

Traffic Impact Analysis

FESTIVAL AT MORENO VALLEY

Prepared for:
BlackRidge Real Estate Group, LLC

January 2018

Prepared by:



603 Park Center Drive, Suite 108
Santa Ana, CA 92705
Phone: 949-656-7910

www.transpogroup.com
TG Project Number: 17261

Moreno Valley Case Number: PEN16-0015

Table of Contents

I. Introduction	1
Purpose and Objectives of the Traffic Study.....	1
Site Location and Study Area.....	1
Project Description	2
Methodology.....	6
Traffic Analysis Scenarios.....	8
II. Area Conditions.....	9
Street System.....	9
Transit.....	9
Pedestrian and Bicycle Systems.....	10
Traffic Volumes.....	10
Levels of Service	13
III. Project Future Traffic	17
Trip Generation.....	17
Trip Distribution and Assignment	21
Background Cumulative Traffic	21
IV. Traffic Analysis	30
Existing With-Project.....	30
Near Term Year (2022) Without-Project.....	36
Near Term Year (2022) With-Project.....	40
General Plan Buildout Year (2040) Without-Project.....	46
General Plan Buildout Year (2040) With-Project.....	50
V. Mitigation Measures	55
Intersections.....	55
Roadway Operations	58
Traffic Calming Options for Davis Street	58
Hemlock Ave and Davis Street Classifications	59

Figures

Figure 1. Project Site Location and Vicinity	3
Figure 2. Study Area Roadway Geometrics and Traffic Control	4
Figure 3. Project Site Plan	5
Figure 4. Existing AM and PM Peak Hour Traffic Volumes	11
Figure 5. Existing Daily Traffic Volumes	12
Figure 6. Retail Distribution Outbound.....	23
Figure 7. Retail Distribution Inbound	24
Figure 8. Business Park Distribution Outbound	25
Figure 9. Business Park Distribution Inbound	26
Figure 10. Project Trip Assignment	27
Figure 11. Cumulative Projects (Location Map).....	28
Figure 12. Cumulative Projects Trip Assignment.....	29
Figure 13. Existing with-Project Peak Hour Traffic Volumes	31
Figure 14. Near Term Year (2022) Without-Project Peak Hour Traffic Volumes.....	37
Figure 15. Near Term Year (2022) With-Project Peak Hour Traffic Volumes.....	41
Figure 16. General Plan Buildout Year Without-Project Peak Hour Traffic Volumes.....	47
Figure 17. General Plan Buildout Year With-Project Peak Hour Traffic Volumes.....	51

Tables

Table 1.	Existing and Proposed Land Uses.....	2
Table 2.	Level of Service Definitions for Intersections.....	6
Table 3.	Level of Service (LOS) Descriptions	6
Table 4.	Level of Service Definitions for Roadway Segments	7
Table 5.	Street Characteristics.....	9
Table 6.	Existing Without-Project Weekday Peak Hour Intersection LOS.....	13
Table 7.	Existing Without-Project Weekday Peak Hour Queuing Analysis	14
Table 8.	Existing Condition Roadway Segment LOS Summary	16
Table 9.	Proposed Project Trip Generation	18
Table 10.	Proposed Project Trip Generation Versus Greiner Engineering (SP 205).....	19
Table 11.	Existing Project Site Trip Generation	20
Table 12.	Cumulative Projects Trip Generation	22
Table 13.	Existing and Existing with-Project Peak Hour Intersection LOS.....	32
Table 14.	Existing With-Project Weekday Peak Hour Queuing Analysis	33
Table 15.	Existing Condition Roadway Segment LOS Summary	35
Table 16.	Near Term Year Without-Project Weekday Peak Hour Intersection LOS.....	36
Table 17.	Near Term Year Without-Project Weekday Peak Hour Queuing Analysis.....	38
Table 18.	Near Term Year With-out Project Roadway Segment LOS Summary	39
Table 19.	Near Term with-Project Peak Hour Intersection LOS	42
Table 20.	Near Term With-Project Weekday Peak Hour Queuing Analysis.....	43
Table 21.	Near Term Year Roadway Segment LOS Summary	45
Table 22.	General Plan Buildout Year Without-Project Peak Hour Intersection LOS	46
Table 23.	General Plan Without-Project Weekday Peak Hour Queuing Analysis	48
Table 24.	General Plan With-out Project Roadway Segment LOS Summary	49
Table 25.	General Plan Buildout with-Project Peak Hour Intersection LOS	52
Table 26.	General Plan Build-out With-Project Weekday Peak Hour Queuing Analysis ..	53
Table 27.	General Plan Buildout Condition Roadway Segment LOS Summary.....	54
Table 28.	General Plan Build-out With-Project Weekday Peak Hour Queuing Analysis ..	57

Appendices

- Appendix A: Scoping Agreement
- Appendix B: Traffic Counts
- Appendix C: LOS Worksheets
- Appendix D: City Approved/Pending Projects List
- Appendix E: Transportation Analysis Model Outputs

I. Introduction

The purpose of this Traffic Impact Analysis (TIA) is to identify potential traffic-related impacts associated with the Festival at Moreno Valley proposed Specific Plan (project) located in the City of Moreno Valley (City). The project proposes to modify the existing 180,000 square feet of retail land use to a business park and retail uses.

The project is bounded by the SR 60 Freeway to the South, Ironwood Avenue to the North, Heacock Street to the West, and Nita Drive to the East. Currently, some of the parcels are vacant while others have some retail uses. In the City's latest adopted land use plan, the area designations include commercial, open space, and office uses.

This TIA has been prepared consistent with the City's *Traffic Impact Analysis Preparation Guide* (August 2007). A *Scoping Agreement for Traffic Analysis Study* has been prepared by Transpo and was approved by the City in November 2017. The Scoping Agreement is provided in Appendix A. The Lead Agency of the proposed project is the City of Moreno Valley.

Purpose and Objectives of the Traffic Study

The purpose of this traffic study is to evaluate the traffic and circulation impacts of the proposed project. The objectives of this traffic study include:

- Documentation of existing traffic conditions and future traffic conditions corresponding to the "Existing plus Project" scenario (consisting of existing year 2017 plus project conditions), "Near-Term Year 2022" (five-year horizon consisting of existing plus ambient growth plus cumulative projects) With and Without Project conditions, and a "Buildout Year 2040" (consisting of the General Plan Buildout Year) With and Without Project conditions.
- Determination of additional circulation system features and system management actions needed to achieve the City's levels of service requirements with implementation of the proposed project.

Site Location and Study Area

Figure 1 illustrates the project site location, while Figure 2 illustrates the project study area and traffic control. Regional access to the project site is provided by State Route 60 (SR 60) via its interchange with Heacock Street. Local access is provided by Heacock Street, Hemlock Avenue, and Ironwood Avenue. Per Scoping Agreement, the study area intersections and roadway segments are as follows:

Study Area Intersections

1. Heacock Street (NS) at Ironwood Avenue (EW)
2. Heacock Street (NS) at Project Access (EW)
3. Heacock Street (NS) at Hemlock Avenue (EW)
4. Heacock Street (NS) at SR 60 Freeway WB Ramps (EW)
5. Heacock Street (NS) at SR 60 Freeway EB Ramps (EW)
6. Project Access (NS) at Hemlock Avenue (EW)
7. Davis Street (NS) at Hemlock Avenue (EW)
8. Project Access (NS) at Hemlock Avenue (EW)
9. Project Access (NS) at Hemlock Avenue (EW)
10. Project Access (NS) at Hemlock Avenue (EW)
11. Nita Drive (NS) at Hemlock Avenue (EW)
12. Davis Street (NS) at Ironwood Avenue (EW)
13. Indian Street (NS) at Ironwood Avenue (EW)
14. Indian Street (NS) at Hemlock Avenue (EW)
15. Indian Street (NS) at Sunnymead Boulevard (EW)

Study Area Roadway Segments

1. Heacock Street – Ironwood Avenue to Hemlock Avenue
2. Heacock Street – Hemlock Avenue to SR 60 Freeway WB Ramps
3. Indian Street – Ironwood Avenue to Hemlock Avenue
4. Indian Street south of Hemlock Avenue
5. Ironwood Avenue west of Heacock Street
6. Ironwood Avenue – Heacock Street to Indian Street
7. Ironwood Avenue east of Indian Street
8. Hemlock Avenue west of Heacock Street
9. Hemlock Avenue – Heacock Street to Indian Street
10. Hemlock Avenue east of Indian Street

All study area intersections and roadway segments are within the jurisdiction of the City.

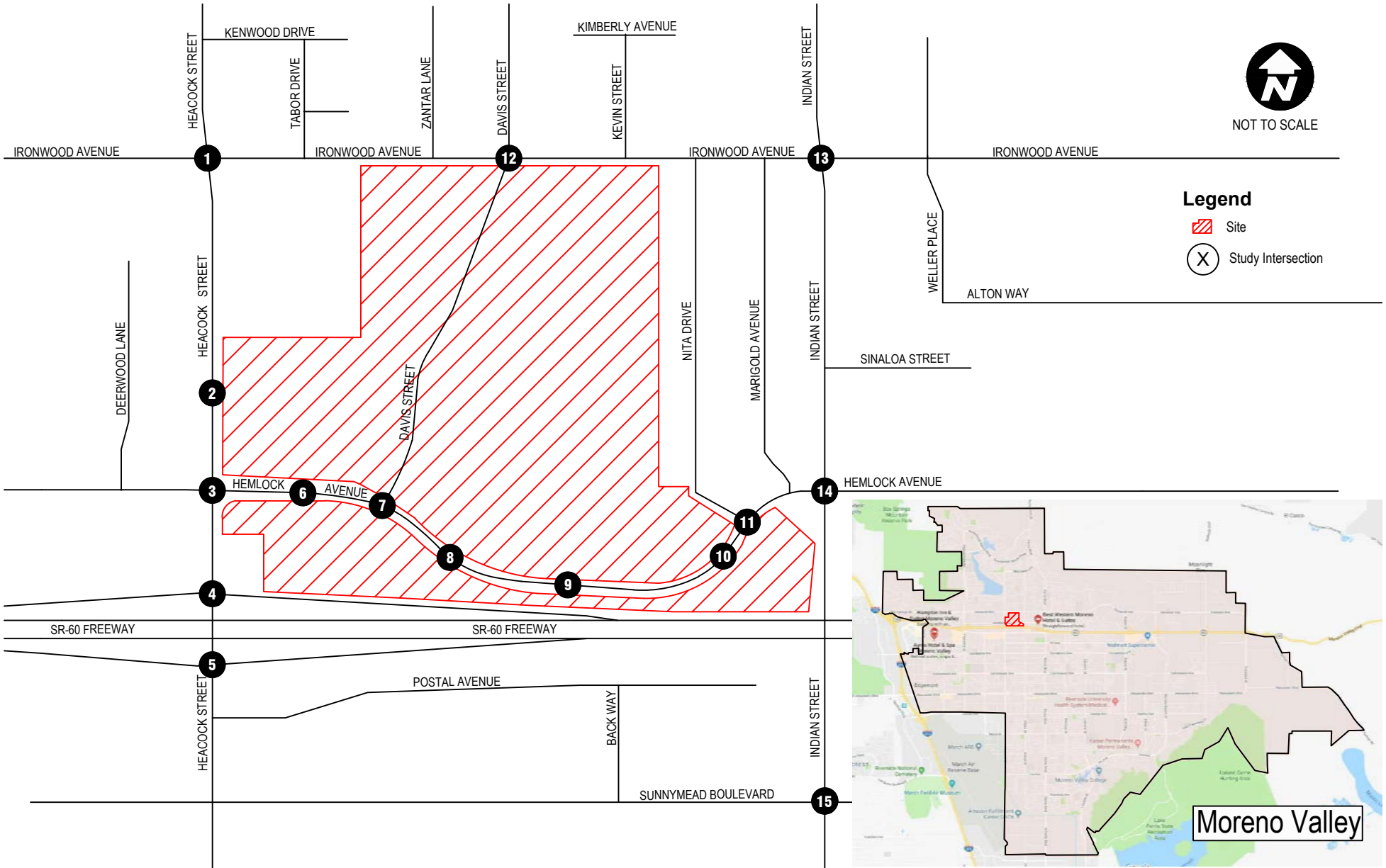
Project Description

The proposed project will include the development of 348,000 square feet of business park and 365,000 square feet of retail over eight planning areas as illustrated in the site plan Figure 3. Existing uses on the site include shopping centers, restaurants, and an auto service shop. Per the City's Adopted Land Use Map the area is zoned as mostly as Commercial and Open Space with an Office zoning to the southeast corner of Ironwood Avenue and Davis Street. The open space is shown in Planning Area 5 (refer to Figure 3) and is retained as such under proposed project conditions.

