum street side building setback area 20'.

Table 8-35 Vacant Sites Available for Homeless Shelters by Right

Zoning Designation	Density (Units/Acre)	Vacant in Acres
Industrial/Business Park	Standards for shelters were adopted in May 2013 – see Chapter 9.09.170 of the City's Municipal Code.	317.7
Total		**317.7**

Single Room Occupancy Hotels (SRO)

The definition of an SRO as contained in the HOME regulations, 24 CFR Part 92.2 is that of a "single room dwelling unit that is the primary residence of its occupant or occupants. The unit must contain either food preparation or sanitary facilities (and may contain both) if the project consists of new construction, conversion of non-residential space or reconstruction." The City of Moreno Valley amended Chapter 9.15.030 (Definitions) of its Municipal Code in May 2013 to include a definition of SRO as followed:

> *"Single room occupancy (SRO) facility" means a structure consisting of six or more units, each of which is designed for occupancy by no more than two persons, which also has bathing facilities, that may or may not have partial kitchen facilities, and which is occupied as a primary residence by its occupants. The definition of SRO does not include residential care homes, senior housing projects, rooming and boarding houses, hotels and motels, bed and breakfast lodging, extended care facilities or hospitals.*

Based on the definition of an SRO, the City of Moreno Valley also amended Chapter 9.09 (Specific Use Development Standards) of the Municipal Code to establish zones that will allow single room occupancy units by right in the Community Commercial (CC) zone and with a conditional use permit in the multiple-family zone of Residential 30 (R30) and the Mixed Use Overlay Districts (MUI, MUC and MUN). The standards for an SRO zone have also been developed and it will be staff's goal that the standards and permit procedures facilitate the development of single room occupancy units.

Summary

The total number of new units required under the RHNA for Moreno Valley's current planning cycle, is 6,129. The sites inventories make evident the adequacy of the appropriately zoned sites to meet the projected housing need. Taken in its entirety the inventory is a formidable planning tool that can make possible the City of Moreno Valley's difficult task of meeting housing needs, even beyond the current cycle's close in 2021.

The land inventory based on Community & Economic Development Department staff analysis meets requirements as mandated by California Government Code Section 65583.

B. Resources

Implementation Tools

A variety of federal, State and local programs are available to create and/or maintain rental and purchase affordability for lower income households and for persons with special needs. These programs are also available to other jurisdictions for potential acquisition, subsidy, or replacement of units at-risk. Table 8-36 summarizes financial resources available to the City, private and non-profit parties to preserve/create housing that is affordable.

In previous years, the primary source of funds for affordable housing activities in Moreno Valley was from the 20 percent Redevelopment Agency housing set-aside fund. The Consolidated Plan 2009–2014 allocated funding for housing programs during that period, as indicated below:

Provide Assistance to Enable Homeownership
- Homeowners Assistance Program
- Foreclosure Acquisition Program

Rehabilitate and Preserve Ownership Housing
- Substantial Rehabilitation Program
- Mobile-Home Repair
- Residential Beautification Program

Expand Affordable Housing through New Construction
- Affordable Housing

On December 29, 2011 the California Supreme Court ruled to uphold ABx1 26, which dissolved all redevelopment agencies (RDAs) in the State. A companion bill, ABx1 27, which would have allowed RDAs to continue to exist, was also declared invalid by the court. The court's decision required that all RDAs within California be eliminated no later than February 1, 2012. Per Resolution OB 2012-07, the City of Moreno Valley Redevelopment Agency was dissolved. The Moreno Valley Housing Authority was selected to be the Successor Agency responsible for all of enforceable obligations owed.

The City previously relied on estimated redevelopment housing set-aside revenues ranging from $4,197,384 to $4,583,576 annually to support the development of affordable housing and the implementation of programs outlined in the Housing Plan. For the 2014-2021 planning cycle, the City is currently implementing and administering programs provided by the State of California, such as the HOME Investment Partnership Program to assist first time home buyers and to provide loans for the rehabilitation of owner-occupied residences, and the HUD Neighborhood

Stabilization Program to fund new construction of single-family homes and to facilitate new ownership of foreclosed homes through the City's acquisition, rehabilitation and resale of these homes.

TABLE 8-36
RESOURCES AVAILABLE FOR HOUSING ACTIVITIES
CITY OF MORENO VALLEY

Program Description	Eligible	Activities
Local Resources		
Density Bonus	The City allows an increase in density to developers who set-aside at least 25% of their project to low-and moderate-income persons, in conjunction with at least one financial and one development incentive	• Density Bonus
Tax-Exempt Bonds	The Moreno Valley Housing Authority and the City have the authority to issue tax-exempt bonds. When available, bond proceeds will be used to develop affordable housing. There is no bonding ability at this time.	• Housing Development
City/Agency Owned Land	If available and appropriate, City or Agency owned land may be made available.	• Housing • Community Facilities
Lease Purchase Program	Lease Revenue Pass-Through Obligation bonds are issued by the California Cities Home Ownership Authority to fund a lease/purchase program that will assist homebuyers countywide.	• Homebuyers Assistance
County of Riverside Resources	Housing Improvement Program, Rental Rehab Program, Senior Home Repair (minor and enhanced), First Time Homebuyers Program, Multi-family Revenue Bonds, and Shelter Care Plus.	• Rental Assistance • Home and Rental Rehabilitation Assistance • First Time Home Buyers Assistance
Moreno Valley Housing Authority	The Moreno Valley Housing Authority was created to address the City's need for safe and sanitary affordable housing opportunities for its residents. It was created in response to the dissolution of the City's redevelopment agency.	Implementation/administration of state and federal programs that: • Provide Loans to First Time Home Buyers • Rehabilitate substandard owner-occupied • homes • Build new affordable housing • Purchase, repair and sell foreclosed homes
State Resources		
Mortgage Credit Certificate (MCC)	Federal tax credit for low and moderate income homebuyers who have not owned a home in the past three years. Allocation for MCC is provided by the State and administered by the County	• First Time Home Buyer Assistance

California Community Reinvestment Corporation (CCRC)	Private, non-profit mortgage banking consortium that provides long term debt financing for affordable multi-family rental housing	• New Construction • Rehabilitation • Acquisition of Properties
California Department of Housing & Community Development Predevelopment Loan Program	Low interest loans for the development of affordable housing with non-profit agencies	• Predevelopment Loans
Emergency Shelter Program	Grants awarded to non-profit organizations for shelter support services	• Support Services
Mobile Home Park Conversion Program (M Prop)	Funds awarded to mobile home park tenant organizations to convert mobile home parks to resident ownership	• Acquisition • Rehabilitation
California Housing Finance Agency (CHFA) Multiple Rental Housing Programs	Below market rate financing offered to builders and developers of multiple family and elderly housing. Tax-exempt bonds provide below-market mortgage money	• New Construction • Rehabilitation • Acquisition of Properties
California Housing Rehabilitation Program	Low interest loans for the rehabilitation of substandard homes owned and occupied by lower-income households. City and nonprofits sponsor housing rehabilitation projects.	• Rehabilitation • Repair of Code Violations • Property Improvements
California Housing Finance Agency Home Mortgage Purchase Program	CHFA sells tax-exempt bonds to provide below-market loans to first time homebuyers. Program is operated through participating lenders that originate loans purchased by CHFA.	• Homebuyer Assistance
Low Income Housing Tax Credit (LIHTC)	Tax credits available to individuals and corporations that invest in low-income rental housing. Tax credits are sold to corporations and people with high tax liability, of which the proceeds are utilized for housing development	• Rehabilitation • New Construction • Acquisition
Federal Resource -Entitlement		
Community Development Block Grant (CDBG)	Entitlement program that is awarded to the City on a formula basis. The objectives are to fund housing activities and expand economic opportunities. Project must meet one of three national objectives: benefit low and moderate income persons; aid in the prevention or elimination of slums or blight; or meet other urgent needs.	• Section 108 Loan Repayments • Historic Preservation • Admin. & Planning • Code Enforcement • Public Facilities Improvements • Economic Development • Housing Activities (i.e. acquisition, rehabilitation)
HOME Investment Partnership	A flexible grant program for housing. The intent of this program is to expand the supply of	• Multiple-Family Acquisition/Rehab

Program	decent, safe, and sanitary affordable housing. HOME is designed as a partnership program between the federal, state, and local governments, non-profit and for-profit housing entities to finance, build/rehabilitate and manage housing for lower-income owners and renters	• Single-Family • CHDO Assistance • Administration
HUD Neighborhood Stabilization Program	The program targeted emergency assistance to states and local governments to acquire and redevelop foreclosed properties that might otherwise become sources of abandonment and blight within their communities. This program is authorized under Title III of the Housing and Economic Recovery Act of 2008.	• Assist in the redevelopment of abandoned and • foreclosed homes and vacant properties • The City of Moreno Valley was allocated $3,687,789 of NSP3 funds • Funds will be used to develop affordable • housing within specific target areas
Emergency Shelter Grants (ESG)	Annual grant funds are allocated on a formula basis. Funds are intended to assist with the provision of shelter and social services for homeless	• Homelessness Prevention • Essential Services • Operating Expenses
Housing Opportunities for Persons with AIDS (HOPWA)	Funds are allocated to Lake Elsinore on behalf of all jurisdictions in Riverside County. Funds are made available countywide for supportive social services, affordable housing development, and rental assistance to persons with HIV/AIDS.	• Rental Assistance • Supportive Social Services • Administration
Mortgage Credit Certificate Program	Under the MCC Program, first-time homebuyers receive a tax credit for the year based on a percentage of the interest paid on their mortgage. This program may be used alone or in conjunction with a Down Payment Assistance Loan.	• Home Buyer Assistance
Low-income Housing Credit (LIHTC)	Program encourages the investment of private capital for the creation of affordable rental housing for low-income households. Tax credits are available to individuals and corporations who invest in such projects.	• New Construction • Housing Rehabilitation • Acquisition
Federal Resources – Competitive		
Supportive Housing Grant	Grants to improve quality of existing shelters and transitional housing. Increase shelters and transitional housing facilities for the homeless	• Housing Rehabilitation
Section 8 Rental Assistance	Rental assistance program which provides a subsidy to very low-income families, individuals, seniors and the disabled. Participants pay 30% of their adjusted income toward rent.	• Rental Assistance
Section 811/202	Grants to non-profit developers of supportive housing for the elderly and persons with disabilities. Section 811 can be used to develop group homes, independent living, facilities, and intermediate care facilities.	• Acquisition • Rehabilitation • New Construction • Rental Assistance • Support Services

Section 811	Grants to non-profit developers of supportive housing for person with disabilities, including group homes, independent living facilities and intermediate care facilities	• Acquisition • Rehabilitation • New Construction • Rental Assistance
Shelter Care Plus	Provides grants for rental assistance for permanent housing and case management for homeless individuals with disabilities and their families	• Rental Assistance • Homeless Prevention
Section 108 Loan	Provides loan guarantee to CDBG entitlement jurisdictions for pursuing large capital improvement or other projects. The jurisdiction must pledge its future CDBG allocations for loan repayment. Maximum loan amount can be up to five times the entitlement jurisdiction's most recent approved annual allocation. Maximum loan term is 20 twenty years.	• Acquisition • Rehabilitation • Home Buyer Assistance • Homeless Assistance
Private Resources		
Federal National Mortgage Association (Fannie Mae)	• Community Home Buyer Program – Fixed rate Mortgages	• Homebuyer Assistance
	• Community Home Improvement Mortgage Program – Mortgages for purchase and rehabilitation of a home	• Homebuyer Assistance/Rehab
	• Fannie Neighbor – Underserved low income minorities are eligible for low down-payment mortgages for the purchase of single-family homes	• Expand Home Ownership for Minorities
California Community Reinvestment Corporation (CCRC)	Non-profit mortgage banking consortium that pools resources to reduce lender risk in financing affordable housing. Provides long term debt financing for affordable multiple-family rental housing	• New Construction • Rehabilitation • Acquisition
Federal Home Loan Bank Affordable Housing Program	Direct subsidies to non-profit and for-profit developers, and public agencies for affordable low-income ownership and rental projects	• New Construction • Expand Home Ownership for Lower Income Persons
Savings Association Mortgage Company (SAMCO)	Statewide loan pool that provides thirty-year permanent loans for affordable housing projects, serving persons earning up to 120% of the median income.	• Construction • Redevelopment

Administrative Resources

The primary Agencies and Officials responsible for the implementation of the City's housing programs and activities lies within the City of Moreno Valley Community & Economic Development Services.

City of Moreno Valley Community & Economic Development Services

The Community & Economic Development Services within Moreno Valley includes the Planning Division, Building Safety Division, Fire Prevention Bureau, and Business Support & Neighborhood Programs. The Planning Division and Building Services are directly related to all City housing related issues and policies.

The Planning Division implements long-range planning efforts and development standards to promote livability and appearance. The Division ensures the City's viability through enforcement of land use, construction, health, safety, and environmental regulations. This involves land use and development standards, building codes, economic vitality, and adherence to the General Plan policies. The Division is ultimately responsible for the administration of the General Plan and implementation of the Zoning Ordinance.

The Building Safety Division enforces state laws that effect, regulate and control the design and construction of all structures proposed within the City of Moreno Valley. Additionally, the Building Division ensures that minimum safeguards are followed with regard to life, health, property and public welfare for the residents of the City of Moreno Valley.

VII. Progress Report

The Progress Report reviews the previous Housing Element's goals, policies, and implementation actions that were to be implemented during the previous planning period. The City of Moreno Valley's previous Housing Element identified five goals that the City anticipated to achieve during the previous planning period.

The five goals from the 2008-2014 planning period included:

- Preservation and revitalization of existing neighborhoods.
- Creation of housing opportunities for special needs populations.
- Creation of rental housing for low and very low income households.
- Creation of housing opportunities for low and moderate income first time home buyers.
- Increase of energy conservation measures.

Each goal has specific policies/programs that were to be accomplished to facilitate the construction of affordable housing and to maintain the existing affordable housing stock. Each policy consists of implementation actions with quantified objectives that were to accomplish the goals established in the Housing Element. Each implementation action had a time frame for completion along with a responsible agency to monitor the policies.

The accomplishments are listed on the right column of the table and display the progress, effectiveness, and appropriateness of the program. Pursuant to Government Code Section 65588, local governments shall review their Housing Element and evaluate the following:

1) The progress of the City or County in implementation of the Housing Element;
2) The effectiveness of the Housing Element in attainment of the community's housing goals and objectives; and
3) The appropriateness of the housing goals, objectives, and policies in contributing to the attainment of the State housing goal.

The following table (Table 8-37) reviews the continued progress in implementation, the effectiveness of the Housing Element, and the appropriateness of the City's housing goals since 2008.

Table 8-37 PROGRESS TOWARD MEETING 2008-2014 HOUSING ELEMENT GOALS AND OBJECTIVES

Policy/ Program	Objective (quantified/qualified)	Result	Evaluation	Continue/ Modify/ Delete
8.1	Administer Home Improvement Loan Program. Review applications; present applications to loan committee; execute loan documents; disburse rehabilitation funds. Goal was 30 rehabilitations.	The City's Neighbor Preservation Division (now Business Support & Neighborhood Programs Division) completed twenty-one (21) HILP rehabilitations between the years 2008-2011. Program Year 2012-2013 No Activity 2011-2012 No Activity 2010-2011 Eight Homes 2009-2010 Seven Homes 2008-2009 Six Homes	Progress: Mostly successful. A total of 21 households have been assisted through this program. However, due to limited marketing and increased costs, the City was unable to meet its goal of assisting 30 households. Effectiveness: A total of twenty-one (21) low and moderate income households have been assisted through this program	The Home Improvement Loan Program is on hold pending identification of new funding source. The program was previously funded by Redevelopment Agency.
8.2	Market HAMR Program via brochures and referrals by code compliance officers as they encounter code related needs on a daily basis. Fund and disburse loan funds. Goal was 3 HAMR rehabilitations.	The City's Neighbor Preservation Division (now Business Support & Neighborhood Programs Division) completed one (1) HAMR rehabilitation. Program Year 2009-2010 One	Progress: The HAMR program rehabbed one (1) house during the 2008-2014 planning cycle out of a goal of three. Funding for the HAMR program was previously the Redevelopment Agency and has not been replaced; therefore the	The Homeowners Assistance for Minor Rehabilitation (HAMR) program is on hold pending identification of new funding source. The program was previously funded by the

		Home	program has been placed on hold.	Redevelopment Agency.
8.3	Administer a program to provide grant funds for neighborhood beautification in targeted neighborhoods. Goal was to assist 25 owner-occupied units.	The City's Neighbor Preservation Division (now Business Support & Neighborhood Programs Division) completed twenty-one (21) rehabilitations for owner-occupied units between the years 2008-2011. <u>Program Year</u> 2010-2011 Eight Homes 2009-2010 Seven Homes 2008-2009 Six Homes	Progress: Mostly successful. A total of 21 households have been assisted through this program. However, due to limited marketing and increased costs, the City was unable to meet its goal of assisting 25 households. The City plans on funding this project with funds included in FY 2013-14 CDBG allocation. Effectiveness: A total of twenty-one (21) low and moderate income households have been assisted through this program.	New program funds included in FY 2013-14 CDBG allocation will allow continuation of the program.
8.4	Receive and approve applications for Mobile Home Grant Program. Market program via City Links newsletter. Continue to distribute program material to mobile home parks. The MHG offers a one-time grant of up to $10,000 to assist income-qualified residents with health and safety home repairs. The mobile	The goal was to assist in sixty (60) rehabilitations to correct substandard living conditions for very low-income owner-occupants of mobile homes from 2008 through 2013. Fifteen (15) Mobile Homes were rehabbed to	Progress: The Mobile Home Grant Program has had limited success due to the lack of funding. With the loss of Redevelopment funds, the City looked for alternative sources and was able to work out agreement with the Riverside Chapter of Habitat for Humanity to continue this	Program is due to continue as the City converted to a contract program with Habitat for Humanity starting in FY 2013-14.

	home must be owner-occupied and located inside an established rental park within Moreno Valley. There are no repayment obligations. Household income generally cannot exceed 50% of the current area median income based on household size.	correct substandard living conditions for very low-income owner-occupants. <u>Program Year</u> 2010-2011 Five Mobile Homes 2009-2010 Four Mobile Homes 2008-2009 Six Mobile Homes	program. Effectiveness: While the number of mobile homes rehabbed did not meet the goal set in the previous planning cycle, fifteen (15) Mobile Homes were rehabbed to correct substandard living conditions for very low-income owner-occupants.	
8.5	Provide enhanced code compliance services. Fund 5,000 hours of code enforcement in the CDBG target areas.	<u>Program Year</u> 2010-2011 2,406 2009-2010 2,099 2008-2009 2,315 (POP: Problem Oriented Policing Program, CLN: Neighborhood Cleanups, CDE: Code Enforcement, FST: Foreclosure Strike Force)	Progress: The City provided increased, proactive Code Enforcement, Neighborhood Cleanups and public safety activities to assist 6,820 households from 2008 through 2011. Effectiveness: The increased proactive Code Enforcement, Neighborhood Cleanups and public safety activities has improved the safety and livability of the CDBG target areas to improve the living environment.	The program originally included both CDBG target areas and the Redevelopment Area. The program was revised after dissolution of the state's redevelopment agencies. Funding of the program in the CDBG target areas will continue in the 2014-2021 planning cycle.
8.6	Conduct 5 annual neighborhood clean-ups. Provide bins for trash disposal.	The City's Neighborhood Clean Up Program provided clean up assistance to 1,286 units.	Progress: The City provided assistance to 1,286 households between 2008 through 2011. The Neighborhood Clean Up Program	The program will continue with funds from future CDBG allocations.

		Program Year 2010-2011 644 2009-2010 315 2008-2009 327	has historically been a very successful program for the City and will continue throughout the next planning cycle. Effectiveness: The Neighborhood Clean Up Program has improved the safety and livability of the cleaned areas, improving the living environment.	
8.7	Administer contract with fair housing agency. Assist 2,500 households.	Assisted 3,076 households citywide with fair housing related issues. Program Year 2010-2011 666 2009-2010 662 2008-2009 1,748	Progress: The City provided assistance to 3,076 households between 2008 through 2011. These services provide educating households on their rights and responsibilities and assist residents with fair housing issues. Effectiveness: The assistance provided educated 3,076 households on their rights and responsibilities and assisted residents with fair housing issues within the City of Moreno Valley.	The program will continue.
8.8	Update Analysis of Impediments to Fair Housing. Adopt	Analysis for July 1, 2013-June 30, 2018 was	Progress: The City of Moreno Valley adopted the	Update when required.

	study.	adopted by the City Council on April 23, 2013.	analysis for July 1, 2013-June 30, 2018 was adopted by the City Council on April 23, 2013. Effectiveness: The study provided assistance to residents with fair housing issues within the City of Moreno Valley.	
8.9	Utilize the Targeted Neighborhood Program to rehabilitate rental units.	Rehabilitated twenty (20) units before the project ended in June 2010.	Progress: The City successfully rehabbed twenty (20) units before funding ended for the project. Effectiveness: Provided safe and clean living environments for twenty (20) families.	The program ended.
8.10	Provide funds for Homebuyer Assistance Program (HAP) silent seconds. Work with approved lenders.	Assisted 13 homebuyers. <u>Program Year</u> 2010-2011 8 2009-2010 1 2008-2009 4	Progress: The City's Neighbor Preservation Division (now Business Support & Neighborhood Programs Division) successfully completed 13 HAP loans to assistance low and moderate income residents become homeowners. Effectiveness: Provided homeownership for thirteen (13) low and moderate income families.	The program will continue.

8.11	Assist very low-income homebuyers via partnership with Habitat for Humanity.	Two (2) homes were constructed in the last planning cycle for very low income homebuyers.	Progress: The City of Moreno Valley has had success working with the Riverside Chapter of Habitat for Humanity. The City will continue to work with Habitat for Humanity and looks to build eight (8) homes during the next planning cycle. Effectiveness: Provided homeownership for two (2) low income families.	The program will continue.
8.12	Agency loans/gap financing of $4.85 million for the creation of affordable rental units at Day & Alessandro to provide 225 units.	Project was not completed during last planning cycle.	Progress: While the City completed the rezoning of the Day & Alessandro site to Residential 30 (R30), the actual project design was not completed.	Project placed on hold. Property transferred to City Housing Authority.
8.13	Agency loans/gap financing or land acquisition for development of affordable units for larger families.	• Oakwood Apartments: The RDA funded $3 million to secure 240 affordable units. This project was completed during FY 2010/11. • Rancho Dorado North Apartments: the RDA funded $1.5 million to secure 70 affordable units.	Progress: From 2010 through 2013, the number of affordable units built in two apartment complexes (Oakwood and Rancho Dorado) equaled 388 units. Effectiveness: Provided safe and affordable housing for approximately 388 residents.	Program 8.13 was deleted after dissolution of the state's redevelopment agencies. The City will continue to look for new funding source and other programs to promote the development of affordable units for larger families.

		This project was completed during FY 2010/11. • Rancho Dorado South Apartments: the RDA funded $8.25 million to secure 78 affordable units. This project was completed during FY 2012/13.		
8.14	Defer Development Impact Fee for affordable units, until issuance of Certificate of Occupancy. Deferment for 633 units.	Deferment for 465 Affordable Units for the following: <u>FY 2011/12</u> Rancho Dorado Apartments (South) 78 units (24 very low income units and 49 low income units) Hemlock Family Apartments 77 units (all units were low income) <u>FY 2010/11</u> Oakwood Apartments 240 units (68 very low income units and 172 low income units) Rancho Dorado Apartments (North) 70 units (22 very low income units and 49 low income units)	Progress: The City has successful used deferment of fees to promote development. The deferment of Development Impact Fee (DIF) payment until issuance of Certificate of Occupancy will continue for affordable units. The City currently also allows for deferment of DIF payments for market rate projects as well. Effectiveness: Provided safe and affordable housing for approximately 465 residents.	The deferment of Development Impact Fee (DIF) payment until issuance of Certificate of Occupancy will continue for affordable units. The City currently also allows for deferment of DIF payments for market rate projects as well.

8.15	Maintain Development Impact Fees (DIF) at a lower level for affordable units.	Assisted 465 units. FY 2011/12 Rancho Dorado Apartments (South) 78 units (24 very low income units and 49 low income units) Hemlock Family Apartments 77 units (all units were low income) FY 2010/11 Oakwood Apartments 240 units (68 very low income units and 172 low income units) Rancho Dorado Apartments (North)	Progress: The City has successful used discounted fees to promote development of affordable housing. The City offers 25% reduction in the Development Impact Fees (DIF) for affordable housing developments. Affordable housing projects are also exempt from paying the Transportation Uniform Mitigation Fee (TUMF), which is a fee of $6,231 per unit and the Multiple Species Habitat Mitigation Fee (MSHCP), which is approximately $1,008 per unit. Effectiveness: Provided safe and affordable housing for approximately 465 residents.	The City will continue to offer reduced Development Impact Fees (DIF) for affordable housing projects.
8.16	Continue to implement permit streamlining.	Ongoing.	Progress: The City has been successful streamlining the entitlement process for affordable housing projects.	Ongoing.
8.17	Waive Traffic Uniform Mitigation Fee (TUMF) for affordable units.	Deferment for 465 Affordable Units for the following: FY 2011/12	Progress: Affordable housing projects are also exempt from paying the Transportation Uniform Mitigation	Ongoing.

		Rancho Dorado Apartments (South) 78 units (24 very low income units and 49 low income units) Hemlock Family Apartments 77 units (all units were low income) FY 2010/11 Oakwood Apartments 240 units (68 very low income units and 172 low income units) Rancho Dorado Apartments (North)	Fee (TUMF), which is a fee of $6,231 per unit. Effectiveness: Provided safe and affordable housing for approximately 465 residents.	
8.18	Provide Agency and HOME funds for rental units affordable to former homeless mentally ill adults.	Assisted in the development of 9 units. (Part of the Rancho Dorado Apartments)	Progress: The City met the goal number of units to provide for special needs person per the previous planning cycle.	Program may continue with HOME funds.
8.19	Agency loans/gap financing or land acquisition to assist in development of rental units for developmentally and physically disabled adults and seniors.	Assist in the development of 9 units. (Part of the Rancho Dorado Apartments)	Progress: The City met the goal number of units to provide for special needs person per the previous planning cycle.	Program deleted with the loss of the Redevelopment Agency.
8.20	Complete studies to assess extent of water infrastructure inadequacy and needs in Box Springs Municipal Water Company (BSMWC).	Completed for the City by Albert A. Webb Associates, Inc. in September 2009.	Progress: The water assessment study is complete. Effectiveness: The study outlined the extent of the water infrastructure upgrades required in order to develop in the Box Springs	Completed.

			Municipal Water Company (BSMWC) area.	
8.21	Work with Eastern Municipal Water District (EMWD) to run water lines for provision of fire flows to Agency owned land for 225 unit project.	Not Completed	Progress: The 225 unit affordable housing project at Alessandro Blvd and Day St was not completed during last planning cycle due to lack of funding.	Project put on hold until a new source of funding can be found. Property transferred to City Housing Authority.
8.22	Apply for grant funds to upgrade water infrastructure.	Not Completed	Progress: The City has not received grant funds to upgrade water infrastructure in the Box Springs Municipal Water Company (BSMWC) service area.	The City will continue to research grant opportunities.
8.23	Establish the Residential 30 (R30) zoning district. The R30 zone will have a 24 unit per acre minimum density.	Adopted by the City Council on September 22, 2009.	Progress: The City Council approved the creation of the Residential 30 (R30) zoning district (September 22, 2009). Effectiveness: The City's adopted ordinances offer incentives to facilitate mixed uses and varying densities. The adoption of a density bonus into the City's Municipal Code encourages higher density in lower density land use designations.	Completed on September 22, 2009.
8.24	Process General Plan	Adopted by the	Progress: The City	Completed on

	Amendment to apply Residential 30 (R30) to designated or alternate sites of equivalent size.	City Council on September 22, 2009.	Council approved the creation of the Residential 30 (R30) zoning district (September 22, 2009). Effectiveness: The City's adopted ordinances offer incentives to facilitate mixed uses and varying densities. The adoption of a density bonus into the City's Municipal Code encourages higher density in lower density land use designations.	September 22, 2009.
8.25	Amend Title 9 of the Development Code. Establish SRO zones in multiple-family and specified commercial zones.	Adopted by the City Council on May 30, 2013.	Progress: During the planning period, the City has provided support to accommodate the needs of extremely low-income households and households with special needs and complied with Senate Bill 2 through amending the Municipal Code to include Single Room Occupancy (SRO) facilities on May 28, 2013. Effectiveness: In 2013, the City Council approved Ordinance number 869 to provide Single Room Occupancy (SRO) facilities in accordance with the	Completed on May 30, 2013.

			City of Moreno Valley Municipal Ordinance, Chapter 9.09.190.	
8.26	Amend Specific Plan 208 (Moreno Valley Industrial Area Specific Plan 208) to add homeless shelters as a permitted use, adopt development standards.	Adopted by the City Council on May 30, 2013.	Progress: During the planning period, the City Council amended the Moreno Valley Industrial Area Plan (SP 208) to permit emergency shelters by right in the Industrial Support Area without a conditional use permit or other discretionary permit on May 28, 2013. Effectiveness: The City will continue to support emergency shelters by right in the Industrial Support Area without a conditional use permit or other discretionary permit and with a Conditional Use Permit in the Community Commercial (CC), Office Commercial (OC), Office (O), Public (P), Industrial (I), and Business Park-Mixed Use (BPX) zoning districts.	Completed on May 30, 2013.
8.27	Amend Title 9 of the Development Code to adopt reasonable accommodation procedures.	Adopted by the City Council on May 30, 2013.	Progress: During the planning period, the City has provided support for reasonable accommodation procedures through	Completed on May 30, 2013.

			amending the Municipal Code on May 28, 2013 to include formal reasonable accommodation procedures. Effectiveness:: In 2013, the City Council approved Ordinance number 869 to provide reasonable accommodation procedures in accordance with the City of Moreno Valley Zoning Ordinance, Chapter 9.02.320.	
8.28	Continue to allow transitional and supportive housing in all residential zones.	Ongoing	Any existing single-family or multiple-family dwelling can be used as transitional or supportive housing, without any city licensing or permits. In addition, boarding and rooming houses can be operated in the RR, HR and multiple-family residential zones, without a conditional use permit. Transitional and supportive housing will continue to be treated as residential uses pursuant to the requirements of SB2. Given the	Ongoing

			availability and number of housing units in Moreno Valley, it has never been necessary for a service provider to develop new housing for supportive housing. As a matter of fact, the City of Moreno Valley has one of the larger concentrations of supportive housing programs in Riverside County. The number licensed group facilities, including group homes, small family homes, and adult residential facilities total 91 facilities.	
8.29	Amend Title 9 of the Development Code to permit, by right, farm worker housing in all multiple-family zones.	Adopted by the City Council on May 30, 2013.	Progress: During the planning period, the City has provided support to accommodate the needs of farm worker housing on May 28, 2013. Effectiveness: In 2013, the City Council approved Ordinance number 869 noting that Farm Worker Housing is allowed by right in all the multiple-family zones.	Completed on May 30, 2013.
8.30	Adopt ordinance requiring all new and replacement roofing utilize radiant barrier plywood.	Adoption by 2010.	The 2013 California Building Code was adopted on December 10, 2013 by the City Council.	Completed.

8.31	Implement residential Solar Initiative Program to MV Utility customers.	Ongoing.	Progress: Literature for the public on energy saving programs offered by local utility companies are available in City Hall offices and on the City's website. Effectiveness: The City will continue to encourage homeowners and landlords to incorporate energy conservation within construction and remodeling projects.	Ongoing.
8.32	Distribute at reduced cost compact fluorescent light bulbs.	Program not funded.	Not Completed.	Program deleted.
8.33	Adopt ordinance requiring all new housing have whole house fans installed at time of construction.	Not Completed.	Not Completed.	Program deleted
8.34	Market energy efficiency program for residents of MV Utility area.	Ongoing.	Progress: The City has energy efficiency information posted on its website under "G.R.E.E.N. MoVal (Getting Residents Energy Efficient Now)" and information regarding various programs is mailed out to MV Utility customers in their bills.	Ongoing.
8.35	Consolidate incentives currently	Not Completed.	Progress: Business Support &	Ongoing.

	provided into a lot consolidation incentive document that will be available to developers by March 2011.		Neighborhood Programs Division staff is working on an incentive document for developers.	

CITY OF MORENO VALLEY
HOUSING ELEMENT 2014
HOUSING SITES INVENTORY

Calculation Number	Sites Inventory	Low & Very Low Units	Moderate Units	Above Moderate Units	Total
1	Units accommodated on vacant parcels	559	815		1,374
2	Units accommodated on parcels rezoned R30	3,019			3,019
3	Units accommodated on vacant parcels with zoning at 5.9 and >= 8 units per acre		7,057		7,057
4	Units accommodated on vacant parcels with zoning = 1-5 units per acre			7,905	7,905
5	Units that have been approved or built between July 2008 and September 2013	633			633
Total Units Accommodated in Inventory		4,211	7,872	7,905	19,988

Calculation 1
Calculation 1
Calculation 1
Calculation 1
Calculation 5
Calculation 3
Calculation 4

PIGEON PASS RD
SUNNYMEAD RANCH PKWY
HEACOCK ST
PERRIS BLVD
MANZANITA AVE
INDIAN ST
JACLYN AVE
KALMIA ST
LASSELLE ST
IRONWOOD AVE
HEMLOCK AVE
SUNNYMEAD BLVD
KITCHING ST
TOWNGATE BLVD
FIR AVE
EUCALYPTUS AVE
DAY ST
ELSWORTH ST
FREDERICK ST
GRAHAM ST
DRACAEA AVE
COTTONWOOD AVE
MORRISON ST
NASON ST
BAY AVE
ALESSANDRO BLVD
OLIVER ST
BRODIAEA AVE
CACTUS AVE
MORENO BEACH DR
REDLANDS BLVD
DELPHINIUM AVE
JOHN F KENNEDY DR
FILAREE AVE
GENTIAN AVE
IRIS AVE
VIA DEL LAGO
KRAMERIA AVE
CARDINAL AVE
NANDINA AVE
LOCUST AVE
KALMIA AVE
JUNIPER AVE
PETTIT ST
THEODORE ST
GILMAN SPRINGS RD

-1830-

N

0 2,500 5,000 10,000 Feet

0 0.5 1 2 Miles

Print Date: 1.7.2014

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Attachment 1

Housing Element RHNA Inventory and Density Calculations

Rezoned R30
Rezoned R30

Office/Office Commercial
O/OC

Above Moderate
= 1-5 units per acre
Units per Acre: 1 2 2.5 2.9 3 4 5

Moderate
= 5.9, and >= 8 (not in RDA areas) units per acre
5.9 8 10 12 13 13.9 15 17 20

Low & Very Low

CITY OF MORENO VALLEY
HOUSING ELEMENT 2014
APPROPRIATELY ZONED SITES FOR LOW & VERY LOW INCOME HOUSING

Calculation Number	Sites Inventory	Low & Very Low Units	Moderate Units	Above Moderate Units	Total
1	Units accommodated on vacant parcels	559	815		1,374
2	Units accommodated on parcels rezoned R30	3,019			3,019
3	Units accommodated on vacant parcels with zoning at 5.9 and >= 8 units per acre		7,057		7,057
4	Units accommodated on vacant parcels with zoning = 1-5 units per acre			7,905	7,905
5	Units that have been approved or built between July 2008 and September 2013	633			633
Total Units in Inventory	Accommodated	4,211	7,872	7,905	19,988

Calculation 1
Calculation 1
Calculation 1
Calculation 1
Calculation 3
Calculation 4
Calculation 5

PIGEON PASS RD
SUNNYMEAD RANCH PKWY
HEACOCK ST
PERRIS BLVD
MANZANITA AVE
INDIAN ST
JACLYN AVE
KALMIA ST
LASSELLE ST
LOCUST AVE
KALMIA AVE
JUNIPER AVE
IRONWOOD AVE
PETTIT ST
HEMLOCK AVE
SUNNYMEAD BLVD
KITCHING ST
TOWNGATE BLVD
FIR AVE
EUCALYPTUS AVE
DAY ST
ELSWORTH ST
FREDERICK ST
GRAHAM ST
DRACAEA AVE
MORRISON ST
THEODORE ST
COTTONWOOD AVE
BAY AVE
NASON ST
OLIVER ST
MORENO BEACH DR
REDLANDS BLVD
ALESSANDRO BLVD
GILMAN SPRINGS RD
BRODIAEA AVE
CACTUS AVE
DELPHINIUM AVE
JOHN F KENNEDY DR
FILAREE AVE
GENTIAN AVE
IRIS AVE
VIA DEL LAGO
KRAMERIA AVE
CARDINAL AVE
NANDINA AVE

N

0 2,500 5,000 10,000 Feet

0 0.5 1 2 Miles

Print Date: 1.7.2014

File: G:\ArcMap\Neighborhood Preservation\VacantProperties_2007\HEMaps2009\Housing Element1_2009Attachment2_Bsize.mxd

Housing Element - RHNA Calculations

- Calculation #1 - Vacant Parcels
- Calculation #3 - Rezoned High Density
- Calculation #4 - Rezoned High Density
- Calculation #5 - Rezoned High Density
- Redevelopment Area

Attachment 2

MORENO VALLEY
WHERE DREAMS SOAR

Vacant Land Inventory - Attachment 3

Based on 10-2013 data
Report Print Date: 1.7.2014

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
LOW & VERY LOW	485220040	R30	Multi-family	3.90	20	Vacant	
	486280043	R30	Multi-family	27.46	412	Vacant	
	486280044	R30	Multi-family	8.47	127	Vacant	
Parcels per Density Designation:	**3**		**Acres per Density Designation:**	**40**			
	Units per Density Designation:		**559**		**Units per Density Designation 80%:**		**447**
MODERATE	308040050	H	Multi-family	19.12	382	Vacant	SP
	478110002	H	Multi-family	2.27	45	Vacant	SP
	478110003	H	Multi-family	0.36	7	Vacant	SP
	478110004	H	Multi-family	1.35	27	Vacant	SP
	478110005	H	Multi-family	0.18	4	Vacant	SP
	478110006	H	Multi-family	1.83	37	Vacant	SP
	478110007	H	Multi-family	2.19	44	Vacant	SP
	486280054	H	Multi-family	10.83	1	Vacant	
	423250009	HD	Multi-family	47.94	959	Vacant	SP
	478090007	M	Multi-family	8.98	108	Vacant	SP
	478090029	M	Multi-family	1.81	22	Vacant	SP
	478100034	M	Multi-family	7.88	95	Vacant	SP,FLOOD
	423250002	MD	Multi-family	15.04	209	Vacant	SP
	423310001	MD	Multi-family	42.88	596	Vacant	SP FAULT
	478220006	MD	Multi-family	9.39	131	Vacant	SP
	478220007	MD	Multi-family	8.98	125	Vacant	SP
	478230009	MD	Multi-family	9.39	131	Vacant	SP
	478230010	MD	Multi-family	8.98	125	Vacant	SP
	308610009	MH	Multi-family	1.28	22	Vacant	SP
	308610010	MH	Multi-family	0.94	16	Vacant	SP
	308610011	MH	Multi-family	1.10	19	Vacant	SP,FLOOD
	308610012	MH	Multi-family	1.31	22	Vacant	SP,FLOOD
	308610013	MH	Multi-family	1.76	30	Vacant	SP
	308610014	MH	Multi-family	1.92	33	Vacant	SP
	308610015	MH	Multi-family	0.87	15	Vacant	SP
	308610016	MH	Multi-family	0.11	2	Vacant	SP
	308610033	MH	Multi-family	0.10	2	Vacant	SP
	291120014	R10	Multi-family	26.13	261	Vacant	RDA
	479230018	R10	Multi-family	4.54	45	Vacant	FLOOD
	482230024	R10	Multi-family	8.02	120	Vacant	
	482582039	R10	Multi-family	5.50	55	Vacant	
	482582040	R10	Multi-family	1.98	20	Vacant	
	291100055	R15	Multi-family	18.88	283	Vacant	RDA
	292181001	R15	Multi-family	1.09	16	Vacant	
	292181015	R15	Multi-family	0.17	3	Vacant	
	292211001	R15	Multi-family	0.40	6	Vacant	
	479050001	R15	Multi-family	1.67	25	Vacant	RDA
	479050003	R15	Multi-family	0.89	13	Vacant	RDA
	479050004	R15	Multi-family	0.89	13	Vacant	RDA
	479230011	R15	Multi-family	2.27	34	Vacant	
	479230012	R15	Multi-family	2.27	34	Vacant	
	479230027	R15	Multi-family	0.52	8	Vacant	FLOOD
	484030013	R15	Multi-family	1.70	26	Vacant	
	484030014	R15	Multi-family	2.30	34	Vacant	
	484030020	R15	Multi-family	1.93	29	Vacant	
	484231015	R15	Multi-family	2.14	32	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
MODERATE	484231016	R15	Multi-family	2.14	32	Vacant	
	488090028	R15	Multi-family	0.50	8	Vacant	RDA
	488090061	R15	Multi-family	1.37	21	Vacant	RDA
	488091025	R15	Multi-family	2.87	43	Vacant	RDA
	488091031	R15	Multi-family	0.86	13	Vacant	RDA
	488330011	R15	Multi-family	9.39	141	Vacant	
	488330024	R15	Multi-family	8.93	134	Vacant	
	296103025	R20	Multi-family	0.28	6	Vacant	
	487370001	R20	Multi-family	9.39	188	Vacant	
	487370002	R20	Multi-family	9.39	188	Vacant	
	481130022	VR	Multi-family	0.42	6	Vacant	SP,RDA
	481130023	VR	Multi-family	0.50	8	Vacant	SP,RDA
	481150024	VR	Multi-family	0.91	14	Vacant	SP,RDA
	481150026	VR	Multi-family	0.45	7	Vacant	SP,RDA
	481150027	VR	Multi-family	0.91	14	Vacant	SP,RDA
	481150030	VR	Multi-family	0.36	5	Vacant	SP,RDA
	481150035	VR	Multi-family	0.09	1	Vacant	SP,RDA
	481171007	VR	Multi-family	0.45	7	Vacant	SP,RDA
	481171008	VR	Multi-family	0.81	12	Vacant	SP,FLOOD,RDA
	481171011	VR	Multi-family	0.34	5	Vacant	SP,RDA
	481171013	VR	Multi-family	0.01	1	Vacant	SP,FLOOD,RDA
	481171032	VR	Multi-family	0.27	4	Vacant	SP,FLOOD,RDA
	481171039	VR	Multi-family	0.77	12	Vacant	SP,RDA
	481171046	VR	Multi-family	0.10	2	Vacant	SP, FLOOD
	481171047	VR	Multi-family	0.10	2	Vacant	SP, FLOOD
	481171048	VR	Multi-family	0.11	2	Vacant	SP, FLOOD
	481171049	VR	Multi-family	0.11	2	Vacant	SP, FLOOD
	481171050	VR	Multi-family	0.14	2	Vacant	SP, FLOOD
	481200013	VR	Multi-family	0.45	7	Vacant	SP,RDA
	481200033	VR	Multi-family	0.91	14	Vacant	SP,RDA
	481200044	VR	Multi-family	0.45	7	Vacant	SP,RDA
	481210025	VR	Multi-family	0.45	7	Vacant	SP,RDA
	481223017	VR	Multi-family	0.36	5	Vacant	SP,FLOOD,RDA
	481230040	VR	Multi-family	0.21	3	Vacant	SP,RDA
	481230041	VR	Multi-family	0.21	3	Vacant	SP,RDA
	481230042	VR	Multi-family	0.22	3	Vacant	SP,FLOOD,RDA
	481230052	VR	Multi-family	0.15	2	Vacant	SP, RDA
	481230053	VR	Multi-family	0.14	2	Vacant	SP, RDA
	481230054	VR	Multi-family	0.14	2	Vacant	SP, RDA
	481230055	VR	Multi-family	0.15	2	Vacant	SP, RDA
	481240001	VR	Multi-family	0.91	14	Vacant	SP,RDA
	481240035	VR	Multi-family	0.58	9	Vacant	SP,RDA
	481240036	VR	Multi-family	0.17	3	Vacant	SP,RDA
	481240042	VR	Multi-family	0.26	4	Vacant	SP,RDA
	481250002	VR	Multi-family	0.45	7	Vacant	SP,RDA
	481250003	VR	Multi-family	0.91	14	Vacant	SP,RDA
	481250041	VR	Multi-family	0.06	1	Vacant	SP,RDA
	481250043	VR	Multi-family	0.02	1	Vacant	SP,RDA
	481260040	VR	Multi-family	0.01	1	Vacant	SP,RDA
	481270008	VR	Multi-family	0.45	7	Vacant	SP,RDA
	481270015	VR	Multi-family	0.23	4	Vacant	SP,RDA
	481270027	VR	Multi-family	0.45	7	Vacant	SP,RDA
	481270046	VR	Multi-family	0.31	5	Vacant	SP,RDA
	481270055	VR	Multi-family	0.60	9	Vacant	SP,RDA
	481270058	VR	Multi-family	1.40	21	Vacant	SP,RDA
	482020014	VR	Multi-family	0.59	9	Vacant	SP,RDA
	482020019	VR	Multi-family	0.52	8	Vacant	SP,RDA

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
MODERATE	482020043	VR	Multi-family	0.01	1	Vacant	SP,RDA
	482020044	VR	Multi-family	0.23	4	Vacant	SP,RDA
	482020064	VR	Multi-family	1.32	20	Vacant	SP, RDA
	482030039	VR	Multi-family	0.03	1	Vacant	SP,RDA
	482030041	VR	Multi-family	0.03	1	Vacant	SP,RDA
	482040008	VR	Multi-family	0.03	1	Vacant	SP,FLOOD,RDA
	482050005	VR	Multi-family	0.91	14	Vacant	SP,RDA
	482050025	VR	Multi-family	0.91	14	Vacant	SP,RDA
	482060027	VR	Multi-family	0.23	4	Vacant	SP,RDA
	482080011	VR	Multi-family	0.85	13	Vacant	SP,RDA
	482080014	VR	Multi-family	0.61	9	Vacant	SP,RDA
	482080024	VR	Multi-family	0.27	4	Vacant	SP,RDA
	482080027	VR	Multi-family	0.26	4	Vacant	SP,RDA
	482080039	VR	Multi-family	0.11	2	Vacant	SP,FLOOD,RDA
	482080044	VR	Multi-family	0.02	1	Vacant	SP,RDA
	482080051	VR	Multi-family	0.10	2	Vacant	SP,FLOOD,RDA
	482080059	VR	Multi-family	0.17	3	Vacant	SP,RDA
	482080060	VR	Multi-family	0.17	3	Vacant	SP,RDA
	482080061	VR	Multi-family	0.21	3	Vacant	SP,FLOOD,RDA
	482090019	VR	Multi-family	0.05	1	Vacant	SP,RDA
	482090026	VR	Multi-family	0.15	2	Vacant	SP,RDA
	482090027	VR	Multi-family	0.45	7	Vacant	SP,RDA
	481120020	VOR	Office	0.61	9	Vacant	SP,RDA
	481120021	VOR	Office	0.30	4	Vacant	SP,RDA
	481130024	VOR	Office	0.45	7	Vacant	SP,RDA
	481130025	VOR	Office	0.45	7	Vacant	SP,RDA
	481140024	VOR	Office	0.91	14	Vacant	SP,RDA
	481140025	VOR	Office	0.91	14	Vacant	SP,RDA
	481171043	VOR	Office	0.01	1	Vacant	SP,RDA
	481270038	VOR	Office	0.11	2	Vacant	SP,RDA
	481270040	VOR	Office	0.21	3	Vacant	SP,RDA
	481270043	VOR	Office	0.02	1	Vacant	SP,RDA
	481270048	VOR	Office	0.01	1	Vacant	SP,RDA
	481270059	VOR	Office	0.05	1	Vacant	SP,RDA
	481270060	VOR	Office	0.93	14	Vacant	SP,RDA
	422070017	LD	Suburban Residential	53.03	313	Vacant	SP
	423250011	LD	Suburban Residential	41.28	244	Vacant	SP
	423250018	LD	Suburban Residential	69.75	412	Vacant	SP
	423260007	LD	Suburban Residential	40.31	238	Vacant	SP
	423260008	LD	Suburban Residential	40.06	236	Vacant	SP FAULT
	423310002	LD	Suburban Residential	41.31	244	Vacant	SP FAULT
	478210054	LD	Suburban Residential	9.81	58	Vacant	SP
	478210055	LD	Suburban Residential	8.91	53	Vacant	SP
	478220001	LD	Suburban Residential	27.76	164	Vacant	SP
	478220004	LD	Suburban Residential	8.98	53	Vacant	SP
	478220005	LD	Suburban Residential	9.39	55	Vacant	SP
	478220010	LD	Suburban Residential	9.39	55	Vacant	SP
	478220011	LD	Suburban Residential	8.98	53	Vacant	SP
	478220016	LD	Suburban Residential	18.37	108	Vacant	SP
	478220017	LD	Suburban Residential	8.98	53	Vacant	SP
	478220018	LD	Suburban Residential	9.39	55	Vacant	SP
	478220019	LD	Suburban Residential	9.39	55	Vacant	SP
	478220020	LD	Suburban Residential	8.98	53	Vacant	SP
	478220022	LD	Suburban Residential	9.39	55	Vacant	SP
	478220023	LD	Suburban Residential	9.39	55	Vacant	SP
	478220024	LD	Suburban Residential	8.98	53	Vacant	SP
	478220025	LD	Suburban Residential	8.98	53	Vacant	SP

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
MODERATE	478220026	LD	Suburban Residential	9.39	55	Vacant	SP
	478230002	LD	Suburban Residential	8.95	53	Vacant	SP
	478230003	LD	Suburban Residential	9.38	55	Vacant	SP
	478230004	LD	Suburban Residential	9.39	55	Vacant	SP
	478230005	LD	Suburban Residential	8.98	53	Vacant	SP
	478230006	LD	Suburban Residential	8.98	53	Vacant	SP
	478230011	LD	Suburban Residential	9.39	55	Vacant	SP
	478230014	LD	Suburban Residential	8.69	51	Vacant	SP
	478230019	LD	Suburban Residential	9.63	57	Vacant	SP
	478230020	LD	Suburban Residential	8.90	53	Vacant	SP
	486280056	LM	Suburban Residential	40.81	1	Vacant	
	486280057	LM	Suburban Residential	22.54	1	Vacant	
	486320008	LM	Suburban Residential	140.58	758	Vacant	SP, FLOOD
	304370009	ML	Suburban Residential	0.03	1	Vacant	SP
	304401011	ML	Suburban Residential	0.02	1	Vacant	SP
	304403012	ML	Suburban Residential	0.05	1	Vacant	SP
	304580001	ML	Suburban Residential	0.15	2	Vacant	SP
	304580002	ML	Suburban Residential	0.15	2	Vacant	SP
	304580003	ML	Suburban Residential	0.15	2	Vacant	SP
	304580004	ML	Suburban Residential	0.16	2	Vacant	SP
	304580005	ML	Suburban Residential	0.16	2	Vacant	SP
	304580006	ML	Suburban Residential	0.16	2	Vacant	SP
	304580007	ML	Suburban Residential	0.16	2	Vacant	SP
	304580008	ML	Suburban Residential	0.17	2	Vacant	SP
	304580009	ML	Suburban Residential	0.20	3	Vacant	SP
	308020012	ML	Suburban Residential	2.13	28	Vacant	SP
	308020019	ML	Suburban Residential	5.07	66	Vacant	SP
	308273018	ML	Suburban Residential	0.17	2	Vacant	SP
	308451012	ML	Suburban Residential	0.16	2	Vacant	SP,FLOOD
	308451013	ML	Suburban Residential	0.12	2	Vacant	SP
	308453012	ML	Suburban Residential	0.02	1	Vacant	SP
	308453013	ML	Suburban Residential	0.50	6	Vacant	SP
	308453014	ML	Suburban Residential	0.07	1	Vacant	SP
	308460021	ML	Suburban Residential	0.15	2	Vacant	SP
	308470049	ML	Suburban Residential	0.19	2	Vacant	SP
	308470050	ML	Suburban Residential	0.25	3	Vacant	SP
	308470051	ML	Suburban Residential	0.03	1	Vacant	SP
	308572025	ML	Suburban Residential	0.13	2	Vacant	SP
	308572026	ML	Suburban Residential	0.13	2	Vacant	SP
	308572027	ML	Suburban Residential	0.17	2	Vacant	SP
	308581020	ML	Suburban Residential	0.14	2	Vacant	SP
	308581021	ML	Suburban Residential	0.14	2	Vacant	SP
	308581022	ML	Suburban Residential	0.14	2	Vacant	SP
	308581023	ML	Suburban Residential	0.14	2	Vacant	SP
	308581024	ML	Suburban Residential	0.15	2	Vacant	SP
	308582009	ML	Suburban Residential	0.11	1	Vacant	SP
	308582010	ML	Suburban Residential	0.18	2	Vacant	SP
	308582028	ML	Suburban Residential	0.21	3	Vacant	SP
	308582029	ML	Suburban Residential	0.13	2	Vacant	SP
	308582030	ML	Suburban Residential	0.14	2	Vacant	SP
	308590001	ML	Suburban Residential	0.17	2	Vacant	SP
	308590002	ML	Suburban Residential	0.14	2	Vacant	SP
	308590003	ML	Suburban Residential	0.12	2	Vacant	SP
	308590004	ML	Suburban Residential	0.14	2	Vacant	SP
	308590005	ML	Suburban Residential	0.14	2	Vacant	SP
	308590006	ML	Suburban Residential	0.13	2	Vacant	SP
	308590007	ML	Suburban Residential	0.14	2	Vacant	SP