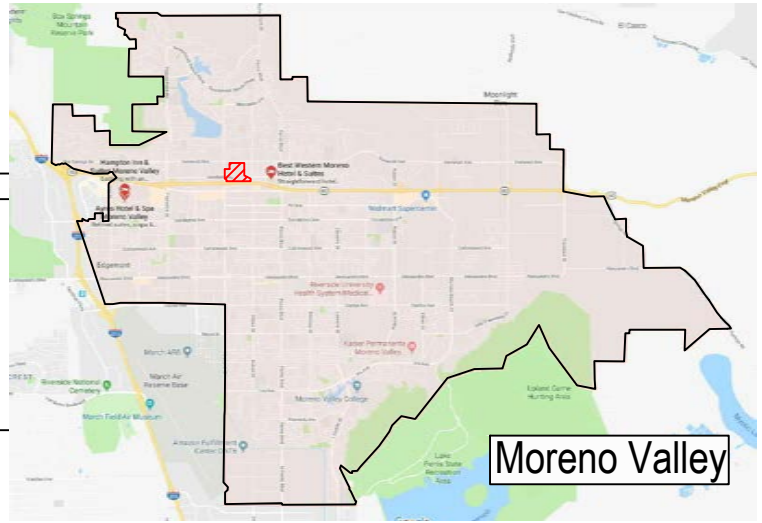
Existing and proposed land uses are shown in Table 1. The proposed project opening year is 2022 and no project phasing is assumed.

Table 1. Existing and Proposed Land Uses

Planning Area	Existing Uses		Proposed Uses	
	Type of Use	Size	Type of Use	Size
1			Business Park	135,000 sf
2			Business Park	35,000 sf
3			Business Park	178,000 sf
			Retail	15,000 sf
4	Shopping (Retail) Center	162,250 sf	Retail	255,000 sf
	Fast Food Restaurant with Drive Through (Yoshinoya)	3,900 sf		
5	Open Space		Open Space	
6	Fast Food Restaurant with Drive Through (Arby's)	2,700 sf	Retail	35,000 sf
	Fast Food Restaurant without Drive Through (KFC)	2,700 sf		
	Auto Service (Jiffy Lube)	3 Service Positions		
	High-Turnover Sit-down Restaurant (Centenario)	8,800 sf		
7	Shopping (Retail) Center	33,675 sf	Retail	40,000 sf
8			Retail	20,000 sf



NOT TO SCALE



Source: Google Maps, 09/2017.

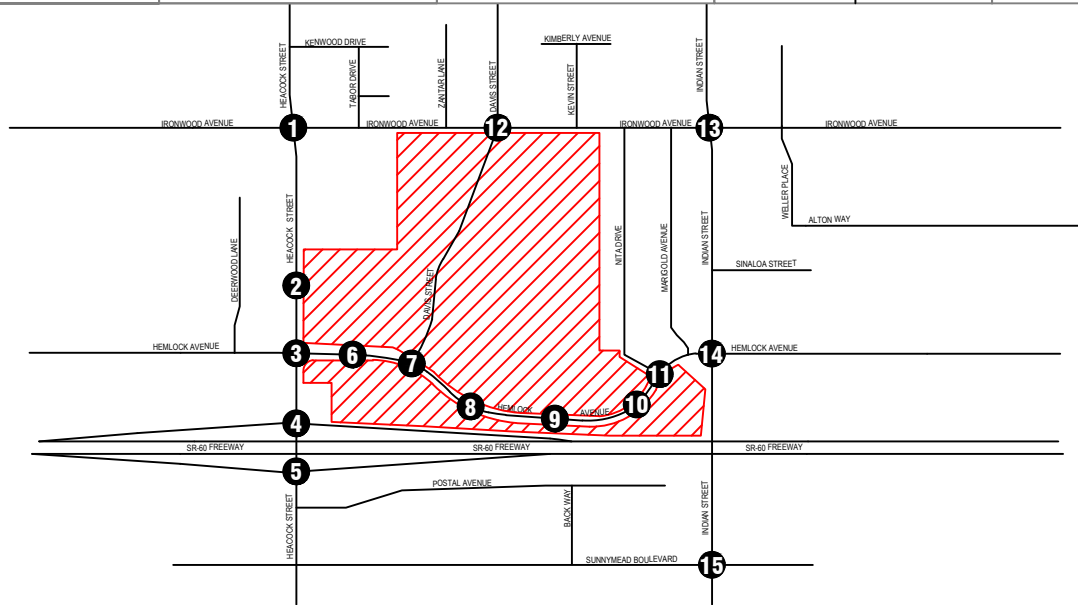
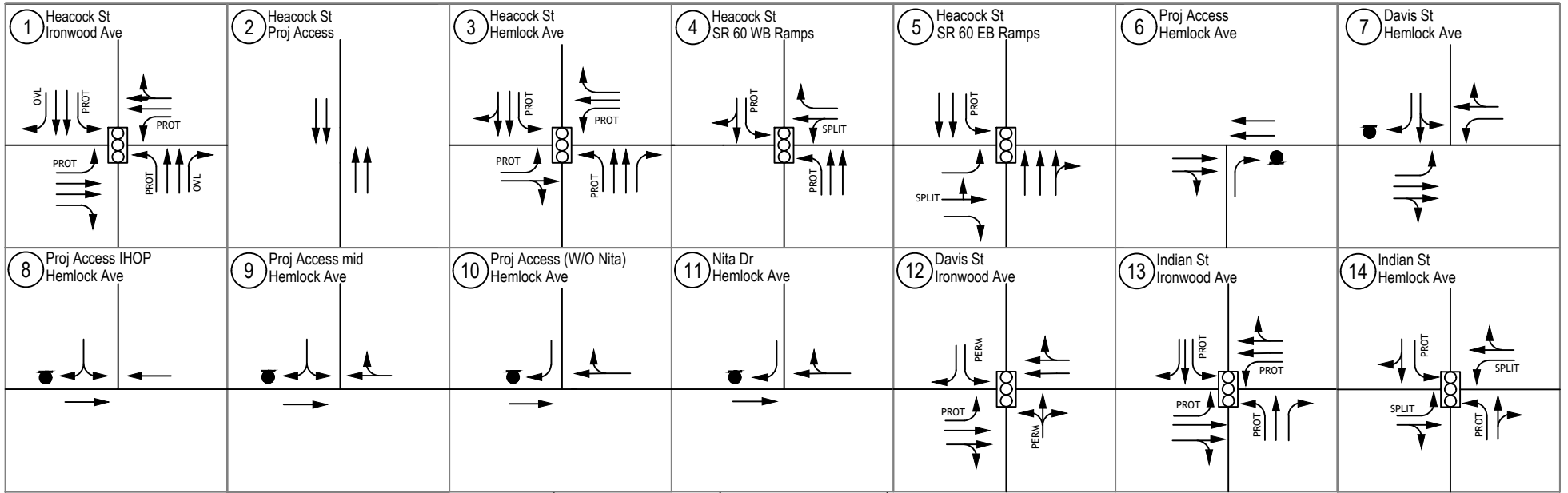
Project Site Location and Study Area

Festival at Moreno Valley

FIGURE

1





Legend

- Site
- Study Intersection
- Lane Geometrics
- Traffic Signal
- Stop Sign
- PROT Protected Left Turn Phasing
- PERM Permitted Left Turn Phasing
- SPLIT Split Phasing
- DEFACTO Defacto Right Turn Lane
- OVL Overlapping Right Turn Phasing
- FREE Free Movement
- XD Number of lanes (divided roadway)
- XU Number of lanes (undivided roadway)



NOT TO SCALE

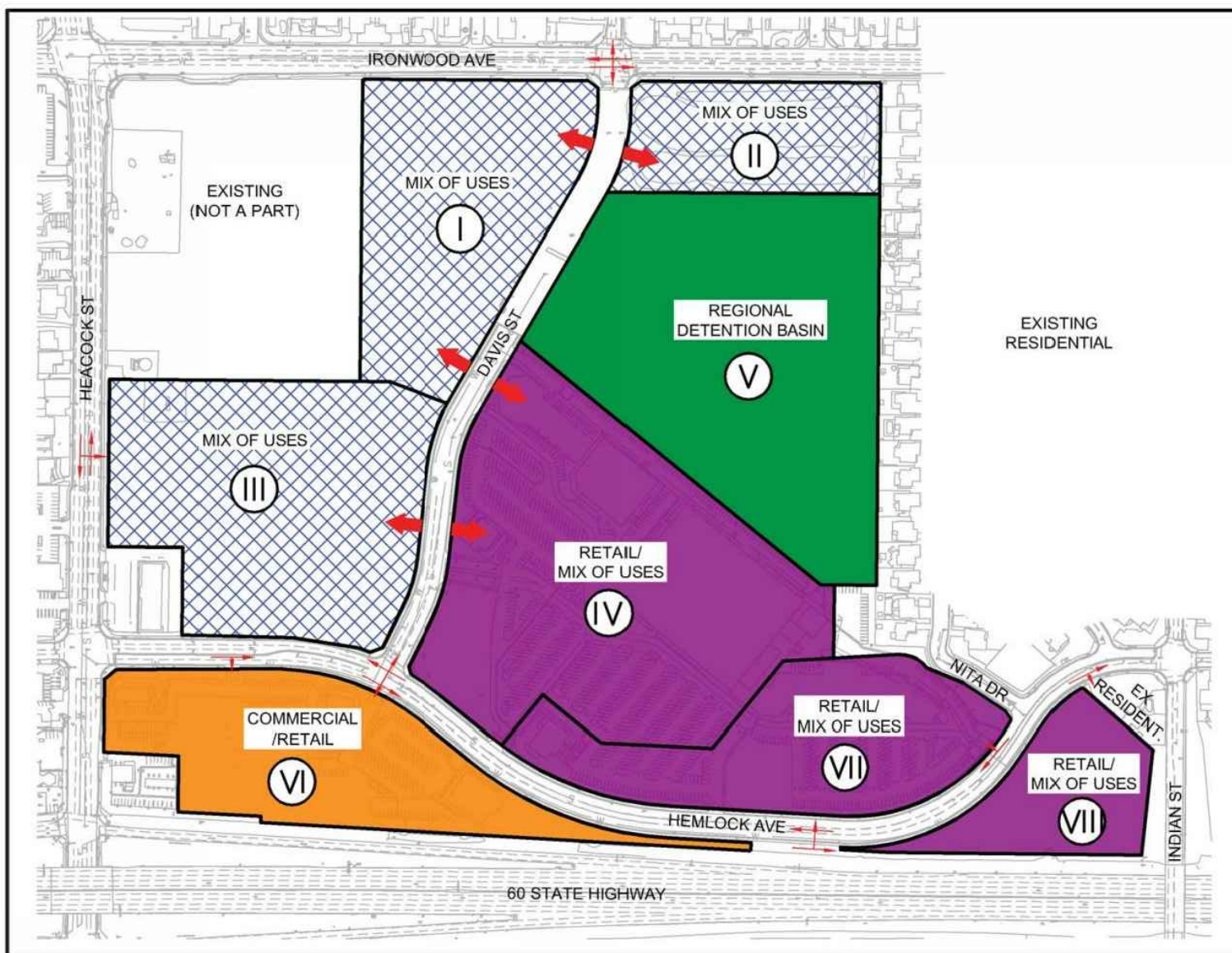
Study Area Intersection and Roadway Geometrics and Traffic Control

Festival at Moreno Valley

FIGURE



NOT TO SCALE



Project Site Plan

Festival at Moreno Valley

FIGURE

Methodology

Intersections

Per City TIA guidelines, the study area intersections were analyzed under the latest version of the *Highway Capacity Manual* (HCM) “Operations” methodology using the *Synchro* level of service (LOS) software program which is consistent with the HCM 2010 methodology. The HCM 2010 methodology determines the control delay a driver may experience at the intersection. If an intersection could not be analyzed using the HCM 2010 methodology because of a particular intersection configuration (e.g., U-turn movements), the HCM 2000 methodology was used.

The degree of congestion at an intersection is described by the level of service, which ranges from LOS A to LOS F, with LOS A representing free-flow conditions with little delay and LOS F representing over-saturated traffic flow throughout the peak hour. A complete description of the meaning of level of service can be found in the Highway Research Board Special Report 209, *Highway Capacity Manual* (HCM 2000). Brief descriptions of the six levels of service for signalized and unsignalized intersections based on the HCM methodology are shown in Table 2.

Table 2. Level of Service Definitions for Intersections

Level of Service	Control Delay in Seconds (signalized)	Control Delay in Seconds (unsignalized)
A	0.0 – 10.0 seconds	0.0 – 10.0 seconds
B	10.1 – 20.0 seconds	10.1 – 15.0 seconds
C	20.1 – 35.0 seconds	15.1 – 25.0 seconds
D	35.1 – 55.0 seconds	25.1 – 35.0 seconds
E	55.1 – 80.0 seconds	35.1 – 50.0 seconds
F	80.1 seconds or greater	50.1 seconds or greater

Table 3 below provides detailed descriptions of each level of service

Table 3. Level of Service (LOS) Descriptions

LOS	Description
A	No approach phase is fully utilized by traffic, and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are nearing full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

Source: *Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.*

Roadway Segments

Per City TIA guidelines, Table 4 provides the LOS criteria for roadway segments based on daily traffic volumes.

Table 4. Level of Service Definitions for Roadway Segments

Roadway	A	B	C	D	E
6-lane Divided Arterial	33,900	39,400	45,000	50,600	56,300
4-lane Divided Arterial	22,500	26,300	30,000	33,800	37,500
4-lane Undivided Arterial	15,000	17,500	20,000	22,500	25,000
2-lane Industrial Collector	7,500	8,800	10,000	11,300	12,500
2-lane Undivided Residential	n/a	n/a	n/a	n/a	2,000

Significance Criteria

The City's significance threshold is based on the *City of Moreno Valley General Plan* (July 2006) which states:

- *LOS D is applicable to intersections and roadway segments that are adjacent to freeway on/off ramps, and/or adjacent land uses. LOS C is applicable to all other intersections and roadway segments. Boundary intersections are assumed to be LOS D.*

Therefore, if the project causes an intersection to operate below the minimum standard, the project would cause a significant project-specific impact at that intersection, and specific mitigation measures must be developed to improve the intersection's LOS back to pre-project levels.

Traffic Analysis Scenarios

This traffic study analyzed the following traffic scenarios:

Existing Condition

Existing traffic volumes were collected at the study intersections and roadway segments in August 2017 during a typical weekday. The existing traffic scenario constitutes the environmental setting in accordance with the *California Environmental Quality Act (CEQA)* analysis at the time that the hearing body reviews the proposed project.

Existing with-Project Condition

The Existing with-Project Condition traffic was developed by adding the proposed project traffic to the Existing Condition traffic volumes. This scenario was the basis for determining project-specific impacts and mitigation measures under existing conditions.

Near Term Year 2022 Baseline Condition

Per City requirements, the Near Term year of analysis would be 2022, a five-year horizon from the existing traffic condition. The proposed project is anticipated to be built and occupied by year 2022. Near-Term year traffic in this scenario was forecast for 2022 by applying an annual ambient growth rate (2% per year per the City's Scoping Agreement) to the existing traffic volumes. In addition to the ambient growth rate, traffic from approved and pending projects (i.e. cumulative projects) in the project's vicinity was added.

Near Term Year 2022 with-Project Condition

The Near Term Year 2022 with-Project Condition traffic was developed by adding the proposed project traffic to the Near-Term Year Baseline Condition. This scenario was also the basis for determining project-specific impacts and mitigation measures for the Near Term Year.

General Plan Buildout Baseline Condition

General Plan Buildout (2040) without Project traffic conditions were derived from the Moreno Valley Transportation Analysis Model which in turn is based-upon the Riverside Transportation Analysis Model (RivTAM) refined to represent General Plan Buildout conditions for the City of Moreno Valley. Traffic volumes for street segments in the study area were obtained from the 2007 and 2035 TransCAD model data sets to establish annual growth rates for each approach leg of the study intersection. Separate growth rates were developed for AM and PM peak period model data volumes. These annual growth rates were applied to the 2017 turning movement counts to forecast traffic growth to 2040 conditions. Consistent with all travel demand model post-processing methods, the forecasts were checked for reasonableness and adjusted if necessary. For example, model adjustments were made to better balance forecasted volume growth between adjacent study intersections.

General Plan Buildout with-Project Condition

The General Plan Buildout with-Project traffic forecasts were determined by adding the project traffic to the General Plan Buildout Baseline (without project) traffic forecasts from the Transportation Analysis Model. The General Plan Buildout traffic forecasts used in the traffic analysis were refined with existing peak hour traffic count data collected at intersection analysis locations.

II. Area Conditions

The following section describes the existing traffic conditions in the project study area. Existing traffic volumes were collected at the study intersections and roadway segments in August 2017 during a typical weekday.

Street System

As mentioned earlier regional access to the project site is provided by State Route 60 (SR 60) via its interchange with Heacock Street. In the project vicinity, the SR 60 consists of two general purpose lanes and one carpool lane per direction. Local access is provided by Heacock Street, Hemlock Avenue, and Ironwood Avenue.

Characteristics of the existing street system in the proposed project vicinity are summarized in Table 5. The roadway classifications are as per the City of Moreno Valley General Plan Circulation Element. Cross-sections described are those in the vicinity of the project and they might vary at intersections to accommodate turning lanes.

Heacock Street is a multi-modal corridor with pedestrian, bicycle, auto, and transit uses. It is also designated as a truck route while at the same time having Class 2 bicycle lanes on both sides between Ironwood Ave and the SR 60 ramps.

Table 5. Street Characteristics

	Heacock St	Ironwood Ave	Indian St	Hemlock Ave	Davis St
Classification	Arterial	Minor Arterial	Minor Arterial	-	-
Traffic Cross-section	4 lanes + TWLT	4 lanes + TWLT	2 lanes	Varies ³	2 lanes + TWLT ⁴
Posted Speed Limit	35	40	35	30	-
Truck Route	Yes	Yes ⁵	No	No	No
Transit	RTA 11	RTA 11	-	RTA 11	-
Bicycle Lanes	Class 2	Class 3	Class 3	-	-
Sidewalks	Both Sides	Both Sides	SB Only	Both Sides	Both Sides

1. TWLT: Two Way Left Turn

2. ADT: Average Daily Traffic

3. The cross-section of Hemlock in 4 lanes divided west of Davis St and two lanes with a TWLT east of Davis St. West of Indian St the TWLT is converted to a median

4. Davis St is not paved to the north of the existing development

5. Ironwood Ave is a truck route between Perris Blvd and Pigeon Pass Rd

Transit

Riverside Transit Agency (RTA) Route 11 buses run in the immediate vicinity of the project site. Buses serving this route run in either of two loops, clockwise or counterclockwise, starting from and terminating at the Moreno Valley Mall.

The major destinations served by this route include in addition to the Mall, Festival at Moreno Valley, the Post Office, Kaiser Medical Offices, Riverside County Superior Court, City Hall, and Moreno Valley High School.

In the immediate vicinity of the project Route 11 runs on Heacock St south of Hemlock Ave, on Hemlock Ave, and on Ironwood Ave. Bus stops are in the vicinity of the Hemlock/Davis, Hemlock/Indian, Indian/Ironwood and Ironwood/Heacock intersections.

Service frequencies are about one bus every hour on both weekdays and weekends. Weekday operations are between 5 AM and 10 PM and weekend operations are between 8.30 AM and 8.30 PM.

Pedestrian and Bicycle Systems

As presented in Table 5, sidewalks exist on both side of most streets in the immediate vicinity of the project with the exception of Indian Street where sidewalks are only available in the southbound direction.

Davis St currently does not connect to Ironwood Avenue and until the connection is established as part of this project, pedestrian accessibility will be served mainly by Heacock St and Nira Dr.

Standard pedestrian crosswalks (consisting of two solid parallel lines) are available at all the study area signalized intersections where pedestrian crossings are permitted.

Bicycle lanes described in Table 5 are as per the City's Bicycle Master Plan. Class 2 bike lanes are on-street paths that are located along the edge of a street with a striped lane denoting this bike path. Class 3 bike routes also are located along a street edge, but are not striped. These paths are identified by street signs only.