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
MODERATE	308592017	ML	Suburban Residential	0.22	3	Vacant	SP
	308592018	ML	Suburban Residential	0.22	3	Vacant	SP
	308592019	ML	Suburban Residential	0.23	3	Vacant	SP
	308601022	ML	Suburban Residential	0.21	3	Vacant	SP
	308601023	ML	Suburban Residential	0.41	5	Vacant	SP
	308620001	ML	Suburban Residential	0.20	3	Vacant	SP
	308620002	ML	Suburban Residential	0.20	3	Vacant	SP
	308620003	ML	Suburban Residential	0.21	3	Vacant	SP
	308620004	ML	Suburban Residential	0.21	3	Vacant	SP
	308620005	ML	Suburban Residential	0.24	3	Vacant	SP
	308620006	ML	Suburban Residential	0.23	3	Vacant	SP
	308620007	ML	Suburban Residential	0.21	3	Vacant	SP
	308620008	ML	Suburban Residential	0.22	3	Vacant	SP
	308620009	ML	Suburban Residential	0.18	2	Vacant	SP
	308620010	ML	Suburban Residential	0.18	2	Vacant	SP
	308620017	ML	Suburban Residential	0.16	2	Vacant	SP
	308620018	ML	Suburban Residential	0.18	2	Vacant	SP
	308620019	ML	Suburban Residential	0.19	2	Vacant	SP
	308620020	ML	Suburban Residential	0.19	2	Vacant	SP
	308620021	ML	Suburban Residential	0.21	3	Vacant	SP
	308620022	ML	Suburban Residential	0.23	3	Vacant	SP
	308620023	ML	Suburban Residential	0.21	0	Vacant	
	308620024	ML	Suburban Residential	0.20	0	Vacant	
	308620025	ML	Suburban Residential	0.18	0	Vacant	
	308620026	ML	Suburban Residential	0.16	0	Vacant	
	308620027	ML	Suburban Residential	0.16	0	Vacant	
	308620028	ML	Suburban Residential	0.15	0	Vacant	
	308620029	ML	Suburban Residential	0.21	0	Vacant	
	308620030	ML	Suburban Residential	0.42	0	Vacant	
	308620031	ML	Suburban Residential	0.25	0	Vacant	
	308620032	ML	Suburban Residential	0.25	0	Vacant	
	308620033	ML	Suburban Residential	0.20	0	Vacant	
	308620034	ML	Suburban Residential	0.22	0	Vacant	
	308620035	ML	Suburban Residential	0.21	0	Vacant	
	308620036	ML	Suburban Residential	0.22	0	Vacant	
	308620043	ML	Suburban Residential	0.20	3	Vacant	SP
	478090026	ML	Suburban Residential	2.94	24	Vacant	SP
	478090027	ML	Suburban Residential	1.87	15	Vacant	SP
	478090028	ML	Suburban Residential	1.81	14	Vacant	SP
	478120010	ML	Suburban Residential	1.89	15	Vacant	SP
	478120011	ML	Suburban Residential	2.27	18	Vacant	SP
	478120021	ML	Suburban Residential	2.00	16	Vacant	SP
	478120022	ML	Suburban Residential	2.26	18	Vacant	SP
	478120023	ML	Suburban Residential	2.27	18	Vacant	SP
	478120024	ML	Suburban Residential	2.00	16	Vacant	SP
	486480047	ML	Suburban Residential	0.11	1	Vacant	SP
	475182048	R5	Suburban Residential	0.17	1	Vacant	
	475182049	R5	Suburban Residential	0.17	1	Vacant	
	475182050	R5	Suburban Residential	0.27	1	Vacant	
	475182051	R5	Suburban Residential	0.32	2	Vacant	
	475182052	R5	Suburban Residential	0.23	1	Vacant	
	475182053	R5	Suburban Residential	0.28	1	Vacant	
	475182054	R5	Suburban Residential	0.09	1	Vacant	
	264236001	RS10	Suburban Residential	2.14	21	Vacant	
	482304037	RS10	Suburban Residential	0.24	2	Vacant	
	482304038	RS10	Suburban Residential	0.19	2	Vacant	
	482304039	RS10	Suburban Residential	0.20	2	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
MODERATE	482304040	RS10	Suburban Residential	0.22	2	Vacant	
	482304041	RS10	Suburban Residential	0.18	2	Vacant	
	482304042	RS10	Suburban Residential	0.21	2	Vacant	
	482304043	RS10	Suburban Residential	0.27	3	Vacant	
	482304044	RS10	Suburban Residential	0.17	2	Vacant	
	482304045	RS10	Suburban Residential	0.17	2	Vacant	
Parcels per Density Designation:	**280**		**Acres per Density Designation:**	**1,170**			
	Units per Density Designation:		**9,980**		**Units per Density Designation 80%:**		**7984**
ABOVE MODERATE	478060017	CC	Commercial	0.84	2	Vacant	FLOOD
	478060019	CC	Commercial	2.12	6	Vacant	FLOOD
	478060024	CC	Commercial	2.29	7	Vacant	FLOOD
	485220041	CC	Commercial	13.90	70	Vacant	
	256150001	HR	Large Lot Residential	33.77	7	Vacant	
	256160002	HR	Large Lot Residential	10.65	2	Vacant	
	256160010	HR	Large Lot Residential	9.55	2	Vacant	
	256160017	HR	Large Lot Residential	10.24	2	Vacant	
	256170004	HR	Large Lot Residential	28.91	6	Vacant	
	259260003	HR	Large Lot Residential	20.00	4	Vacant	
	259260004	HR	Large Lot Residential	10.00	2	Vacant	
	259260005	HR	Large Lot Residential	10.00	2	Vacant	
	259260006	HR	Large Lot Residential	20.00	4	Vacant	
	259260039	HR	Large Lot Residential	12.18	2	Vacant	
	264040003	HR	Large Lot Residential	12.56	2	Vacant	
	264040010	HR	Large Lot Residential	6.15	1	Vacant	
	264040011	HR	Large Lot Residential	6.15	1	Vacant	
	264040013	HR	Large Lot Residential	1.34	7	Vacant	
	264110006	HR	Large Lot Residential	2.35	12	Vacant	
	264110009	HR	Large Lot Residential	18.98	4	Vacant	
	264110010	HR	Large Lot Residential	20.04	4	Vacant	
	264110022	HR	Large Lot Residential	1.58	8	Vacant	
	264110024	HR	Large Lot Residential	1.79	9	Vacant	
	471201008	HR	Large Lot Residential	166.17	33	Vacant	
	471290003	HR	Large Lot Residential	2.57	13	Vacant	
	471290004	HR	Large Lot Residential	2.57	13	Vacant	
	471290005	HR	Large Lot Residential	2.40	12	Vacant	
	471290006	HR	Large Lot Residential	7.63	2	Vacant	
	473150002	HR	Large Lot Residential	13.75	3	Vacant	
	473150048	HR	Large Lot Residential	10.52	2	Vacant	
	473150049	HR	Large Lot Residential	15.73	3	Vacant	
	473150053	HR	Large Lot Residential	19.88	4	Vacant	FAULT
	473160001	HR	Large Lot Residential	17.50	4	Vacant	
	473160002	HR	Large Lot Residential	2.50	12	Vacant	
	474100002	HR	Large Lot Residential	20.00	4	Vacant	
	474100003	HR	Large Lot Residential	10.00	2	Vacant	
	474210001	HR	Large Lot Residential	40.00	8	Vacant	
	474210003	HR	Large Lot Residential	60.00	12	Vacant	
	474210004	HR	Large Lot Residential	60.00	12	Vacant	
	474210005	HR	Large Lot Residential	10.00	2	Vacant	
	474210006	HR	Large Lot Residential	10.00	2	Vacant	
	474210008	HR	Large Lot Residential	10.00	2	Vacant	
	474220065	HR	Large Lot Residential	13.49	3	Vacant	
	474220070	HR	Large Lot Residential	32.27	6	Vacant	
	474230005	HR	Large Lot Residential	3.32	1	Vacant	
	474230032	HR	Large Lot Residential	3.26	1	Vacant	
	474310001	HR	Large Lot Residential	5.14	1	Vacant	
	474310002	HR	Large Lot Residential	2.50	12	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	474310003	HR	Large Lot Residential	2.50	12	Vacant	
	474310004	HR	Large Lot Residential	2.51	13	Vacant	
	474310005	HR	Large Lot Residential	2.62	13	Vacant	
	474320003	HR	Large Lot Residential	1.07	5	Vacant	
	474320005	HR	Large Lot Residential	1.02	5	Vacant	
	474341005	HR	Large Lot Residential	1.72	9	Vacant	
	474341006	HR	Large Lot Residential	1.40	7	Vacant	
	474341007	HR	Large Lot Residential	0.91	5	Vacant	
	474341008	HR	Large Lot Residential	1.02	5	Vacant	
	474410017	HR	Large Lot Residential	0.00	1	Vacant	
	474410028	HR	Large Lot Residential	1.43	7	Vacant	
	474410029	HR	Large Lot Residential	1.59	8	Vacant	
	474500010	HR	Large Lot Residential	2.47	12	Vacant	
	478020023	HR	Large Lot Residential	24.86	5	Vacant	
	478020027	HR	Large Lot Residential	23.43	5	Vacant	
	488160001	HR	Large Lot Residential	19.38	4	Vacant	
	488160003	HR	Large Lot Residential	10.42	2	Vacant	
	488190031	HR	Large Lot Residential	1.80	9	Vacant	
	488190033	HR	Large Lot Residential	2.75	1	Vacant	
	488200015	HR	Large Lot Residential	2.51	13	Vacant	
	264040006	R1	Large Lot Residential	3.00	3	Vacant	
	264040009	R1	Large Lot Residential	6.15	6	Vacant	
	264040012	R1	Large Lot Residential	1.52	2	Vacant	
	264040014	R1	Large Lot Residential	0.92	1	Vacant	
	264040015	R1	Large Lot Residential	0.92	1	Vacant	
	264040016	R1	Large Lot Residential	0.95	1	Vacant	
	264110018	R1	Large Lot Residential	0.26	1	Vacant	
	264110027	R1	Large Lot Residential	0.97	1	Vacant	
	264110028	R1	Large Lot Residential	1.24	1	Vacant	
	264175005	R1	Large Lot Residential	0.99	1	Vacant	
	264175006	R1	Large Lot Residential	1.07	1	Vacant	
	264175007	R1	Large Lot Residential	1.23	1	Vacant	
	264175008	R1	Large Lot Residential	1.02	1	Vacant	
	264312003	R1	Large Lot Residential	0.85	1	Vacant	
	473120069	R1	Large Lot Residential	64.70	65	Vacant	FAULT
	473150050	R1	Large Lot Residential	1.17	1	Vacant	
	473150051	R1	Large Lot Residential	15.77	16	Vacant	
	473150052	R1	Large Lot Residential	21.37	21	Vacant	FAULT
	473150058	R1	Large Lot Residential	8.34	8	Vacant	
	473150059	R1	Large Lot Residential	9.00	9	Vacant	FAULT
	473150061	R1	Large Lot Residential	9.33	9	Vacant	FAULT
	473150063	R1	Large Lot Residential	11.94	12	Vacant	
	473174002	R1	Large Lot Residential	9.39	9	Vacant	
	473174003	R1	Large Lot Residential	9.39	9	Vacant	
	473174004	R1	Large Lot Residential	8.96	9	Vacant	
	473174005	R1	Large Lot Residential	8.96	9	Vacant	
	473174007	R1	Large Lot Residential	9.39	9	Vacant	
	473174008	R1	Large Lot Residential	8.55	9	Vacant	
	473174010	R1	Large Lot Residential	2.15	2	Vacant	
	473174012	R1	Large Lot Residential	2.17	2	Vacant	
	473174013	R1	Large Lot Residential	2.17	2	Vacant	
	473210005	R1	Large Lot Residential	3.90	4	Vacant	FAULT
	473220004	R1	Large Lot Residential	3.68	4	Vacant	FAULT
	473220009	R1	Large Lot Residential	9.39	9	Vacant	
	473220010	R1	Large Lot Residential	7.74	8	Vacant	
	473220011	R1	Large Lot Residential	1.65	2	Vacant	
	473220015	R1	Large Lot Residential	9.39	9	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	473220017	R1	Large Lot Residential	16.10	16	Vacant	FAULT
	473220043	R1	Large Lot Residential	5.84	6	Vacant	
	473220044	R1	Large Lot Residential	13.03	13	Vacant	FAULT
	473220057	R1	Large Lot Residential	0.85	1	Vacant	
	473220064	R1	Large Lot Residential	0.99	1	Vacant	
	473220071	R1	Large Lot Residential	1.17	1	Vacant	
	473220072	R1	Large Lot Residential	1.70	2	Vacant	
	473220075	R1	Large Lot Residential	2.78	3	Vacant	FAULT
	473250003	R1	Large Lot Residential	8.98	9	Vacant	
	473250028	R1	Large Lot Residential	1.44	1	Vacant	
	473250029	R1	Large Lot Residential	9.55	10	Vacant	
	473250030	R1	Large Lot Residential	2.71	3	Vacant	
	473250042	R1	Large Lot Residential	3.86	4	Vacant	
	473250050	R1	Large Lot Residential	1.10	1	Vacant	
	473250051	R1	Large Lot Residential	1.10	1	Vacant	
	473290003	R1	Large Lot Residential	2.35	2	Vacant	
	473290006	R1	Large Lot Residential	1.50	2	Vacant	
	473290007	R1	Large Lot Residential	4.70	5	Vacant	
	473290011	R1	Large Lot Residential	2.00	2	Vacant	
	473290012	R1	Large Lot Residential	6.98	7	Vacant	
	473290013	R1	Large Lot Residential	9.39	9	Vacant	
	473290014	R1	Large Lot Residential	9.39	9	Vacant	
	473290015	R1	Large Lot Residential	8.54	8	Vacant	
	473290018	R1	Large Lot Residential	0.85	1	Vacant	
	473290019	R1	Large Lot Residential	4.08	4	Vacant	
	473310001	R1	Large Lot Residential	55.60	56	Vacant	
	473310013	R1	Large Lot Residential	0.88	1	Vacant	
	473310016	R1	Large Lot Residential	1.20	1	Vacant	
	473401017	R1	Large Lot Residential	0.38	1	Vacant	
	474230049	R1	Large Lot Residential	0.10	1	Vacant	
	474250003	R1	Large Lot Residential	10.00	10	Vacant	
	474250032	R1	Large Lot Residential	2.59	3	Vacant	
	474250033	R1	Large Lot Residential	2.53	2	Vacant	
	474260058	R1	Large Lot Residential	1.87	2	Vacant	
	474260060	R1	Large Lot Residential	3.13	3	Vacant	
	474271001	R1	Large Lot Residential	0.06	1	Vacant	
	474271008	R1	Large Lot Residential	1.55	2	Vacant	
	474271011	R1	Large Lot Residential	2.81	3	Vacant	
	474272030	R1	Large Lot Residential	2.95	3	Vacant	
	474272033	R1	Large Lot Residential	2.41	2	Vacant	
	481041028	R1	Large Lot Residential	0.11	1	Vacant	SP,RDA
	481090023	R1	Large Lot Residential	0.30	1	Vacant	SP,FLOOD,RDA
	488250004	R1	Large Lot Residential	9.41	9	Vacant	
	488250005	R1	Large Lot Residential	9.40	9	Vacant	
	488250006	R1	Large Lot Residential	8.09	8	Vacant	
	488250008	R1	Large Lot Residential	8.55	9	Vacant	
	488250009	R1	Large Lot Residential	9.40	9	Vacant	
	488250010	R1	Large Lot Residential	9.40	9	Vacant	
	488250011	R1	Large Lot Residential	8.74	9	Vacant	
	488260001	R1	Large Lot Residential	2.00	2	Vacant	
	488260002	R1	Large Lot Residential	2.00	2	Vacant	
	488260007	R1	Large Lot Residential	4.70	5	Vacant	
	488260008	R1	Large Lot Residential	4.70	5	Vacant	
	488260009	R1	Large Lot Residential	8.97	9	Vacant	
	488260010	R1	Large Lot Residential	8.97	9	Vacant	
	488260011	R1	Large Lot Residential	9.40	9	Vacant	
	488260013	R1	Large Lot Residential	9.40	9	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	488260015	R1	Large Lot Residential	2.48	2	Vacant	
	488260016	R1	Large Lot Residential	2.19	2	Vacant	
	488260019	R1	Large Lot Residential	2.83	3	Vacant	
	488260020	R1	Large Lot Residential	2.51	2	Vacant	
	488260023	R1	Large Lot Residential	8.97	9	Vacant	FAULT
	488260024	R1	Large Lot Residential	8.97	9	Vacant	
	488260025	R1	Large Lot Residential	9.40	9	Vacant	FAULT
	488260026	R1	Large Lot Residential	9.40	9	Vacant	FAULT
	488260027	R1	Large Lot Residential	18.80	19	Vacant	FAULT
	488260029	R1	Large Lot Residential	6.45	6	Vacant	FAULT
	488260030	R1	Large Lot Residential	8.80	9	Vacant	FAULT
	488260031	R1	Large Lot Residential	16.60	17	Vacant	
	488260032	R1	Large Lot Residential	9.39	9	Vacant	
	488260034	R1	Large Lot Residential	9.40	9	Vacant	FAULT
	488260036	R1	Large Lot Residential	8.97	9	Vacant	FAULT
	488310001	R1	Large Lot Residential	8.97	9	Vacant	
	488310002	R1	Large Lot Residential	9.39	9	Vacant	
	488310003	R1	Large Lot Residential	9.39	9	Vacant	
	488310004	R1	Large Lot Residential	8.19	8	Vacant	
	488320007	R1	Large Lot Residential	0.19	1	Vacant	
	473171034	RR	Large Lot Residential	0.80	2	Vacant	FAULT
	473171037	RR	Large Lot Residential	1.29	3	Vacant	FAULT
	473200004	RR	Large Lot Residential	7.18	3	Vacant	FAULT
	473210001	RR	Large Lot Residential	2.15	1	Vacant	FAULT
	473220018	RR	Large Lot Residential	11.11	4	Vacant	FAULT
	473220019	RR	Large Lot Residential	9.06	4	Vacant	FAULT
	488260028	RR	Large Lot Residential	2.00	1	Vacant	FAULT
	478230001	CH	Multi-family	8.14	1	Vacant	SP
	260040026	R5	Open Space/Park	9.82	49	Vacant	SP
	260040030	R5	Open Space/Park	12.80	64	Vacant	SP
	259240062	EST	Residential 2 Dwellings/Acr	18.11	36	Vacant	SP
	471201011	R2	Residential 2 Dwellings/Acr	37.51	75	Vacant	
	471201011	R2	Residential 2 Dwellings/Acr	37.51	75	Vacant	
	471290017	R2	Residential 2 Dwellings/Acr	0.62	1	Vacant	
	471300023	R2	Residential 2 Dwellings/Acr	9.76	20	Vacant	
	473171020	R2	Residential 2 Dwellings/Acr	6.50	13	Vacant	
	473171022	R2	Residential 2 Dwellings/Acr	6.12	12	Vacant	
	473401021	R2	Residential 2 Dwellings/Acr	5.69	11	Vacant	
	474220026	R2	Residential 2 Dwellings/Acr	0.09	1	Vacant	
	474220035	R2	Residential 2 Dwellings/Acr	0.35	1	Vacant	
	474220044	R2	Residential 2 Dwellings/Acr	0.01	1	Vacant	
	474371008	R2	Residential 2 Dwellings/Acr	0.32	1	Vacant	
	474371010	R2	Residential 2 Dwellings/Acr	0.50	1	Vacant	
	474371015	R2	Residential 2 Dwellings/Acr	0.32	1	Vacant	
	474371017	R2	Residential 2 Dwellings/Acr	0.32	1	Vacant	
	474371018	R2	Residential 2 Dwellings/Acr	0.40	1	Vacant	
	474500002	R2	Residential 2 Dwellings/Acr	17.68	35	Vacant	
	474500005	R2	Residential 2 Dwellings/Acr	5.20	10	Vacant	
	488032002	R2	Residential 2 Dwellings/Acr	0.56	1	Vacant	
	488060006	R2	Residential 2 Dwellings/Acr	0.55	1	Vacant	
	488080003	R2	Residential 2 Dwellings/Acr	17.31	35	Vacant	
	488080011	R2	Residential 2 Dwellings/Acr	8.54	17	Vacant	
	488080012	R2	Residential 2 Dwellings/Acr	7.44	15	Vacant	
	488270019	R2	Residential 2 Dwellings/Acr	0.87	2	Vacant	
	488270020	R2	Residential 2 Dwellings/Acr	0.89	2	Vacant	
	488270021	R2	Residential 2 Dwellings/Acr	3.78	8	Vacant	
	488270024	R2	Residential 2 Dwellings/Acr	0.75	2	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	488270025	R2	Residential 2 Dwellings/Acr	0.67	1	Vacant	
	473150012	RA2	Residential Agriculture 2 Dv	0.37	1	Vacant	
	473150015	RA2	Residential Agriculture 2 Dv	8.50	17	Vacant	
	473150025	RA2	Residential Agriculture 2 Dv	1.80	4	Vacant	
	473150079	RA2	Residential Agriculture 2 Dv	17.25	34	Vacant	
	473160004	RA2	Residential Agriculture 2 Dv	75.10	150	Vacant	
	473160007	RA2	Residential Agriculture 2 Dv	36.15	72	Vacant	
	473160008	RA2	Residential Agriculture 2 Dv	27.32	55	Vacant	
	473160011	RA2	Residential Agriculture 2 Dv	9.22	18	Vacant	
	473160013	RA2	Residential Agriculture 2 Dv	9.20	18	Vacant	
	473160017	RA2	Residential Agriculture 2 Dv	32.35	65	Vacant	
	473160018	RA2	Residential Agriculture 2 Dv	9.09	18	Vacant	
	473160019	RA2	Residential Agriculture 2 Dv	9.05	18	Vacant	
	473230009	RA2	Residential Agriculture 2 Dv	3.64	7	Vacant	FAULT
	473280011	RA2	Residential Agriculture 2 Dv	9.39	19	Vacant	
	473280012	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	473280013	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	473280014	RA2	Residential Agriculture 2 Dv	9.39	19	Vacant	
	473280015	RA2	Residential Agriculture 2 Dv	9.39	19	Vacant	
	473280016	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	473280018	RA2	Residential Agriculture 2 Dv	1.14	2	Vacant	
	473280019	RA2	Residential Agriculture 2 Dv	1.14	2	Vacant	
	473300001	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	473300002	RA2	Residential Agriculture 2 Dv	9.39	19	Vacant	
	473300003	RA2	Residential Agriculture 2 Dv	9.39	19	Vacant	
	473300004	RA2	Residential Agriculture 2 Dv	4.70	9	Vacant	
	473300005	RA2	Residential Agriculture 2 Dv	4.27	8	Vacant	
	473300008	RA2	Residential Agriculture 2 Dv	9.39	19	Vacant	
	473300009	RA2	Residential Agriculture 2 Dv	9.39	19	Vacant	
	473300010	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	474130034	RA2	Residential Agriculture 2 Dv	0.42	1	Vacant	
	474142006	RA2	Residential Agriculture 2 Dv	4.80	10	Vacant	
	474161016	RA2	Residential Agriculture 2 Dv	0.08	1	Vacant	
	474161035	RA2	Residential Agriculture 2 Dv	1.15	2	Vacant	
	474170008	RA2	Residential Agriculture 2 Dv	1.67	3	Vacant	
	474180012	RA2	Residential Agriculture 2 Dv	0.72	1	Vacant	
	474180030	RA2	Residential Agriculture 2 Dv	0.46	1	Vacant	
	474180031	RA2	Residential Agriculture 2 Dv	0.46	1	Vacant	
	474180032	RA2	Residential Agriculture 2 Dv	1.18	2	Vacant	
	474250011	RA2	Residential Agriculture 2 Dv	1.02	2	Vacant	
	474250015	RA2	Residential Agriculture 2 Dv	13.41	27	Vacant	
	474250017	RA2	Residential Agriculture 2 Dv	0.53	1	Vacant	
	474250057	RA2	Residential Agriculture 2 Dv	1.02	2	Vacant	
	474250058	RA2	Residential Agriculture 2 Dv	0.36	1	Vacant	
	474590034	RA2	Residential Agriculture 2 Dv	1.00	2	Vacant	
	474590036	RA2	Residential Agriculture 2 Dv	1.50	3	Vacant	
	474590037	RA2	Residential Agriculture 2 Dv	0.90	2	Vacant	
	474590039	RA2	Residential Agriculture 2 Dv	1.01	2	Vacant	
	475060023	RA2	Residential Agriculture 2 Dv	0.46	1	Vacant	
	478020024	RA2	Residential Agriculture 2 Dv	20.04	40	Vacant	
	478020025	RA2	Residential Agriculture 2 Dv	20.95	42	Vacant	
	478020026	RA2	Residential Agriculture 2 Dv	26.87	54	Vacant	
	478020030	RA2	Residential Agriculture 2 Dv	22.09	44	Vacant	
	478020031	RA2	Residential Agriculture 2 Dv	1.00	2	Vacant	
	478020035	RA2	Residential Agriculture 2 Dv	7.98	16	Vacant	
	478020037	RA2	Residential Agriculture 2 Dv	8.15	16	Vacant	
	478230008	RA2	Residential Agriculture 2 Dv	36.38	73	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	478230015	RA2	Residential Agriculture 2 Dv	8.69	17	Vacant	
	478230016	RA2	Residential Agriculture 2 Dv	9.10	18	Vacant	
	478240002	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	478240003	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	478240005	RA2	Residential Agriculture 2 Dv	9.10	18	Vacant	
	478240006	RA2	Residential Agriculture 2 Dv	9.10	18	Vacant	
	478240007	RA2	Residential Agriculture 2 Dv	8.69	17	Vacant	
	478240008	RA2	Residential Agriculture 2 Dv	9.39	19	Vacant	
	478240021	RA2	Residential Agriculture 2 Dv	8.68	17	Vacant	
	478240022	RA2	Residential Agriculture 2 Dv	8.84	18	Vacant	
	478240023	RA2	Residential Agriculture 2 Dv	8.84	18	Vacant	
	478240031	RA2	Residential Agriculture 2 Dv	2.05	4	Vacant	
	478240032	RA2	Residential Agriculture 2 Dv	2.05	4	Vacant	
	478240033	RA2	Residential Agriculture 2 Dv	1.76	4	Vacant	
	478240034	RA2	Residential Agriculture 2 Dv	1.76	4	Vacant	
	478421009	RA2	Residential Agriculture 2 Dv	0.49	1	Vacant	
	478421013	RA2	Residential Agriculture 2 Dv	0.40	1	Vacant	
	486250003	RA2	Residential Agriculture 2 Dv	2.18	4	Vacant	FLOOD
	486290005	RA2	Residential Agriculture 2 Dv	1.06	2	Vacant	
	486290010	RA2	Residential Agriculture 2 Dv	1.17	2	Vacant	
	486290028	RA2	Residential Agriculture 2 Dv	8.97	18	Vacant	FLOOD
	486290032	RA2	Residential Agriculture 2 Dv	8.91	18	Vacant	
	486290033	RA2	Residential Agriculture 2 Dv	1.31	3	Vacant	
	486290035	RA2	Residential Agriculture 2 Dv	17.06	34	Vacant	
	486570010	RA2	Residential Agriculture 2 Dv	9.39	19	Vacant	
	487060006	RA2	Residential Agriculture 2 Dv	0.94	2	Vacant	
	487090006	RA2	Residential Agriculture 2 Dv	0.80	2	Vacant	
	487140011	RA2	Residential Agriculture 2 Dv	0.48	1	Vacant	
	487140013	RA2	Residential Agriculture 2 Dv	0.48	1	Vacant	
	487150001	RA2	Residential Agriculture 2 Dv	0.76	2	Vacant	
	487150014	RA2	Residential Agriculture 2 Dv	2.08	4	Vacant	
	487150016	RA2	Residential Agriculture 2 Dv	2.58	5	Vacant	
	487160001	RA2	Residential Agriculture 2 Dv	9.73	20	Vacant	
	487170001	RA2	Residential Agriculture 2 Dv	5.99	12	Vacant	
	487170004	RA2	Residential Agriculture 2 Dv	4.57	9	Vacant	
	487170005	RA2	Residential Agriculture 2 Dv	4.89	10	Vacant	
	487470001	RA2	Residential Agriculture 2 Dv	9.40	19	Vacant	
	487550001	RA2	Residential Agriculture 2 Dv	0.56	1	Vacant	
	487550002	RA2	Residential Agriculture 2 Dv	0.52	1	Vacant	
	487550003	RA2	Residential Agriculture 2 Dv	0.52	1	Vacant	
	487550004	RA2	Residential Agriculture 2 Dv	0.53	1	Vacant	
	487551001	RA2	Residential Agriculture 2 Dv	0.56	1	Vacant	
	487551002	RA2	Residential Agriculture 2 Dv	0.61	1	Vacant	
	487551003	RA2	Residential Agriculture 2 Dv	0.59	1	Vacant	
	487551004	RA2	Residential Agriculture 2 Dv	0.57	1	Vacant	
	487551005	RA2	Residential Agriculture 2 Dv	0.51	1	Vacant	
	487551006	RA2	Residential Agriculture 2 Dv	0.55	1	Vacant	
	487551008	RA2	Residential Agriculture 2 Dv	0.58	1	Vacant	
	488080004	RA2	Residential Agriculture 2 Dv	18.91	38	Vacant	
	488080005	RA2	Residential Agriculture 2 Dv	8.67	17	Vacant	
	488080006	RA2	Residential Agriculture 2 Dv	8.37	17	Vacant	
	488080007	RA2	Residential Agriculture 2 Dv	8.37	17	Vacant	
	488080008	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	488080009	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	488080010	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	488160004	RA2	Residential Agriculture 2 Dv	12.20	24	Vacant	
	488160005	RA2	Residential Agriculture 2 Dv	6.03	12	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	488170007	RA2	Residential Agriculture 2 Dv	1.82	4	Vacant	
	488170011	RA2	Residential Agriculture 2 Dv	8.07	16	Vacant	
	488180024	RA2	Residential Agriculture 2 Dv	14.73	30	Vacant	
	488180025	RA2	Residential Agriculture 2 Dv	9.52	19	Vacant	
	488180027	RA2	Residential Agriculture 2 Dv	9.95	20	Vacant	
	488180028	RA2	Residential Agriculture 2 Dv	18.31	37	Vacant	
	488190023	RA2	Residential Agriculture 2 Dv	0.92	2	Vacant	
	488250001	RA2	Residential Agriculture 2 Dv	9.40	19	Vacant	
	488250002	RA2	Residential Agriculture 2 Dv	8.97	18	Vacant	
	488250013	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	488250014	RA2	Residential Agriculture 2 Dv	9.40	19	Vacant	
	488300002	RA2	Residential Agriculture 2 Dv	6.90	14	Vacant	
	488330009	RA2	Residential Agriculture 2 Dv	4.48	9	Vacant	
	488330010	RA2	Residential Agriculture 2 Dv	4.48	9	Vacant	
	488330014	RA2	Residential Agriculture 2 Dv	4.21	8	Vacant	
	488330015	RA2	Residential Agriculture 2 Dv	4.48	9	Vacant	
	488330016	RA2	Residential Agriculture 2 Dv	9.39	19	Vacant	
	488330017	RA2	Residential Agriculture 2 Dv	9.39	19	Vacant	
	488330018	RA2	Residential Agriculture 2 Dv	8.97	18	Vacant	
	488340001	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	488340002	RA2	Residential Agriculture 2 Dv	9.40	19	Vacant	
	488340009	RA2	Residential Agriculture 2 Dv	9.40	19	Vacant	
	488340010	RA2	Residential Agriculture 2 Dv	9.40	19	Vacant	
	488340011	RA2	Residential Agriculture 2 Dv	8.98	18	Vacant	
	478090036	L	Suburban Residential	3.97	20	Vacant	SP,FLOOD
	478100009	L	Suburban Residential	8.98	45	Vacant	SP
	478100010	L	Suburban Residential	8.98	45	Vacant	SP,FLOOD
	478120005	L	Suburban Residential	2.07	10	Vacant	SP
	478120006	L	Suburban Residential	2.27	11	Vacant	SP
	478120019	L	Suburban Residential	2.27	11	Vacant	SP
	478120020	L	Suburban Residential	2.00	10	Vacant	SP
	478240011	L	Suburban Residential	8.98	45	Vacant	SP
	478240012	L	Suburban Residential	8.98	45	Vacant	SP
	478320026	L	Suburban Residential	0.34	2	Vacant	SP
	486300013	LM	Suburban Residential	286.05	1	Vacant	SP
	486300013	LM	Suburban Residential	286.05	0	Vacant	SP
	486310032	LM	Suburban Residential	155.47	1,403	Vacant	SP, FLOOD
	474500017	R1	Suburban Residential	15.16	15	Vacant	SP
	259260027	R3	Suburban Residential	2.46	7	Vacant	
	259260029	R3	Suburban Residential	4.80	14	Vacant	
	259260030	R3	Suburban Residential	6.65	20	Vacant	
	259260036	R3	Suburban Residential	2.35	7	Vacant	
	259260037	R3	Suburban Residential	2.11	6	Vacant	
	259260038	R3	Suburban Residential	2.30	7	Vacant	
	259260040	R3	Suburban Residential	2.47	7	Vacant	
	259260041	R3	Suburban Residential	2.50	8	Vacant	
	259260042	R3	Suburban Residential	2.29	7	Vacant	
	259520030	R3	Suburban Residential	0.13	1	Vacant	
	474490025	R3	Suburban Residential	43.21	130	Vacant	
	474711001	R3	Suburban Residential	0.55	2	Vacant	
	474711002	R3	Suburban Residential	0.54	2	Vacant	
	474711003	R3	Suburban Residential	0.53	2	Vacant	
	474711004	R3	Suburban Residential	0.70	2	Vacant	
	474711005	R3	Suburban Residential	0.54	2	Vacant	
	474711006	R3	Suburban Residential	0.57	2	Vacant	
	474711007	R3	Suburban Residential	0.66	2	Vacant	
	474711008	R3	Suburban Residential	0.57	2	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	474711009	R3	Suburban Residential	0.37	1	Vacant	
	474711010	R3	Suburban Residential	0.45	1	Vacant	
	474712001	R3	Suburban Residential	0.48	1	Vacant	
	474712002	R3	Suburban Residential	0.47	1	Vacant	
	474712003	R3	Suburban Residential	0.51	2	Vacant	
	474712004	R3	Suburban Residential	0.75	2	Vacant	
	474712005	R3	Suburban Residential	0.40	1	Vacant	
	474712006	R3	Suburban Residential	0.42	1	Vacant	
	474712007	R3	Suburban Residential	0.55	2	Vacant	
	474713001	R3	Suburban Residential	0.48	1	Vacant	
	474713002	R3	Suburban Residential	0.59	2	Vacant	
	474713003	R3	Suburban Residential	0.40	1	Vacant	
	474720001	R3	Suburban Residential	0.51	2	Vacant	
	474720002	R3	Suburban Residential	0.52	2	Vacant	
	474720003	R3	Suburban Residential	0.52	2	Vacant	
	474720004	R3	Suburban Residential	0.54	2	Vacant	
	474720016	R3	Suburban Residential	0.32	1	Vacant	
	474721001	R3	Suburban Residential	0.41	1	Vacant	
	474721002	R3	Suburban Residential	0.47	1	Vacant	
	474721003	R3	Suburban Residential	0.47	1	Vacant	
	474721004	R3	Suburban Residential	0.47	1	Vacant	
	474721005	R3	Suburban Residential	0.46	1	Vacant	
	474722001	R3	Suburban Residential	0.88	3	Vacant	
	474722002	R3	Suburban Residential	0.62	2	Vacant	
	474722003	R3	Suburban Residential	0.60	2	Vacant	
	474722004	R3	Suburban Residential	0.52	2	Vacant	
	474722005	R3	Suburban Residential	0.45	1	Vacant	
	474722006	R3	Suburban Residential	0.44	1	Vacant	
	474722007	R3	Suburban Residential	0.39	1	Vacant	
	474723001	R3	Suburban Residential	0.54	2	Vacant	
	474723002	R3	Suburban Residential	0.58	2	Vacant	
	478040016	R3	Suburban Residential	1.26	4	Vacant	FLOOD
	478040017	R3	Suburban Residential	1.56	5	Vacant	FLOOD
	478040018	R3	Suburban Residential	1.47	4	Vacant	FLOOD
	478040020	R3	Suburban Residential	2.56	8	Vacant	FLOOD
	478040021	R3	Suburban Residential	1.79	5	Vacant	FLOOD
	478040024	R3	Suburban Residential	3.31	10	Vacant	
	478040025	R3	Suburban Residential	1.02	3	Vacant	
	478040027	R3	Suburban Residential	3.66	11	Vacant	
	478040031	R3	Suburban Residential	0.72	2	Vacant	
	478040032	R3	Suburban Residential	0.55	2	Vacant	
	478040033	R3	Suburban Residential	0.43	1	Vacant	
	478040034	R3	Suburban Residential	0.44	1	Vacant	
	478040035	R3	Suburban Residential	0.75	2	Vacant	
	478060013	R3	Suburban Residential	1.17	4	Vacant	
	478060016	R3	Suburban Residential	3.34	10	Vacant	FLOOD
	478060018	R3	Suburban Residential	6.56	20	Vacant	FLOOD
	478060023	R3	Suburban Residential	2.26	7	Vacant	FLOOD
	478070013	R3	Suburban Residential	1.26	4	Vacant	
	478070014	R3	Suburban Residential	1.26	4	Vacant	
	478080002	R3	Suburban Residential	5.84	18	Vacant	
	478080004	R3	Suburban Residential	2.34	7	Vacant	
	478080005	R3	Suburban Residential	2.34	7	Vacant	
	478080007	R3	Suburban Residential	9.10	27	Vacant	
	478080008	R3	Suburban Residential	8.69	26	Vacant	FLOOD
	478080009	R3	Suburban Residential	0.69	2	Vacant	
	478080010	R3	Suburban Residential	0.71	2	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	478080011	R3	Suburban Residential	0.57	2	Vacant	
	478080013	R3	Suburban Residential	8.97	27	Vacant	FLOOD
	478100002	R3	Suburban Residential	6.58	20	Vacant	FLOOD
	478100018	R3	Suburban Residential	6.39	19	Vacant	
	478100022	R3	Suburban Residential	3.76	11	Vacant	FLOOD
	478100023	R3	Suburban Residential	3.29	10	Vacant	FLOOD
	478100024	R3	Suburban Residential	1.26	4	Vacant	FLOOD
	478100025	R3	Suburban Residential	1.10	3	Vacant	
	478165021	R3	Suburban Residential	0.18	1	Vacant	
	478165022	R3	Suburban Residential	0.17	1	Vacant	
	478165023	R3	Suburban Residential	0.18	1	Vacant	
	478166015	R3	Suburban Residential	0.16	1	Vacant	
	478166030	R3	Suburban Residential	0.38	1	Vacant	
	478166031	R3	Suburban Residential	0.17	1	Vacant	
	478166032	R3	Suburban Residential	0.09	1	Vacant	
	478166033	R3	Suburban Residential	0.09	1	Vacant	
	478171010	R3	Suburban Residential	0.72	2	Vacant	
	478172003	R3	Suburban Residential	0.20	1	Vacant	
	478174027	R3	Suburban Residential	0.18	1	Vacant	
	478174035	R3	Suburban Residential	0.07	1	Vacant	
	478175002	R3	Suburban Residential	0.32	1	Vacant	
	478175004	R3	Suburban Residential	0.08	1	Vacant	
	478182002	R3	Suburban Residential	0.18	1	Vacant	
	478182011	R3	Suburban Residential	0.08	1	Vacant	
	478182060	R3	Suburban Residential	0.14	1	Vacant	
	478192050	R3	Suburban Residential	0.19	1	Vacant	
	478202053	R3	Suburban Residential	0.57	2	Vacant	
	478250001	R3	Suburban Residential	18.83	56	Vacant	FLOOD
	478353003	R3	Suburban Residential	1.11	3	Vacant	FLOOD
	478362003	R3	Suburban Residential	1.13	3	Vacant	FLOOD
	478430010	R3	Suburban Residential	0.45	1	Vacant	
	486260002	R3	Suburban Residential	9.00	27	Vacant	
	486260007	R3	Suburban Residential	8.97	27	Vacant	
	486260010	R3	Suburban Residential	8.53	26	Vacant	
	486260011	R3	Suburban Residential	8.94	27	Vacant	
	488190024	R3	Suburban Residential	6.89	21	Vacant	
	488190027	R3	Suburban Residential	9.40	28	Vacant	
	488190032	R3	Suburban Residential	2.20	7	Vacant	
	488200012	R3	Suburban Residential	2.08	6	Vacant	
	488200022	R3	Suburban Residential	1.78	5	Vacant	
	488200023	R3	Suburban Residential	1.45	4	Vacant	
	488200025	R3	Suburban Residential	27.55	83	Vacant	
	488210004	R3	Suburban Residential	1.08	3	Vacant	
	488210006	R3	Suburban Residential	10.60	32	Vacant	
	488210007	R3	Suburban Residential	10.60	32	Vacant	
	488210020	R3	Suburban Residential	9.10	27	Vacant	
	488210021	R3	Suburban Residential	9.10	27	Vacant	
	488220005	R3	Suburban Residential	9.10	27	Vacant	FLOOD
	488220006	R3	Suburban Residential	2.73	8	Vacant	FLOOD
	488220011	R3	Suburban Residential	0.80	2	Vacant	
	488220012	R3	Suburban Residential	1.04	3	Vacant	
	488220014	R3	Suburban Residential	8.93	27	Vacant	FLOOD
	488350019	R3	Suburban Residential	8.75	44	Vacant	
	488350021	R3	Suburban Residential	9.17	46	Vacant	
	488350023	R3	Suburban Residential	9.17	46	Vacant	
	488350025	R3	Suburban Residential	8.75	44	Vacant	
	488370001	R3	Suburban Residential	0.24	1	Vacant	FLOOD