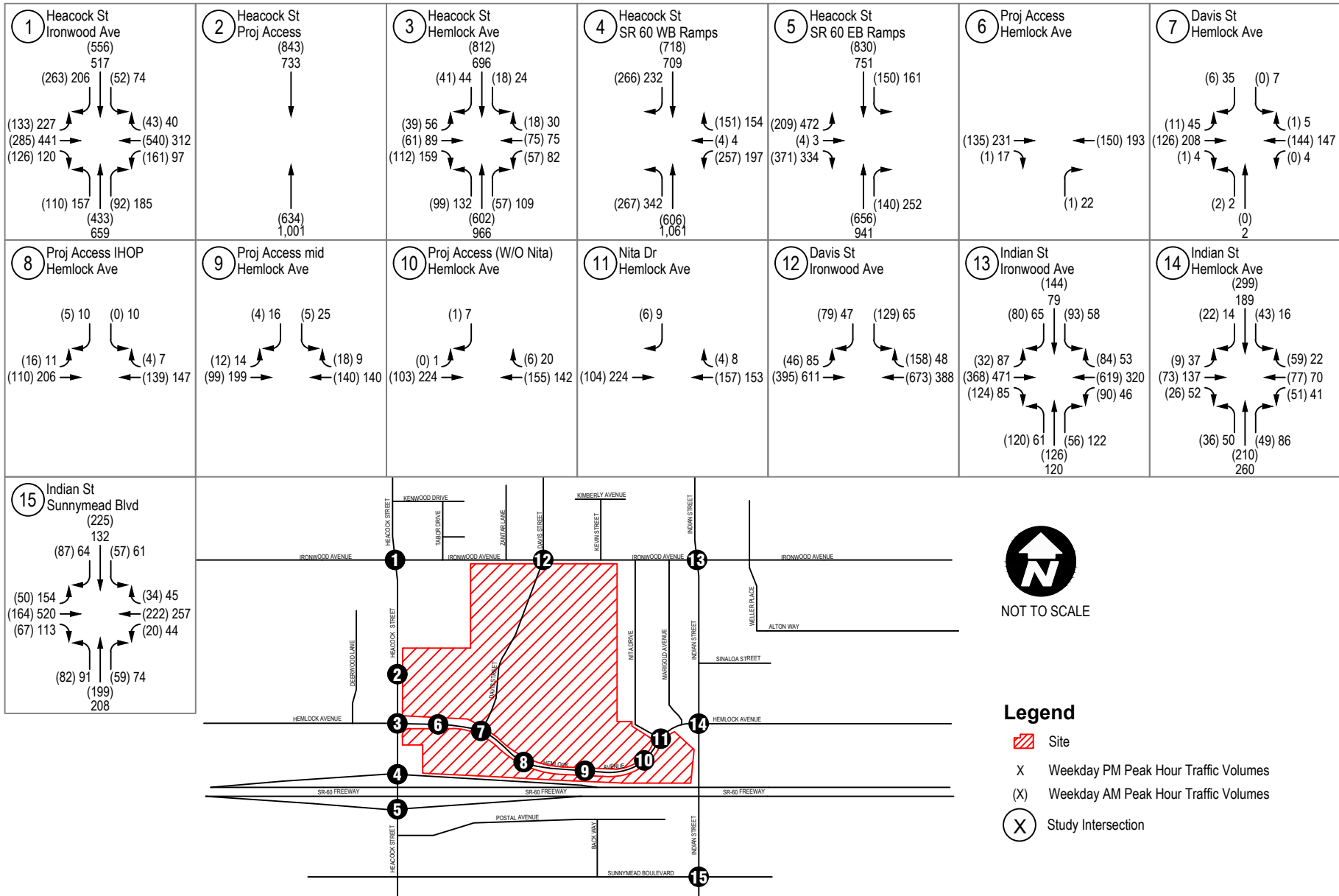
In the immediate project vicinity Heacock St is the only Class 2 facility while Ironwood Ave and Indian St are designated as Class 3 facilities. The Bicycle Master Plan recommends the following in the project vicinity:

- Class 2 bike lane along Hemlock between Indian St and Heacock St
- Class 2 bike lane along Heacock St (south of Hemlock Ave)
- Class 2 bike lane along Ironwood Ave
- Class 3 bike route along Davis St

Traffic Volumes

Existing traffic volumes were collected at the study intersections and roadway segments in August 2017.

Figure 4 shows the existing AM and PM peak hour traffic volumes at the study intersections, while Figure 5 shows the existing daily traffic volumes on the study area roadway segments. The raw traffic volume count sheets are provided in Appendix B.



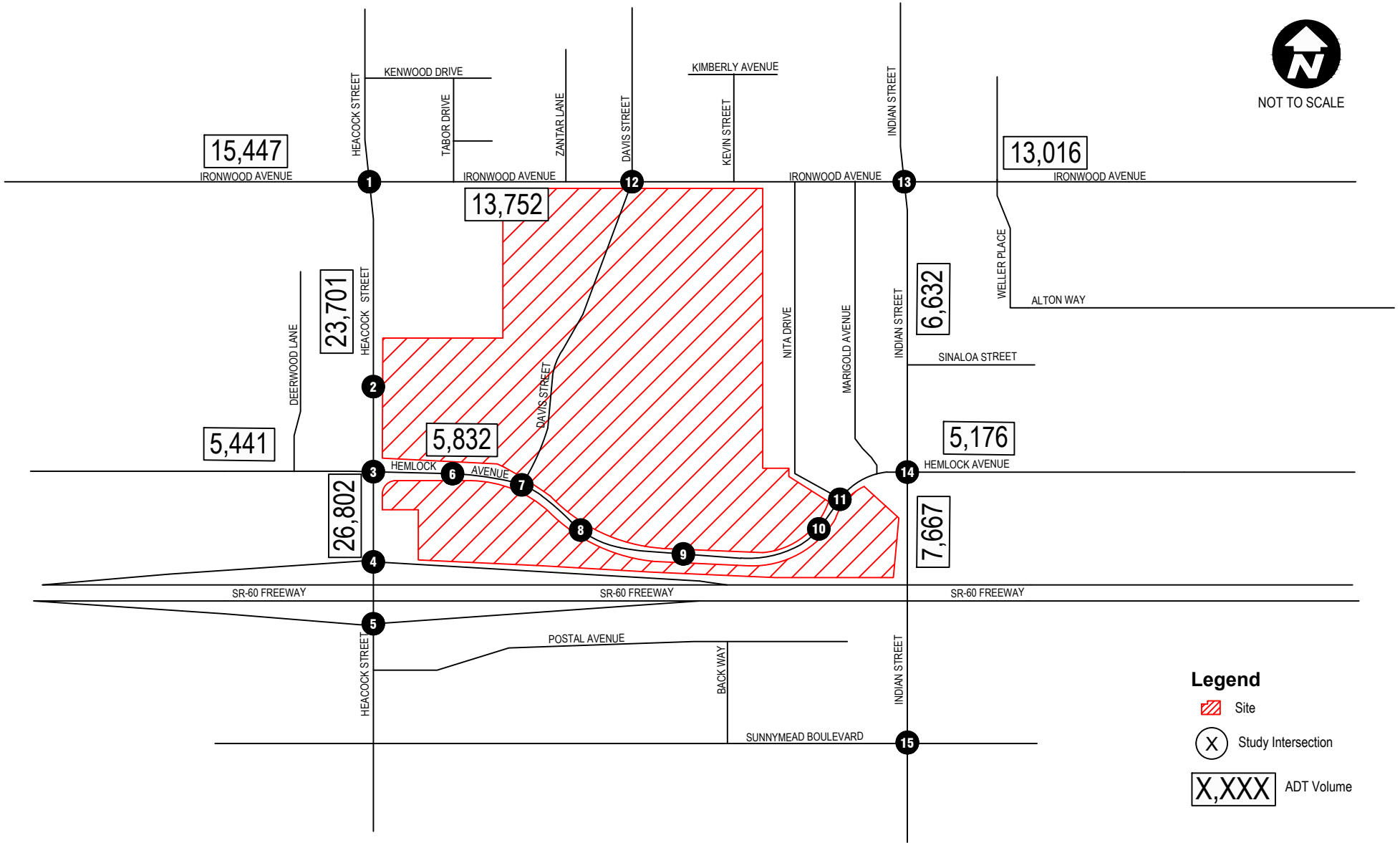
Existing AM and PM Peak Hour Traffic Volumes

Festival at Moreno Valley




FIGURE



NOT TO SCALE



Legend

-  Site
-  Study Intersection
-  ADT Volume

Existing Daily Traffic Volumes

Festival at Moreno Valley

FIGURE

5



Levels of Service

Intersection Operations

Level of Service Analysis

Based on the analysis methodology described in Section I, the existing AM and PM peak hour traffic volumes were input into the *Synchro* LOS software to determine the existing intersection delay and LOS values. Table 6 presents the results of the existing intersection LOS analysis, while the LOS calculation sheets are provided in Appendix C.

Table 6. Existing Without-Project Weekday Peak Hour Intersection LOS

Intersection	Traffic Control	City's LOS Standard	AM Peak		PM Peak	
			LOS ¹	Delay ²	LOS ¹	Delay ²
1. Heacock Street/Ironwood Avenue	Signal	LOS D	C	26.9	C	28.0
2. Heacock Street/(new) Project Access	OWSC	LOS D	-	-	-	-
3. Heacock Street/Hemlock Avenue	Signal	LOS D	B	18.9	C	22.3
4. Heacock Street/State Route (SR 60) WB Ramps	Signal	LOS D	C	21.8	B	19.6
5. Heacock Street/State Route (SR 60) EB Ramps	Signal	LOS D	C	21.9	C	21.8
6. Project Access/Hemlock Avenue	OWSC	LOS C	A	8.7	A	9.9
7. Davis Street/Hemlock Avenue	TWSC	LOS C	B	11.1	B	13.5
8. Project Access IHOP/Hemlock Avenue	OWSC	LOS C	A	9.1	B	10.0
9. Project Access (middle dwy)/Hemlock Avenue	OWSC	LOS C	A	9.7	B	10.3
10. Project Access (w/o Nita Dr)/Hemlock Avenue	OWSC	LOS C	A	9.2	A	9.1
11. Nita Drive/Hemlock Avenue	OWSC	LOS C	A	9.2	A	9.2
12. Davis Street/Ironwood Avenue	Signal	LOS C	C	25.8	C	33.0
13. Indian Street/Ironwood Avenue	Signal	LOS D	C	32.1	C	25.9
14. Indian Street/Hemlock Avenue	Signal	LOS D	C	22.3	C	22.1
15. Indian Street/Sunnymead Boulevard	Signal	LOS D	C	21.2	C	27.3

1. Level of Service
2. Delay measured in seconds/vehicle
3. Delay and LOS are based on Highway Capacity Manual 2010
4. Signal = Traffic Signal (evaluated using the HCM Methodology)
5. TWSC = Two Way Stop Controlled (evaluated using the HCM Methodology)
6. OWSC = One Way Stop Controlled (evaluated using the HCM Methodology)

Based on the existing LOS analysis, all study area intersections are currently operating with a satisfactory LOS as per City's standards during both peak hours.

Queuing Analysis

A queuing analysis was conducted at the study area intersections to determine if the left turn pocket (storage) lengths are able to accommodate queues. The 95th percentile queue calculations were calculated using *Synchro* for the weekday AM and weekday PM peak hours and results summary is presented in Table 7 with detailed calculation in Appendix C. Table 7 shows that the existing 95th percentile queue lengths exceed storage space. It should be noted that the 95th percentile queue is not necessarily ever observed, it is simply based on statistical calculations. In other words, if traffic was observed for 100 cycles, the 95th percentile queue would be the queue experienced with the 95th busiest cycle (or 5% of the time). It is however used by many jurisdictions as the basis for calculating storage lengths.