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	488370002	R3	Suburban Residential	0.25	1	Vacant	FLOOD
	488370003	R3	Suburban Residential	0.25	1	Vacant	FLOOD
	488370004	R3	Suburban Residential	0.25	1	Vacant	FLOOD
	488370005	R3	Suburban Residential	0.25	1	Vacant	FLOOD
	488370006	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370007	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370008	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370009	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370010	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370011	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370012	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370013	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370014	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370015	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370016	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370017	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488370018	R3	Suburban Residential	0.26	1	Vacant	FLOOD
	488370019	R3	Suburban Residential	0.26	1	Vacant	FLOOD
	488370020	R3	Suburban Residential	0.29	1	Vacant	FLOOD
	488370021	R3	Suburban Residential	0.30	1	Vacant	FLOOD
	488370022	R3	Suburban Residential	0.30	1	Vacant	FLOOD
	488370023	R3	Suburban Residential	0.29	1	Vacant	FLOOD
	488370024	R3	Suburban Residential	0.26	1	Vacant	FLOOD
	488370025	R3	Suburban Residential	0.27	1	Vacant	FLOOD
	488370026	R3	Suburban Residential	0.27	1	Vacant	FLOOD
	488370027	R3	Suburban Residential	0.26	1	Vacant	FLOOD
	488370028	R3	Suburban Residential	0.29	1	Vacant	FLOOD
	488370029	R3	Suburban Residential	0.30	1	Vacant	FLOOD
	488370030	R3	Suburban Residential	0.30	1	Vacant	FLOOD
	488370031	R3	Suburban Residential	0.29	1	Vacant	FLOOD
	488370032	R3	Suburban Residential	0.26	1	Vacant	FLOOD
	488370033	R3	Suburban Residential	0.27	1	Vacant	FLOOD
	488371001	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371002	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371003	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371004	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371005	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371006	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371007	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371008	R3	Suburban Residential	0.25	1	Vacant	FLOOD
	488371009	R3	Suburban Residential	0.29	1	Vacant	FLOOD
	488371010	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371011	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371012	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371013	R3	Suburban Residential	0.32	1	Vacant	FLOOD
	488371014	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371015	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371016	R3	Suburban Residential	0.26	1	Vacant	FLOOD
	488371017	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371018	R3	Suburban Residential	0.31	1	Vacant	FLOOD
	488371019	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	488371020	R3	Suburban Residential	0.30	1	Vacant	FLOOD
	488371021	R3	Suburban Residential	0.25	1	Vacant	FLOOD
	488371022	R3	Suburban Residential	0.27	1	Vacant	FLOOD
	488371023	R3	Suburban Residential	0.23	1	Vacant	FLOOD
	256150025	R5	Suburban Residential	0.43	2	Vacant	
	256150026	R5	Suburban Residential	0.39	2	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	256150031	R5	Suburban Residential	0.46	2	Vacant	
	256150034	R5	Suburban Residential	0.50	2	Vacant	
	256150035	R5	Suburban Residential	0.43	2	Vacant	
	256181010	R5	Suburban Residential	0.58	3	Vacant	
	256181020	R5	Suburban Residential	0.69	3	Vacant	
	256182048	R5	Suburban Residential	1.40	7	Vacant	
	256191001	R5	Suburban Residential	0.26	1	Vacant	
	256191055	R5	Suburban Residential	0.32	2	Vacant	
	256191056	R5	Suburban Residential	0.96	5	Vacant	
	256191061	R5	Suburban Residential	0.44	2	Vacant	
	256222007	R5	Suburban Residential	0.31	2	Vacant	
	256222009	R5	Suburban Residential	0.13	1	Vacant	
	256222010	R5	Suburban Residential	0.15	1	Vacant	
	256222011	R5	Suburban Residential	0.27	1	Vacant	
	256222012	R5	Suburban Residential	0.33	2	Vacant	
	256244006	R5	Suburban Residential	0.23	1	Vacant	
	256244008	R5	Suburban Residential	0.14	1	Vacant	
	260040039	R5	Suburban Residential	1.05	5	Vacant	
	260480001	R5	Suburban Residential	0.10	1	Vacant	
	260480002	R5	Suburban Residential	0.11	1	Vacant	
	260480003	R5	Suburban Residential	0.10	1	Vacant	
	260480004	R5	Suburban Residential	0.12	1	Vacant	
	260480005	R5	Suburban Residential	0.15	1	Vacant	
	260480006	R5	Suburban Residential	0.10	1	Vacant	
	260480007	R5	Suburban Residential	0.11	1	Vacant	
	260480008	R5	Suburban Residential	0.10	1	Vacant	
	260480014	R5	Suburban Residential	0.11	1	Vacant	
	260480015	R5	Suburban Residential	0.10	1	Vacant	
	260480016	R5	Suburban Residential	0.10	1	Vacant	
	260480017	R5	Suburban Residential	0.11	1	Vacant	
	260480018	R5	Suburban Residential	0.10	1	Vacant	
	260480019	R5	Suburban Residential	0.10	1	Vacant	
	260480020	R5	Suburban Residential	0.11	1	Vacant	
	260480021	R5	Suburban Residential	0.10	1	Vacant	
	260480022	R5	Suburban Residential	0.10	1	Vacant	
	260480023	R5	Suburban Residential	0.11	1	Vacant	
	260480024	R5	Suburban Residential	0.11	1	Vacant	
	260480025	R5	Suburban Residential	0.10	1	Vacant	
	260480026	R5	Suburban Residential	0.10	1	Vacant	
	260480027	R5	Suburban Residential	0.11	1	Vacant	
	260480028	R5	Suburban Residential	0.10	1	Vacant	
	260480029	R5	Suburban Residential	0.10	1	Vacant	
	260480030	R5	Suburban Residential	0.11	1	Vacant	
	260480031	R5	Suburban Residential	0.10	1	Vacant	
	260480032	R5	Suburban Residential	0.10	1	Vacant	
	260480033	R5	Suburban Residential	0.11	1	Vacant	
	260480034	R5	Suburban Residential	0.11	1	Vacant	
	260480035	R5	Suburban Residential	0.10	1	Vacant	
	260480036	R5	Suburban Residential	0.10	1	Vacant	
	260480037	R5	Suburban Residential	0.11	1	Vacant	
	260480038	R5	Suburban Residential	0.10	1	Vacant	
	260480039	R5	Suburban Residential	0.11	1	Vacant	
	260480040	R5	Suburban Residential	0.11	1	Vacant	
	260480041	R5	Suburban Residential	0.11	1	Vacant	
	260480042	R5	Suburban Residential	0.11	1	Vacant	
	260480043	R5	Suburban Residential	0.14	1	Vacant	
	260480044	R5	Suburban Residential	0.11	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	260480045	R5	Suburban Residential	0.10	1	Vacant	
	260480046	R5	Suburban Residential	0.10	1	Vacant	
	260480047	R5	Suburban Residential	0.10	1	Vacant	
	260480048	R5	Suburban Residential	0.10	1	Vacant	
	260480049	R5	Suburban Residential	0.11	1	Vacant	
	260480050	R5	Suburban Residential	0.16	1	Vacant	
	260480051	R5	Suburban Residential	0.13	1	Vacant	
	260480052	R5	Suburban Residential	0.11	1	Vacant	
	260480053	R5	Suburban Residential	0.11	1	Vacant	
	260480054	R5	Suburban Residential	0.11	1	Vacant	
	260480055	R5	Suburban Residential	0.11	1	Vacant	
	260480056	R5	Suburban Residential	0.10	1	Vacant	
	260480057	R5	Suburban Residential	0.10	1	Vacant	
	260480058	R5	Suburban Residential	0.11	1	Vacant	
	260480059	R5	Suburban Residential	0.11	1	Vacant	
	260480060	R5	Suburban Residential	0.13	1	Vacant	
	260480061	R5	Suburban Residential	0.13	1	Vacant	
	260480062	R5	Suburban Residential	0.10	1	Vacant	
	260480063	R5	Suburban Residential	0.10	1	Vacant	
	260480064	R5	Suburban Residential	0.16	1	Vacant	
	260480065	R5	Suburban Residential	0.12	1	Vacant	
	260480066	R5	Suburban Residential	0.11	1	Vacant	
	260480067	R5	Suburban Residential	0.10	1	Vacant	
	260480068	R5	Suburban Residential	0.13	1	Vacant	
	260480069	R5	Suburban Residential	0.12	1	Vacant	
	260480070	R5	Suburban Residential	0.13	1	Vacant	
	260480074	R5	Suburban Residential	0.18	1	Vacant	
	260480075	R5	Suburban Residential	0.24	1	Vacant	
	260480076	R5	Suburban Residential	0.10	1	Vacant	
	260480077	R5	Suburban Residential	0.07	1	Vacant	
	260480078	R5	Suburban Residential	1.40	7	Vacant	
	260480079	R5	Suburban Residential	0.23	1	Vacant	
	260480080	R5	Suburban Residential	3.32	17	Vacant	
	260490001	R5	Suburban Residential	0.14	1	Vacant	
	260490002	R5	Suburban Residential	0.14	1	Vacant	
	260490003	R5	Suburban Residential	0.11	1	Vacant	
	260490004	R5	Suburban Residential	0.11	1	Vacant	
	260490005	R5	Suburban Residential	0.11	1	Vacant	
	260490006	R5	Suburban Residential	0.11	1	Vacant	
	260490007	R5	Suburban Residential	0.11	1	Vacant	
	260490008	R5	Suburban Residential	0.11	1	Vacant	
	260490009	R5	Suburban Residential	0.12	1	Vacant	
	260490010	R5	Suburban Residential	0.11	1	Vacant	
	260490011	R5	Suburban Residential	0.10	1	Vacant	
	260490012	R5	Suburban Residential	0.12	1	Vacant	
	260490013	R5	Suburban Residential	0.12	1	Vacant	
	260490014	R5	Suburban Residential	0.11	1	Vacant	
	260490015	R5	Suburban Residential	0.12	1	Vacant	
	260490016	R5	Suburban Residential	0.12	1	Vacant	
	260490017	R5	Suburban Residential	0.12	1	Vacant	
	260490018	R5	Suburban Residential	0.13	1	Vacant	
	260490019	R5	Suburban Residential	0.12	1	Vacant	
	260490020	R5	Suburban Residential	0.12	1	Vacant	
	260490021	R5	Suburban Residential	0.11	1	Vacant	
	260490022	R5	Suburban Residential	0.11	1	Vacant	
	260490023	R5	Suburban Residential	0.13	1	Vacant	
	260490024	R5	Suburban Residential	0.18	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	260490025	R5	Suburban Residential	0.13	1	Vacant	
	260490026	R5	Suburban Residential	0.11	1	Vacant	
	260490027	R5	Suburban Residential	0.14	1	Vacant	
	260490028	R5	Suburban Residential	0.15	1	Vacant	
	260490029	R5	Suburban Residential	0.11	1	Vacant	
	260490030	R5	Suburban Residential	0.13	1	Vacant	
	260490031	R5	Suburban Residential	0.14	1	Vacant	
	260490032	R5	Suburban Residential	0.10	1	Vacant	
	260490033	R5	Suburban Residential	0.10	1	Vacant	
	260490034	R5	Suburban Residential	0.10	1	Vacant	
	260490035	R5	Suburban Residential	0.14	1	Vacant	
	260490036	R5	Suburban Residential	0.12	1	Vacant	
	260490037	R5	Suburban Residential	0.10	1	Vacant	
	260490038	R5	Suburban Residential	0.10	1	Vacant	
	260490039	R5	Suburban Residential	0.10	1	Vacant	
	260490040	R5	Suburban Residential	0.10	1	Vacant	
	260490041	R5	Suburban Residential	0.15	1	Vacant	
	260490042	R5	Suburban Residential	0.16	1	Vacant	
	260490043	R5	Suburban Residential	0.11	1	Vacant	
	260490044	R5	Suburban Residential	0.11	1	Vacant	
	260490045	R5	Suburban Residential	0.10	1	Vacant	
	260490046	R5	Suburban Residential	0.10	1	Vacant	
	260490047	R5	Suburban Residential	0.10	1	Vacant	
	260490048	R5	Suburban Residential	0.10	1	Vacant	
	260490049	R5	Suburban Residential	0.10	1	Vacant	
	260490050	R5	Suburban Residential	0.10	1	Vacant	
	260490051	R5	Suburban Residential	0.10	1	Vacant	
	260490052	R5	Suburban Residential	0.14	1	Vacant	
	260490053	R5	Suburban Residential	0.26	1	Vacant	
	260490054	R5	Suburban Residential	0.11	1	Vacant	
	260490055	R5	Suburban Residential	0.11	1	Vacant	
	260490061	R5	Suburban Residential	5.36	27	Vacant	
	260490062	R5	Suburban Residential	0.07	1	Vacant	
	260490063	R5	Suburban Residential	2.23	11	Vacant	
	260500001	R5	Suburban Residential	0.13	1	Vacant	
	260500002	R5	Suburban Residential	0.11	1	Vacant	
	260500003	R5	Suburban Residential	0.11	1	Vacant	
	260500004	R5	Suburban Residential	0.11	1	Vacant	
	260500005	R5	Suburban Residential	0.12	1	Vacant	
	260500006	R5	Suburban Residential	0.10	1	Vacant	
	260500007	R5	Suburban Residential	0.10	1	Vacant	
	260500008	R5	Suburban Residential	0.11	1	Vacant	
	260500009	R5	Suburban Residential	0.10	1	Vacant	
	260500010	R5	Suburban Residential	0.10	1	Vacant	
	260500011	R5	Suburban Residential	0.11	1	Vacant	
	260500012	R5	Suburban Residential	0.10	1	Vacant	
	260500013	R5	Suburban Residential	0.14	1	Vacant	
	260500014	R5	Suburban Residential	0.10	1	Vacant	
	260500015	R5	Suburban Residential	0.10	1	Vacant	
	260500016	R5	Suburban Residential	0.11	1	Vacant	
	260500017	R5	Suburban Residential	0.13	1	Vacant	
	260500018	R5	Suburban Residential	0.13	1	Vacant	
	260500019	R5	Suburban Residential	0.11	1	Vacant	
	260500020	R5	Suburban Residential	0.10	1	Vacant	
	260500021	R5	Suburban Residential	0.10	1	Vacant	
	260500022	R5	Suburban Residential	0.10	1	Vacant	
	260500023	R5	Suburban Residential	0.10	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	260500024	R5	Suburban Residential	0.11	1	Vacant	
	260500025	R5	Suburban Residential	0.13	1	Vacant	
	260500026	R5	Suburban Residential	0.12	1	Vacant	
	260500027	R5	Suburban Residential	0.11	1	Vacant	
	260500028	R5	Suburban Residential	0.10	1	Vacant	
	260500029	R5	Suburban Residential	0.10	1	Vacant	
	260500030	R5	Suburban Residential	0.11	1	Vacant	
	260500031	R5	Suburban Residential	0.10	1	Vacant	
	260500032	R5	Suburban Residential	0.11	1	Vacant	
	260500033	R5	Suburban Residential	0.12	1	Vacant	
	260500034	R5	Suburban Residential	0.12	1	Vacant	
	260500035	R5	Suburban Residential	0.11	1	Vacant	
	260500036	R5	Suburban Residential	0.10	1	Vacant	
	260500037	R5	Suburban Residential	0.11	1	Vacant	
	260500038	R5	Suburban Residential	0.11	1	Vacant	
	260500039	R5	Suburban Residential	0.12	1	Vacant	
	260500040	R5	Suburban Residential	0.17	1	Vacant	
	260500041	R5	Suburban Residential	0.12	1	Vacant	
	260500042	R5	Suburban Residential	0.03	1	Vacant	
	260500044	R5	Suburban Residential	0.12	1	Vacant	
	260500045	R5	Suburban Residential	0.04	1	Vacant	
	260500046	R5	Suburban Residential	0.08	1	Vacant	
	260500047	R5	Suburban Residential	0.18	1	Vacant	
	260500048	R5	Suburban Residential	2.51	13	Vacant	
	292193003	R5	Suburban Residential	0.23	1	Vacant	
	316020020	R5	Suburban Residential	1.22	6	Vacant	
	316020021	R5	Suburban Residential	1.22	6	Vacant	
	316020022	R5	Suburban Residential	0.91	4	Vacant	
	316020023	R5	Suburban Residential	0.91	4	Vacant	
	316020024	R5	Suburban Residential	4.69	24	Vacant	
	316020025	R5	Suburban Residential	4.80	24	Vacant	
	316020026	R5	Suburban Residential	4.37	22	Vacant	
	316030003	R5	Suburban Residential	1.16	6	Vacant	
	316030018	R5	Suburban Residential	2.48	12	Vacant	
	316030019	R5	Suburban Residential	2.48	12	Vacant	
	316030021	R5	Suburban Residential	1.38	7	Vacant	
	316100021	R5	Suburban Residential	3.53	18	Vacant	
	316100022	R5	Suburban Residential	3.53	18	Vacant	
	316100024	R5	Suburban Residential	6.73	34	Vacant	
	316100026	R5	Suburban Residential	3.06	15	Vacant	
	316110003	R5	Suburban Residential	2.37	12	Vacant	
	316110005	R5	Suburban Residential	4.19	21	Vacant	
	316110006	R5	Suburban Residential	3.81	19	Vacant	
	316110022	R5	Suburban Residential	1.66	8	Vacant	
	316110023	R5	Suburban Residential	4.73	24	Vacant	
	316110024	R5	Suburban Residential	4.66	23	Vacant	
	316160003	R5	Suburban Residential	0.62	3	Vacant	
	316160008	R5	Suburban Residential	7.25	36	Vacant	
	316160012	R5	Suburban Residential	0.17	1	Vacant	
	316160013	R5	Suburban Residential	0.04	1	Vacant	
	422070014	R5	Suburban Residential	10.09	50	Vacant	
	422070034	R5	Suburban Residential	2.24	11	Vacant	
	422070036	R5	Suburban Residential	2.45	12	Vacant	
	474100025	R5	Suburban Residential	27.68	138	Vacant	
	474110004	R5	Suburban Residential	28.05	140	Vacant	
	474110014	R5	Suburban Residential	4.17	21	Vacant	
	474110017	R5	Suburban Residential	0.01	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	474120010	R5	Suburban Residential	0.61	3	Vacant	
	474120011	R5	Suburban Residential	0.63	3	Vacant	
	474120045	R5	Suburban Residential	0.71	4	Vacant	
	474120046	R5	Suburban Residential	0.37	2	Vacant	
	474120047	R5	Suburban Residential	0.26	1	Vacant	
	474120054	R5	Suburban Residential	0.42	2	Vacant	
	474200014	R5	Suburban Residential	10.00	50	Vacant	
	475050040	R5	Suburban Residential	2.66	13	Vacant	
	475060001	R5	Suburban Residential	9.14	46	Vacant	
	475090003	R5	Suburban Residential	1.00	5	Vacant	
	475100004	R5	Suburban Residential	0.02	1	Vacant	
	475100005	R5	Suburban Residential	0.03	1	Vacant	
	475100006	R5	Suburban Residential	0.01	1	Vacant	
	475100018	R5	Suburban Residential	0.03	1	Vacant	
	475100019	R5	Suburban Residential	0.16	1	Vacant	
	475111036	R5	Suburban Residential	0.38	2	Vacant	
	475150003	R5	Suburban Residential	4.82	24	Vacant	
	475160056	R5	Suburban Residential	0.19	1	Vacant	
	475160065	R5	Suburban Residential	1.48	7	Vacant	
	475210006	R5	Suburban Residential	0.59	3	Vacant	
	475210047	R5	Suburban Residential	0.38	2	Vacant	
	475220060	R5	Suburban Residential	0.68	3	Vacant	
	475220061	R5	Suburban Residential	0.73	4	Vacant	
	475220062	R5	Suburban Residential	0.88	4	Vacant	
	475220063	R5	Suburban Residential	0.82	4	Vacant	
	475232017	R5	Suburban Residential	0.21	1	Vacant	
	475250075	R5	Suburban Residential	0.26	1	Vacant	
	475250076	R5	Suburban Residential	0.26	1	Vacant	
	475272008	R5	Suburban Residential	0.16	1	Vacant	
	475280005	R5	Suburban Residential	0.03	1	Vacant	
	475280073	R5	Suburban Residential	0.23	1	Vacant	
	475280078	R5	Suburban Residential	0.16	1	Vacant	
	475280079	R5	Suburban Residential	0.16	1	Vacant	
	475280080	R5	Suburban Residential	0.16	1	Vacant	
	475280081	R5	Suburban Residential	0.16	1	Vacant	
	475280082	R5	Suburban Residential	0.16	1	Vacant	
	475280083	R5	Suburban Residential	0.16	1	Vacant	
	475280084	R5	Suburban Residential	0.16	1	Vacant	
	475280085	R5	Suburban Residential	0.16	1	Vacant	
	475351019	R5	Suburban Residential	0.96	5	Vacant	
	475360001	R5	Suburban Residential	0.22	1	Vacant	
	475360002	R5	Suburban Residential	0.21	1	Vacant	
	475360003	R5	Suburban Residential	0.21	1	Vacant	
	478090011	R5	Suburban Residential	8.04	40	Vacant	
	478090012	R5	Suburban Residential	2.44	12	Vacant	
	478090015	R5	Suburban Residential	1.86	9	Vacant	
	478090019	R5	Suburban Residential	2.18	11	Vacant	
	478090022	R5	Suburban Residential	1.09	6	Vacant	
	478090030	R5	Suburban Residential	0.81	4	Vacant	
	478090031	R5	Suburban Residential	1.14	6	Vacant	
	478220002	R5	Suburban Residential	9.39	47	Vacant	
	478220003	R5	Suburban Residential	8.98	45	Vacant	
	478220012	R5	Suburban Residential	8.98	45	Vacant	
	478220013	R5	Suburban Residential	9.39	47	Vacant	
	479132049	R5	Suburban Residential	0.21	1	Vacant	RDA
	479150062	R5	Suburban Residential	0.97	5	Vacant	
	479170002	R5	Suburban Residential	0.20	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	479170033	R5	Suburban Residential	0.69	3	Vacant	
	479391054	R5	Suburban Residential	0.03	1	Vacant	RDA
	479391060	R5	Suburban Residential	0.01	1	Vacant	RDA
	479391062	R5	Suburban Residential	0.05	1	Vacant	RDA
	481342020	R5	Suburban Residential	0.12	1	Vacant	
	481342036	R5	Suburban Residential	0.44	2	Vacant	
	481342037	R5	Suburban Residential	0.46	2	Vacant	
	482121001	R5	Suburban Residential	4.34	22	Vacant	RDA
	482152042	R5	Suburban Residential	0.01	1	Vacant	RDA
	482161021	R5	Suburban Residential	4.06	20	Vacant	RDA
	482161022	R5	Suburban Residential	1.15	6	Vacant	RDA
	482161023	R5	Suburban Residential	1.11	6	Vacant	RDA
	482161024	R5	Suburban Residential	2.30	12	Vacant	RDA
	482170009	R5	Suburban Residential	0.77	4	Vacant	
	482170011	R5	Suburban Residential	0.39	2	Vacant	
	482170014	R5	Suburban Residential	0.02	1	Vacant	
	482170016	R5	Suburban Residential	0.02	1	Vacant	
	482170049	R5	Suburban Residential	0.39	2	Vacant	
	482170050	R5	Suburban Residential	0.06	1	Vacant	
	482170051	R5	Suburban Residential	0.03	1	Vacant	
	485020005	R5	Suburban Residential	8.04	40	Vacant	FLOOD,RDA
	485032001	R5	Suburban Residential	0.16	1	Vacant	RDA
	485032013	R5	Suburban Residential	0.17	1	Vacant	RDA
	485111001	R5	Suburban Residential	0.17	1	Vacant	
	485111002	R5	Suburban Residential	0.17	1	Vacant	
	485111003	R5	Suburban Residential	0.17	1	Vacant	
	485111004	R5	Suburban Residential	0.17	1	Vacant	
	485111005	R5	Suburban Residential	0.17	1	Vacant	
	485111006	R5	Suburban Residential	0.17	1	Vacant	
	485111007	R5	Suburban Residential	0.15	1	Vacant	
	485111008	R5	Suburban Residential	0.19	1	Vacant	
	485111009	R5	Suburban Residential	0.23	1	Vacant	
	485111010	R5	Suburban Residential	0.21	1	Vacant	
	485111011	R5	Suburban Residential	0.20	1	Vacant	
	485111012	R5	Suburban Residential	0.16	1	Vacant	
	485111013	R5	Suburban Residential	0.17	1	Vacant	
	485111014	R5	Suburban Residential	0.17	1	Vacant	
	485111015	R5	Suburban Residential	0.17	1	Vacant	
	485111016	R5	Suburban Residential	0.17	1	Vacant	
	485111017	R5	Suburban Residential	0.17	1	Vacant	
	485111018	R5	Suburban Residential	0.19	1	Vacant	
	485112001	R5	Suburban Residential	0.19	1	Vacant	
	485112002	R5	Suburban Residential	0.17	1	Vacant	
	485112003	R5	Suburban Residential	0.17	1	Vacant	
	485112004	R5	Suburban Residential	0.17	1	Vacant	
	485112005	R5	Suburban Residential	0.17	1	Vacant	
	485112006	R5	Suburban Residential	0.21	1	Vacant	
	485112007	R5	Suburban Residential	0.20	1	Vacant	
	485112008	R5	Suburban Residential	0.20	1	Vacant	
	485112022	R5	Suburban Residential	0.20	1	Vacant	
	485112023	R5	Suburban Residential	0.19	1	Vacant	
	485113003	R5	Suburban Residential	0.18	1	Vacant	
	485113004	R5	Suburban Residential	0.21	1	Vacant	
	485113005	R5	Suburban Residential	0.20	1	Vacant	
	485113006	R5	Suburban Residential	0.18	1	Vacant	
	485113007	R5	Suburban Residential	0.18	1	Vacant	
	485113008	R5	Suburban Residential	0.17	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	485113009	R5	Suburban Residential	0.17	1	Vacant	
	485113010	R5	Suburban Residential	0.17	1	Vacant	
	485113011	R5	Suburban Residential	0.17	1	Vacant	
	485113012	R5	Suburban Residential	0.17	1	Vacant	
	485113013	R5	Suburban Residential	0.17	1	Vacant	
	485113014	R5	Suburban Residential	0.17	1	Vacant	
	485113015	R5	Suburban Residential	0.17	1	Vacant	
	485113016	R5	Suburban Residential	0.18	1	Vacant	
	485113017	R5	Suburban Residential	0.23	1	Vacant	
	485113018	R5	Suburban Residential	0.21	1	Vacant	
	485113019	R5	Suburban Residential	0.17	1	Vacant	
	485113020	R5	Suburban Residential	0.17	1	Vacant	
	485113021	R5	Suburban Residential	0.17	1	Vacant	
	485113022	R5	Suburban Residential	0.17	1	Vacant	
	485113023	R5	Suburban Residential	0.17	1	Vacant	
	485113024	R5	Suburban Residential	0.17	1	Vacant	
	485113025	R5	Suburban Residential	0.17	1	Vacant	
	485113026	R5	Suburban Residential	0.17	1	Vacant	
	485113027	R5	Suburban Residential	0.17	1	Vacant	
	485113028	R5	Suburban Residential	0.17	1	Vacant	
	485113029	R5	Suburban Residential	0.18	1	Vacant	
	485113033	R5	Suburban Residential	0.17	1	Vacant	
	485114001	R5	Suburban Residential	0.19	1	Vacant	
	485114002	R5	Suburban Residential	0.17	1	Vacant	
	485114003	R5	Suburban Residential	0.17	1	Vacant	
	485114004	R5	Suburban Residential	0.17	1	Vacant	
	485114005	R5	Suburban Residential	0.17	1	Vacant	
	485114006	R5	Suburban Residential	0.17	1	Vacant	
	485114007	R5	Suburban Residential	0.17	1	Vacant	
	485114008	R5	Suburban Residential	0.17	1	Vacant	
	485114009	R5	Suburban Residential	0.17	1	Vacant	
	485114010	R5	Suburban Residential	0.17	1	Vacant	
	485114011	R5	Suburban Residential	0.19	1	Vacant	
	485114012	R5	Suburban Residential	0.19	1	Vacant	
	485114013	R5	Suburban Residential	0.17	1	Vacant	
	485114014	R5	Suburban Residential	0.17	1	Vacant	
	485114015	R5	Suburban Residential	0.17	1	Vacant	
	485114016	R5	Suburban Residential	0.17	1	Vacant	
	485114017	R5	Suburban Residential	0.17	1	Vacant	
	485114018	R5	Suburban Residential	0.17	1	Vacant	
	485114019	R5	Suburban Residential	0.17	1	Vacant	
	485114020	R5	Suburban Residential	0.17	1	Vacant	
	485114021	R5	Suburban Residential	0.17	1	Vacant	
	485114022	R5	Suburban Residential	0.17	1	Vacant	
	485121001	R5	Suburban Residential	0.18	1	Vacant	
	485121002	R5	Suburban Residential	0.18	1	Vacant	
	485121003	R5	Suburban Residential	0.17	1	Vacant	
	485121004	R5	Suburban Residential	0.17	1	Vacant	
	485121005	R5	Suburban Residential	0.17	1	Vacant	
	485121006	R5	Suburban Residential	0.17	1	Vacant	
	485121007	R5	Suburban Residential	0.17	1	Vacant	
	485121008	R5	Suburban Residential	0.17	1	Vacant	
	485121009	R5	Suburban Residential	0.17	1	Vacant	
	485121010	R5	Suburban Residential	0.19	1	Vacant	
	485121014	R5	Suburban Residential	0.17	1	Vacant	
	485121015	R5	Suburban Residential	0.17	1	Vacant	
	485121016	R5	Suburban Residential	0.16	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	485121017	R5	Suburban Residential	0.18	1	Vacant	
	485121018	R5	Suburban Residential	0.19	1	Vacant	
	485121019	R5	Suburban Residential	0.23	1	Vacant	
	485121020	R5	Suburban Residential	0.20	1	Vacant	
	485121021	R5	Suburban Residential	0.21	1	Vacant	
	485121024	R5	Suburban Residential	0.07	1	Vacant	
	485121025	R5	Suburban Residential	0.18	1	Vacant	
	485122001	R5	Suburban Residential	0.17	1	Vacant	
	485122002	R5	Suburban Residential	0.17	1	Vacant	
	485122003	R5	Suburban Residential	0.17	1	Vacant	
	485122004	R5	Suburban Residential	0.17	1	Vacant	
	485122005	R5	Suburban Residential	0.17	1	Vacant	
	485122006	R5	Suburban Residential	0.21	1	Vacant	
	485122007	R5	Suburban Residential	0.19	1	Vacant	
	485122008	R5	Suburban Residential	0.23	1	Vacant	
	485122009	R5	Suburban Residential	0.26	1	Vacant	
	485122010	R5	Suburban Residential	0.17	1	Vacant	
	485122011	R5	Suburban Residential	0.17	1	Vacant	
	485122012	R5	Suburban Residential	0.19	1	Vacant	
	485123001	R5	Suburban Residential	0.18	1	Vacant	
	485123002	R5	Suburban Residential	0.19	1	Vacant	
	485123003	R5	Suburban Residential	0.19	1	Vacant	
	485123004	R5	Suburban Residential	0.30	2	Vacant	
	485123005	R5	Suburban Residential	0.30	2	Vacant	
	485123006	R5	Suburban Residential	0.18	1	Vacant	
	485123007	R5	Suburban Residential	0.18	1	Vacant	
	485123008	R5	Suburban Residential	0.17	1	Vacant	
	485123009	R5	Suburban Residential	0.17	1	Vacant	
	485123010	R5	Suburban Residential	0.17	1	Vacant	
	485123011	R5	Suburban Residential	0.17	1	Vacant	
	485123012	R5	Suburban Residential	0.17	1	Vacant	
	485123013	R5	Suburban Residential	0.17	1	Vacant	
	485123014	R5	Suburban Residential	0.17	1	Vacant	
	485123015	R5	Suburban Residential	0.20	1	Vacant	
	485123016	R5	Suburban Residential	0.19	1	Vacant	
	485123017	R5	Suburban Residential	0.17	1	Vacant	
	485123018	R5	Suburban Residential	0.17	1	Vacant	
	485123019	R5	Suburban Residential	0.17	1	Vacant	
	485123020	R5	Suburban Residential	0.17	1	Vacant	
	485123021	R5	Suburban Residential	0.17	1	Vacant	
	485123022	R5	Suburban Residential	0.17	1	Vacant	
	485123023	R5	Suburban Residential	0.17	1	Vacant	
	485123024	R5	Suburban Residential	0.18	1	Vacant	
	485123025	R5	Suburban Residential	0.18	1	Vacant	
	485123026	R5	Suburban Residential	0.18	1	Vacant	
	485123027	R5	Suburban Residential	0.17	1	Vacant	
	485123028	R5	Suburban Residential	0.17	1	Vacant	
	485123029	R5	Suburban Residential	0.17	1	Vacant	
	485123030	R5	Suburban Residential	0.17	1	Vacant	
	485123031	R5	Suburban Residential	0.19	1	Vacant	
	485220023	R5	Suburban Residential	18.06	90	Vacant	
	485220032	R5	Suburban Residential	19.12	96	Vacant	
	486240002	R5	Suburban Residential	9.00	45	Vacant	FLOOD
	486240011	R5	Suburban Residential	18.78	94	Vacant	FLOOD
	486250007	R5	Suburban Residential	9.39	47	Vacant	
	486260008	R5	Suburban Residential	9.39	47	Vacant	
	486260009	R5	Suburban Residential	8.97	45	Vacant	FLOOD

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	486310014	R5	Suburban Residential	8.96	45	Vacant	FLOOD
	486522012	R5	Suburban Residential	0.76	4	Vacant	
	486522013	R5	Suburban Residential	4.58	23	Vacant	FLOOD
	486540010	R5	Suburban Residential	0.46	2	Vacant	FLOOD
	486550010	R5	Suburban Residential	0.44	2	Vacant	FLOOD
	487042010	R5	Suburban Residential	0.01	1	Vacant	
	487053001	R5	Suburban Residential	0.03	1	Vacant	
	487091002	R5	Suburban Residential	0.17	1	Vacant	
	487230008	R5	Suburban Residential	0.20	1	Vacant	
	487230009	R5	Suburban Residential	0.23	1	Vacant	
	487230015	R5	Suburban Residential	0.20	1	Vacant	
	487230016	R5	Suburban Residential	0.19	1	Vacant	
	487242007	R5	Suburban Residential	0.25	1	Vacant	RDA
	487242008	R5	Suburban Residential	0.32	2	Vacant	RDA
	487242009	R5	Suburban Residential	0.22	1	Vacant	RDA
	487242010	R5	Suburban Residential	0.21	1	Vacant	RDA
	487242011	R5	Suburban Residential	0.20	1	Vacant	RDA
	487243016	R5	Suburban Residential	0.22	1	Vacant	RDA
	487243017	R5	Suburban Residential	0.21	1	Vacant	RDA
	487243018	R5	Suburban Residential	0.21	1	Vacant	RDA
	487243019	R5	Suburban Residential	0.21	1	Vacant	RDA
	487243020	R5	Suburban Residential	0.21	1	Vacant	RDA
	487243021	R5	Suburban Residential	0.21	1	Vacant	RDA
	487243022	R5	Suburban Residential	0.24	1	Vacant	RDA
	487260002	R5	Suburban Residential	2.44	12	Vacant	
	487260003	R5	Suburban Residential	2.44	12	Vacant	
	487320001	R5	Suburban Residential	0.21	1	Vacant	
	487320002	R5	Suburban Residential	0.20	1	Vacant	
	487320003	R5	Suburban Residential	0.20	1	Vacant	
	487320004	R5	Suburban Residential	0.20	1	Vacant	
	487320005	R5	Suburban Residential	0.21	1	Vacant	
	487320006	R5	Suburban Residential	0.25	1	Vacant	
	487320007	R5	Suburban Residential	0.27	1	Vacant	
	487320008	R5	Suburban Residential	0.18	1	Vacant	
	487320009	R5	Suburban Residential	0.21	1	Vacant	
	487320010	R5	Suburban Residential	0.26	1	Vacant	
	487320011	R5	Suburban Residential	0.27	1	Vacant	
	487320012	R5	Suburban Residential	0.21	1	Vacant	
	487320013	R5	Suburban Residential	0.23	1	Vacant	
	487320014	R5	Suburban Residential	0.93	5	Vacant	
	487321001	R5	Suburban Residential	0.22	1	Vacant	
	487321002	R5	Suburban Residential	0.18	1	Vacant	
	487321003	R5	Suburban Residential	0.23	1	Vacant	
	487321004	R5	Suburban Residential	0.25	1	Vacant	
	487321005	R5	Suburban Residential	0.19	1	Vacant	
	487321006	R5	Suburban Residential	0.17	1	Vacant	
	487321007	R5	Suburban Residential	0.20	1	Vacant	
	487321008	R5	Suburban Residential	0.22	1	Vacant	
	487321009	R5	Suburban Residential	0.23	1	Vacant	
	487321010	R5	Suburban Residential	0.22	1	Vacant	
	487321011	R5	Suburban Residential	0.20	1	Vacant	
	487321012	R5	Suburban Residential	0.19	1	Vacant	
	487321013	R5	Suburban Residential	0.18	1	Vacant	
	487321014	R5	Suburban Residential	0.17	1	Vacant	
	487321015	R5	Suburban Residential	0.17	1	Vacant	
	487321016	R5	Suburban Residential	0.17	1	Vacant	
	487321017	R5	Suburban Residential	0.18	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	487321018	R5	Suburban Residential	0.19	1	Vacant	
	487321019	R5	Suburban Residential	0.17	1	Vacant	
	487321020	R5	Suburban Residential	0.17	1	Vacant	
	487321021	R5	Suburban Residential	0.17	1	Vacant	
	487321022	R5	Suburban Residential	0.18	1	Vacant	
	487321023	R5	Suburban Residential	0.19	1	Vacant	
	487321024	R5	Suburban Residential	0.20	1	Vacant	
	487321025	R5	Suburban Residential	0.21	1	Vacant	
	487321026	R5	Suburban Residential	0.19	1	Vacant	
	487321027	R5	Suburban Residential	0.23	1	Vacant	
	487321028	R5	Suburban Residential	0.19	1	Vacant	
	487321029	R5	Suburban Residential	0.29	2	Vacant	
	487321030	R5	Suburban Residential	0.23	1	Vacant	
	487321031	R5	Suburban Residential	0.24	1	Vacant	
	487321032	R5	Suburban Residential	0.29	2	Vacant	
	487330001	R5	Suburban Residential	0.21	1	Vacant	
	487330002	R5	Suburban Residential	0.19	1	Vacant	
	487330003	R5	Suburban Residential	0.21	1	Vacant	
	487330004	R5	Suburban Residential	0.17	1	Vacant	
	487333009	R5	Suburban Residential	0.21	1	Vacant	
	487333010	R5	Suburban Residential	0.20	1	Vacant	
	487333011	R5	Suburban Residential	0.23	1	Vacant	
	487333012	R5	Suburban Residential	0.22	1	Vacant	
	487340001	R5	Suburban Residential	0.21	1	Vacant	
	487340002	R5	Suburban Residential	0.21	1	Vacant	
	487340003	R5	Suburban Residential	0.19	1	Vacant	
	487340004	R5	Suburban Residential	0.26	1	Vacant	
	487340005	R5	Suburban Residential	0.32	2	Vacant	
	487340006	R5	Suburban Residential	0.25	1	Vacant	
	487340007	R5	Suburban Residential	0.19	1	Vacant	
	487340008	R5	Suburban Residential	0.19	1	Vacant	
	487340013	R5	Suburban Residential	0.19	1	Vacant	
	487340014	R5	Suburban Residential	0.18	1	Vacant	
	487340015	R5	Suburban Residential	0.18	1	Vacant	
	487340016	R5	Suburban Residential	0.18	1	Vacant	
	487340017	R5	Suburban Residential	0.18	1	Vacant	
	487340018	R5	Suburban Residential	0.18	1	Vacant	
	487340020	R5	Suburban Residential	0.19	1	Vacant	
	487341004	R5	Suburban Residential	0.21	1	Vacant	
	487341005	R5	Suburban Residential	0.21	1	Vacant	
	487341011	R5	Suburban Residential	0.27	1	Vacant	
	487341016	R5	Suburban Residential	0.19	1	Vacant	
	487341017	R5	Suburban Residential	0.19	1	Vacant	
	487341018	R5	Suburban Residential	0.19	1	Vacant	
	487341019	R5	Suburban Residential	0.19	1	Vacant	
	487341020	R5	Suburban Residential	0.18	1	Vacant	
	487341021	R5	Suburban Residential	0.18	1	Vacant	
	487341022	R5	Suburban Residential	0.17	1	Vacant	
	487341023	R5	Suburban Residential	0.22	1	Vacant	
	487342001	R5	Suburban Residential	0.20	1	Vacant	
	487342002	R5	Suburban Residential	0.19	1	Vacant	
	487342003	R5	Suburban Residential	0.28	1	Vacant	
	487342005	R5	Suburban Residential	0.36	2	Vacant	
	487343005	R5	Suburban Residential	0.24	1	Vacant	
	487343006	R5	Suburban Residential	0.24	1	Vacant	
	487343007	R5	Suburban Residential	0.24	1	Vacant	
	487343008	R5	Suburban Residential	0.24	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	487343009	R5	Suburban Residential	0.24	1	Vacant	
	487343010	R5	Suburban Residential	0.24	1	Vacant	
	487343011	R5	Suburban Residential	0.34	2	Vacant	
	487370016	R5	Suburban Residential	8.09	40	Vacant	
	487470014	R5	Suburban Residential	5.41	27	Vacant	
	487470016	R5	Suburban Residential	0.85	4	Vacant	
	487470028	R5	Suburban Residential	17.94	90	Vacant	
	487540001	R5	Suburban Residential	0.18	1	Vacant	
	487540002	R5	Suburban Residential	0.20	1	Vacant	
	487540003	R5	Suburban Residential	0.25	1	Vacant	
	487540004	R5	Suburban Residential	0.24	1	Vacant	
	487540005	R5	Suburban Residential	0.28	1	Vacant	
	487540006	R5	Suburban Residential	0.20	1	Vacant	
	487540007	R5	Suburban Residential	0.21	1	Vacant	
	487540008	R5	Suburban Residential	0.17	1	Vacant	
	487540009	R5	Suburban Residential	0.20	1	Vacant	
	487540010	R5	Suburban Residential	0.23	1	Vacant	
	487540011	R5	Suburban Residential	0.20	1	Vacant	
	487540012	R5	Suburban Residential	0.20	1	Vacant	
	487540013	R5	Suburban Residential	0.21	1	Vacant	
	487540014	R5	Suburban Residential	0.22	1	Vacant	
	487540015	R5	Suburban Residential	0.24	1	Vacant	
	487540016	R5	Suburban Residential	0.25	1	Vacant	
	487540017	R5	Suburban Residential	1.01	5	Vacant	
	487541001	R5	Suburban Residential	0.24	1	Vacant	
	487541002	R5	Suburban Residential	0.22	1	Vacant	
	487541003	R5	Suburban Residential	0.22	1	Vacant	
	487541004	R5	Suburban Residential	0.24	1	Vacant	
	487541005	R5	Suburban Residential	0.25	1	Vacant	
	487541006	R5	Suburban Residential	0.25	1	Vacant	
	487541007	R5	Suburban Residential	0.24	1	Vacant	
	487541008	R5	Suburban Residential	0.21	1	Vacant	
	487560008	R5	Suburban Residential	0.19	1	Vacant	RDA
	487560009	R5	Suburban Residential	0.17	1	Vacant	RDA
	487560010	R5	Suburban Residential	0.17	1	Vacant	RDA
	487560011	R5	Suburban Residential	0.17	1	Vacant	RDA
	487560012	R5	Suburban Residential	0.19	1	Vacant	RDA
	487560013	R5	Suburban Residential	0.27	1	Vacant	RDA
	487560014	R5	Suburban Residential	0.24	1	Vacant	RDA
	487560015	R5	Suburban Residential	0.19	1	Vacant	RDA
	487560016	R5	Suburban Residential	0.20	1	Vacant	RDA
	487560017	R5	Suburban Residential	0.20	1	Vacant	RDA
	487560018	R5	Suburban Residential	0.19	1	Vacant	RDA
	487560019	R5	Suburban Residential	0.20	1	Vacant	RDA
	487560020	R5	Suburban Residential	0.21	1	Vacant	RDA
	487560021	R5	Suburban Residential	0.22	1	Vacant	RDA
	487560022	R5	Suburban Residential	0.22	1	Vacant	RDA
	487560023	R5	Suburban Residential	0.22	1	Vacant	RDA
	487560024	R5	Suburban Residential	0.21	1	Vacant	RDA
	487560025	R5	Suburban Residential	0.41	2	Vacant	RDA
	487560026	R5	Suburban Residential	0.27	1	Vacant	RDA
	487560027	R5	Suburban Residential	0.22	1	Vacant	RDA
	487560028	R5	Suburban Residential	0.26	1	Vacant	RDA
	487560029	R5	Suburban Residential	0.19	1	Vacant	RDA
	487560030	R5	Suburban Residential	0.21	1	Vacant	RDA
	487560031	R5	Suburban Residential	0.21	1	Vacant	RDA
	487560032	R5	Suburban Residential	0.21	1	Vacant	RDA

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	487560033	R5	Suburban Residential	0.21	1	Vacant	RDA
	487560034	R5	Suburban Residential	0.22	1	Vacant	RDA
	487561005	R5	Suburban Residential	0.22	1	Vacant	RDA
	487561006	R5	Suburban Residential	0.22	1	Vacant	RDA
	487561007	R5	Suburban Residential	0.22	1	Vacant	RDA
	487561008	R5	Suburban Residential	0.22	1	Vacant	RDA
	487561009	R5	Suburban Residential	0.23	1	Vacant	RDA
	487561010	R5	Suburban Residential	0.20	1	Vacant	RDA
	487561011	R5	Suburban Residential	0.20	1	Vacant	RDA
	487561012	R5	Suburban Residential	0.19	1	Vacant	RDA
	487561013	R5	Suburban Residential	0.18	1	Vacant	RDA
	487561014	R5	Suburban Residential	0.18	1	Vacant	RDA
	487561015	R5	Suburban Residential	0.18	1	Vacant	RDA
	487561016	R5	Suburban Residential	0.18	1	Vacant	RDA
	487561017	R5	Suburban Residential	0.18	1	Vacant	RDA
	487561018	R5	Suburban Residential	0.18	1	Vacant	RDA
	487561019	R5	Suburban Residential	0.17	1	Vacant	RDA
	487561020	R5	Suburban Residential	0.17	1	Vacant	RDA
	487561021	R5	Suburban Residential	0.17	1	Vacant	RDA
	487561022	R5	Suburban Residential	0.17	1	Vacant	RDA
	487561023	R5	Suburban Residential	0.17	1	Vacant	RDA
	487561024	R5	Suburban Residential	0.26	1	Vacant	RDA
	487561025	R5	Suburban Residential	0.21	1	Vacant	RDA
	487561026	R5	Suburban Residential	0.21	1	Vacant	RDA
	487561027	R5	Suburban Residential	0.20	1	Vacant	RDA
	487561028	R5	Suburban Residential	0.25	1	Vacant	RDA
	487561029	R5	Suburban Residential	0.22	1	Vacant	RDA
	487561030	R5	Suburban Residential	0.22	1	Vacant	RDA
	487561031	R5	Suburban Residential	0.25	1	Vacant	RDA
	487561032	R5	Suburban Residential	0.34	2	Vacant	RDA
	487561033	R5	Suburban Residential	0.46	2	Vacant	RDA
	487561034	R5	Suburban Residential	0.46	2	Vacant	RDA
	487561035	R5	Suburban Residential	0.34	2	Vacant	RDA
	487561036	R5	Suburban Residential	0.22	1	Vacant	RDA
	487561037	R5	Suburban Residential	0.25	1	Vacant	RDA
	487561038	R5	Suburban Residential	0.28	1	Vacant	RDA
	487561039	R5	Suburban Residential	0.36	2	Vacant	RDA
	487561040	R5	Suburban Residential	0.19	1	Vacant	RDA
	487561041	R5	Suburban Residential	0.17	1	Vacant	RDA
	487561042	R5	Suburban Residential	0.18	1	Vacant	RDA
	487561043	R5	Suburban Residential	0.18	1	Vacant	RDA
	487561044	R5	Suburban Residential	0.20	1	Vacant	RDA
	487570001	R5	Suburban Residential	0.18	1	Vacant	
	487570002	R5	Suburban Residential	0.17	1	Vacant	
	487570003	R5	Suburban Residential	0.17	1	Vacant	
	487570004	R5	Suburban Residential	0.17	1	Vacant	
	487570005	R5	Suburban Residential	0.16	1	Vacant	
	487570006	R5	Suburban Residential	0.17	1	Vacant	
	487570007	R5	Suburban Residential	0.18	1	Vacant	
	487570008	R5	Suburban Residential	0.18	1	Vacant	
	487570009	R5	Suburban Residential	0.17	1	Vacant	
	487570010	R5	Suburban Residential	0.17	1	Vacant	
	487570011	R5	Suburban Residential	0.17	1	Vacant	
	487570012	R5	Suburban Residential	0.18	1	Vacant	
	487570013	R5	Suburban Residential	0.29	1	Vacant	
	487570014	R5	Suburban Residential	0.23	1	Vacant	
	487570015	R5	Suburban Residential	0.18	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	487570016	R5	Suburban Residential	0.19	1	Vacant	
	487570017	R5	Suburban Residential	0.19	1	Vacant	
	487570018	R5	Suburban Residential	0.19	1	Vacant	
	487570019	R5	Suburban Residential	0.20	1	Vacant	
	487571001	R5	Suburban Residential	0.16	1	Vacant	
	487571002	R5	Suburban Residential	0.16	1	Vacant	
	487571003	R5	Suburban Residential	0.16	1	Vacant	
	487571004	R5	Suburban Residential	0.17	1	Vacant	
	487571005	R5	Suburban Residential	0.16	1	Vacant	
	487571006	R5	Suburban Residential	0.30	2	Vacant	
	487572001	R5	Suburban Residential	0.18	1	Vacant	
	487572002	R5	Suburban Residential	0.17	1	Vacant	
	487572003	R5	Suburban Residential	0.16	1	Vacant	
	487572004	R5	Suburban Residential	0.17	1	Vacant	
	487572005	R5	Suburban Residential	0.23	1	Vacant	
	487572006	R5	Suburban Residential	0.26	1	Vacant	
	487572007	R5	Suburban Residential	0.24	1	Vacant	
	487572008	R5	Suburban Residential	0.26	1	Vacant	
	487572009	R5	Suburban Residential	0.28	1	Vacant	
	487572010	R5	Suburban Residential	0.29	1	Vacant	
	487572011	R5	Suburban Residential	0.31	2	Vacant	
	487572012	R5	Suburban Residential	0.24	1	Vacant	
	487572013	R5	Suburban Residential	0.24	1	Vacant	
	487572014	R5	Suburban Residential	0.18	1	Vacant	
	487572015	R5	Suburban Residential	0.17	1	Vacant	
	487572016	R5	Suburban Residential	0.17	1	Vacant	
	487572017	R5	Suburban Residential	0.17	1	Vacant	
	487572018	R5	Suburban Residential	0.17	1	Vacant	
	487572019	R5	Suburban Residential	0.17	1	Vacant	
	487572020	R5	Suburban Residential	0.17	1	Vacant	
	487572021	R5	Suburban Residential	0.17	1	Vacant	
	487572022	R5	Suburban Residential	0.19	1	Vacant	
	487572023	R5	Suburban Residential	0.18	1	Vacant	
	487572024	R5	Suburban Residential	0.17	1	Vacant	
	487572025	R5	Suburban Residential	0.17	1	Vacant	
	487572026	R5	Suburban Residential	0.17	1	Vacant	
	487572027	R5	Suburban Residential	0.17	1	Vacant	
	487572028	R5	Suburban Residential	0.28	1	Vacant	
	487572029	R5	Suburban Residential	0.21	1	Vacant	
	487572030	R5	Suburban Residential	0.22	1	Vacant	
	487572031	R5	Suburban Residential	0.18	1	Vacant	
	487572032	R5	Suburban Residential	0.17	1	Vacant	
	487572033	R5	Suburban Residential	0.17	1	Vacant	
	487572034	R5	Suburban Residential	0.17	1	Vacant	
	487572035	R5	Suburban Residential	0.17	1	Vacant	
	487572036	R5	Suburban Residential	0.17	1	Vacant	
	487572037	R5	Suburban Residential	0.17	1	Vacant	
	487572038	R5	Suburban Residential	0.23	1	Vacant	
	487572039	R5	Suburban Residential	0.18	1	Vacant	
	487572040	R5	Suburban Residential	0.18	1	Vacant	
	487572041	R5	Suburban Residential	0.17	1	Vacant	
	487572042	R5	Suburban Residential	0.19	1	Vacant	
	487572043	R5	Suburban Residential	0.22	1	Vacant	
	487572044	R5	Suburban Residential	0.24	1	Vacant	
	487573001	R5	Suburban Residential	0.22	1	Vacant	
	487573002	R5	Suburban Residential	0.18	1	Vacant	
	487573003	R5	Suburban Residential	0.17	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	487574001	R5	Suburban Residential	0.05	0	Vacant	
	487574002	R5	Suburban Residential	0.02	0	Vacant	
	488330012	R5	Suburban Residential	9.40	47	Vacant	
	488350005	R5	Suburban Residential	9.40	47	Vacant	
	488350006	R5	Suburban Residential	8.97	45	Vacant	
	488350007	R5	Suburban Residential	8.97	45	Vacant	
	478120001	VL	Suburban Residential	2.00	8	Vacant	SP
	478120002	VL	Suburban Residential	2.20	9	Vacant	SP
	478120007	VL	Suburban Residential	1.83	7	Vacant	SP
	478120008	VL	Suburban Residential	2.20	9	Vacant	SP
	478120017	VL	Suburban Residential	2.00	8	Vacant	SP
	478120018	VL	Suburban Residential	2.26	9	Vacant	SP
	478240024	VL	Suburban Residential	9.39	38	Vacant	SP
Parcels per Density Designation:	**1,315**		**Acres per Density Designation:**	**4,735**			
	Units per Density Designation:		**9,881**		**Units per Density Designation 80%:**		**7905**
O/OC	297170029	O	Office	8.46	0	Vacant	RDA
	475190005	O	Office	2.87	0	Vacant	
	479070051	O	Office	1.15	0	Vacant	
	479090003	O	Office	0.49	0	Vacant	RDA
	479120043	O	Office	0.34	0	Vacant	RDA
	482180074	O	Office	2.37	0	Vacant	
	484030002	O	Office	0.79	0	Vacant	
	484030003	O	Office	4.55	0	Vacant	
	484030025	O	Office	3.21	0	Vacant	
	486310022	O	Office	18.81	0	Vacant	
	487470022	O	Office	18.48	0	Vacant	
	488210015	O	Office	2.75	0	Vacant	
	488260012	O	Office	8.08	0	Vacant	
	488260014	O	Office	8.34	0	Vacant	
	488260017	O	Office	1.87	0	Vacant	
	488260018	O	Office	1.88	0	Vacant	
	488260021	O	Office	2.14	0	Vacant	
	488260022	O	Office	2.13	0	Vacant	
	488260033	O	Office	8.01	0	Vacant	
	488260035	O	Office	7.80	0	Vacant	
	488260037	O	Office	7.39	0	Vacant	FAULT
	488310005	O	Office	7.61	0	Vacant	
	488310006	O	Office	3.00	0	Vacant	
	488320008	O	Office	3.66	0	Vacant	
	488320009	O	Office	0.87	0	Vacant	
	292193023	OC	Office	0.06	0	Vacant	
	479120027	OC	Office	1.01	0	Vacant	RDA
	479120029	OC	Office	0.65	0	Vacant	RDA
	479120042	OC	Office	0.36	0	Vacant	RDA
	479131012	OC	Office	3.77	0	Vacant	RDA
	479140023	OC	Office	1.35	0	Vacant	RDA
	479140024	OC	Office	2.14	0	Vacant	RDA
	484030016	OC	Office	9.00	0	Vacant	
	484072106	OC	Office	0.20	0	Vacant	
	486240003	OC	Office	5.44	0	Vacant	
	486240004	OC	Office	1.06	0	Vacant	
	486240005	OC	Office	1.06	0	Vacant	
	486240006	OC	Office	1.21	0	Vacant	
	486240007	OC	Office	2.11	0	Vacant	
	486240012	OC	Office	1.88	0	Vacant	
	486240013	OC	Office	6.74	0	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
O/OC	486270019	OC	Office	8.26	0	Vacant	
	488080013	OC	Office	16.24	0	Vacant	
	488080014	OC	Office	8.45	0	Vacant	
	488080015	OC	Office	8.98	0	Vacant	
	488080016	OC	Office	4.48	0	Vacant	
	488080017	OC	Office	7.95	0	Vacant	