As shown in Table 7, the queue lengths of various intersection approaches exceed the existing pocket length under existing conditions. Mitigation measures are presented in Section V.

Table 7. Existing Without-Project Weekday Peak Hour Queuing Analysis

Intersection	Movement	Existing Pocket Length (ft)	95 th Percentile Queue ¹		Exceeds Existing Pocket Length	
			AM	PM	AM	PM
1. Heacock Street/Ironwood Avenue	EBL	90	149	126	Yes	Yes
	WBL	135	178	108	Yes	No
	NBL	140	127	175	No	Yes
	SBL	100	70	88	No	No
2. Heacock Street/(new) Project Access		No pocket Lanes and/or No Queues				
3. Heacock Street/Hemlock Avenue	EBL	70	50	70	No	No
	WBL	360	66	92	No	No
	NBL	100	98	136	No	Yes
	SBL	95	31	39	No	No
4. Heacock Street/State Route (SR 60) WB Ramps	NBL	200	239	256	Yes	Yes
5. Heacock Street/State Route (SR 60) EB Ramps	EBL	0	101	213	Yes	Yes
	SBL	190	150	160	No	No
6. Project Access/Hemlock Avenue		No pocket Lanes and/or No Queues				
7. Davis Street/Hemlock Avenue	EBL	180	0	3	No	No
8. Project Access IHOP/Hemlock Avenue		No pocket Lanes and/or No Queues				
9. Project Access (middle dwy)/Hemlock Avenue		No pocket Lanes and/or No Queues				
10. Project Access (w/o Nita Dr)/Hemlock Avenue		No pocket Lanes and/or No Queues				
11. Nita Drive/Hemlock Avenue		No pocket Lanes and/or No Queues				
12. Davis Street/Ironwood Avenue	EBL	150	88	162	No	Yes
	SBL	40	111	61	Yes	Yes
13. Indian Street/Ironwood Avenue	EBL	95	51	103	No	Yes
	WBL	100	109	64	Yes	No
	NBL	110	139	78	Yes	No
	SBL	80	112	75	Yes	No
14. Indian Street/Hemlock Avenue	EBL	150	19	46	No	No
	WBL	80	56	49	No	No
	NBL	145	50	63	No	No
	SBL	100	54	28	No	No
15. Indian Street/Sunnymead Boulevard	EBL	90	62	136	No	Yes
	WBL	100	33	61	No	No
	NBL	145	89	104	No	No
	SBL	90	68	77	No	No

1. Calculated using Synchro – bold numbers indicate where Synchro yielded “95th percentile volume exceeds capacity, queue maybe longer.” The queues were evaluated in Simtraffic at these locations.

Signal Warrant Analysis

The signal warrant analysis as per the latest edition of the Federal Highway Administration’s (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), was used for all study area intersections. No unsignalized intersection was found to meet the warrants for signalization. Detailed worksheets are provided in Appendix C.

Roadway Segments

Based on the analysis methodology described in Section I, the existing daily traffic volumes at the study area roadway segments were compared to the City's roadway segment LOS values presented in Table 4 above. Table 8 presents the results of the existing roadway segment LOS analysis.

Based on the existing roadway segment analysis, all study area roadway segments currently operate with LOS D or better.

Table 8. Existing Condition Roadway Segment LOS Summary

Roadway Segment	Existing Classification	Number of Lanes	Divided/Undivided	ADT ¹	LOS Standard ²	Maximum Capacity ADT ³	V/C	LOS	Exceeds Threshold ?
1. Heacock Street - Ironwood Avenue to Hemlock Avenue	Arterial	4	Divided	23,701	LOS D	37,500	0.632	B	No
2. Heacock Street - Hemlock Avenue to SR 60 WB Ramps	Arterial	4	Divided	26,802	LOS D	37,500	0.715	C	No
3. Indian Street - Ironwood Avenue to Hemlock Avenue	Minor Arterial	2	Undivided	6,632	LOS D	12,500	0.531	A	No
4. Indian Street - South of Hemlock Avenue	Minor Arterial	2	Undivided	7,667	LOS D	12,500	0.613	B	No
5. Ironwood Avenue - West of Heacock Street	Minor Arterial	4	Divided	15,447	LOS C	37,500	0.412	A	No
6. Ironwood Avenue - Heacock Street to Davis Street	Minor Arterial	4	Divided	13,752	LOS C	37,500	0.367	A	No
7. Ironwood Avenue - East of Indian Street	Minor Arterial	4	Divided	13,016	LOS C	37,500	0.347	A	No
8. Hemlock Avenue - West of Heacock Street ⁴	Minor Arterial	2	Undivided	5,441	LOS C	12,500	0.435	A	No
9. Hemlock Avenue - Heacock Street to Davis Street ⁴	Minor Arterial	4	Divided	5,832	LOS C	37,500	0.156	A	No
10. Hemlock Avenue - East of Indian Street ⁴	Minor Arterial	2	Undivided	5,176	LOS C	12,500	0.414	A	No

1. ADT: Average Daily Traffic

2. LOS based on City of Moreno Valley Roadway Segment LOS Values (Table 4)

3. Based on City of Moreno Valley Guidelines daily service volume standards table (LOS E). Four Lane Divided Arterial and Two Lane Industrial Collector used as classifications.

4. Roadway classification and LOS standard not listed in City Guidelines, assumed to be Minor Arterial, Two Lane Industrial Collector, with LOS Standard C.

III. Project Future Traffic

This section describes the project trip generation, distribution, and assignment. These have been agreed upon with the City prior to embarking on the TIA and documented in the scoping agreement included in Appendix A.

Trip Generation

Weekday daily, AM and PM peak hour trip generation estimates for the proposed project were developed using trip rates provided in the *Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition, 2017*. Summaries of the trip generation rates and resulting vehicle trips for the proposed project are presented in Table 9.

Comparison to Specific Plan 205

The total trip generation of the project (before accounting for internal capture, pass-by or existing uses) was found to be 18,108 daily trips with 482 trips in the AM Peak (298 inbound and 185 outbound) and 1,537 trips in the PM Peak (735 inbound and 802 outbound). These trip generation numbers are compared to the approved Festival at Moreno Valley Specific Plan 205 trip generation numbers (Greiner Engineering Study 1986) and the results are illustrated in Table 10. As shown in Table 9, the current proposed specific plan generates less trips than the Specific Plan 205 to the order of 214 trips Daily and 900 trips in the PM Peak (note that AM Peak period was not assessed in the Greiner Engineering Study).

Internal Trip Capture and Pass-by

Internal capture was calculated using methodology from NCHRP 684 Mixed Use Spreadsheet which yields an internal trip capture of 7% in the AM peak and 4% in PM Peak and Daily.

Pass-by trip rates for the retail component of the project were estimated at 34% during PM peak hour and 17% during the AM peak hour and Daily based on the *Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition, 2017*. These calculation sheets were submitted with the scoping agreement and approved by the City.

Net New Trips

The existing land uses were provided by the Client and the net new trips of the project are calculated by accounting for the existing uses as shown in Table 11. The net new trips generated by the project are calculated to be 7,612 daily trips with 527 trips in the PM Peak (231 inbound and 295 outbound). During the AM peak the project would produce less trips than existing conditions whereby the project is forecasted to remove 78 trips from the street system (21 inbound and 56 outbound).

Table 9. Proposed Project Trip Generation

	LU	Units	Daily	AM Peak Hour			PM Peak Hour		
				IN	OUT	TOTAL	IN	OUT	TOTAL
<u>Trip Rates</u>									
Shopping Center ¹	Code 820	TSF	37.75	0.58	0.36	0.94	1.83	1.98	3.81
Business Park ²	Code 770	TSF	12.44	0.24	0.16	0.40	0.19	0.23	0.42
<u>Project Trip Generation</u>									
Planning Area 1									
Business Park	135.000	TSF	1,679	33	21	54	26	31	57
<i>Subtotal</i>			1,679	33	21	54	26	31	57
Planning Area 2									
Business Park	35.000	TSF	435	9	5	14	7	8	15
<i>Subtotal</i>			435	9	5	14	7	8	15
Planning Area 3									
Business Park	178.000	TSF	2,214	43	28	71	34	40	75
Retail	15.000	TSF	566	9	5	14	27	30	57
<i>Subtotal</i>			2,781	52	33	85	62	70	132
Planning Area 4									
Retail	255.000	TSF	9,626	149	91	240	466	505	972
<i>Subtotal</i>			9,626	149	91	240	466	505	972
Planning Area 6									
Retail	35.000	TSF	1,321	20	13	33	64	69	133
<i>Subtotal</i>			1,321	20	13	33	64	69	133
Planning Area 7									
Retail	40.000	TSF	1,510	23	14	38	73	79	152
<i>Subtotal</i>			1,510	23	14	38	73	79	152
Planning Area 8									
Retail	20.000	TSF	755	12	7	19	37	40	76
<i>Subtotal</i>			755	12	7	19	37	40	76
<u>Total Trip Generation</u>			<u>18,108</u>	<u>298</u>	<u>185</u>	<u>482</u>	<u>735</u>	<u>802</u>	<u>1,537</u>
Internal Trip Capture ³			-724	-21	-13	-34	-29	-32	-61
Pass-By Trips ⁴			-2,342	-29	-29	-58	-236	-237	-473
Net Trip Generation With Internal Trip Capture and Pass By			15,041	248	142	390	469	533	1,003
Existing Land Uses (includes Internal Trip Capture and Pass-By Reductions)⁵			7,429	269	199	468	238	238	476
Net New Trips (Project – Existing)			7,612	-21	-56	-78	231	295	527

Note: TSF = Thousand Square Feet

1. Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 820 - Shopping Center.
2. Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 770 - Business Park.
3. Internal capture calculated using methodology from NCHRP 684 Mixed Use Spreadsheet (AM = 7%, PM/Daily = 4%)
4. Pass-by trip rate for Retail Uses (34% during PM peak hour, 17% during the AM peak hour and Daily based on weekend mid-day) from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 820 - Shopping Center.
5. Refer to Table 10 for details
6. Note that Planning Area 5 is Open Space and as such is not included above

Table 10. Proposed Project Trip Generation Versus Greiner Engineering (SP 205)

LU	Units	Daily	AM Peak Hour			PM Peak Hour		
			IN	OUT	TOTAL	IN	OUT	TOTAL
<i>Proposed Project Total Traffic (No Internal Trip Capture or Pass-by Reductions)</i>								
		18,108	298	185	482	735	802	1,537
Greiner Engineering Study (Table 3) (No Internal Trip Capture or Pass-by Reductions)								
		18,322	--	--	--	1,081	1,356	2,437
<u>Trip Generation With Internal Trip Capture and Pass By</u>								
		-214	--	--	--	-346	-554	-900

1. Greiner Engineering – Specific Plan 205 Site Specific Analysis – December 1986
2. Greiner Engineering Study did not evaluate the AM Peak Hour as PM is the more peak with highest number of trips