Parcels per Density Designation: 47 **Acres per Density Designation:** 219

Units per Density Designation: 0 **Units per Density Designation 80%:** 0

Total Parcels: 1,645 **Total Vacant Acres:** 6,164.36

Total Residential Units: 20,420 **Total Residential Units 80%:** 16,336

High Density Sites Inventory - Attachment 4

Based on 10-2013 data
Report Print Date: 10.7.2013

DENSITY	Calculation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
LOW & VERY LOW	3	486270001	R30	Multi-family	1.80	43	Vacant	
		486270002	R30	Multi-family	9.30	223	Vacant	
		486270003	R30	Multi-family	9.25	222	Vacant	
		486270004	R30	Multi-family	1.92	46	Vacant	
		486270005	R30	Multi-family	4.62	55	Developed	
		486270006	R30	Multi-family	4.62	111	Vacant	
		486270008	R30	Multi-family	1.85	44	Vacant	
		486270013	R30	Multi-family	2.09	25	Developed	
		486270014	R30	Multi-family	2.09	25	Developed	
		486270015	R30	Multi-family	2.09	25	Developed	
		486270016	R30	Multi-family	2.09	25	Developed	
		486270017	R30	Multi-family	2.64	63	Vacant	
		486280002	R30	Multi-family	9.00	216	Vacant	
		486280004	R30	Multi-family	9.39	225	Vacant	
		486280005	R30	Multi-family	2.22	53	Vacant	
		486280006	R30	Multi-family	2.22	53	Vacant	
		486280007	R30	Multi-family	2.26	54	Vacant	
		486280008	R30	Multi-family	2.26	54	Vacant	
		486280010	R30	Multi-family	2.17	52	Vacant	
		486280011	R30	Multi-family	2.38	57	Vacant	
		486280012	R30	Multi-family	2.17	52	Vacant	
		486280013	R30	Multi-family	2.38	57	Vacant	
Parcels per High Density Site:		**22**		**Acres per High Density Site:**		**80.81**		
						Units per High Density Site 80%: 1,780		
LOW & VERY LOW	4	485220006	R30	Multi-family	2.24	54	Vacant	
		485220007	R30	Multi-family	2.24	54	Vacant	
		485220008	R30	Multi-family	2.24	27	Developed	
		485220009	R30	Multi-family	2.24	27	Developed	
		485220015	R30	Multi-family	1.28	15	Developed	
		485220016	R30	Multi-family	1.66	20	Developed	
		485220017	R30	Multi-family	10.41	250	Vacant	
		485220040	R30	Multi-family	19.43	466	Vacant	
Parcels per High Density Site:		**8**		**Acres per High Density Site:**		**41.74**		
						Units per High Density Site 80%: 913		
LOW & VERY LOW	5	291191004	R30	Multi-family	0.32	8	Vacant	
		291191007	R30	Multi-family	0.29	7	Vacant	
		291191008	R30	Multi-family	1.57	38	Vacant	
		291191009	R30	Multi-family	1.56	37	Vacant	
		291191010	R30	Multi-family	1.00	24	Vacant	
		291191011	R30	Multi-family	1.00	24	Vacant	
		291191012	R30	Multi-family	0.24	6	Vacant	
		291191013	R30	Multi-family	0.82	20	Vacant	
		291191025	R30	Multi-family	0.20	5	Vacant	
		291191026	R30	Multi-family	0.07	2	Vacant	
		291191027	R30	Multi-family	0.80	19	Vacant	
		291191028	R30	Multi-family	0.30	7	Vacant	
		291191029	R30	Multi-family	0.34	8	Vacant	
		291200023	R30	Multi-family	1.50	4	Developed	BSMWD, RDA
		291200024	R30	Multi-family	2.50	60	Vacant	BSMWD, RDA
		291200025	R30	Multi-family	1.50	4	Developed	BSMWD, RDA

DENSITY	Calculation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
LOW & VERY LOW	5	291200027	R30	Multi-family	0.86	2	Developed	BSMWD, RDA
		291200030	R30	Multi-family	0.37	1	Developed	BSMWD, RDA
		291200038	R30	Multi-family	0.34	1	Developed	BSMWD, RDA
		291200039	R30	Multi-family	0.95	23	Vacant	BSMWD, RDA
		291200040	R30	Multi-family	0.42	1	Developed	BSMWD, RDA
		291264001	R30	Multi-family	0.23	1	Developed	RDA
		291264002	R30	Multi-family	0.23	1	Developed	RDA
		291264003	R30	Multi-family	0.19	0	Developed	RDA
		291264004	R30	Multi-family	0.19	0	Developed	RDA
		291264005	R30	Multi-family	0.19	0	Developed	RDA
		291264006	R30	Multi-family	0.19	0	Developed	RDA
		291264007	R30	Multi-family	0.19	0	Developed	RDA
		291264008	R30	Multi-family	0.21	1	Developed	RDA
		291264009	R30	Multi-family	0.44	1	Developed	RDA
		291264011	R30	Multi-family	3.16	8	Developed	RDA
		291264012	R30	Multi-family	0.35	1	Developed	RDA
		291273001	R30	Multi-family	0.55	1	Developed	FLOOD, RDA
		291273004	R30	Multi-family	0.23	1	Developed	RDA
		291273005	R30	Multi-family	0.31	1	Developed	RDA
		291273007	R30	Multi-family	0.52	1	Developed	FLOOD, RDA
		291273008	R30	Multi-family	3.88	9	Developed	FLOOD, RDA

Parcels per High Density Site: 37

Acres per High Density Site: 28.01

Units per High Density Site 80%: 327

Total Parcels: 67

Total Acres: 150.56

Total Residential Units 80%: 3,020

Vacant Land Inventory - Mobilehome Sites
Attachment 5

Based on 10-2013 data
Report Print Date: 10.7.2013

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	316100024	R5	Suburban Residential	6.73	3	Vacant	
	316160008	R5	Suburban Residential	7.25	3	Vacant	
	422070014	R5	Suburban Residential	10.09	4	Vacant	
	474100025	R5	Suburban Residential	27.68	11	Vacant	
	474110004	R5	Suburban Residential	28.05	11	Vacant	
	474200014	R5	Suburban Residential	10.00	4	Vacant	
	475060001	R5	Suburban Residential	9.14	4	Vacant	
	478090011	R5	Suburban Residential	8.04	3	Vacant	
	478220002	R5	Suburban Residential	9.39	4	Vacant	
	478220003	R5	Suburban Residential	8.98	4	Vacant	
	478220012	R5	Suburban Residential	8.98	4	Vacant	
	478220013	R5	Suburban Residential	9.39	4	Vacant	
	485020005	R5	Suburban Residential	8.04	3	Vacant	FLOOD,RDA
	485220023	R5	Suburban Residential	18.06	7	Vacant	
	485220032	R5	Suburban Residential	19.12	8	Vacant	
	485220041	R5	Suburban Residential	17.77	7	Vacant	
	486240002	R5	Suburban Residential	9.00	4	Vacant	FLOOD
	486240011	R5	Suburban Residential	18.78	8	Vacant	FLOOD
	486250007	R5	Suburban Residential	9.39	4	Vacant	
	486260008	R5	Suburban Residential	9.39	4	Vacant	
	486260009	R5	Suburban Residential	8.97	4	Vacant	FLOOD
	486310014	R5	Suburban Residential	8.96	4	Vacant	FLOOD
	487370016	R5	Suburban Residential	8.53	3	Vacant	
	487470014	R5	Suburban Residential	5.41	2	Vacant	
	487470028	R5	Suburban Residential	18.04	7	Vacant	
	488330012	R5	Suburban Residential	9.40	4	Vacant	
	488350005	R5	Suburban Residential	9.40	4	Vacant	
	488350006	R5	Suburban Residential	8.97	4	Vacant	
	488350007	R5	Suburban Residential	8.97	4	Vacant	
	488350019	R5	Suburban Residential	8.97	4	Vacant	
	488350021	R5	Suburban Residential	9.40	4	Vacant	
	488350023	R5	Suburban Residential	9.40	4	Vacant	
	488350025	R5	Suburban Residential	8.97	4	Vacant	

Parcels per Density Designation: 33 **Acres per Density Designation: 377** **Units per Density Designation: 156**

Total Parcels: 33 **Total Vacant Acres: 376.66** **Total Residential Units: 156**

Vacant Land Inventory - Manufactured Home Sites
Attachment 6

Based on 10-2013 data
Report Print Date: 10.7.2013

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	256150001	HR	Large Lot Residential	33.77	1	Vacant	
	256160002	HR	Large Lot Residential	10.65	1	Vacant	
	256160010	HR	Large Lot Residential	9.55	1	Vacant	
	256160017	HR	Large Lot Residential	10.24	1	Vacant	
	256170004	HR	Large Lot Residential	28.91	1	Vacant	
	259260003	HR	Large Lot Residential	20.00	1	Vacant	
	259260004	HR	Large Lot Residential	10.00	1	Vacant	
	259260005	HR	Large Lot Residential	10.00	1	Vacant	
	259260006	HR	Large Lot Residential	20.00	1	Vacant	
	259260039	HR	Large Lot Residential	12.18	1	Vacant	
	264040003	HR	Large Lot Residential	12.56	1	Vacant	
	264040010	HR	Large Lot Residential	6.15	1	Vacant	
	264040011	HR	Large Lot Residential	6.15	1	Vacant	
	264040013	HR	Large Lot Residential	1.34	1	Vacant	
	264110006	HR	Large Lot Residential	2.35	1	Vacant	
	264110009	HR	Large Lot Residential	18.98	1	Vacant	
	264110010	HR	Large Lot Residential	20.04	1	Vacant	
	264110022	HR	Large Lot Residential	1.58	1	Vacant	
	264110024	HR	Large Lot Residential	1.79	1	Vacant	
	471201008	HR	Large Lot Residential	166.17	3	Vacant	
	471290003	HR	Large Lot Residential	2.57	1	Vacant	
	471290004	HR	Large Lot Residential	2.57	1	Vacant	
	471290005	HR	Large Lot Residential	2.40	1	Vacant	
	471290006	HR	Large Lot Residential	7.63	1	Vacant	
	473150002	HR	Large Lot Residential	13.75	1	Vacant	
	473150048	HR	Large Lot Residential	10.52	1	Vacant	
	473150049	HR	Large Lot Residential	15.73	1	Vacant	
	473150053	HR	Large Lot Residential	19.88	1	Vacant	FAULT
	473160001	HR	Large Lot Residential	17.50	1	Vacant	
	473160002	HR	Large Lot Residential	2.50	1	Vacant	
	474100002	HR	Large Lot Residential	20.00	1	Vacant	
	474100003	HR	Large Lot Residential	10.00	1	Vacant	
	474210001	HR	Large Lot Residential	40.00	1	Vacant	
	474210003	HR	Large Lot Residential	60.00	1	Vacant	
	474210004	HR	Large Lot Residential	60.00	1	Vacant	
	474210005	HR	Large Lot Residential	10.00	1	Vacant	
	474210006	HR	Large Lot Residential	10.00	1	Vacant	
	474210008	HR	Large Lot Residential	10.00	1	Vacant	
	474220065	HR	Large Lot Residential	13.49	1	Vacant	
	474220070	HR	Large Lot Residential	32.27	1	Vacant	
	474230005	HR	Large Lot Residential	3.32	1	Vacant	
	474230032	HR	Large Lot Residential	3.26	1	Vacant	
	474310001	HR	Large Lot Residential	5.14	1	Vacant	
	474310002	HR	Large Lot Residential	2.50	1	Vacant	
	474310003	HR	Large Lot Residential	2.50	1	Vacant	
	474310004	HR	Large Lot Residential	2.51	1	Vacant	
	474310005	HR	Large Lot Residential	2.62	1	Vacant	
	474320003	HR	Large Lot Residential	1.07	1	Vacant	
	474320005	HR	Large Lot Residential	1.02	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	474341005	HR	Large Lot Residential	1.72	1	Vacant	
	474341006	HR	Large Lot Residential	1.40	1	Vacant	
	474341007	HR	Large Lot Residential	0.91	1	Vacant	
	474341008	HR	Large Lot Residential	1.02	1	Vacant	
	474410017	HR	Large Lot Residential	0.00	1	Vacant	
	474410028	HR	Large Lot Residential	1.43	1	Vacant	
	474410029	HR	Large Lot Residential	1.59	1	Vacant	
	474500010	HR	Large Lot Residential	2.47	1	Vacant	
	478020023	HR	Large Lot Residential	24.86	1	Vacant	
	478020027	HR	Large Lot Residential	23.43	1	Vacant	
	488160001	HR	Large Lot Residential	19.38	1	Vacant	
	488160003	HR	Large Lot Residential	10.42	1	Vacant	
	488190031	HR	Large Lot Residential	1.80	1	Vacant	
	488190033	HR	Large Lot Residential	2.75	1	Vacant	
	488200015	HR	Large Lot Residential	2.51	1	Vacant	
	264040006	R1	Large Lot Residential	3.00	1	Vacant	
	264040009	R1	Large Lot Residential	6.15	1	Vacant	
	264040012	R1	Large Lot Residential	1.52	1	Vacant	
	264040014	R1	Large Lot Residential	0.92	1	Vacant	
	264040015	R1	Large Lot Residential	0.92	1	Vacant	
	264040016	R1	Large Lot Residential	0.95	1	Vacant	
	264110018	R1	Large Lot Residential	0.26	1	Vacant	
	264110027	R1	Large Lot Residential	0.97	1	Vacant	
	264110028	R1	Large Lot Residential	1.24	1	Vacant	
	264175005	R1	Large Lot Residential	1.06	1	Vacant	
	264175006	R1	Large Lot Residential	1.11	1	Vacant	
	264175007	R1	Large Lot Residential	1.27	1	Vacant	
	264175008	R1	Large Lot Residential	1.05	1	Vacant	
	264312003	R1	Large Lot Residential	0.98	1	Vacant	
	473120069	R1	Large Lot Residential	64.70	5	Vacant	FAULT
	473150050	R1	Large Lot Residential	1.17	1	Vacant	
	473150051	R1	Large Lot Residential	15.77	1	Vacant	
	473150052	R1	Large Lot Residential	21.37	2	Vacant	FAULT
	473150058	R1	Large Lot Residential	8.34	1	Vacant	
	473150059	R1	Large Lot Residential	9.00	1	Vacant	FAULT
	473150061	R1	Large Lot Residential	9.33	1	Vacant	FAULT
	473150063	R1	Large Lot Residential	11.94	1	Vacant	
	473174002	R1	Large Lot Residential	9.39	1	Vacant	
	473174003	R1	Large Lot Residential	9.39	1	Vacant	
	473174004	R1	Large Lot Residential	8.96	1	Vacant	
	473174005	R1	Large Lot Residential	8.96	1	Vacant	
	473174007	R1	Large Lot Residential	9.39	1	Vacant	
	473174008	R1	Large Lot Residential	8.55	1	Vacant	
	473174010	R1	Large Lot Residential	2.15	1	Vacant	
	473174012	R1	Large Lot Residential	2.17	1	Vacant	
	473174013	R1	Large Lot Residential	2.17	1	Vacant	
	473220004	R1	Large Lot Residential	3.68	1	Vacant	FAULT
	473220009	R1	Large Lot Residential	9.39	1	Vacant	
	473220010	R1	Large Lot Residential	7.74	1	Vacant	
	473220011	R1	Large Lot Residential	1.65	1	Vacant	
	473220015	R1	Large Lot Residential	9.39	1	Vacant	
	473220017	R1	Large Lot Residential	16.10	1	Vacant	FAULT
	473220043	R1	Large Lot Residential	5.84	1	Vacant	
	473220044	R1	Large Lot Residential	13.03	1	Vacant	FAULT

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	473220057	R1	Large Lot Residential	0.85	1	Vacant	
	473220064	R1	Large Lot Residential	0.99	1	Vacant	
	473220071	R1	Large Lot Residential	1.17	1	Vacant	
	473220072	R1	Large Lot Residential	1.70	1	Vacant	
	473220075	R1	Large Lot Residential	2.78	1	Vacant	FAULT
	473250003	R1	Large Lot Residential	8.98	1	Vacant	
	473250028	R1	Large Lot Residential	1.44	1	Vacant	
	473250029	R1	Large Lot Residential	9.55	1	Vacant	
	473250030	R1	Large Lot Residential	2.71	1	Vacant	
	473250042	R1	Large Lot Residential	3.86	1	Vacant	
	473250050	R1	Large Lot Residential	1.10	1	Vacant	
	473250051	R1	Large Lot Residential	1.10	1	Vacant	
	473290003	R1	Large Lot Residential	2.35	1	Vacant	
	473290006	R1	Large Lot Residential	1.50	1	Vacant	
	473290007	R1	Large Lot Residential	4.70	1	Vacant	
	473290011	R1	Large Lot Residential	2.00	1	Vacant	
	473290012	R1	Large Lot Residential	6.98	1	Vacant	
	473290013	R1	Large Lot Residential	9.39	1	Vacant	
	473290014	R1	Large Lot Residential	9.39	1	Vacant	
	473290015	R1	Large Lot Residential	8.54	1	Vacant	
	473290019	R1	Large Lot Residential	4.08	1	Vacant	
	473310001	R1	Large Lot Residential	55.60	4	Vacant	
	473310013	R1	Large Lot Residential	0.88	1	Vacant	
	473310016	R1	Large Lot Residential	1.20	1	Vacant	
	473401017	R1	Large Lot Residential	0.38	1	Vacant	
	474250003	R1	Large Lot Residential	10.00	1	Vacant	
	474250032	R1	Large Lot Residential	2.59	1	Vacant	
	474250033	R1	Large Lot Residential	2.53	1	Vacant	
	474271001	R1	Large Lot Residential	0.06	1	Vacant	
	474271008	R1	Large Lot Residential	1.55	1	Vacant	
	474271011	R1	Large Lot Residential	2.81	1	Vacant	
	474272030	R1	Large Lot Residential	2.95	1	Vacant	
	474272033	R1	Large Lot Residential	2.41	1	Vacant	
	481041028	R1	Large Lot Residential	0.11	1	Vacant	SP,RDA
	481090023	R1	Large Lot Residential	0.30	1	Vacant	SP,FLOOD,RDA
	488250004	R1	Large Lot Residential	9.41	1	Vacant	
	488250005	R1	Large Lot Residential	9.40	1	Vacant	
	488250006	R1	Large Lot Residential	8.09	1	Vacant	
	488250008	R1	Large Lot Residential	8.55	1	Vacant	
	488250009	R1	Large Lot Residential	9.40	1	Vacant	
	488250010	R1	Large Lot Residential	9.40	1	Vacant	
	488250011	R1	Large Lot Residential	8.74	1	Vacant	
	488260001	R1	Large Lot Residential	2.00	1	Vacant	
	488260002	R1	Large Lot Residential	2.00	1	Vacant	
	488260007	R1	Large Lot Residential	4.70	1	Vacant	
	488260008	R1	Large Lot Residential	4.70	1	Vacant	
	488260009	R1	Large Lot Residential	8.97	1	Vacant	
	488260010	R1	Large Lot Residential	8.97	1	Vacant	
	488260011	R1	Large Lot Residential	9.40	1	Vacant	
	488260013	R1	Large Lot Residential	9.40	1	Vacant	
	488260015	R1	Large Lot Residential	2.48	1	Vacant	
	488260016	R1	Large Lot Residential	2.19	1	Vacant	
	488260019	R1	Large Lot Residential	2.83	1	Vacant	
	488260020	R1	Large Lot Residential	2.51	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	488260023	R1	Large Lot Residential	8.97	1	Vacant	FAULT
	488260024	R1	Large Lot Residential	8.97	1	Vacant	
	488260025	R1	Large Lot Residential	9.40	1	Vacant	FAULT
	488260026	R1	Large Lot Residential	9.40	1	Vacant	FAULT
	488260027	R1	Large Lot Residential	18.80	2	Vacant	FAULT
	488260029	R1	Large Lot Residential	6.45	1	Vacant	FAULT
	488260030	R1	Large Lot Residential	8.80	1	Vacant	FAULT
	488260031	R1	Large Lot Residential	16.60	1	Vacant	
	488260032	R1	Large Lot Residential	9.39	1	Vacant	
	488260034	R1	Large Lot Residential	9.40	1	Vacant	FAULT
	488260036	R1	Large Lot Residential	8.97	1	Vacant	FAULT
	488310001	R1	Large Lot Residential	8.97	1	Vacant	
	488310002	R1	Large Lot Residential	9.39	1	Vacant	
	488310003	R1	Large Lot Residential	9.39	1	Vacant	
	488310004	R1	Large Lot Residential	8.19	1	Vacant	
	488320007	R1	Large Lot Residential	0.19	1	Vacant	
	473171034	RR	Large Lot Residential	0.80	1	Vacant	FAULT
	473171037	RR	Large Lot Residential	1.29	1	Vacant	FAULT
	473200004	RR	Large Lot Residential	7.18	1	Vacant	FAULT
	473210001	RR	Large Lot Residential	2.15	1	Vacant	FAULT
	473220018	RR	Large Lot Residential	11.11	1	Vacant	FAULT
	473220019	RR	Large Lot Residential	9.06	1	Vacant	FAULT
	488260028	RR	Large Lot Residential	2.00	1	Vacant	FAULT
	471201011	R2	Residential 2 Dwellings/Acr	29.47	5	Vacant	
	471201011	R2	Residential 2 Dwellings/Acr	8.04	1	Vacant	
	471290017	R2	Residential 2 Dwellings/Acr	0.62	1	Vacant	
	471300023	R2	Residential 2 Dwellings/Acr	9.76	4	Vacant	SP
	473171020	R2	Residential 2 Dwellings/Acr	6.50	1	Vacant	
	473171022	R2	Residential 2 Dwellings/Acr	6.12	1	Vacant	
	473401021	R2	Residential 2 Dwellings/Acr	5.69	1	Vacant	
	474220026	R2	Residential 2 Dwellings/Acr	0.09	1	Vacant	
	474220035	R2	Residential 2 Dwellings/Acr	0.35	1	Vacant	
	474220044	R2	Residential 2 Dwellings/Acr	0.01	1	Vacant	
	474371008	R2	Residential 2 Dwellings/Acr	0.32	1	Vacant	
	474371010	R2	Residential 2 Dwellings/Acr	0.50	1	Vacant	
	474371015	R2	Residential 2 Dwellings/Acr	0.32	1	Vacant	
	474371017	R2	Residential 2 Dwellings/Acr	0.32	1	Vacant	
	474371018	R2	Residential 2 Dwellings/Acr	0.40	1	Vacant	
	474500002	R2	Residential 2 Dwellings/Acr	17.68	3	Vacant	
	474500005	R2	Residential 2 Dwellings/Acr	5.20	1	Vacant	
	488032002	R2	Residential 2 Dwellings/Acr	0.56	1	Vacant	
	488060006	R2	Residential 2 Dwellings/Acr	0.55	1	Vacant	
	488080003	R2	Residential 2 Dwellings/Acr	17.31	3	Vacant	
	488080011	R2	Residential 2 Dwellings/Acr	8.54	1	Vacant	
	488080012	R2	Residential 2 Dwellings/Acr	7.44	1	Vacant	
	488270019	R2	Residential 2 Dwellings/Acr	0.87	1	Vacant	
	488270020	R2	Residential 2 Dwellings/Acr	0.89	1	Vacant	
	488270021	R2	Residential 2 Dwellings/Acr	3.78	1	Vacant	
	488270024	R2	Residential 2 Dwellings/Acr	0.88	1	Vacant	
	488270025	R2	Residential 2 Dwellings/Acr	0.87	1	Vacant	
	473150012	RA2	Residential Agriculture 2 Dv	0.37	1	Vacant	
	473150015	RA2	Residential Agriculture 2 Dv	8.50	1	Vacant	
	473150025	RA2	Residential Agriculture 2 Dv	1.80	1	Vacant	
	473150079	RA2	Residential Agriculture 2 Dv	17.25	3	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	473160004	RA2	Residential Agriculture 2 Dv	75.10	12	Vacant	
	473160007	RA2	Residential Agriculture 2 Dv	36.15	6	Vacant	
	473160008	RA2	Residential Agriculture 2 Dv	27.32	4	Vacant	
	473160011	RA2	Residential Agriculture 2 Dv	9.22	1	Vacant	
	473160013	RA2	Residential Agriculture 2 Dv	9.20	1	Vacant	
	473160017	RA2	Residential Agriculture 2 Dv	32.35	5	Vacant	
	473160018	RA2	Residential Agriculture 2 Dv	9.09	1	Vacant	
	473160019	RA2	Residential Agriculture 2 Dv	9.05	1	Vacant	
	473230009	RA2	Residential Agriculture 2 Dv	3.64	1	Vacant	FAULT
	473280011	RA2	Residential Agriculture 2 Dv	9.39	2	Vacant	
	473280012	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	473280013	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	473280014	RA2	Residential Agriculture 2 Dv	9.39	2	Vacant	
	473280015	RA2	Residential Agriculture 2 Dv	9.39	2	Vacant	
	473280016	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	473280018	RA2	Residential Agriculture 2 Dv	1.14	1	Vacant	
	473280019	RA2	Residential Agriculture 2 Dv	1.14	1	Vacant	
	473300001	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	473300002	RA2	Residential Agriculture 2 Dv	9.39	2	Vacant	
	473300003	RA2	Residential Agriculture 2 Dv	9.39	2	Vacant	
	473300004	RA2	Residential Agriculture 2 Dv	4.70	1	Vacant	
	473300005	RA2	Residential Agriculture 2 Dv	4.27	1	Vacant	
	473300008	RA2	Residential Agriculture 2 Dv	9.39	2	Vacant	
	473300009	RA2	Residential Agriculture 2 Dv	9.39	2	Vacant	
	473300010	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	474130034	RA2	Residential Agriculture 2 Dv	0.42	1	Vacant	
	474142006	RA2	Residential Agriculture 2 Dv	4.80	1	Vacant	
	474161016	RA2	Residential Agriculture 2 Dv	0.08	1	Vacant	
	474161035	RA2	Residential Agriculture 2 Dv	1.15	1	Vacant	
	474170008	RA2	Residential Agriculture 2 Dv	1.67	1	Vacant	
	474180012	RA2	Residential Agriculture 2 Dv	0.72	1	Vacant	
	474180030	RA2	Residential Agriculture 2 Dv	0.46	1	Vacant	
	474180031	RA2	Residential Agriculture 2 Dv	0.46	1	Vacant	
	474180032	RA2	Residential Agriculture 2 Dv	1.18	1	Vacant	
	474250011	RA2	Residential Agriculture 2 Dv	1.02	1	Vacant	
	474250015	RA2	Residential Agriculture 2 Dv	13.41	2	Vacant	
	474250017	RA2	Residential Agriculture 2 Dv	0.53	1	Vacant	
	474250057	RA2	Residential Agriculture 2 Dv	1.02	1	Vacant	
	474250058	RA2	Residential Agriculture 2 Dv	0.36	1	Vacant	
	474590034	RA2	Residential Agriculture 2 Dv	1.00	1	Vacant	
	474590036	RA2	Residential Agriculture 2 Dv	1.50	1	Vacant	
	474590037	RA2	Residential Agriculture 2 Dv	0.90	1	Vacant	
	474590039	RA2	Residential Agriculture 2 Dv	1.01	1	Vacant	
	475060023	RA2	Residential Agriculture 2 Dv	0.46	1	Vacant	
	478020024	RA2	Residential Agriculture 2 Dv	20.04	3	Vacant	
	478020025	RA2	Residential Agriculture 2 Dv	20.95	3	Vacant	
	478020026	RA2	Residential Agriculture 2 Dv	26.87	4	Vacant	
	478020030	RA2	Residential Agriculture 2 Dv	22.09	4	Vacant	
	478020031	RA2	Residential Agriculture 2 Dv	1.00	1	Vacant	
	478020035	RA2	Residential Agriculture 2 Dv	7.98	1	Vacant	
	478020037	RA2	Residential Agriculture 2 Dv	8.15	1	Vacant	
	478230008	RA2	Residential Agriculture 2 Dv	36.38	6	Vacant	
	478230015	RA2	Residential Agriculture 2 Dv	8.69	1	Vacant	
	478230016	RA2	Residential Agriculture 2 Dv	9.10	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	478240002	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	478240003	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	478240005	RA2	Residential Agriculture 2 Dv	9.10	1	Vacant	
	478240006	RA2	Residential Agriculture 2 Dv	9.10	1	Vacant	
	478240007	RA2	Residential Agriculture 2 Dv	8.69	1	Vacant	
	478240008	RA2	Residential Agriculture 2 Dv	9.39	2	Vacant	
	478240021	RA2	Residential Agriculture 2 Dv	8.68	1	Vacant	
	478240022	RA2	Residential Agriculture 2 Dv	8.84	1	Vacant	
	478240023	RA2	Residential Agriculture 2 Dv	8.84	1	Vacant	
	478240031	RA2	Residential Agriculture 2 Dv	2.05	1	Vacant	
	478240032	RA2	Residential Agriculture 2 Dv	2.05	1	Vacant	
	478240033	RA2	Residential Agriculture 2 Dv	1.76	1	Vacant	
	478240034	RA2	Residential Agriculture 2 Dv	1.76	1	Vacant	
	478421009	RA2	Residential Agriculture 2 Dv	0.49	1	Vacant	
	478421013	RA2	Residential Agriculture 2 Dv	0.40	1	Vacant	
	486250003	RA2	Residential Agriculture 2 Dv	2.18	1	Vacant	FLOOD
	486290005	RA2	Residential Agriculture 2 Dv	1.06	1	Vacant	
	486290010	RA2	Residential Agriculture 2 Dv	1.17	1	Vacant	
	486290028	RA2	Residential Agriculture 2 Dv	8.97	1	Vacant	FLOOD
	486290032	RA2	Residential Agriculture 2 Dv	8.91	1	Vacant	
	486290033	RA2	Residential Agriculture 2 Dv	1.31	0	Vacant	
	486290035	RA2	Residential Agriculture 2 Dv	17.06	0	Vacant	
	486570010	RA2	Residential Agriculture 2 Dv	9.39	2	Vacant	
	487060006	RA2	Residential Agriculture 2 Dv	0.94	1	Vacant	
	487090006	RA2	Residential Agriculture 2 Dv	0.80	1	Vacant	
	487140011	RA2	Residential Agriculture 2 Dv	0.48	1	Vacant	
	487140013	RA2	Residential Agriculture 2 Dv	0.48	1	Vacant	
	487150001	RA2	Residential Agriculture 2 Dv	0.76	1	Vacant	
	487150016	RA2	Residential Agriculture 2 Dv	2.58	1	Vacant	
	487160001	RA2	Residential Agriculture 2 Dv	9.73	2	Vacant	
	487170001	RA2	Residential Agriculture 2 Dv	5.99	1	Vacant	
	487170004	RA2	Residential Agriculture 2 Dv	4.57	1	Vacant	
	487170005	RA2	Residential Agriculture 2 Dv	4.89	1	Vacant	
	487470001	RA2	Residential Agriculture 2 Dv	9.40	2	Vacant	
	488080004	RA2	Residential Agriculture 2 Dv	18.91	3	Vacant	
	488080005	RA2	Residential Agriculture 2 Dv	8.67	1	Vacant	
	488080006	RA2	Residential Agriculture 2 Dv	8.37	1	Vacant	
	488080007	RA2	Residential Agriculture 2 Dv	8.37	1	Vacant	
	488080008	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	488080009	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	488080010	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	488160004	RA2	Residential Agriculture 2 Dv	12.20	2	Vacant	
	488160005	RA2	Residential Agriculture 2 Dv	6.03	1	Vacant	
	488170007	RA2	Residential Agriculture 2 Dv	1.82	1	Vacant	
	488170011	RA2	Residential Agriculture 2 Dv	8.07	1	Vacant	
	488180024	RA2	Residential Agriculture 2 Dv	14.73	2	Vacant	
	488180025	RA2	Residential Agriculture 2 Dv	9.52	2	Vacant	
	488180027	RA2	Residential Agriculture 2 Dv	10.00	2	Vacant	
	488180028	RA2	Residential Agriculture 2 Dv	18.82	3	Vacant	
	488190023	RA2	Residential Agriculture 2 Dv	0.92	1	Vacant	
	488250001	RA2	Residential Agriculture 2 Dv	9.40	2	Vacant	
	488250002	RA2	Residential Agriculture 2 Dv	8.97	1	Vacant	
	488250013	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	488250014	RA2	Residential Agriculture 2 Dv	9.40	2	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	488300002	RA2	Residential Agriculture 2 Dv	6.90	1	Vacant	
	488330009	RA2	Residential Agriculture 2 Dv	4.48	1	Vacant	
	488330010	RA2	Residential Agriculture 2 Dv	4.48	1	Vacant	
	488330014	RA2	Residential Agriculture 2 Dv	4.21	1	Vacant	
	488330015	RA2	Residential Agriculture 2 Dv	4.48	1	Vacant	
	488330016	RA2	Residential Agriculture 2 Dv	9.39	2	Vacant	
	488330017	RA2	Residential Agriculture 2 Dv	9.39	2	Vacant	
	488330018	RA2	Residential Agriculture 2 Dv	8.97	1	Vacant	
	488340001	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	488340002	RA2	Residential Agriculture 2 Dv	9.40	2	Vacant	
	488340009	RA2	Residential Agriculture 2 Dv	9.40	2	Vacant	
	488340010	RA2	Residential Agriculture 2 Dv	9.40	2	Vacant	
	488340011	RA2	Residential Agriculture 2 Dv	8.98	1	Vacant	
	474500017	R1	Suburban Residential	15.16	1	Vacant	SP
	259260027	R3	Suburban Residential	2.46	1	Vacant	
	259260029	R3	Suburban Residential	4.80	1	Vacant	
	259260030	R3	Suburban Residential	6.65	2	Vacant	
	259260036	R3	Suburban Residential	2.35	1	Vacant	
	259260037	R3	Suburban Residential	2.11	1	Vacant	
	259260038	R3	Suburban Residential	2.30	1	Vacant	
	259260040	R3	Suburban Residential	2.47	1	Vacant	
	259260041	R3	Suburban Residential	2.50	1	Vacant	
	259260042	R3	Suburban Residential	2.29	1	Vacant	
	259520030	R3	Suburban Residential	0.13	1	Vacant	
	474490025	R3	Suburban Residential	43.21	10	Vacant	
	474711001	R3	Suburban Residential	0.55	1	Vacant	
	474711002	R3	Suburban Residential	0.54	1	Vacant	
	474711003	R3	Suburban Residential	0.53	1	Vacant	
	474711004	R3	Suburban Residential	0.70	1	Vacant	
	474711005	R3	Suburban Residential	0.54	1	Vacant	
	474711006	R3	Suburban Residential	0.57	1	Vacant	
	474711007	R3	Suburban Residential	0.66	1	Vacant	
	474711008	R3	Suburban Residential	0.57	1	Vacant	
	474711009	R3	Suburban Residential	0.37	1	Vacant	
	474711010	R3	Suburban Residential	0.45	1	Vacant	
	474712001	R3	Suburban Residential	0.48	1	Vacant	
	474712002	R3	Suburban Residential	0.47	1	Vacant	
	474712003	R3	Suburban Residential	0.51	1	Vacant	
	474712004	R3	Suburban Residential	0.75	1	Vacant	
	474712005	R3	Suburban Residential	0.40	1	Vacant	
	474712006	R3	Suburban Residential	0.42	1	Vacant	
	474712007	R3	Suburban Residential	0.55	1	Vacant	
	474713001	R3	Suburban Residential	0.48	1	Vacant	
	474713002	R3	Suburban Residential	0.59	1	Vacant	
	474713003	R3	Suburban Residential	0.40	1	Vacant	
	474720001	R3	Suburban Residential	0.51	1	Vacant	
	474720002	R3	Suburban Residential	0.52	1	Vacant	
	474720003	R3	Suburban Residential	0.52	1	Vacant	
	474720004	R3	Suburban Residential	0.54	1	Vacant	
	474720016	R3	Suburban Residential	0.32	1	Vacant	
	474721001	R3	Suburban Residential	0.41	1	Vacant	
	474721002	R3	Suburban Residential	0.47	1	Vacant	
	474721003	R3	Suburban Residential	0.47	1	Vacant	
	474721004	R3	Suburban Residential	0.47	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	474721005	R3	Suburban Residential	0.46	1	Vacant	
	474722001	R3	Suburban Residential	0.88	1	Vacant	
	474722002	R3	Suburban Residential	0.62	1	Vacant	
	474722003	R3	Suburban Residential	0.60	1	Vacant	
	474722004	R3	Suburban Residential	0.52	1	Vacant	
	474722005	R3	Suburban Residential	0.45	1	Vacant	
	474722006	R3	Suburban Residential	0.44	1	Vacant	
	474722007	R3	Suburban Residential	0.39	1	Vacant	
	474723001	R3	Suburban Residential	0.54	1	Vacant	
	474723002	R3	Suburban Residential	0.58	1	Vacant	
	478040016	R3	Suburban Residential	1.26	1	Vacant	FLOOD
	478040017	R3	Suburban Residential	1.56	1	Vacant	FLOOD
	478040018	R3	Suburban Residential	1.47	1	Vacant	FLOOD
	478040020	R3	Suburban Residential	2.56	1	Vacant	FLOOD
	478040021	R3	Suburban Residential	1.79	1	Vacant	FLOOD
	478040024	R3	Suburban Residential	3.31	1	Vacant	
	478040025	R3	Suburban Residential	1.02	1	Vacant	
	478040027	R3	Suburban Residential	3.66	1	Vacant	
	478040031	R3	Suburban Residential	0.72	0	Vacant	
	478040032	R3	Suburban Residential	0.55	0	Vacant	
	478040033	R3	Suburban Residential	0.43	0	Vacant	
	478040034	R3	Suburban Residential	0.44	0	Vacant	
	478040035	R3	Suburban Residential	0.75	0	Vacant	
	478060013	R3	Suburban Residential	1.17	1	Vacant	
	478060016	R3	Suburban Residential	3.34	0	Vacant	FLOOD
	478060018	R3	Suburban Residential	6.56	0	Vacant	FLOOD
	478060023	R3	Suburban Residential	2.26	0	Vacant	FLOOD
	478070013	R3	Suburban Residential	1.26	1	Vacant	
	478070014	R3	Suburban Residential	1.26	1	Vacant	
	478080002	R3	Suburban Residential	5.84	1	Vacant	
	478080004	R3	Suburban Residential	2.34	1	Vacant	
	478080005	R3	Suburban Residential	2.34	1	Vacant	
	478080007	R3	Suburban Residential	9.10	2	Vacant	
	478080008	R3	Suburban Residential	8.69	2	Vacant	FLOOD
	478080009	R3	Suburban Residential	0.69	1	Vacant	
	478080010	R3	Suburban Residential	0.71	1	Vacant	
	478080011	R3	Suburban Residential	0.57	1	Vacant	
	478080013	R3	Suburban Residential	8.97	2	Vacant	FLOOD
	478100002	R3	Suburban Residential	6.58	2	Vacant	FLOOD
	478100018	R3	Suburban Residential	6.39	2	Vacant	
	478100022	R3	Suburban Residential	3.76	1	Vacant	FLOOD
	478100023	R3	Suburban Residential	3.29	1	Vacant	FLOOD
	478100024	R3	Suburban Residential	1.26	1	Vacant	FLOOD
	478100025	R3	Suburban Residential	1.10	1	Vacant	
	478165021	R3	Suburban Residential	0.18	1	Vacant	
	478165022	R3	Suburban Residential	0.17	1	Vacant	
	478165023	R3	Suburban Residential	0.18	1	Vacant	
	478166015	R3	Suburban Residential	0.16	1	Vacant	
	478166030	R3	Suburban Residential	0.38	1	Vacant	
	478166031	R3	Suburban Residential	0.17	1	Vacant	
	478166032	R3	Suburban Residential	0.09	1	Vacant	
	478166033	R3	Suburban Residential	0.09	1	Vacant	
	478171010	R3	Suburban Residential	0.72	1	Vacant	
	478172003	R3	Suburban Residential	0.20	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	478174027	R3	Suburban Residential	0.18	1	Vacant	
	478174035	R3	Suburban Residential	0.07	1	Vacant	
	478175002	R3	Suburban Residential	0.32	1	Vacant	
	478175004	R3	Suburban Residential	0.08	1	Vacant	
	478182002	R3	Suburban Residential	0.18	1	Vacant	
	478182011	R3	Suburban Residential	0.08	1	Vacant	
	478182060	R3	Suburban Residential	0.14	1	Vacant	
	478192050	R3	Suburban Residential	0.19	1	Vacant	
	478202053	R3	Suburban Residential	0.57	1	Vacant	
	478250001	R3	Suburban Residential	18.83	4	Vacant	FLOOD
	478353003	R3	Suburban Residential	1.00	1	Vacant	FLOOD
	478362003	R3	Suburban Residential	1.30	1	Vacant	FLOOD
	478430010	R3	Suburban Residential	0.40	1	Vacant	
	486260002	R3	Suburban Residential	9.00	2	Vacant	
	486260007	R3	Suburban Residential	8.97	2	Vacant	
	486260010	R3	Suburban Residential	8.53	2	Vacant	
	486260011	R3	Suburban Residential	8.94	2	Vacant	
	488190024	R3	Suburban Residential	6.89	2	Vacant	
	488190027	R3	Suburban Residential	9.40	2	Vacant	
	488190032	R3	Suburban Residential	2.20	1	Vacant	
	488200012	R3	Suburban Residential	2.08	1	Vacant	
	488200022	R3	Suburban Residential	1.78	1	Vacant	
	488200023	R3	Suburban Residential	1.45	1	Vacant	
	488200025	R3	Suburban Residential	27.55	7	Vacant	
	488210004	R3	Suburban Residential	1.08	1	Vacant	
	488210006	R3	Suburban Residential	10.60	3	Vacant	
	488210007	R3	Suburban Residential	10.60	3	Vacant	
	488210020	R3	Suburban Residential	9.10	2	Vacant	
	488210021	R3	Suburban Residential	9.10	2	Vacant	
	488220005	R3	Suburban Residential	9.10	2	Vacant	FLOOD
	488220006	R3	Suburban Residential	2.73	1	Vacant	FLOOD
	488220011	R3	Suburban Residential	0.80	1	Vacant	
	488220012	R3	Suburban Residential	1.04	1	Vacant	
	488220014	R3	Suburban Residential	8.93	0	Vacant	FLOOD
	256150025	R5	Suburban Residential	0.43	1	Vacant	
	256150026	R5	Suburban Residential	0.39	1	Vacant	
	256150031	R5	Suburban Residential	0.46	1	Vacant	
	256150034	R5	Suburban Residential	0.50	1	Vacant	
	256150035	R5	Suburban Residential	0.43	1	Vacant	
	256181010	R5	Suburban Residential	0.58	1	Vacant	
	256181020	R5	Suburban Residential	0.69	1	Vacant	
	256182048	R5	Suburban Residential	1.40	1	Vacant	
	256191001	R5	Suburban Residential	0.26	1	Vacant	
	256191055	R5	Suburban Residential	0.32	1	Vacant	
	256191056	R5	Suburban Residential	0.96	1	Vacant	
	256191061	R5	Suburban Residential	0.44	1	Vacant	
	256222007	R5	Suburban Residential	0.31	1	Vacant	
	256222009	R5	Suburban Residential	0.13	1	Vacant	
	256222010	R5	Suburban Residential	0.15	1	Vacant	
	256222011	R5	Suburban Residential	0.27	1	Vacant	
	256222012	R5	Suburban Residential	0.33	1	Vacant	
	256244006	R5	Suburban Residential	0.23	1	Vacant	
	256244008	R5	Suburban Residential	0.14	1	Vacant	
	260040026	R5	Suburban Residential	9.82	4	Vacant	SP