Table 11. Existing Project Site Trip Generation

	LU	Units	Daily	AM Peak Hour			PM Peak Hour		
				IN	OUT	TOTAL	IN	OUT	TOTAL
<u>Trip Rates¹</u>									
Shopping Center	820	TSF	37.75	0.58	0.36	0.94	1.83	1.98	3.81
Fast Food Restaurant With Drive Through	934	TSF	470.95	20.50	19.69	40.19	16.99	15.68	32.67
Fast Food Restaurant Without Drive Through	933	TSF	346.23	15.06	10.04	25.10	14.17	14.17	28.34
High-Turnover Sit-down Restaurant	932	TSF	112.18	5.47	4.47	9.94	6.06	3.71	9.77
Automobile Service	941	SP	40.00	2.01	0.99	3.00	2.72	2.13	4.85
<u>Project Trip Generation</u>									
Planning Area 1	Vacant								
Planning Area 2	Vacant								
Planning Area 3	Vacant								
Planning Area 4									
Shopping Center (Retail Center)	162.250	TSF	6,125	95	58	153	297	321	618
Fast Food Restaurant With Drive Through (Yoshinoya)	3.900	TSF	1,837	80	77	157	66	61	127
<i>Subtotal</i>			<i>7,962</i>	<i>174</i>	<i>135</i>	<i>309</i>	<i>363</i>	<i>383</i>	<i>746</i>
Planning Area 6									
Fast Food Restaurant With Drive Through (Arby's)	2.700	TSF	1,272	55	53	109	46	42	88
Fast Food Restaurant Without Drive Through (KFC)	2.700	TSF	935	41	27	68	38	38	77
Auto Service (Jiffy Lube)	3	SP	120	6	3	9	8	6	15
High-Turnover Sit-down Restaurant (Centenario)	8.800	TSF	987	48	39	87	53	33	86
<i>Subtotal</i>			<i>3,314</i>	<i>150</i>	<i>123</i>	<i>273</i>	<i>146</i>	<i>120</i>	<i>265</i>
Planning Area 7									
Shopping Center (Retail Center)	33.675	TSF	1,271	20	12	32	62	67	128
<i>Subtotal</i>			<i>1,271</i>	<i>20</i>	<i>12</i>	<i>32</i>	<i>62</i>	<i>67</i>	<i>128</i>
Planning Area 8	Vacant								
<u>Total Trip Generation</u>			<u>12,546</u>	<u>344</u>	<u>269</u>	<u>614</u>	<u>570</u>	<u>569</u>	<u>1,139</u>
Internal Trip Capture ²			-2,886	-17	-13	-31	-131	-131	-262
Pass-By Trips For Shopping Center ³			-1,257	-16	-15	-31	-131	-130	-261
Pass-By Trips For Fast Food With Drive Through ⁴			-777	-33	-33	-66	-53	-53	-106
Pass-By Trips For High-Turnover Sit-down Restaurant ⁵			-197	-9	-8	-17	-17	-17	-34
Total Pass-by Trips			-2,232	-58	-57	-115	-201	-200	-401
Net Trip Generation With Internal Trip Capture and Pass By			7,429	269	199	468	238	238	476

Note: TSF = Thousand Square Feet

1. Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 820 - Shopping Center, Land Use Code 934 - Fast-Food Restaurant With Drive-Through Window, Land Use Code 933 - Fast-Food Restaurant Without Drive-Through Window, Land Use Code 932 - High-Turnover (Sit-Down) Restaurant, Land Use Code 941 - Quick Lubrication Vehicle Shop.
2. Internal capture calculated using methodology from NCHRP 684 Mixed Use Spreadsheet
3. Pass-by trip rates (35% during PM peak hour, 17% for AM peak hour and Daily) from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 820 - Shopping Center.
4. Pass-by trip rates (49% during PM peak hour, 25% for AM peak hour and Daily) from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 934 - Fast Food Restaurant with Drive Through.
5. Pass-by trip rates (40% during PM peak hour, 20% for AM peak hour and Daily) from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 932 - High Turnover Sit-down Restaurant.

Trip Distribution and Assignment

Regional and local trip distribution percentages for the proposed project were based on logical peak hour commute patterns and approved in the City's Scoping Agreement. Figure 6 and Figure 7 illustrate the Retail outbound and inbound trip distribution percentages respectively, while Figure 8 and Figure 9 illustrate the outbound and inbound trip distribution percentages for the Business Park component of the project respectively. The trip distribution percentages at each intersection were applied to the proposed project's weekday AM and PM peak hour trip generation estimates to calculate the project trip assignment. The resulting weekday AM, and PM peak hour trip assignments are also shown on Figure 10.

Background Cumulative Traffic

Ambient Growth Rate

Traffic Conditions prior to the time that the proposed development is completed will be estimated by increasing the existing traffic counts by a growth rate of 2% per year. The ambient growth rate will be applied from 2017 till 2022.

Cumulative Projects

The cumulative project list includes reasonably foreseeable development projects which are either approved or being processed concurrently in the study. A list of these projects was compiled in collaboration with the City's Planning Department (Economic Development) and location of each cumulative project is shown in Figure 11, while the trip generation of each cumulative project is shown in Table 12.

The cumulative project trips were then distributed and assigned on the study area intersections as shown in Figure 12.

Near Term and General Plan Traffic Forecasts

A "buildup" and "buildout" analysis were carried out. The "buildup" scenario corresponds to Near Term Year 2022 and was used to approximate the Opening Year Cumulative traffic forecasts. The "buildup" approach combines existing traffic counts with a background ambient growth factor to forecast the Near Term Year 2022 background traffic conditions. The Opening Year Cumulative traffic forecasts include background traffic, traffic generated by other cumulative development projects within the study area, and the traffic generated by the proposed Project. The 2022 roadway network is similar to the existing conditions roadway network with the exception of future roadways and intersections proposed to be developed by the Project.

The "buildout" approach is used to forecast the General Plan Buildout Without and With Project conditions of the study area. The Moreno Valley Transportation Analysis Model (based on RivTam) was used for this analysis.

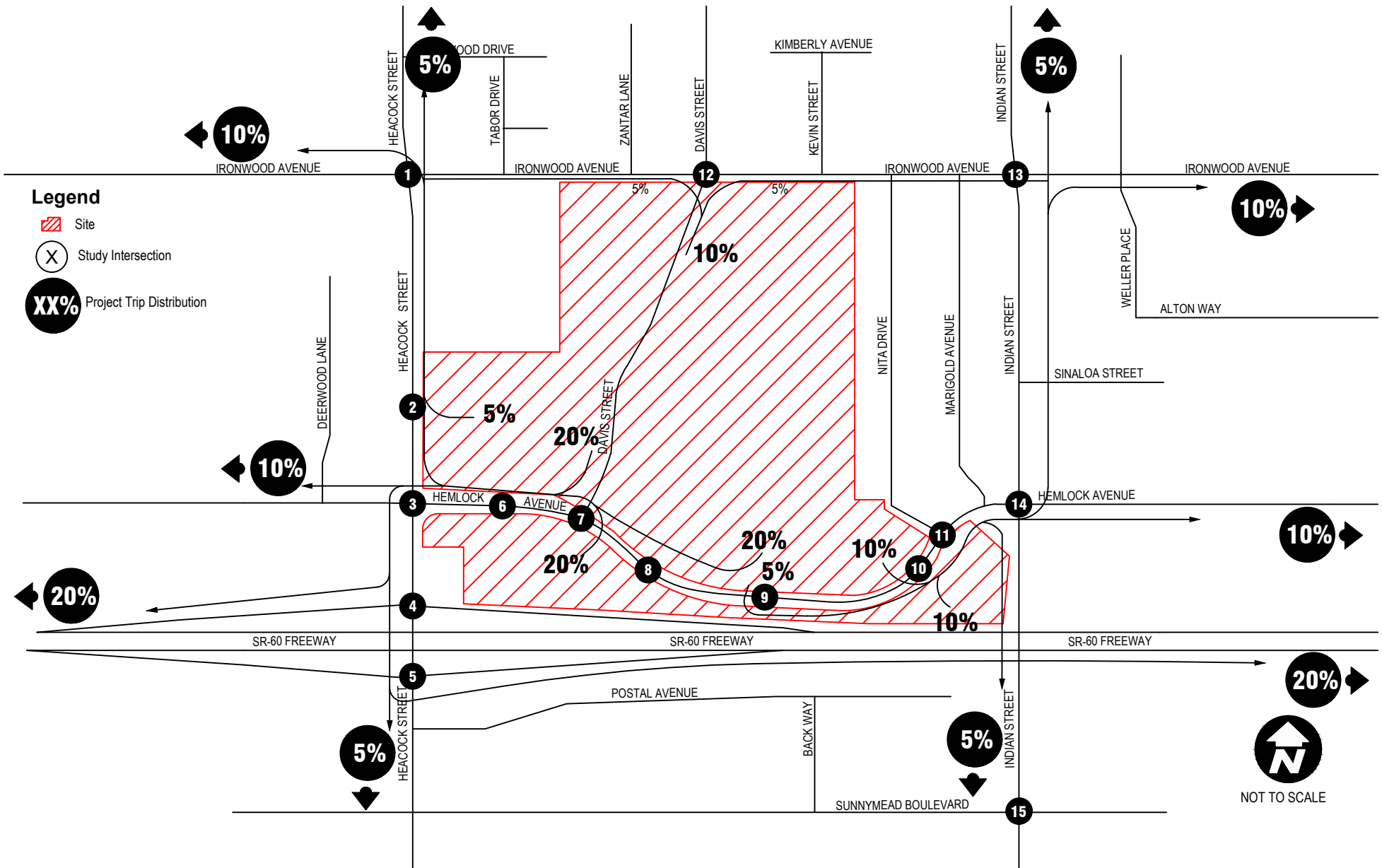
Table 12. Cumulative Projects Trip Generation

	LU	Units	Daily	AM Peak Hour			PM Peak Hour		
				IN	OUT	TOTAL	IN	OUT	TOTAL
<u>Trip Rates¹</u>									
Shopping Center	820	TSF	37.75	0.58	0.36	0.94	1.83	1.98	3.81
Office	710	TSF	9.74	1.00	0.16	1.16	0.18	0.97	1.15
Hotel	310	RM	8.36	0.28	0.19	0.47	0.31	0.29	0.60
Single Family Residential	210	DU	9.44	0.19	0.56	0.74	0.62	0.37	0.99
Multi-Family Housing	220	DU	7.32	0.11	0.35	0.46	0.35	0.21	0.56
<u>Project Trip Generation</u>									
1. Moreno Valley Plaza (Shopping Center)	341.000	TSF	12,873	199	122	321	624	676	1,299
Minus Pass-By Trips ²			-1,287	-20	-12	-32	-118	-128	-247
Subtotal Moreno Valley Plaza (Shopping Center)			11,585	179	110	288	505	547	1,052
2. Olivewood Plaza (Office)	22.758	TSF	222	23	4	26	4	22	26
3. Riverside County Office Building (Office)	52.000	TSF	506	52	8	60	10	50	60
4. Sleep Inn & Suites (Hotel)	66	RM	552	18	13	31	20	19	40
5. Econo Lodge (Hotel)	51	RM	426	14	10	24	16	15	31
6. Holiday Inn Express (Hotel)	153	RM	1,279	42	29	72	47	45	92
7. Best Western Hotel and Suites (Hotel)	59	RM	493	16	11	28	18	17	35
8. Tract 32710 (Single Family Residential)	6	DU	57	1	3	4	4	2	6
9. Tract 32126 (Single Family Residential)	35	DU	330	6	19	26	22	13	35
10. Tract 36761 (Single Family Residential)	7	DU	66	1	4	5	4	3	7
11. Tract 31621 (Single Family Residential)	12	DU	113	2	7	9	7	4	12
12. Tract 35956 (Single Family Residential)	2	DU	19	0	1	1	1	1	2
13. PA15-0042 (Multi-Family Apartments)	39	DU	285	4	14	18	14	8	22
14. Tract 31814 (Multi-Family Condos)	60	DU	439	6	21	28	21	12	34
15. Tract 33771 (Multi-Family Condos)	12	DU	88	1	4	6	4	2	7
16. PEN 16-0066 (Multi-Family Apartments)	12	DU	88	1	4	6	4	2	7
17. Tract 35663 (Multi-Family Condos)	12	DU	88	1	4	6	4	2	7
18. Tract 35769 (Multi-Family Condos)	16	DU	117	2	6	7	6	3	9
19. PA09-0006 (Multi-Family Apartments)	15	DU	110	2	5	7	5	3	8
Total Trip Generation			7,429	269	199	468	238	238	476

Note: TSF = Thousand Square Feet, DU = Dwelling Unit, RM = Room Vehicle

1. Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 820 - Shopping Center, Land Use Code 710 - Office, Land Use Code 310 - Hotel, Land Use Code 210 - Single Family Residential, Land Use Code 220 - Multi-Family Housing (Low-Rise).

2. Pass-by trip rates (19% during PM peak hour, 10% for AM peak hour and Daily) from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 820 - Shopping Center



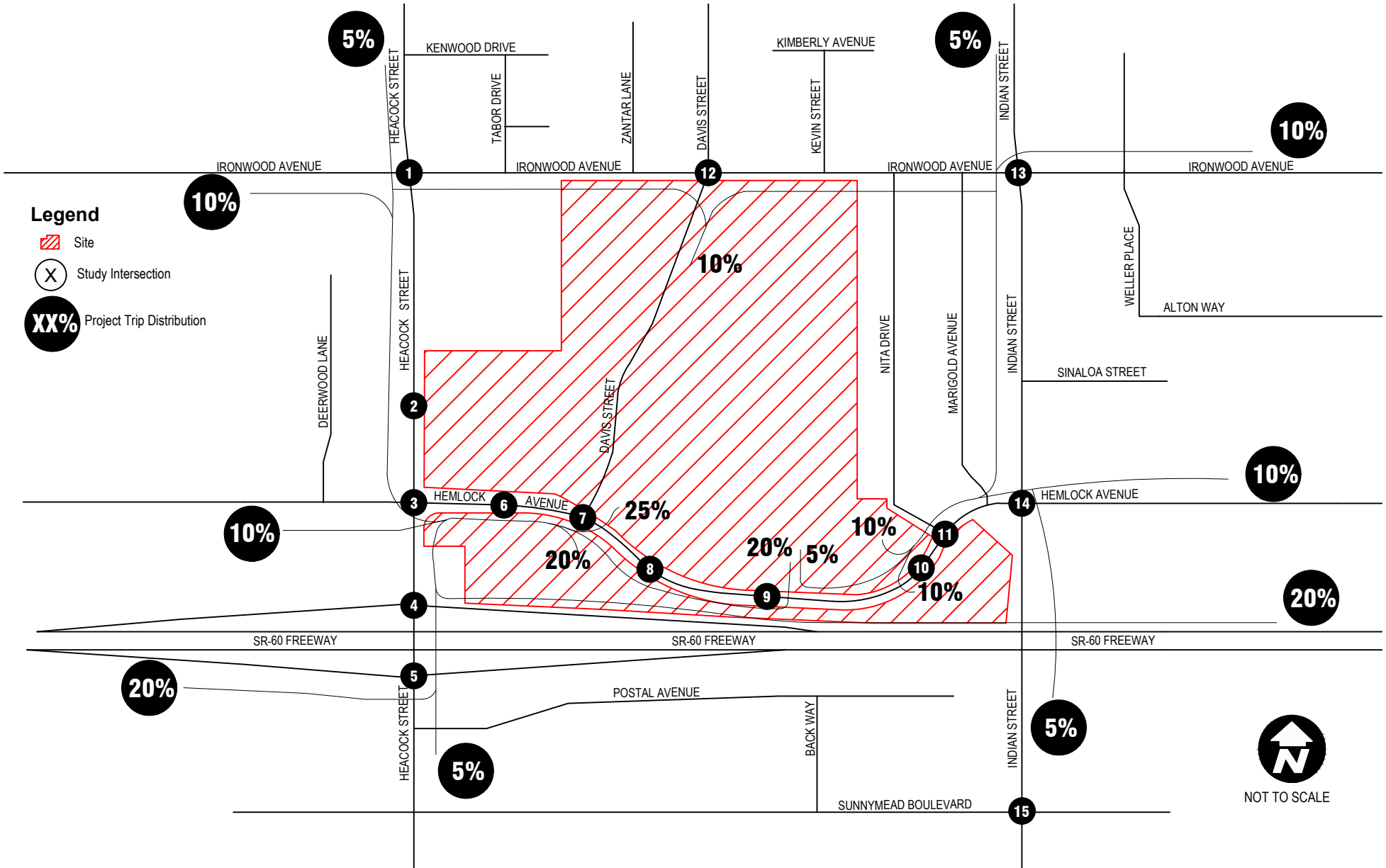
Source: Google Maps, 09/2017.

Retail Distribution Outbound

Festival at Moreno Valley

FIGURE





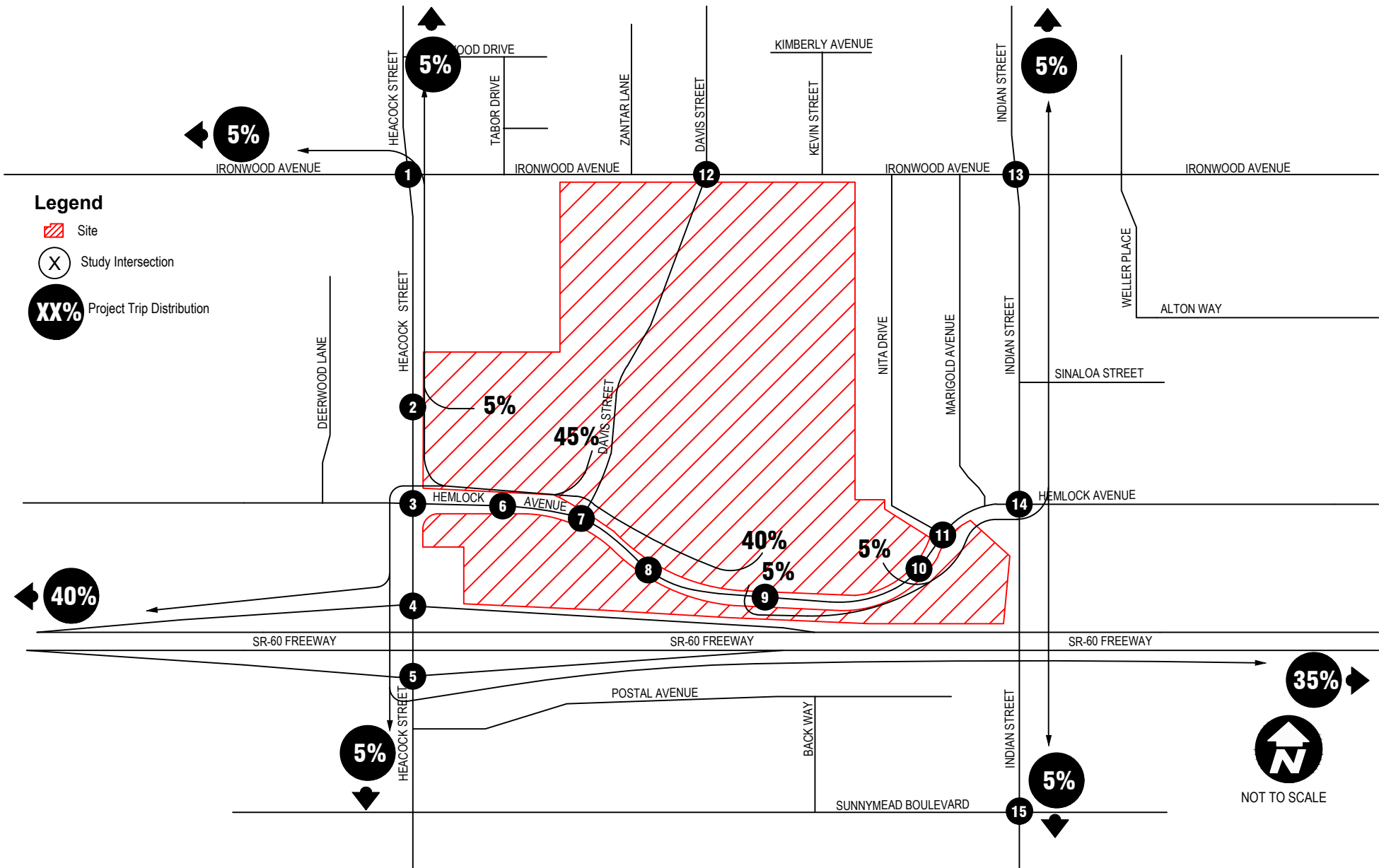
Source: Google Maps, 09/2017.