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	260040030	R5	Suburban Residential	12.80	5	Vacant	SP
	260040039	R5	Suburban Residential	1.05	1	Vacant	
	260480001	R5	Suburban Residential	0.10	1	Vacant	
	260480002	R5	Suburban Residential	0.11	1	Vacant	
	260480003	R5	Suburban Residential	0.10	1	Vacant	
	260480004	R5	Suburban Residential	0.12	1	Vacant	
	260480007	R5	Suburban Residential	0.11	1	Vacant	
	260480008	R5	Suburban Residential	0.10	1	Vacant	
	260480014	R5	Suburban Residential	0.11	1	Vacant	
	260480015	R5	Suburban Residential	0.10	1	Vacant	
	260480016	R5	Suburban Residential	0.10	1	Vacant	
	260480017	R5	Suburban Residential	0.11	1	Vacant	
	260480018	R5	Suburban Residential	0.10	1	Vacant	
	260480019	R5	Suburban Residential	0.10	1	Vacant	
	260480020	R5	Suburban Residential	0.11	1	Vacant	
	260480021	R5	Suburban Residential	0.10	1	Vacant	
	260480022	R5	Suburban Residential	0.10	1	Vacant	
	260480023	R5	Suburban Residential	0.11	1	Vacant	
	260480024	R5	Suburban Residential	0.11	1	Vacant	
	260480025	R5	Suburban Residential	0.10	1	Vacant	
	260480026	R5	Suburban Residential	0.10	1	Vacant	
	260480027	R5	Suburban Residential	0.11	1	Vacant	
	260480028	R5	Suburban Residential	0.10	1	Vacant	
	260480029	R5	Suburban Residential	0.10	1	Vacant	
	260480030	R5	Suburban Residential	0.11	1	Vacant	
	260480031	R5	Suburban Residential	0.10	1	Vacant	
	260480032	R5	Suburban Residential	0.10	1	Vacant	
	260480033	R5	Suburban Residential	0.11	1	Vacant	
	260480034	R5	Suburban Residential	0.11	1	Vacant	
	260480035	R5	Suburban Residential	0.10	1	Vacant	
	260480036	R5	Suburban Residential	0.10	1	Vacant	
	260480037	R5	Suburban Residential	0.11	1	Vacant	
	260480038	R5	Suburban Residential	0.10	1	Vacant	
	260480039	R5	Suburban Residential	0.11	1	Vacant	
	260480040	R5	Suburban Residential	0.11	1	Vacant	
	260480041	R5	Suburban Residential	0.11	1	Vacant	
	260480042	R5	Suburban Residential	0.11	1	Vacant	
	260480043	R5	Suburban Residential	0.14	1	Vacant	
	260480044	R5	Suburban Residential	0.11	1	Vacant	
	260480045	R5	Suburban Residential	0.10	1	Vacant	
	260480046	R5	Suburban Residential	0.10	1	Vacant	
	260480047	R5	Suburban Residential	0.10	1	Vacant	
	260480048	R5	Suburban Residential	0.10	1	Vacant	
	260480049	R5	Suburban Residential	0.11	1	Vacant	
	260480050	R5	Suburban Residential	0.16	1	Vacant	
	260480051	R5	Suburban Residential	0.13	1	Vacant	
	260480052	R5	Suburban Residential	0.11	1	Vacant	
	260480053	R5	Suburban Residential	0.11	1	Vacant	
	260480054	R5	Suburban Residential	0.11	1	Vacant	
	260480055	R5	Suburban Residential	0.11	1	Vacant	
	260480056	R5	Suburban Residential	0.10	1	Vacant	
	260480057	R5	Suburban Residential	0.10	1	Vacant	
	260480058	R5	Suburban Residential	0.11	1	Vacant	
	260480059	R5	Suburban Residential	0.11	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	260480060	R5	Suburban Residential	0.13	1	Vacant	
	260480061	R5	Suburban Residential	0.13	1	Vacant	
	260480062	R5	Suburban Residential	0.10	1	Vacant	
	260480063	R5	Suburban Residential	0.10	1	Vacant	
	260480064	R5	Suburban Residential	0.16	1	Vacant	
	260480065	R5	Suburban Residential	0.12	1	Vacant	
	260480066	R5	Suburban Residential	0.11	1	Vacant	
	260480067	R5	Suburban Residential	0.10	1	Vacant	
	260480068	R5	Suburban Residential	0.13	1	Vacant	
	260480069	R5	Suburban Residential	0.12	1	Vacant	
	260480070	R5	Suburban Residential	0.13	1	Vacant	
	260480074	R5	Suburban Residential	0.18	1	Vacant	
	260480075	R5	Suburban Residential	0.24	1	Vacant	
	260480076	R5	Suburban Residential	0.10	1	Vacant	
	260480077	R5	Suburban Residential	0.07	1	Vacant	
	260480078	R5	Suburban Residential	1.40	1	Vacant	
	260480079	R5	Suburban Residential	0.23	1	Vacant	
	260490001	R5	Suburban Residential	0.14	1	Vacant	
	260490002	R5	Suburban Residential	0.14	1	Vacant	
	260490003	R5	Suburban Residential	0.11	1	Vacant	
	260490004	R5	Suburban Residential	0.11	1	Vacant	
	260490005	R5	Suburban Residential	0.11	1	Vacant	
	260490006	R5	Suburban Residential	0.11	1	Vacant	
	260490007	R5	Suburban Residential	0.11	1	Vacant	
	260490008	R5	Suburban Residential	0.11	1	Vacant	
	260490009	R5	Suburban Residential	0.12	1	Vacant	
	260490010	R5	Suburban Residential	0.11	1	Vacant	
	260490011	R5	Suburban Residential	0.10	1	Vacant	
	260490012	R5	Suburban Residential	0.12	1	Vacant	
	260490013	R5	Suburban Residential	0.12	1	Vacant	
	260490014	R5	Suburban Residential	0.11	1	Vacant	
	260490015	R5	Suburban Residential	0.12	1	Vacant	
	260490016	R5	Suburban Residential	0.12	1	Vacant	
	260490017	R5	Suburban Residential	0.12	1	Vacant	
	260490018	R5	Suburban Residential	0.13	1	Vacant	
	260490019	R5	Suburban Residential	0.12	1	Vacant	
	260490020	R5	Suburban Residential	0.12	1	Vacant	
	260490021	R5	Suburban Residential	0.11	1	Vacant	
	260490022	R5	Suburban Residential	0.11	1	Vacant	
	260490023	R5	Suburban Residential	0.13	1	Vacant	
	260490024	R5	Suburban Residential	0.18	1	Vacant	
	260490025	R5	Suburban Residential	0.13	1	Vacant	
	260490026	R5	Suburban Residential	0.11	1	Vacant	
	260490027	R5	Suburban Residential	0.14	1	Vacant	
	260490028	R5	Suburban Residential	0.15	1	Vacant	
	260490029	R5	Suburban Residential	0.11	1	Vacant	
	260490030	R5	Suburban Residential	0.13	1	Vacant	
	260490031	R5	Suburban Residential	0.14	1	Vacant	
	260490032	R5	Suburban Residential	0.10	1	Vacant	
	260490033	R5	Suburban Residential	0.10	1	Vacant	
	260490034	R5	Suburban Residential	0.10	1	Vacant	
	260490035	R5	Suburban Residential	0.14	1	Vacant	
	260490036	R5	Suburban Residential	0.12	1	Vacant	
	260490037	R5	Suburban Residential	0.10	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	260490038	R5	Suburban Residential	0.10	1	Vacant	
	260490039	R5	Suburban Residential	0.10	1	Vacant	
	260490040	R5	Suburban Residential	0.10	1	Vacant	
	260490041	R5	Suburban Residential	0.15	1	Vacant	
	260490042	R5	Suburban Residential	0.16	1	Vacant	
	260490043	R5	Suburban Residential	0.11	1	Vacant	
	260490044	R5	Suburban Residential	0.11	1	Vacant	
	260490045	R5	Suburban Residential	0.10	1	Vacant	
	260490046	R5	Suburban Residential	0.10	1	Vacant	
	260490047	R5	Suburban Residential	0.10	1	Vacant	
	260490048	R5	Suburban Residential	0.10	1	Vacant	
	260490049	R5	Suburban Residential	0.10	1	Vacant	
	260490050	R5	Suburban Residential	0.10	1	Vacant	
	260490051	R5	Suburban Residential	0.10	1	Vacant	
	260490052	R5	Suburban Residential	0.14	1	Vacant	
	260490053	R5	Suburban Residential	0.26	1	Vacant	
	260490054	R5	Suburban Residential	0.11	1	Vacant	
	260490055	R5	Suburban Residential	0.11	1	Vacant	
	260490061	R5	Suburban Residential	5.36	2	Vacant	
	260490062	R5	Suburban Residential	0.07	1	Vacant	
	260500001	R5	Suburban Residential	0.13	1	Vacant	
	260500002	R5	Suburban Residential	0.11	1	Vacant	
	260500003	R5	Suburban Residential	0.11	1	Vacant	
	260500004	R5	Suburban Residential	0.11	1	Vacant	
	260500005	R5	Suburban Residential	0.12	1	Vacant	
	260500006	R5	Suburban Residential	0.10	1	Vacant	
	260500007	R5	Suburban Residential	0.10	1	Vacant	
	260500008	R5	Suburban Residential	0.11	1	Vacant	
	260500009	R5	Suburban Residential	0.10	1	Vacant	
	260500010	R5	Suburban Residential	0.10	1	Vacant	
	260500011	R5	Suburban Residential	0.11	1	Vacant	
	260500012	R5	Suburban Residential	0.10	1	Vacant	
	260500013	R5	Suburban Residential	0.14	1	Vacant	
	260500014	R5	Suburban Residential	0.10	1	Vacant	
	260500015	R5	Suburban Residential	0.10	1	Vacant	
	260500016	R5	Suburban Residential	0.11	1	Vacant	
	260500017	R5	Suburban Residential	0.13	1	Vacant	
	260500018	R5	Suburban Residential	0.13	1	Vacant	
	260500019	R5	Suburban Residential	0.11	1	Vacant	
	260500020	R5	Suburban Residential	0.10	1	Vacant	
	260500021	R5	Suburban Residential	0.10	1	Vacant	
	260500022	R5	Suburban Residential	0.10	1	Vacant	
	260500023	R5	Suburban Residential	0.10	1	Vacant	
	260500024	R5	Suburban Residential	0.11	1	Vacant	
	260500025	R5	Suburban Residential	0.13	1	Vacant	
	260500026	R5	Suburban Residential	0.12	1	Vacant	
	260500027	R5	Suburban Residential	0.11	1	Vacant	
	260500028	R5	Suburban Residential	0.10	1	Vacant	
	260500029	R5	Suburban Residential	0.10	1	Vacant	
	260500030	R5	Suburban Residential	0.11	1	Vacant	
	260500031	R5	Suburban Residential	0.10	1	Vacant	
	260500032	R5	Suburban Residential	0.11	1	Vacant	
	260500033	R5	Suburban Residential	0.12	1	Vacant	
	260500034	R5	Suburban Residential	0.12	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	260500035	R5	Suburban Residential	0.11	1	Vacant	
	260500036	R5	Suburban Residential	0.10	1	Vacant	
	260500037	R5	Suburban Residential	0.11	1	Vacant	
	260500038	R5	Suburban Residential	0.11	1	Vacant	
	260500039	R5	Suburban Residential	0.12	1	Vacant	
	260500040	R5	Suburban Residential	0.17	1	Vacant	
	260500041	R5	Suburban Residential	0.12	1	Vacant	
	260500042	R5	Suburban Residential	0.03	1	Vacant	
	260500044	R5	Suburban Residential	0.12	1	Vacant	
	260500045	R5	Suburban Residential	0.04	1	Vacant	
	260500046	R5	Suburban Residential	0.08	1	Vacant	
	260500047	R5	Suburban Residential	0.18	1	Vacant	
	292193003	R5	Suburban Residential	0.23	1	Vacant	
	316020020	R5	Suburban Residential	1.22	1	Vacant	
	316020021	R5	Suburban Residential	1.22	1	Vacant	
	316020022	R5	Suburban Residential	0.91	1	Vacant	
	316020023	R5	Suburban Residential	0.91	1	Vacant	
	316020024	R5	Suburban Residential	4.69	2	Vacant	
	316020025	R5	Suburban Residential	4.80	2	Vacant	
	316020026	R5	Suburban Residential	4.37	2	Vacant	
	316030003	R5	Suburban Residential	1.16	1	Vacant	
	316030018	R5	Suburban Residential	2.48	1	Vacant	
	316030019	R5	Suburban Residential	2.48	1	Vacant	
	316030021	R5	Suburban Residential	1.38	1	Vacant	
	316100021	R5	Suburban Residential	3.53	1	Vacant	
	316100022	R5	Suburban Residential	3.53	1	Vacant	
	316100024	R5	Suburban Residential	6.73	3	Vacant	
	316100026	R5	Suburban Residential	3.06	1	Vacant	
	316110003	R5	Suburban Residential	2.37	1	Vacant	
	316110005	R5	Suburban Residential	4.19	2	Vacant	
	316110006	R5	Suburban Residential	3.81	2	Vacant	
	316110022	R5	Suburban Residential	1.85	1	Vacant	
	316110023	R5	Suburban Residential	4.83	2	Vacant	
	316110024	R5	Suburban Residential	4.85	2	Vacant	
	316160003	R5	Suburban Residential	0.62	1	Vacant	
	316160008	R5	Suburban Residential	7.25	3	Vacant	
	316160012	R5	Suburban Residential	0.17	1	Vacant	
	316160013	R5	Suburban Residential	0.04	1	Vacant	
	422070014	R5	Suburban Residential	10.09	4	Vacant	
	422070034	R5	Suburban Residential	2.24	1	Vacant	
	422070036	R5	Suburban Residential	2.45	1	Vacant	
	474100025	R5	Suburban Residential	27.68	11	Vacant	
	474110004	R5	Suburban Residential	28.05	11	Vacant	
	474110014	R5	Suburban Residential	4.17	2	Vacant	
	474110017	R5	Suburban Residential	0.01	1	Vacant	
	474120010	R5	Suburban Residential	0.61	1	Vacant	
	474120011	R5	Suburban Residential	0.63	1	Vacant	
	474120045	R5	Suburban Residential	0.71	1	Vacant	
	474120046	R5	Suburban Residential	0.37	1	Vacant	
	474120047	R5	Suburban Residential	0.26	1	Vacant	
	474120054	R5	Suburban Residential	0.57	1	Vacant	
	474200014	R5	Suburban Residential	10.00	4	Vacant	
	475050040	R5	Suburban Residential	4.54	2	Vacant	
	475060001	R5	Suburban Residential	9.14	4	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	475090003	R5	Suburban Residential	1.00	1	Vacant	
	475100004	R5	Suburban Residential	0.02	1	Vacant	
	475100005	R5	Suburban Residential	0.03	1	Vacant	
	475100006	R5	Suburban Residential	0.01	1	Vacant	
	475100018	R5	Suburban Residential	0.03	1	Vacant	
	475100019	R5	Suburban Residential	0.16	1	Vacant	
	475111036	R5	Suburban Residential	0.38	1	Vacant	
	475150003	R5	Suburban Residential	4.82	2	Vacant	
	475160056	R5	Suburban Residential	0.19	1	Vacant	
	475160065	R5	Suburban Residential	1.48	1	Vacant	
	475210006	R5	Suburban Residential	0.59	1	Vacant	
	475210047	R5	Suburban Residential	0.38	1	Vacant	
	475220060	R5	Suburban Residential	0.68	1	Vacant	
	475220061	R5	Suburban Residential	0.73	1	Vacant	
	475220062	R5	Suburban Residential	0.88	1	Vacant	
	475220063	R5	Suburban Residential	0.82	1	Vacant	
	475232017	R5	Suburban Residential	0.21	1	Vacant	
	475250075	R5	Suburban Residential	0.26	1	Vacant	
	475250076	R5	Suburban Residential	0.26	1	Vacant	
	475272008	R5	Suburban Residential	0.16	1	Vacant	
	475280005	R5	Suburban Residential	0.03	1	Vacant	
	475280073	R5	Suburban Residential	0.23	1	Vacant	
	475280078	R5	Suburban Residential	0.16	1	Vacant	
	475280079	R5	Suburban Residential	0.16	1	Vacant	
	475280080	R5	Suburban Residential	0.16	1	Vacant	
	475280081	R5	Suburban Residential	0.16	1	Vacant	
	475280082	R5	Suburban Residential	0.16	1	Vacant	
	475280083	R5	Suburban Residential	0.16	1	Vacant	
	475280084	R5	Suburban Residential	0.16	1	Vacant	
	475280085	R5	Suburban Residential	0.16	1	Vacant	
	475351019	R5	Suburban Residential	0.96	1	Vacant	
	475360001	R5	Suburban Residential	0.22	1	Vacant	
	475360002	R5	Suburban Residential	0.21	1	Vacant	
	475360003	R5	Suburban Residential	0.21	1	Vacant	
	478090011	R5	Suburban Residential	8.04	3	Vacant	
	478090012	R5	Suburban Residential	2.44	1	Vacant	
	478090015	R5	Suburban Residential	1.86	1	Vacant	
	478090019	R5	Suburban Residential	2.18	1	Vacant	
	478090022	R5	Suburban Residential	1.09	1	Vacant	
	478090030	R5	Suburban Residential	0.81	1	Vacant	
	478090031	R5	Suburban Residential	1.14	1	Vacant	
	478220002	R5	Suburban Residential	9.39	4	Vacant	
	478220003	R5	Suburban Residential	8.98	4	Vacant	
	478220012	R5	Suburban Residential	8.98	4	Vacant	
	478220013	R5	Suburban Residential	9.39	4	Vacant	
	479132049	R5	Suburban Residential	0.21	1	Vacant	RDA
	479150062	R5	Suburban Residential	0.97	1	Vacant	
	479170002	R5	Suburban Residential	0.20	1	Vacant	
	479170033	R5	Suburban Residential	0.69	1	Vacant	
	479391054	R5	Suburban Residential	0.03	1	Vacant	RDA
	479391060	R5	Suburban Residential	0.01	1	Vacant	RDA
	481342020	R5	Suburban Residential	0.12	1	Vacant	
	481342036	R5	Suburban Residential	0.48	1	Vacant	
	481342037	R5	Suburban Residential	0.51	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	482121001	R5	Suburban Residential	4.34	2	Vacant	RDA
	482152042	R5	Suburban Residential	0.01	1	Vacant	RDA
	482161021	R5	Suburban Residential	4.06	2	Vacant	RDA
	482161022	R5	Suburban Residential	1.15	1	Vacant	RDA
	482161023	R5	Suburban Residential	1.11	1	Vacant	RDA
	482161024	R5	Suburban Residential	2.30	1	Vacant	RDA
	482170009	R5	Suburban Residential	0.77	1	Vacant	
	482170011	R5	Suburban Residential	0.39	1	Vacant	
	482170014	R5	Suburban Residential	0.02	1	Vacant	
	482170016	R5	Suburban Residential	0.02	1	Vacant	
	482170049	R5	Suburban Residential	0.39	1	Vacant	
	482170050	R5	Suburban Residential	0.06	1	Vacant	
	482170051	R5	Suburban Residential	0.03	1	Vacant	
	485020005	R5	Suburban Residential	8.04	3	Vacant	FLOOD,RDA
	485032001	R5	Suburban Residential	0.16	1	Vacant	RDA
	485032013	R5	Suburban Residential	0.17	1	Vacant	RDA
	485111001	R5	Suburban Residential	0.17	1	Vacant	
	485111002	R5	Suburban Residential	0.17	1	Vacant	
	485111003	R5	Suburban Residential	0.17	1	Vacant	
	485111004	R5	Suburban Residential	0.17	1	Vacant	
	485111005	R5	Suburban Residential	0.17	1	Vacant	
	485111006	R5	Suburban Residential	0.17	1	Vacant	
	485111007	R5	Suburban Residential	0.15	1	Vacant	
	485111008	R5	Suburban Residential	0.19	1	Vacant	
	485111009	R5	Suburban Residential	0.23	1	Vacant	
	485111010	R5	Suburban Residential	0.21	1	Vacant	
	485111011	R5	Suburban Residential	0.20	1	Vacant	
	485111012	R5	Suburban Residential	0.16	1	Vacant	
	485111013	R5	Suburban Residential	0.17	1	Vacant	
	485111014	R5	Suburban Residential	0.17	1	Vacant	
	485111015	R5	Suburban Residential	0.17	1	Vacant	
	485111016	R5	Suburban Residential	0.17	1	Vacant	
	485111017	R5	Suburban Residential	0.17	1	Vacant	
	485111018	R5	Suburban Residential	0.19	1	Vacant	
	485112001	R5	Suburban Residential	0.19	1	Vacant	
	485112002	R5	Suburban Residential	0.17	1	Vacant	
	485112003	R5	Suburban Residential	0.17	1	Vacant	
	485112004	R5	Suburban Residential	0.17	1	Vacant	
	485112005	R5	Suburban Residential	0.17	1	Vacant	
	485112006	R5	Suburban Residential	0.21	1	Vacant	
	485112007	R5	Suburban Residential	0.20	1	Vacant	
	485112008	R5	Suburban Residential	0.20	1	Vacant	
	485112022	R5	Suburban Residential	0.20	1	Vacant	
	485112023	R5	Suburban Residential	0.19	1	Vacant	
	485113003	R5	Suburban Residential	0.18	1	Vacant	
	485113004	R5	Suburban Residential	0.21	1	Vacant	
	485113005	R5	Suburban Residential	0.20	1	Vacant	
	485113006	R5	Suburban Residential	0.18	1	Vacant	
	485113007	R5	Suburban Residential	0.18	1	Vacant	
	485113008	R5	Suburban Residential	0.17	1	Vacant	
	485113009	R5	Suburban Residential	0.17	1	Vacant	
	485113010	R5	Suburban Residential	0.17	1	Vacant	
	485113011	R5	Suburban Residential	0.17	1	Vacant	
	485113012	R5	Suburban Residential	0.17	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	485113013	R5	Suburban Residential	0.17	1	Vacant	
	485113014	R5	Suburban Residential	0.17	1	Vacant	
	485113015	R5	Suburban Residential	0.17	1	Vacant	
	485113016	R5	Suburban Residential	0.18	1	Vacant	
	485113017	R5	Suburban Residential	0.23	1	Vacant	
	485113018	R5	Suburban Residential	0.21	1	Vacant	
	485113019	R5	Suburban Residential	0.17	1	Vacant	
	485113020	R5	Suburban Residential	0.17	1	Vacant	
	485113021	R5	Suburban Residential	0.17	1	Vacant	
	485113022	R5	Suburban Residential	0.17	1	Vacant	
	485113023	R5	Suburban Residential	0.17	1	Vacant	
	485113024	R5	Suburban Residential	0.17	1	Vacant	
	485113025	R5	Suburban Residential	0.17	1	Vacant	
	485113026	R5	Suburban Residential	0.17	1	Vacant	
	485113027	R5	Suburban Residential	0.17	1	Vacant	
	485113028	R5	Suburban Residential	0.17	1	Vacant	
	485113029	R5	Suburban Residential	0.18	1	Vacant	
	485113033	R5	Suburban Residential	0.17	1	Vacant	
	485114001	R5	Suburban Residential	0.19	1	Vacant	
	485114002	R5	Suburban Residential	0.17	1	Vacant	
	485114003	R5	Suburban Residential	0.17	1	Vacant	
	485114004	R5	Suburban Residential	0.17	1	Vacant	
	485114005	R5	Suburban Residential	0.17	1	Vacant	
	485114006	R5	Suburban Residential	0.17	1	Vacant	
	485114007	R5	Suburban Residential	0.17	1	Vacant	
	485114008	R5	Suburban Residential	0.17	1	Vacant	
	485114009	R5	Suburban Residential	0.17	1	Vacant	
	485114010	R5	Suburban Residential	0.17	1	Vacant	
	485114011	R5	Suburban Residential	0.19	1	Vacant	
	485114012	R5	Suburban Residential	0.19	1	Vacant	
	485114013	R5	Suburban Residential	0.17	1	Vacant	
	485114014	R5	Suburban Residential	0.17	1	Vacant	
	485114015	R5	Suburban Residential	0.17	1	Vacant	
	485114016	R5	Suburban Residential	0.17	1	Vacant	
	485114017	R5	Suburban Residential	0.17	1	Vacant	
	485114018	R5	Suburban Residential	0.17	1	Vacant	
	485114019	R5	Suburban Residential	0.17	1	Vacant	
	485114020	R5	Suburban Residential	0.17	1	Vacant	
	485114021	R5	Suburban Residential	0.17	1	Vacant	
	485114022	R5	Suburban Residential	0.17	1	Vacant	
	485121001	R5	Suburban Residential	0.18	1	Vacant	
	485121002	R5	Suburban Residential	0.18	1	Vacant	
	485121003	R5	Suburban Residential	0.17	1	Vacant	
	485121004	R5	Suburban Residential	0.17	1	Vacant	
	485121005	R5	Suburban Residential	0.17	1	Vacant	
	485121006	R5	Suburban Residential	0.17	1	Vacant	
	485121007	R5	Suburban Residential	0.17	1	Vacant	
	485121008	R5	Suburban Residential	0.17	1	Vacant	
	485121009	R5	Suburban Residential	0.17	1	Vacant	
	485121010	R5	Suburban Residential	0.19	1	Vacant	
	485121014	R5	Suburban Residential	0.17	1	Vacant	
	485121015	R5	Suburban Residential	0.17	1	Vacant	
	485121016	R5	Suburban Residential	0.16	1	Vacant	
	485121017	R5	Suburban Residential	0.18	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	485121018	R5	Suburban Residential	0.19	1	Vacant	
	485121019	R5	Suburban Residential	0.23	1	Vacant	
	485121020	R5	Suburban Residential	0.20	1	Vacant	
	485121021	R5	Suburban Residential	0.21	1	Vacant	
	485121024	R5	Suburban Residential	0.07	1	Vacant	
	485121025	R5	Suburban Residential	0.18	1	Vacant	
	485122001	R5	Suburban Residential	0.17	1	Vacant	
	485122002	R5	Suburban Residential	0.17	1	Vacant	
	485122003	R5	Suburban Residential	0.17	1	Vacant	
	485122004	R5	Suburban Residential	0.17	1	Vacant	
	485122005	R5	Suburban Residential	0.17	1	Vacant	
	485122006	R5	Suburban Residential	0.21	1	Vacant	
	485122007	R5	Suburban Residential	0.19	1	Vacant	
	485122008	R5	Suburban Residential	0.23	1	Vacant	
	485122009	R5	Suburban Residential	0.26	1	Vacant	
	485122010	R5	Suburban Residential	0.17	1	Vacant	
	485122011	R5	Suburban Residential	0.17	1	Vacant	
	485122012	R5	Suburban Residential	0.19	1	Vacant	
	485123001	R5	Suburban Residential	0.18	1	Vacant	
	485123002	R5	Suburban Residential	0.19	1	Vacant	
	485123003	R5	Suburban Residential	0.19	1	Vacant	
	485123004	R5	Suburban Residential	0.30	1	Vacant	
	485123005	R5	Suburban Residential	0.30	1	Vacant	
	485123006	R5	Suburban Residential	0.18	1	Vacant	
	485123007	R5	Suburban Residential	0.18	1	Vacant	
	485123008	R5	Suburban Residential	0.17	1	Vacant	
	485123009	R5	Suburban Residential	0.17	1	Vacant	
	485123010	R5	Suburban Residential	0.17	1	Vacant	
	485123011	R5	Suburban Residential	0.17	1	Vacant	
	485123012	R5	Suburban Residential	0.17	1	Vacant	
	485123013	R5	Suburban Residential	0.17	1	Vacant	
	485123014	R5	Suburban Residential	0.17	1	Vacant	
	485123015	R5	Suburban Residential	0.20	1	Vacant	
	485123016	R5	Suburban Residential	0.19	1	Vacant	
	485123017	R5	Suburban Residential	0.17	1	Vacant	
	485123018	R5	Suburban Residential	0.17	1	Vacant	
	485123019	R5	Suburban Residential	0.17	1	Vacant	
	485123020	R5	Suburban Residential	0.17	1	Vacant	
	485123021	R5	Suburban Residential	0.17	1	Vacant	
	485123022	R5	Suburban Residential	0.17	1	Vacant	
	485123023	R5	Suburban Residential	0.17	1	Vacant	
	485123024	R5	Suburban Residential	0.18	1	Vacant	
	485123025	R5	Suburban Residential	0.18	1	Vacant	
	485123026	R5	Suburban Residential	0.18	1	Vacant	
	485123027	R5	Suburban Residential	0.17	1	Vacant	
	485123028	R5	Suburban Residential	0.17	1	Vacant	
	485123029	R5	Suburban Residential	0.17	1	Vacant	
	485123030	R5	Suburban Residential	0.17	1	Vacant	
	485123031	R5	Suburban Residential	0.19	1	Vacant	
	485220023	R5	Suburban Residential	18.06	7	Vacant	
	485220032	R5	Suburban Residential	19.12	8	Vacant	
	486240002	R5	Suburban Residential	9.00	4	Vacant	FLOOD
	486240011	R5	Suburban Residential	18.78	8	Vacant	FLOOD
	486250007	R5	Suburban Residential	9.39	4	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	486260008	R5	Suburban Residential	9.39	4	Vacant	
	486260009	R5	Suburban Residential	8.97	4	Vacant	FLOOD
	486310014	R5	Suburban Residential	8.96	4	Vacant	FLOOD
	486522012	R5	Suburban Residential	0.76	1	Vacant	
	486522013	R5	Suburban Residential	4.58	2	Vacant	FLOOD
	487042010	R5	Suburban Residential	0.01	1	Vacant	
	487053001	R5	Suburban Residential	0.03	1	Vacant	
	487091002	R5	Suburban Residential	0.17	1	Vacant	
	487230008	R5	Suburban Residential	0.20	1	Vacant	
	487230009	R5	Suburban Residential	0.23	1	Vacant	
	487230015	R5	Suburban Residential	0.20	1	Vacant	
	487230016	R5	Suburban Residential	0.19	1	Vacant	
	487260002	R5	Suburban Residential	2.44	1	Vacant	
	487260003	R5	Suburban Residential	2.44	1	Vacant	
	487320001	R5	Suburban Residential	0.21	1	Vacant	
	487320002	R5	Suburban Residential	0.20	1	Vacant	
	487320003	R5	Suburban Residential	0.20	1	Vacant	
	487320004	R5	Suburban Residential	0.20	1	Vacant	
	487320005	R5	Suburban Residential	0.21	1	Vacant	
	487320006	R5	Suburban Residential	0.25	1	Vacant	
	487320007	R5	Suburban Residential	0.27	1	Vacant	
	487320008	R5	Suburban Residential	0.18	1	Vacant	
	487320009	R5	Suburban Residential	0.21	1	Vacant	
	487320010	R5	Suburban Residential	0.26	1	Vacant	
	487320011	R5	Suburban Residential	0.27	1	Vacant	
	487320012	R5	Suburban Residential	0.21	1	Vacant	
	487320013	R5	Suburban Residential	0.23	1	Vacant	
	487320014	R5	Suburban Residential	0.93	1	Vacant	
	487321001	R5	Suburban Residential	0.22	1	Vacant	
	487321002	R5	Suburban Residential	0.18	1	Vacant	
	487321003	R5	Suburban Residential	0.23	1	Vacant	
	487321004	R5	Suburban Residential	0.25	1	Vacant	
	487321005	R5	Suburban Residential	0.19	1	Vacant	
	487321006	R5	Suburban Residential	0.17	1	Vacant	
	487321007	R5	Suburban Residential	0.20	1	Vacant	
	487321008	R5	Suburban Residential	0.22	1	Vacant	
	487321009	R5	Suburban Residential	0.23	1	Vacant	
	487321010	R5	Suburban Residential	0.22	1	Vacant	
	487321011	R5	Suburban Residential	0.20	1	Vacant	
	487321012	R5	Suburban Residential	0.19	1	Vacant	
	487321013	R5	Suburban Residential	0.18	1	Vacant	
	487321014	R5	Suburban Residential	0.17	1	Vacant	
	487321015	R5	Suburban Residential	0.17	1	Vacant	
	487321016	R5	Suburban Residential	0.17	1	Vacant	
	487321017	R5	Suburban Residential	0.18	1	Vacant	
	487321018	R5	Suburban Residential	0.19	1	Vacant	
	487321019	R5	Suburban Residential	0.17	1	Vacant	
	487321020	R5	Suburban Residential	0.17	1	Vacant	
	487321021	R5	Suburban Residential	0.17	1	Vacant	
	487321022	R5	Suburban Residential	0.18	1	Vacant	
	487321023	R5	Suburban Residential	0.19	1	Vacant	
	487321024	R5	Suburban Residential	0.20	1	Vacant	
	487321025	R5	Suburban Residential	0.21	1	Vacant	
	487321026	R5	Suburban Residential	0.19	1	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	487321027	R5	Suburban Residential	0.23	1	Vacant	
	487321028	R5	Suburban Residential	0.19	1	Vacant	
	487321029	R5	Suburban Residential	0.29	1	Vacant	
	487321030	R5	Suburban Residential	0.23	1	Vacant	
	487321031	R5	Suburban Residential	0.24	1	Vacant	
	487321032	R5	Suburban Residential	0.29	1	Vacant	
	487330001	R5	Suburban Residential	0.21	1	Vacant	
	487330002	R5	Suburban Residential	0.19	1	Vacant	
	487330003	R5	Suburban Residential	0.21	1	Vacant	
	487330004	R5	Suburban Residential	0.17	1	Vacant	
	487333009	R5	Suburban Residential	0.21	1	Vacant	
	487333010	R5	Suburban Residential	0.20	1	Vacant	
	487333011	R5	Suburban Residential	0.23	1	Vacant	
	487333012	R5	Suburban Residential	0.22	1	Vacant	
	487340001	R5	Suburban Residential	0.21	1	Vacant	
	487340002	R5	Suburban Residential	0.21	1	Vacant	
	487340003	R5	Suburban Residential	0.19	1	Vacant	
	487340004	R5	Suburban Residential	0.26	1	Vacant	
	487340005	R5	Suburban Residential	0.32	1	Vacant	
	487340006	R5	Suburban Residential	0.25	1	Vacant	
	487340007	R5	Suburban Residential	0.19	1	Vacant	
	487340008	R5	Suburban Residential	0.19	1	Vacant	
	487340013	R5	Suburban Residential	0.19	1	Vacant	
	487340014	R5	Suburban Residential	0.18	1	Vacant	
	487340015	R5	Suburban Residential	0.18	1	Vacant	
	487340016	R5	Suburban Residential	0.18	1	Vacant	
	487340017	R5	Suburban Residential	0.18	1	Vacant	
	487340018	R5	Suburban Residential	0.18	1	Vacant	
	487340020	R5	Suburban Residential	0.19	1	Vacant	
	487341004	R5	Suburban Residential	0.21	1	Vacant	
	487341005	R5	Suburban Residential	0.21	1	Vacant	
	487341011	R5	Suburban Residential	0.27	1	Vacant	
	487341016	R5	Suburban Residential	0.19	1	Vacant	
	487341017	R5	Suburban Residential	0.19	1	Vacant	
	487341018	R5	Suburban Residential	0.19	1	Vacant	
	487341019	R5	Suburban Residential	0.19	1	Vacant	
	487341020	R5	Suburban Residential	0.18	1	Vacant	
	487341021	R5	Suburban Residential	0.18	1	Vacant	
	487341022	R5	Suburban Residential	0.17	1	Vacant	
	487341023	R5	Suburban Residential	0.22	1	Vacant	
	487342001	R5	Suburban Residential	0.20	1	Vacant	
	487342002	R5	Suburban Residential	0.19	1	Vacant	
	487342003	R5	Suburban Residential	0.28	1	Vacant	
	487342005	R5	Suburban Residential	0.36	1	Vacant	
	487343005	R5	Suburban Residential	0.24	1	Vacant	
	487343006	R5	Suburban Residential	0.24	1	Vacant	
	487343007	R5	Suburban Residential	0.24	1	Vacant	
	487343008	R5	Suburban Residential	0.24	1	Vacant	
	487343009	R5	Suburban Residential	0.24	1	Vacant	
	487343010	R5	Suburban Residential	0.24	1	Vacant	
	487343011	R5	Suburban Residential	0.34	1	Vacant	
	487470014	R5	Suburban Residential	5.41	2	Vacant	
	487470016	R5	Suburban Residential	0.85	1	Vacant	
	487470028	R5	Suburban Residential	18.04	7	Vacant	

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
ABOVE MODERATE	487540001	R5	Suburban Residential	0.18	1	Vacant	
	487540002	R5	Suburban Residential	0.20	1	Vacant	
	487540003	R5	Suburban Residential	0.25	1	Vacant	
	487540004	R5	Suburban Residential	0.24	1	Vacant	
	487540005	R5	Suburban Residential	0.28	1	Vacant	
	487540006	R5	Suburban Residential	0.20	1	Vacant	
	487540007	R5	Suburban Residential	0.21	1	Vacant	
	487540008	R5	Suburban Residential	0.17	1	Vacant	
	487540009	R5	Suburban Residential	0.20	1	Vacant	
	487540010	R5	Suburban Residential	0.23	1	Vacant	
	487540011	R5	Suburban Residential	0.20	1	Vacant	
	487540012	R5	Suburban Residential	0.20	1	Vacant	
	487540013	R5	Suburban Residential	0.21	1	Vacant	
	487540014	R5	Suburban Residential	0.22	1	Vacant	
	487540015	R5	Suburban Residential	0.24	1	Vacant	
	487540016	R5	Suburban Residential	0.25	1	Vacant	
	487540017	R5	Suburban Residential	1.01	1	Vacant	
	487541001	R5	Suburban Residential	0.24	1	Vacant	
	487541002	R5	Suburban Residential	0.22	1	Vacant	
	487541003	R5	Suburban Residential	0.22	1	Vacant	
	487541004	R5	Suburban Residential	0.24	1	Vacant	
	487541005	R5	Suburban Residential	0.25	1	Vacant	
	487541006	R5	Suburban Residential	0.25	1	Vacant	
	487541007	R5	Suburban Residential	0.24	1	Vacant	
	487541008	R5	Suburban Residential	0.21	1	Vacant	
	488330012	R5	Suburban Residential	9.40	4	Vacant	
	488350005	R5	Suburban Residential	9.40	4	Vacant	
	488350006	R5	Suburban Residential	8.97	4	Vacant	
	488350007	R5	Suburban Residential	8.97	4	Vacant	
	488350019	R5	Suburban Residential	8.97	4	Vacant	
	488350021	R5	Suburban Residential	9.40	4	Vacant	
	488350023	R5	Suburban Residential	9.40	4	Vacant	
	488350025	R5	Suburban Residential	8.97	4	Vacant	

Parcels per Density Designation: 1,054 **Acres per Density Designation:** 3,777 **Units per Density Designation:** 1,305

Total Parcels: 1,054 **Total Vacant Acres:** 3,777.08 **Total Residential Units:** 1,305

Vacant Land Inventory - Transitional Housing Sites
Attachment 7

Based on 10-2013 data
Report Print Date: 10.7.2013

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
LOW & VERY LOW	291120014	R10	Multi-family	26.13	21	Vacant	RDA
	291100055	R15	Multi-family	18.88	23	Vacant	RDA
	292222015	R15	Multi-family	0.20	1	Vacant	RDA
	292222036	R15	Multi-family	0.20	1	Vacant	RDA
	479050001	R15	Multi-family	1.67	2	Vacant	RDA
	479050003	R15	Multi-family	0.89	1	Vacant	RDA
	479050004	R15	Multi-family	0.89	1	Vacant	RDA
	479090021	R15	Multi-family	0.33	1	Vacant	RDA
	479121027	R15	Multi-family	0.26	1	Vacant	RDA
	488090028	R15	Multi-family	0.50	1	Vacant	RDA
	488090061	R15	Multi-family	1.37	2	Vacant	RDA
	488091025	R15	Multi-family	2.87	3	Vacant	RDA
	488091031	R15	Multi-family	0.86	1	Vacant	RDA
	291281006	R20	Multi-family	0.48	1	Vacant	RDA
	291291003	R20	Multi-family	0.20	1	Vacant	RDA
	481130022	VR	Multi-family	0.42	1	Vacant	SP,RDA
	481130023	VR	Multi-family	0.50	1	Vacant	SP,RDA
	481150024	VR	Multi-family	0.91	1	Vacant	SP,RDA
	481150026	VR	Multi-family	0.45	1	Vacant	SP,RDA
	481150027	VR	Multi-family	0.91	1	Vacant	SP,RDA
	481150030	VR	Multi-family	0.36	1	Vacant	SP,RDA
	481150035	VR	Multi-family	0.09	1	Vacant	SP,RDA
	481161022	VR	Multi-family	0.20	1	Vacant	SP,FLOOD,RDA
	481171007	VR	Multi-family	0.45	1	Vacant	SP,RDA
	481171008	VR	Multi-family	0.81	1	Vacant	SP,FLOOD,RDA
	481171011	VR	Multi-family	0.34	1	Vacant	SP,RDA
	481171013	VR	Multi-family	0.01	1	Vacant	SP,FLOOD,RDA
	481171027	VR	Multi-family	0.45	1	Vacant	SP,RDA
	481171032	VR	Multi-family	0.27	1	Vacant	SP,FLOOD,RDA
	481171039	VR	Multi-family	0.77	1	Vacant	SP,RDA
	481171046	VR	Multi-family	0.10	1	Vacant	SP, FLOOD
	481171047	VR	Multi-family	0.10	1	Vacant	SP, FLOOD
	481171048	VR	Multi-family	0.11	1	Vacant	SP, FLOOD
	481171049	VR	Multi-family	0.11	1	Vacant	SP, FLOOD
	481171050	VR	Multi-family	0.14	1	Vacant	SP, FLOOD
	481200013	VR	Multi-family	0.45	1	Vacant	SP,RDA
	481200033	VR	Multi-family	0.91	1	Vacant	SP,RDA
	481200044	VR	Multi-family	0.45	1	Vacant	SP,RDA
	481210025	VR	Multi-family	0.45	1	Vacant	SP,RDA
	481223017	VR	Multi-family	0.36	1	Vacant	SP,FLOOD,RDA
	481230040	VR	Multi-family	0.21	1	Vacant	SP,RDA
	481230041	VR	Multi-family	0.21	1	Vacant	SP,RDA
	481230042	VR	Multi-family	0.22	1	Vacant	SP,FLOOD,RDA
	481230050	VR	Multi-family	0.17	1	Vacant	SP,RDA
	481230052	VR	Multi-family	0.15	1	Vacant	SP, RDA
	481230053	VR	Multi-family	0.14	1	Vacant	SP, RDA
	481230054	VR	Multi-family	0.14	1	Vacant	SP, RDA
	481230055	VR	Multi-family	0.15	1	Vacant	SP, RDA
	481240001	VR	Multi-family	0.91	1	Vacant	SP,RDA

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
LOW & VERY LOW	481240035	VR	Multi-family	0.58	1	Vacant	SP,RDA
	481240036	VR	Multi-family	0.17	1	Vacant	SP,RDA
	481240042	VR	Multi-family	0.26	1	Vacant	SP,RDA
	481250002	VR	Multi-family	0.45	1	Vacant	SP,RDA
	481250003	VR	Multi-family	0.91	1	Vacant	SP,RDA
	481250026	VR	Multi-family	0.45	1	Vacant	SP,RDA
	481250041	VR	Multi-family	0.06	1	Vacant	SP,RDA
	481250043	VR	Multi-family	0.02	1	Vacant	SP,RDA
	481260040	VR	Multi-family	0.01	1	Vacant	SP,RDA
	481270008	VR	Multi-family	0.45	1	Vacant	SP,RDA
	481270015	VR	Multi-family	0.23	1	Vacant	SP,RDA
	481270027	VR	Multi-family	0.45	1	Vacant	SP,RDA
	481270046	VR	Multi-family	0.31	1	Vacant	SP,RDA
	481270055	VR	Multi-family	0.60	1	Vacant	SP,RDA
	481270058	VR	Multi-family	1.40	2	Vacant	SP,RDA
	482020014	VR	Multi-family	0.59	1	Vacant	SP,RDA
	482020019	VR	Multi-family	0.52	1	Vacant	SP,RDA
	482020043	VR	Multi-family	0.01	1	Vacant	SP,RDA
	482020044	VR	Multi-family	0.23	1	Vacant	SP,RDA
	482020064	VR	Multi-family	1.32	2	Vacant	SP, RDA
	482030039	VR	Multi-family	0.03	1	Vacant	SP,RDA
	482030041	VR	Multi-family	0.03	1	Vacant	SP,RDA
	482040008	VR	Multi-family	0.03	1	Vacant	SP,FLOOD,RDA
	482050005	VR	Multi-family	0.91	1	Vacant	SP,RDA
	482050025	VR	Multi-family	0.91	1	Vacant	SP,RDA
	482060027	VR	Multi-family	0.23	1	Vacant	SP,RDA
	482080011	VR	Multi-family	0.85	1	Vacant	SP,RDA
	482080014	VR	Multi-family	0.61	1	Vacant	SP,RDA
	482080024	VR	Multi-family	0.27	1	Vacant	SP,RDA
	482080027	VR	Multi-family	0.26	1	Vacant	SP,RDA
	482080039	VR	Multi-family	0.11	1	Vacant	SP,FLOOD,RDA
	482080044	VR	Multi-family	0.02	1	Vacant	SP,RDA
	482080051	VR	Multi-family	0.10	1	Vacant	SP,FLOOD,RDA
	482080059	VR	Multi-family	0.17	1	Vacant	SP,RDA
	482080060	VR	Multi-family	0.17	1	Vacant	SP,RDA
	482080061	VR	Multi-family	0.21	1	Vacant	SP,FLOOD,RDA
	482090019	VR	Multi-family	0.05	1	Vacant	SP,RDA
	482090026	VR	Multi-family	0.15	1	Vacant	SP,RDA
	482090027	VR	Multi-family	0.45	1	Vacant	SP,RDA
	481120020	VOR	Office	0.61	1	Vacant	SP,RDA
	481120021	VOR	Office	0.30	1	Vacant	SP,RDA
	481130024	VOR	Office	0.45	1	Vacant	SP,RDA
	481130025	VOR	Office	0.45	1	Vacant	SP,RDA
	481140021	VOR	Office	0.91	1	Vacant	SP,RDA
	481140024	VOR	Office	0.91	1	Vacant	SP,RDA
	481140025	VOR	Office	0.91	1	Vacant	SP,RDA
	481171043	VOR	Office	0.01	1	Vacant	SP,RDA
	481270038	VOR	Office	0.11	1	Vacant	SP,RDA
	481270040	VOR	Office	0.21	1	Vacant	SP,RDA
	481270043	VOR	Office	0.02	1	Vacant	SP,RDA
	481270048	VOR	Office	0.01	1	Vacant	SP,RDA
	481270059	VOR	Office	0.05	1	Vacant	SP,RDA
	481270060	VOR	Office	0.93	1	Vacant	SP,RDA

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
Parcels per Density Designation:	**102**		**Acres per Density Designation:**	**89**		**Units per Density Designation:**	**150**
MODERATE	479230018	R10	Multi-family	4.54	4	Vacant	FLOOD
	482230024	R10	Multi-family	8.26	7	Vacant	
	482582039	R10	Multi-family	5.50	4	Vacant	
	482582040	R10	Multi-family	1.98	2	Vacant	
	292181001	R15	Multi-family	1.09	1	Vacant	
	292181015	R15	Multi-family	0.17	1	Vacant	
	292211001	R15	Multi-family	0.40	1	Vacant	
	479230011	R15	Multi-family	2.27	3	Vacant	
	479230012	R15	Multi-family	2.27	3	Vacant	
	479230027	R15	Multi-family	0.52	1	Vacant	FLOOD
	484030013	R15	Multi-family	1.70	2	Vacant	
	484030014	R15	Multi-family	2.30	3	Vacant	
	484030020	R15	Multi-family	1.93	2	Vacant	
	484231015	R15	Multi-family	2.14	3	Vacant	
	484231016	R15	Multi-family	2.14	3	Vacant	
	486280043	R15	Multi-family	27.52	33	Vacant	
	486280044	R15	Multi-family	8.61	10	Vacant	
	488330011	R15	Multi-family	9.39	11	Vacant	
	488330024	R15	Multi-family	8.97	11	Vacant	
	296103025	R20	Multi-family	0.28	1	Vacant	
	487370001	R20	Multi-family	9.39	15	Vacant	
	487370002	R20	Multi-family	9.39	15	Vacant	
	487400008	R20	Multi-family	0.65	1	Vacant	
	487400023	R20	Multi-family	0.29	1	Vacant	
Parcels per Density Designation:	**24**		**Acres per Density Designation:**	**112**		**Units per Density Designation:**	**138**

Total Parcels: 126 **Total Vacant Acres: 200.31** **Total Residential Units: 288**

Vacant Land Inventory - Homeless Shelter Sites
Attachment 8 (With CUP)

Based on 10-2013 data
Report Print Date: 10.7.2013

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
LOW & VERY LOW	481120020	VOR	Office	0.61	9	Vacant	SP,RDA
	481120021	VOR	Office	0.30	4	Vacant	SP,RDA
	481130024	VOR	Office	0.45	7	Vacant	SP,RDA
	481130025	VOR	Office	0.45	7	Vacant	SP,RDA
	481140021	VOR	Office	0.91	14	Vacant	SP,RDA
	481140024	VOR	Office	0.91	14	Vacant	SP,RDA
	481140025	VOR	Office	0.91	14	Vacant	SP,RDA
	481171043	VOR	Office	0.01	1	Vacant	SP,RDA
	481270038	VOR	Office	0.11	2	Vacant	SP,RDA
	481270040	VOR	Office	0.21	3	Vacant	SP,RDA
	481270043	VOR	Office	0.02	1	Vacant	SP,RDA
	481270048	VOR	Office	0.01	1	Vacant	SP,RDA
	481270059	VOR	Office	0.05	1	Vacant	SP,RDA
	481270060	VOR	Office	0.93	14	Vacant	SP,RDA
Parcels per Density Designation:	**14**		**Acres per Density Designation:**	**6**	**Units per Density Designation:**		**92**
O/OC	297170029	O	Office	8.46	0	Vacant	RDA
	475190005	O	Office	2.87	0	Vacant	
	479070051	O	Office	1.19	0	Vacant	RDA
	479090003	O	Office	0.49	0	Vacant	RDA
	479120043	O	Office	0.34	0	Vacant	RDA
	482180074	O	Office	2.37	0	Vacant	
	484030002	O	Office	0.79	0	Vacant	
	484030003	O	Office	4.55	0	Vacant	
	484030025	O	Office	3.76	0	Vacant	
	486310022	O	Office	18.81	0	Vacant	
	487470022	O	Office	18.48	0	Vacant	
	488210015	O	Office	2.75	0	Vacant	
	488260012	O	Office	8.08	0	Vacant	
	488260014	O	Office	8.34	0	Vacant	
	488260017	O	Office	1.87	0	Vacant	
	488260018	O	Office	1.88	0	Vacant	
	488260021	O	Office	2.14	0	Vacant	
	488260022	O	Office	2.13	0	Vacant	
	488260033	O	Office	8.01	0	Vacant	
	488260035	O	Office	7.80	0	Vacant	
	488260037	O	Office	7.39	0	Vacant	FAULT
	488310005	O	Office	7.61	0	Vacant	
	488310006	O	Office	3.00	0	Vacant	
	488320008	O	Office	3.66	0	Vacant	
	488320009	O	Office	0.87	0	Vacant	
	291090032	OC	Office	0.12	0	Vacant	RDA
	292193023	OC	Office	0.06	0	Vacant	
	479120027	OC	Office	1.01	0	Vacant	RDA
	479120029	OC	Office	0.65	0	Vacant	RDA
	479120042	OC	Office	0.36	0	Vacant	RDA
	479131012	OC	Office	3.77	0	Vacant	RDA
	479140023	OC	Office	1.35	0	Vacant	RDA

Density Designation	APN	Zoning	GP Designation	Acre	Capacity	Existing Use	Environmental Constraints
O/OC	479140024	OC	Office	2.14	0	Vacant	RDA
	484030016	OC	Office	9.00	0	Vacant	
	484072106	OC	Office	0.20	0	Vacant	
	486240003	OC	Office	5.44	0	Vacant	
	486240004	OC	Office	1.06	0	Vacant	
	486240005	OC	Office	1.06	0	Vacant	
	486240006	OC	Office	1.21	0	Vacant	
	486240007	OC	Office	2.11	0	Vacant	
	486240012	OC	Office	1.88	0	Vacant	
	486240013	OC	Office	6.74	0	Vacant	
	486270019	OC	Office	8.26	0	Vacant	
	488080013	OC	Office	16.24	0	Vacant	
	488080014	OC	Office	8.45	0	Vacant	
	488080015	OC	Office	8.98	0	Vacant	
	488080016	OC	Office	4.48	0	Vacant	
	488080017	OC	Office	7.95	0	Vacant	

Parcels per Density Designation: 48 **Acres per Density Designation:** 220 **Units per Density Designation:** 0

Total Parcels: 62 **Total Vacant Acres:** 226.04 **Total Residential Units:** 92

Vacant Land Inventory - Homeless Shelter Sites (SP 208)
Attachment 9 (Without CUP)

Based on 10-2013 data
Report Print Date: 10.7.2013

APN	Zoning	GP Designation	Acre	Existing Use	Environmental Constraints
312250016	I	Industrial/Business Park	1.87	Vacant	SP
312250032	I	Industrial/Business Park	5.12	Vacant	SP
312250038	I	Industrial/Business Park	7.94	Vacant	SP
312250048	I	Industrial/Business Park	4.15	Vacant	SP
312270001	I	Industrial/Business Park	1.53	Vacant	SP
312270030	I	Industrial/Business Park	1.67	Vacant	SP
312270031	I	Industrial/Business Park	3.35	Vacant	SP
312270037	I	Industrial/Business Park	4.40	Vacant	SP
316020016	I	Industrial/Business Park	4.52	Vacant	SP,FLOOD
316020017	I	Industrial/Business Park	4.52	Vacant	SP
316020018	I	Industrial/Business Park	4.53	Vacant	SP
316020033	I	Industrial/Business Park	19.93	Vacant	SP,FLOOD
316020034	I	Industrial/Business Park	19.52	Vacant	SP,FLOOD
316020036	I	Industrial/Business Park	14.81	Vacant	SP,FLOOD
316100034	I	Industrial/Business Park	2.50	Vacant	SP,FLOOD
316100048	I	Industrial/Business Park	4.93	Vacant	SP
316100050	I	Industrial/Business Park	7.39	Vacant	SP,FLOOD
316100051	I	Industrial/Business Park	8.71	Vacant	SP
316180012	I	Industrial/Business Park	18.78	Vacant	SP
316180014	I	Industrial/Business Park	20.07	Vacant	SP
316190011	I	Industrial/Business Park	4.46	Vacant	SP
316190036	I	Industrial/Business Park	4.78	Vacant	SP
316190037	I	Industrial/Business Park	4.14	Vacant	SP
316190045	I	Industrial/Business Park	9.94	Vacant	SP
316200001	I	Industrial/Business Park	2.39	Vacant	SP
316200015	I	Industrial/Business Park	2.39	Vacant	SP
316200019	I	Industrial/Business Park	4.14	Vacant	SP
316210003	I	Industrial/Business Park	5.14	Vacant	SP
316210004	I	Industrial/Business Park	5.14	Vacant	SP
316210005	I	Industrial/Business Park	5.06	Vacant	SP
316210008	I	Industrial/Business Park	4.38	Vacant	SP
316210019	I	Industrial/Business Park	4.97	Vacant	SP
316210020	I	Industrial/Business Park	4.97	Vacant	SP
316210032	I	Industrial/Business Park	4.96	Vacant	SP
316210033	I	Industrial/Business Park	4.95	Vacant	SP
316210038	I	Industrial/Business Park	4.80	Vacant	SP
316210052	I	Industrial/Business Park	4.83	Vacant	SP
316210057	I	Industrial/Business Park	4.77	Vacant	SP
316210071	I	Industrial/Business Park	17.27	Vacant	SP
316210073	I	Industrial/Business Park	17.44	Vacant	SP
316210075	I	Industrial/Business Park	18.20	Vacant	SP
316210079	I	Industrial/Business Park	18.37	Vacant	SP

Total Parcels: 42 **Total Vacant Acres: 317.73**

CITY OF MORENO VALLEY
HOUSING ELEMENT 2008
EXCEPTION AREAS

Legend

- Vacant Properties
- RDA Bounds
- Flood Areas
- Fault Zones
- AICUZ
- Parcels
- City Bounds

N

0 2,500 5,000 10,000 Feet

0 0.5 1 2 Miles

Print Date: 7.20.10

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Attachment 10

MORENO VALLEY
WHERE DREAMS SOAR

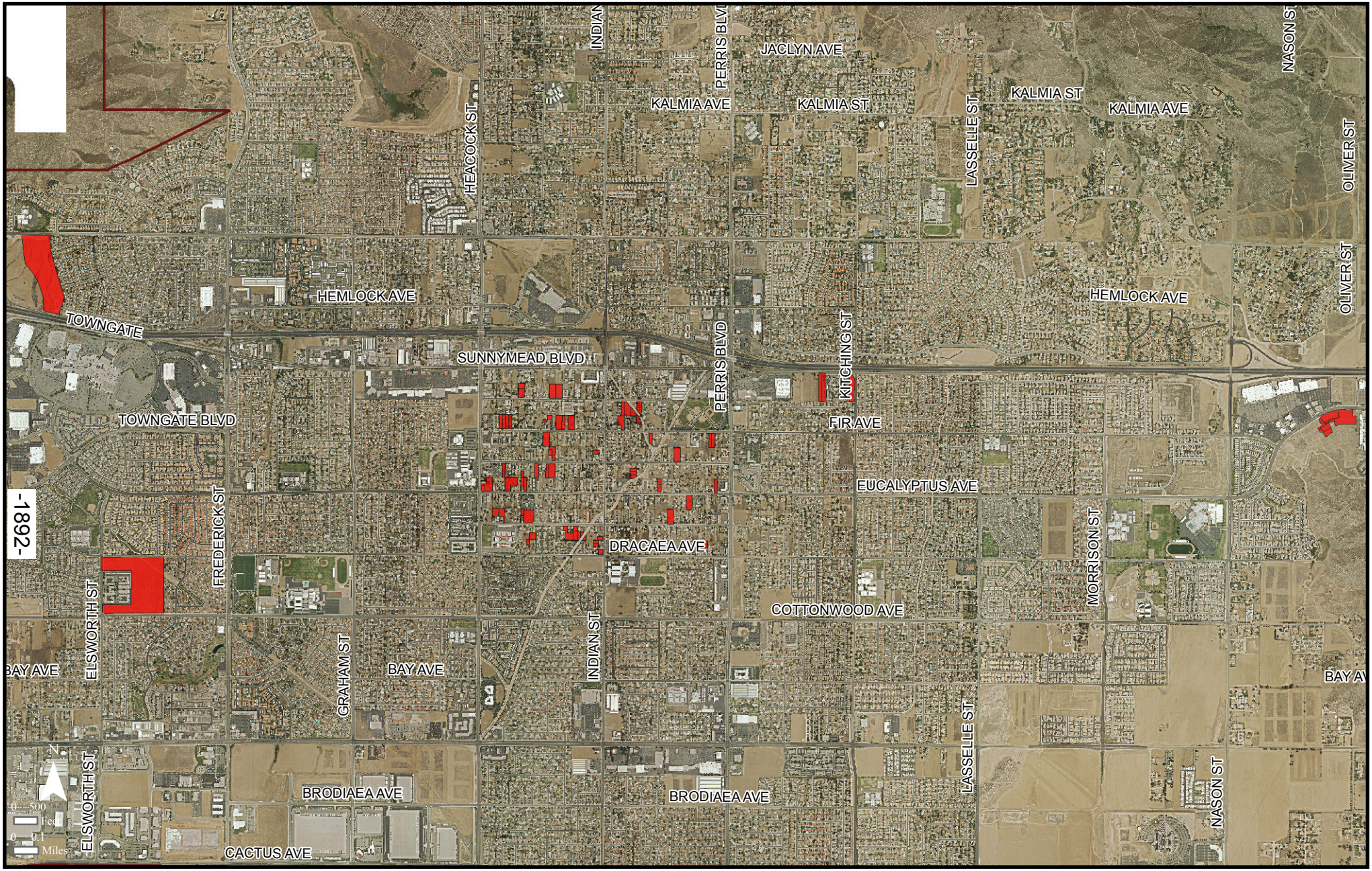

Exhibit:

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Map Status: DRAFT

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Print Date: October 3, 2013

CITY OF MORENO VALLEY

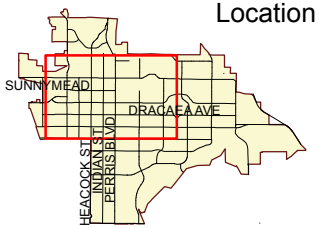
LOW & VERY LOW INCOME CALCULATION 1

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map



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Print Date: October 3, 2013

CITY OF MORENO VALLEY

LOW & VERY LOW INCOME CALCULATION 1

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map

Exhibit:

A - 11

Map Status: DRAFT

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Print Date: October 3, 2013

CITY OF MORENO VALLEY

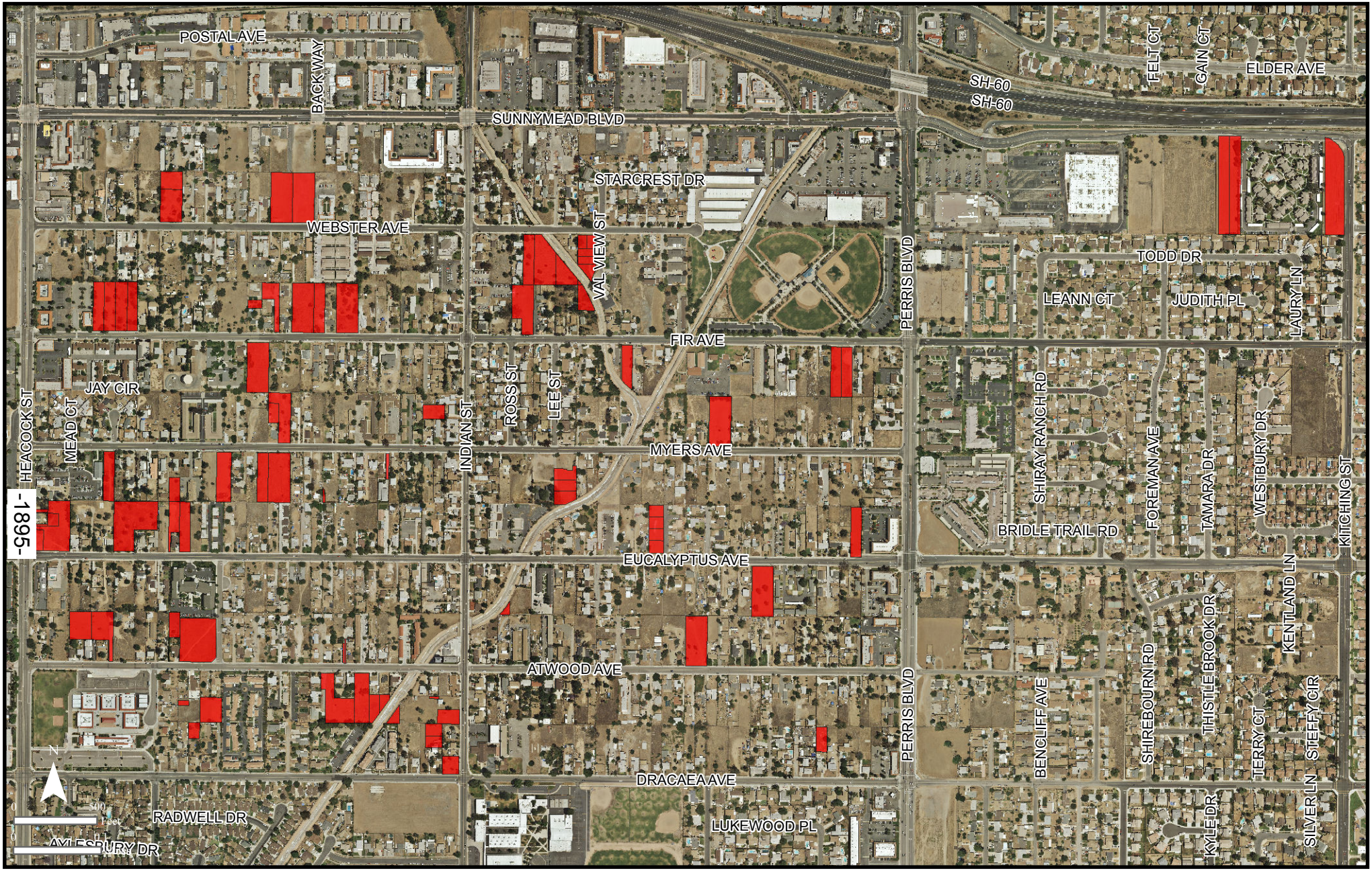
LOW & VERY LOW INCOME CALCULATION 1

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map



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Print Date: October 3, 2013

CITY OF MORENO VALLEY

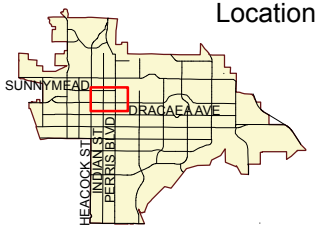
LOW & VERY LOW INCOME CALCULATION 1

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map



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Print Date: October 3, 2013

CITY OF MORENO VALLEY

LOW & VERY LOW INCOME CALCULATION 1

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. Data and information on this map is subject to update and modification. 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. This map is not to be recopied or resold.

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map

Exhibit:

A - 3

Map Status: DRAFT

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Print Date: October 3, 2013

CITY OF MORENO VALLEY

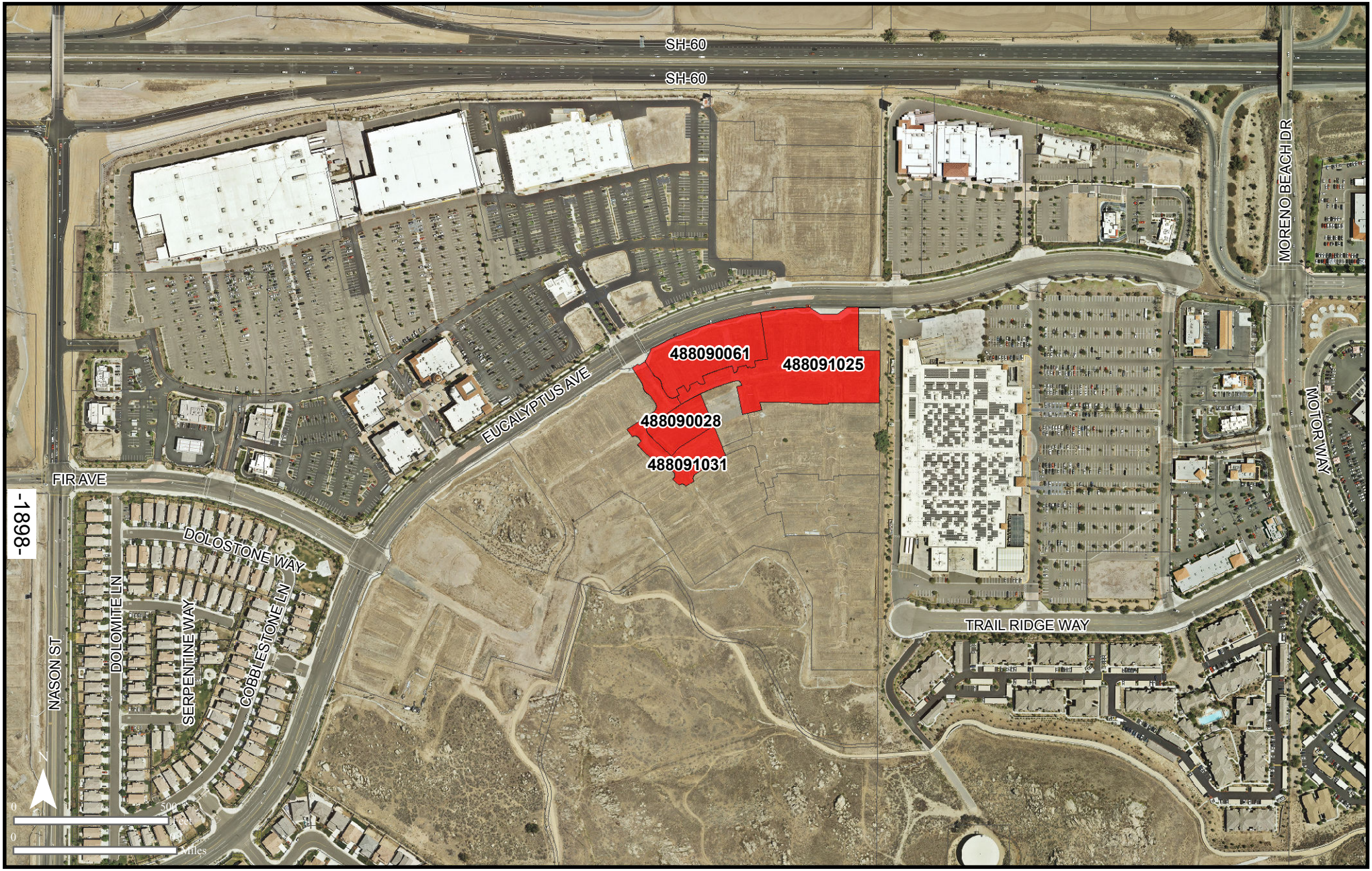
LOW & VERY LOW INCOME CALCULATION 1

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map



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Print Date: October 3, 2013

CITY OF MORENO VALLEY

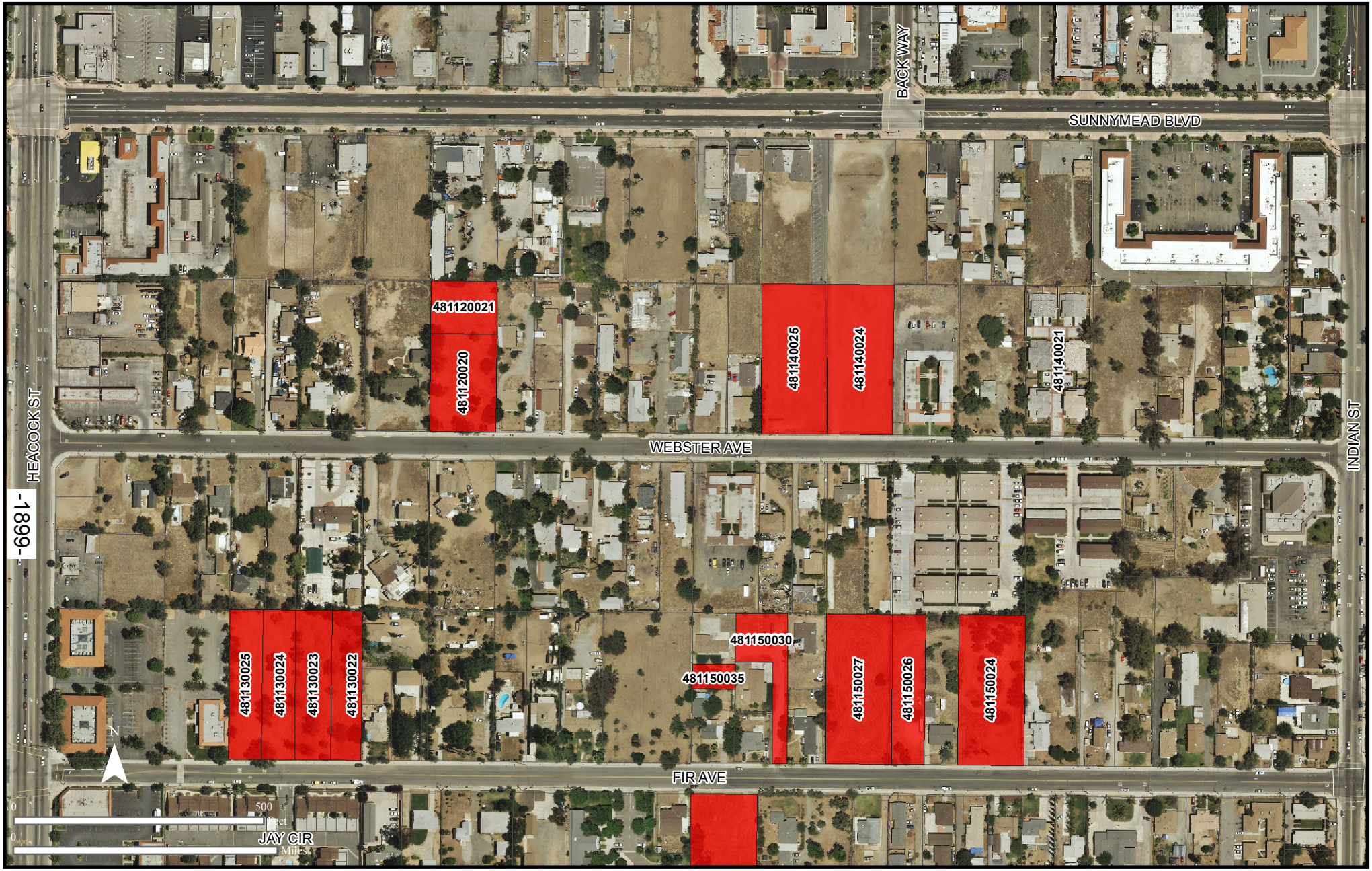
LOW & VERY LOW INCOME CALCULATION 1

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map



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Print Date: October 3, 2013

CITY OF MORENO VALLEY

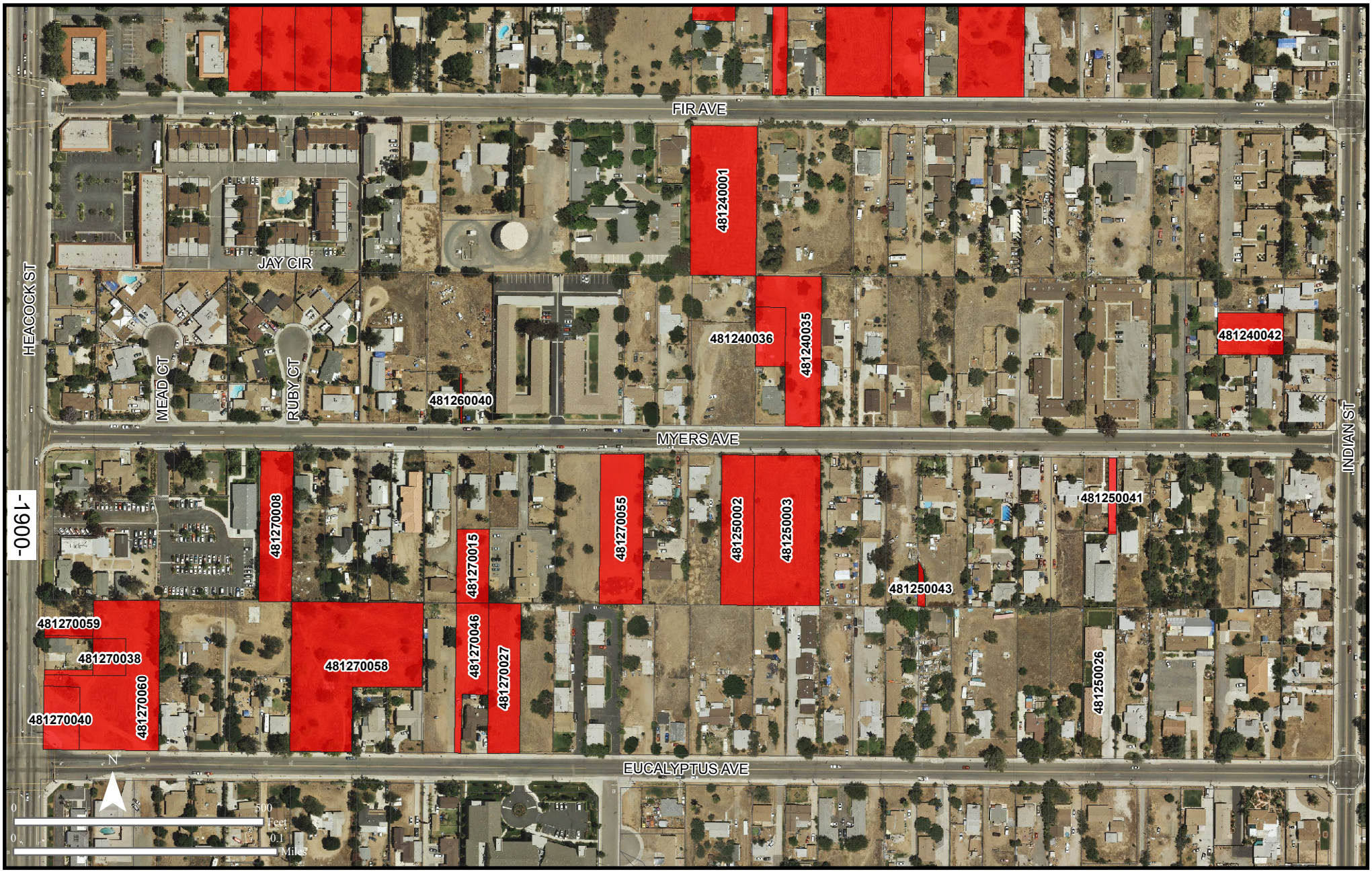
LOW & VERY LOW INCOME CALCULATION 1

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map



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Print Date: October 3, 2013

CITY OF MORENO VALLEY

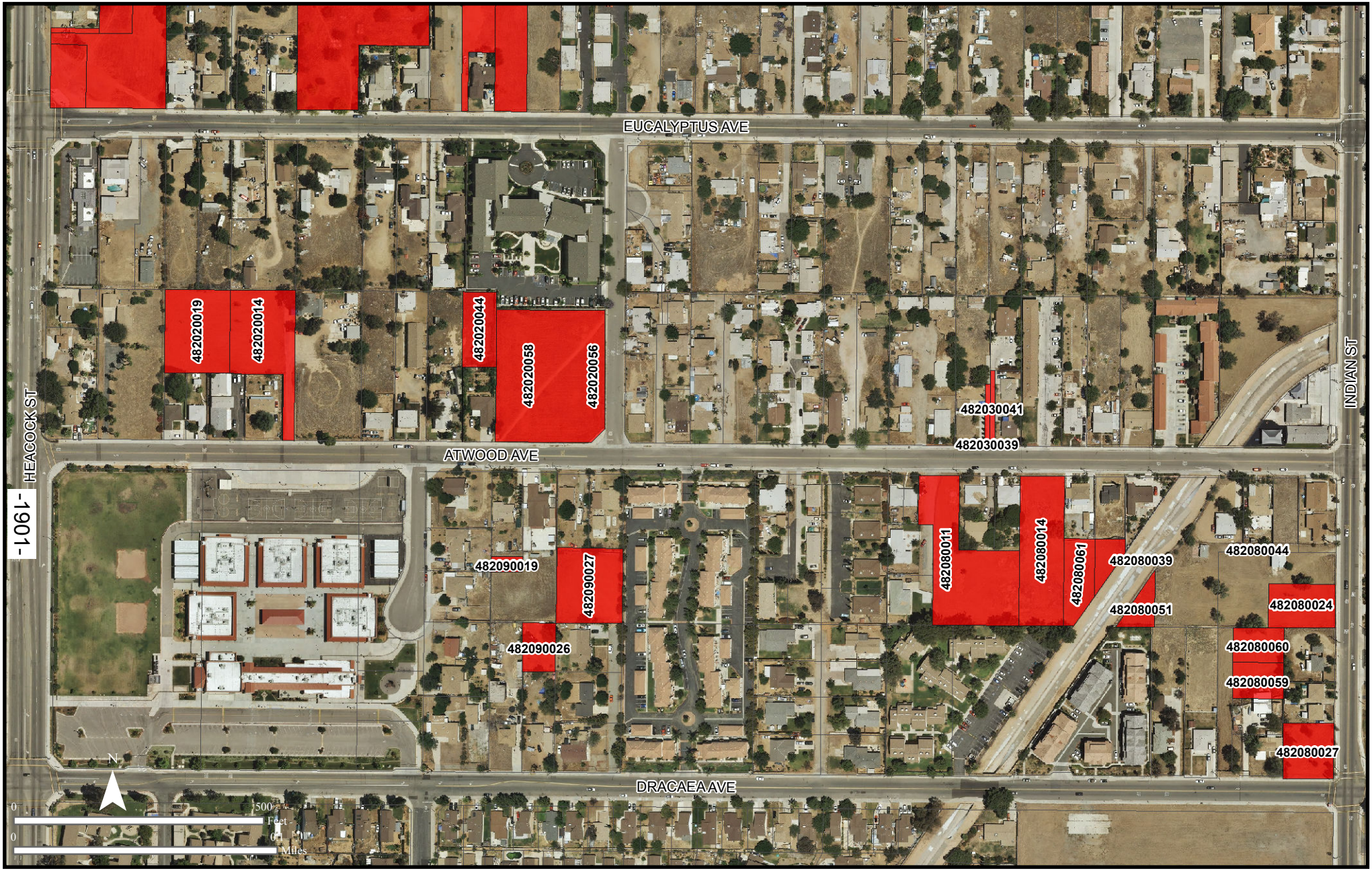
LOW & VERY LOW INCOME CALCULATION 1

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map



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Print Date: October 3, 2013

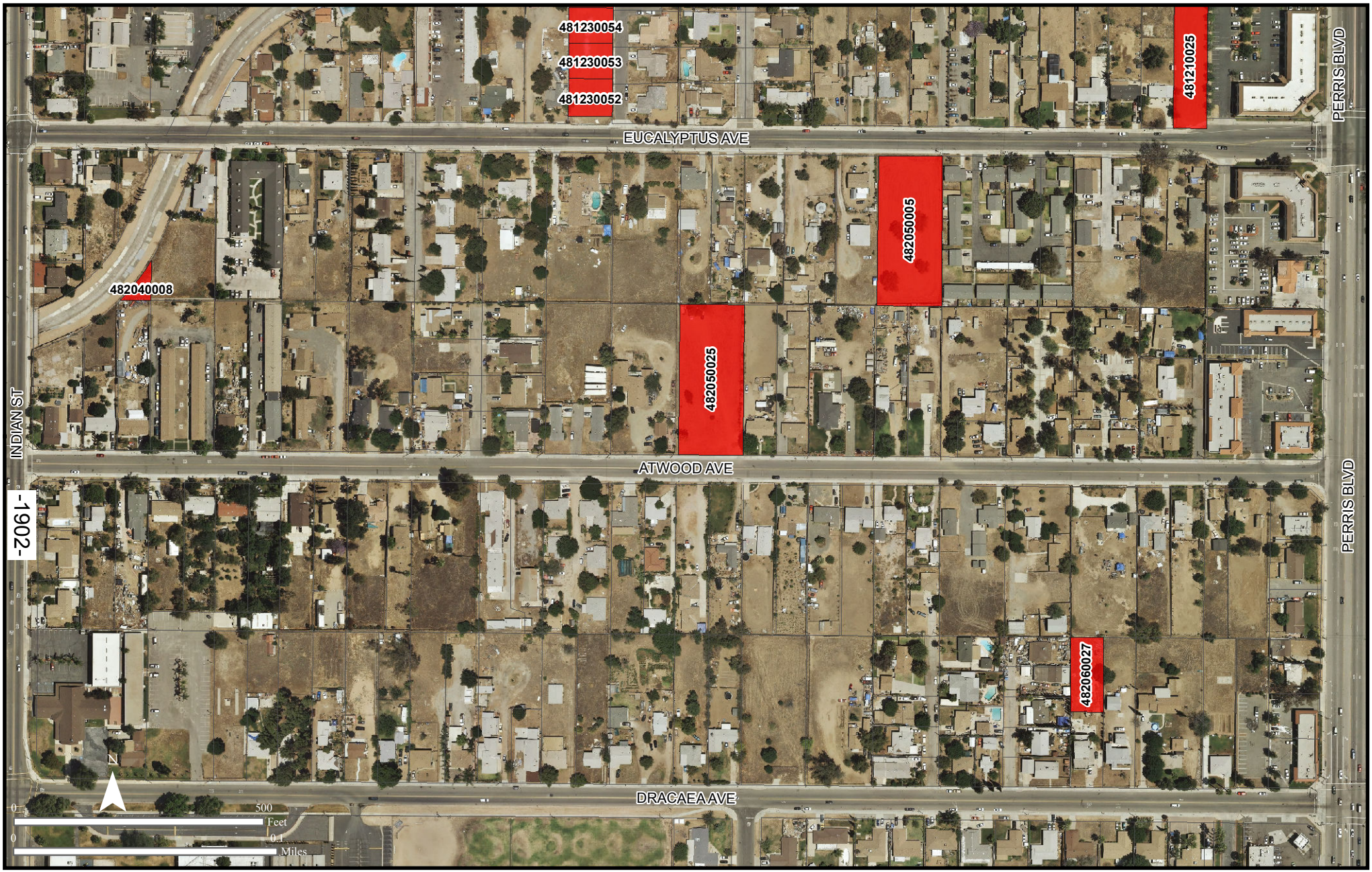
CITY OF MORENO VALLEY
LOW & VERY LOW INCOME CALCULATION 1

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map



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Map Status: DRAFT

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Print Date: October 3, 2013

CITY OF MORENO VALLEY

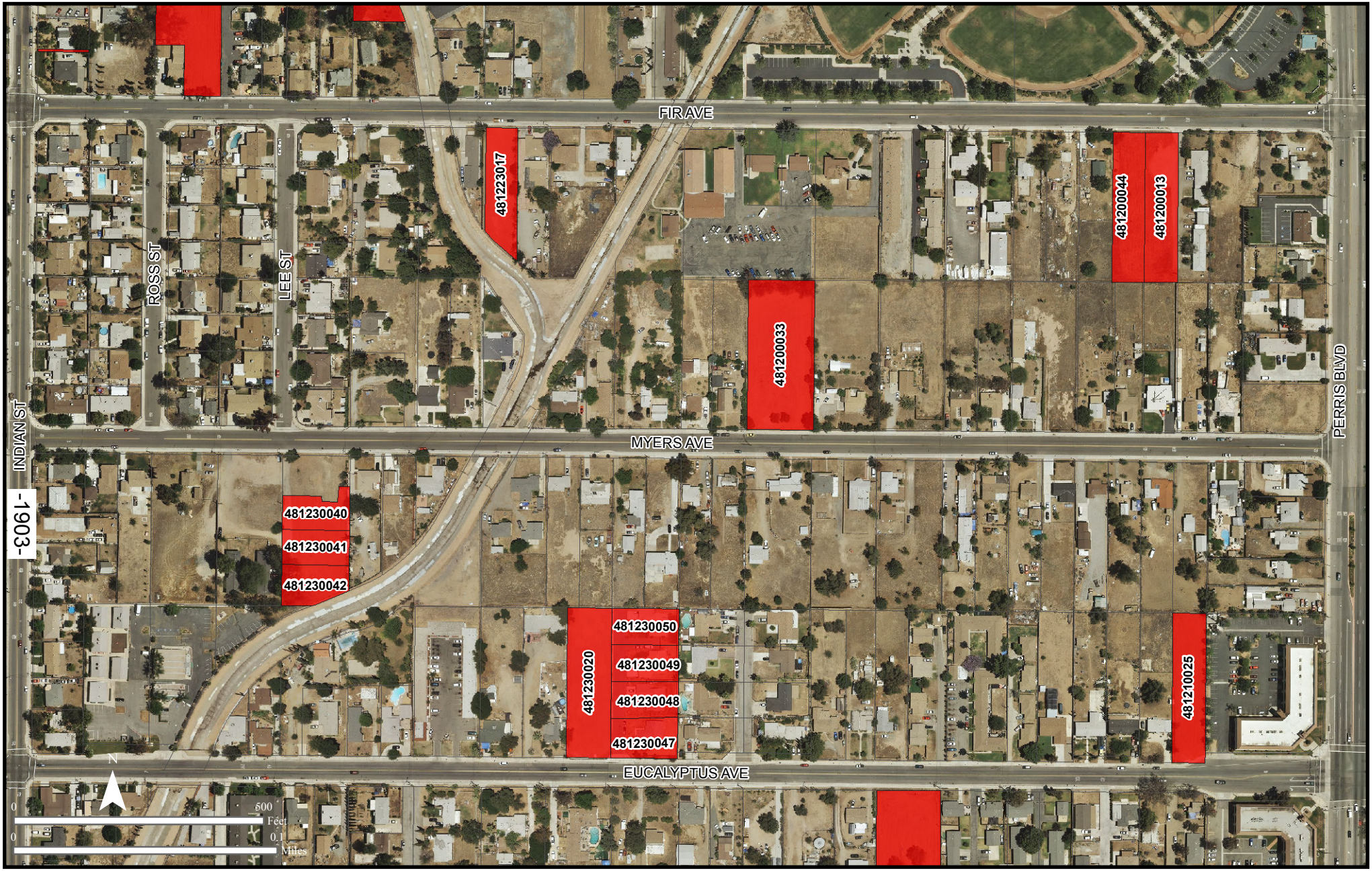
LOW & VERY LOW INCOME CALCULATION 1

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map



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Print Date: October 3, 2013

CITY OF MORENO VALLEY

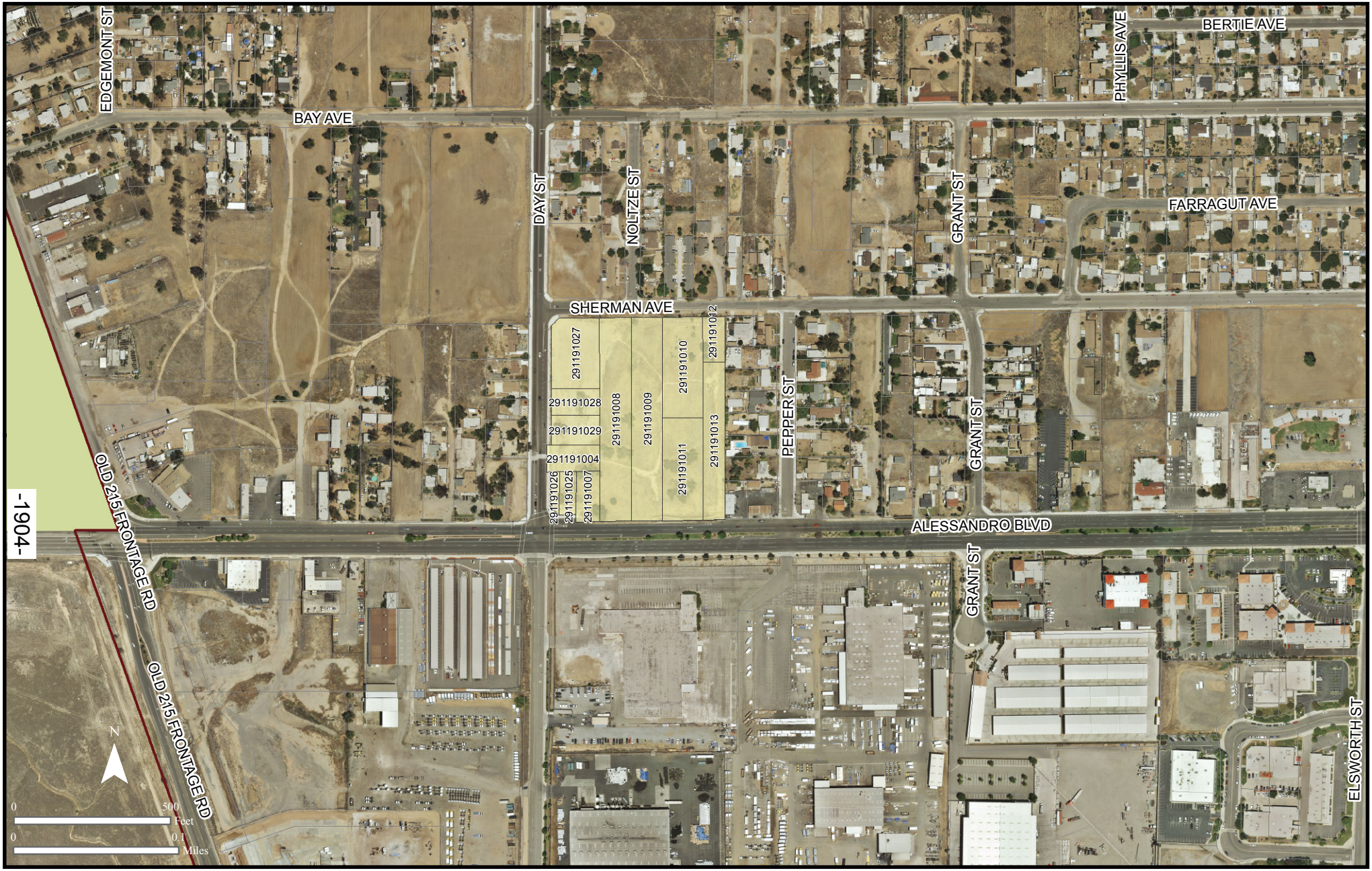
LOW & VERY LOW INCOME CALCULATION 1

Map Produced by Moreno Valley Geographic Information System

Map Legend

Calculation #1 - Vacant Parcels

Location Map



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Print Date: October 7, 2013

CITY OF MORENO VALLEY

RESIDENTIAL 30 (R30) REZONING

Map Produced by Moreno Valley Geographic Information System

Map Legend

- Area #1 Parcels
- Moreno Valley

Location Map

Exhibit:

C

Map Status: DRAFT

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Print Date: October 7, 2013

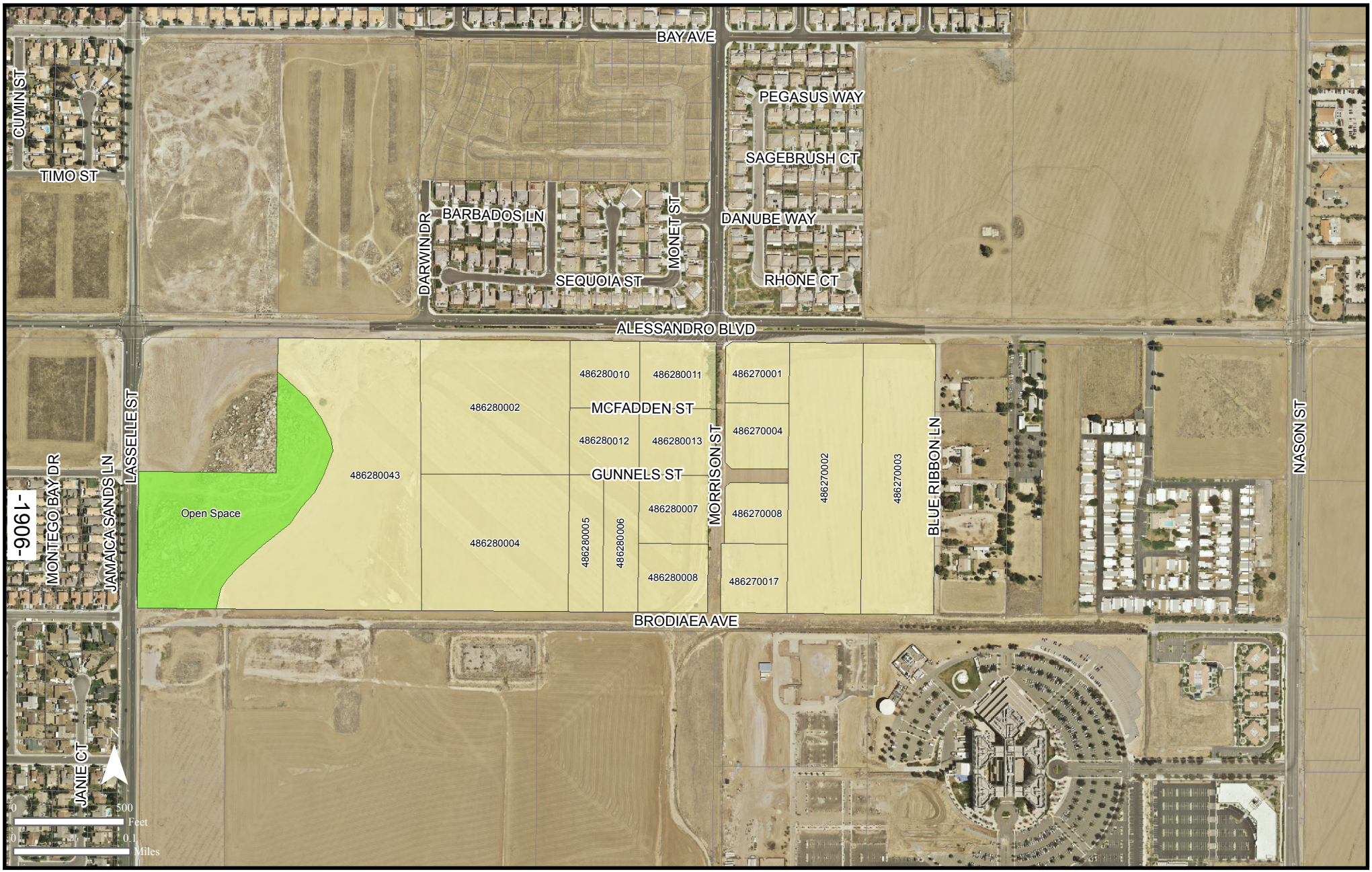
CITY OF MORENO VALLEY
REZONED HIGH DENSITY
CALCULATION 5

Map Produced by Moreno Valley Geographic Information System

Map Legend

Area #2 Parcels

Location Map



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Print Date: October 7, 2013

CITY OF MORENO VALLEY

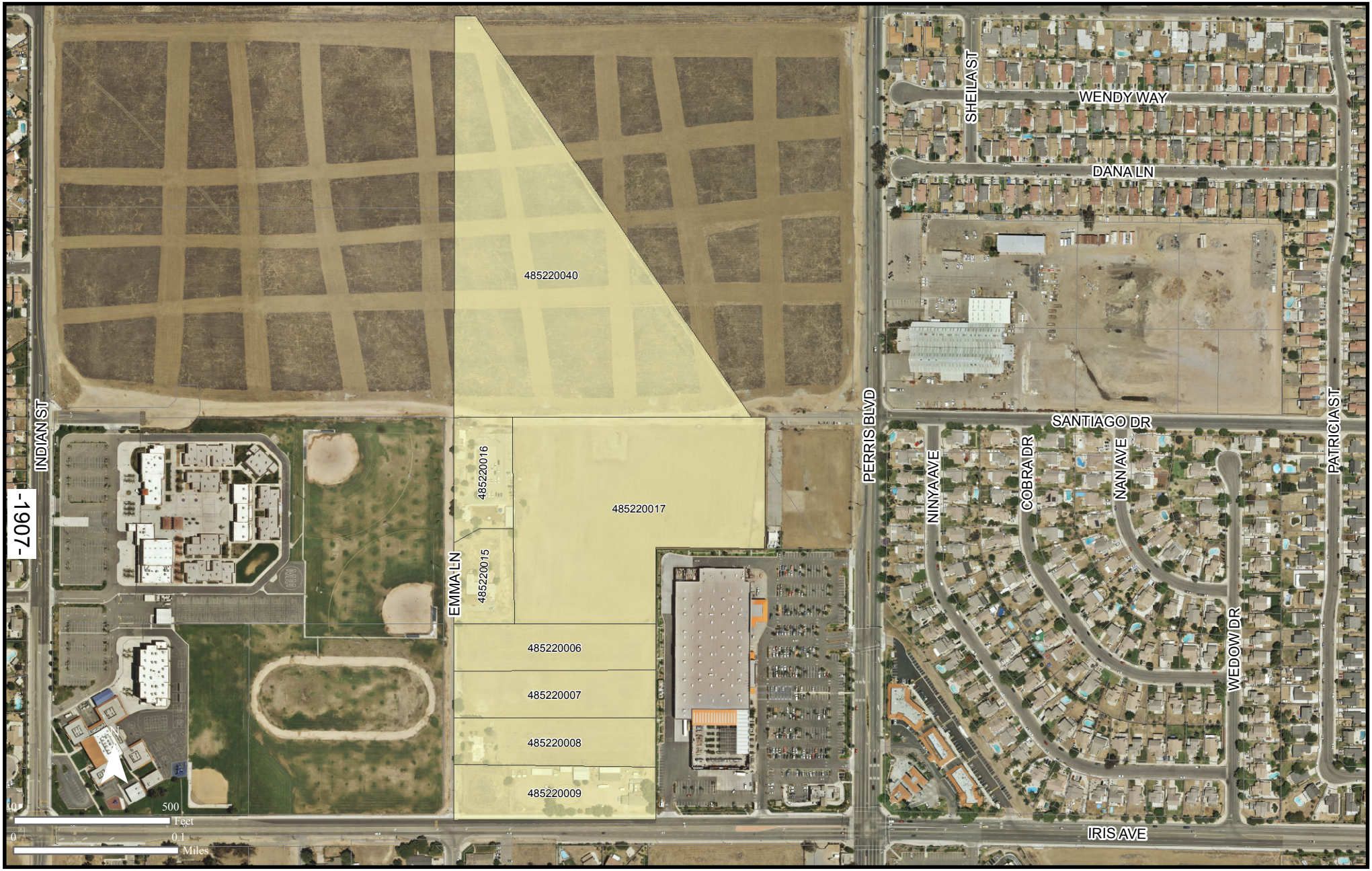
RESIDENTIAL 30 (R30) REZONING

Map Produced by Moreno Valley Geographic Information System

Map Legend

- Area #3 Parcels
- Open Space

Location Map



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Print Date: October 7, 2013

CITY OF MORENO VALLEY

RESIDENTIAL 30 (R30) REZONING

Map Produced by Moreno Valley Geographic Information System

Map Legend

Area #4 Parcels

Location Map

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