Retail Distribution Inbound

Festival at Moreno Valley

FIGURE

7

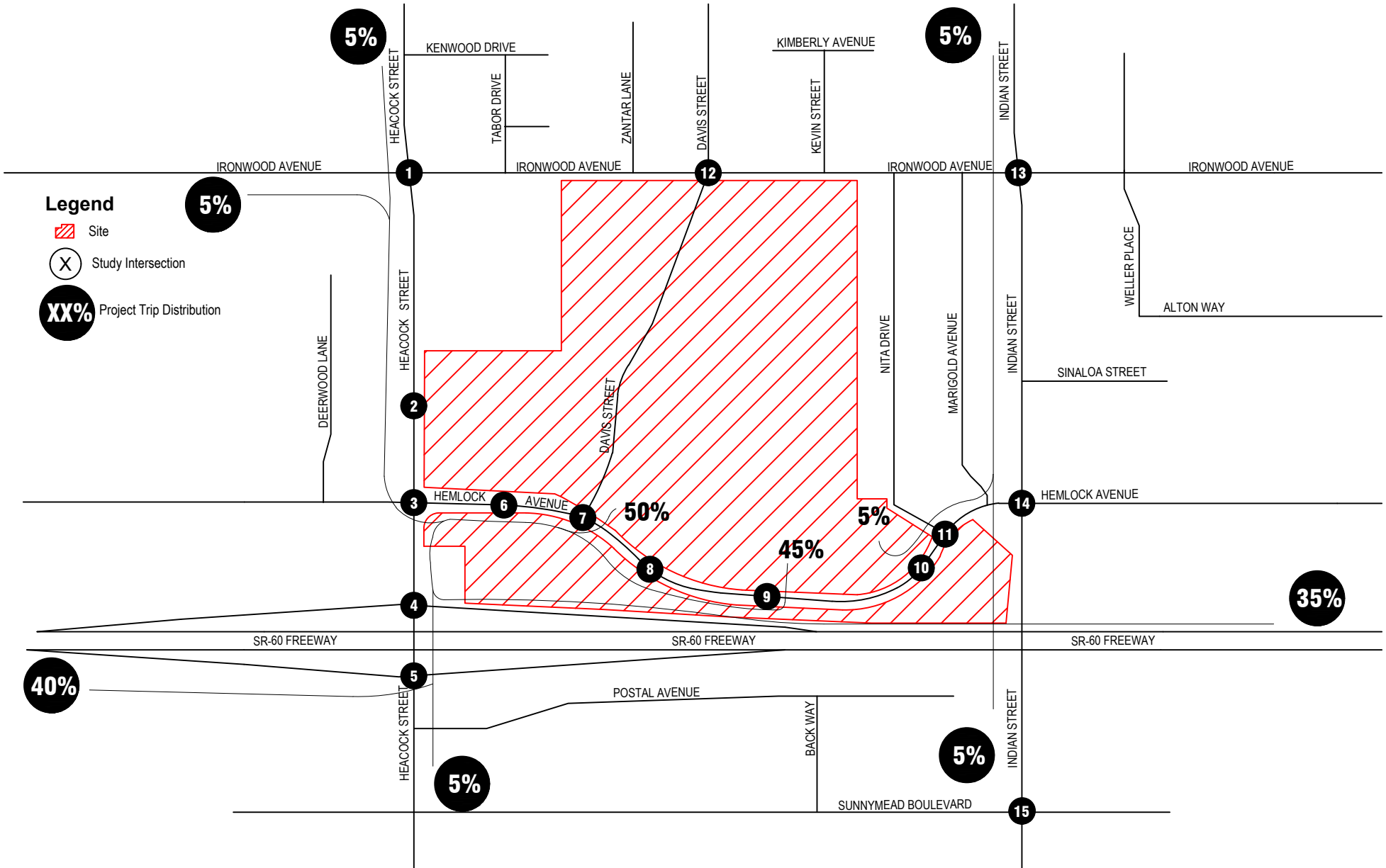


Source: Google Maps, 09/2017.

Business Park Distribution Outbound

Festival at Moreno Valley

FIGURE



Source: Google Maps, 09/2017.

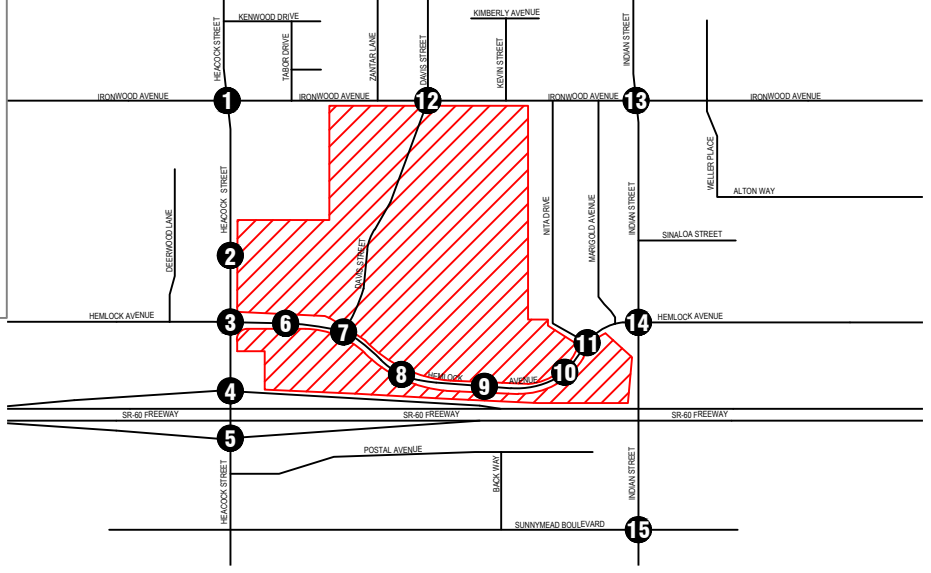
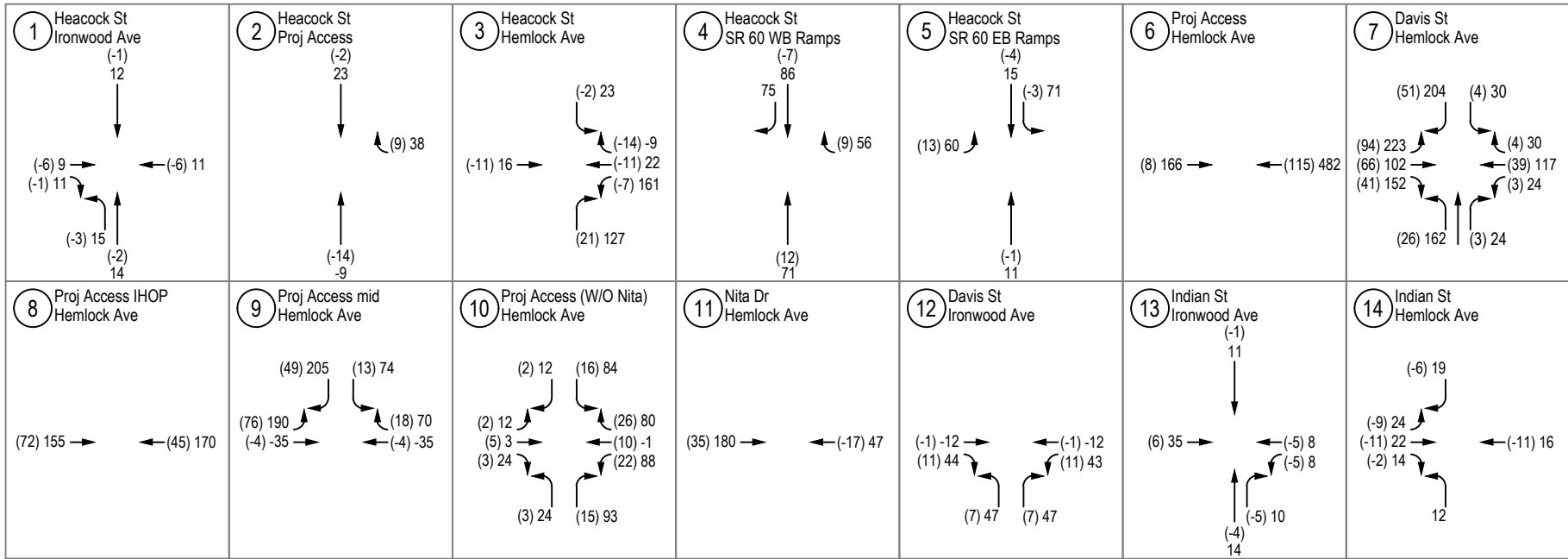
Business Park Distribution Inbound

Festival at Moreno Valley

FIGURE

9





- Legend**
- Site
 - Weekday PM Peak Hour Traffic Volumes
 - Weekday AM Peak Hour Traffic Volumes
 - Study Intersection

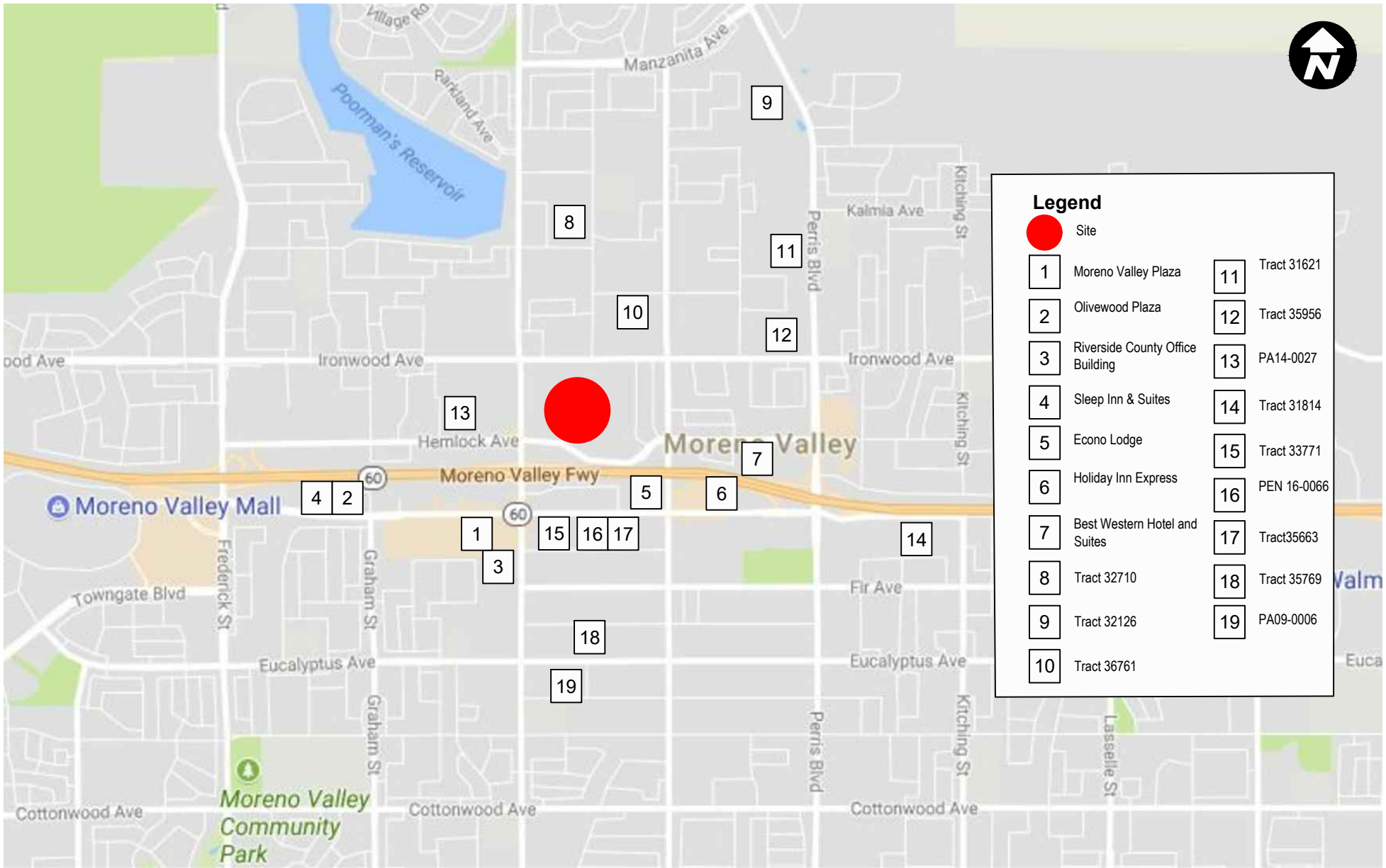


Project Trip Distribution and Assignment

Festival at Moreno Valley

FIGURE





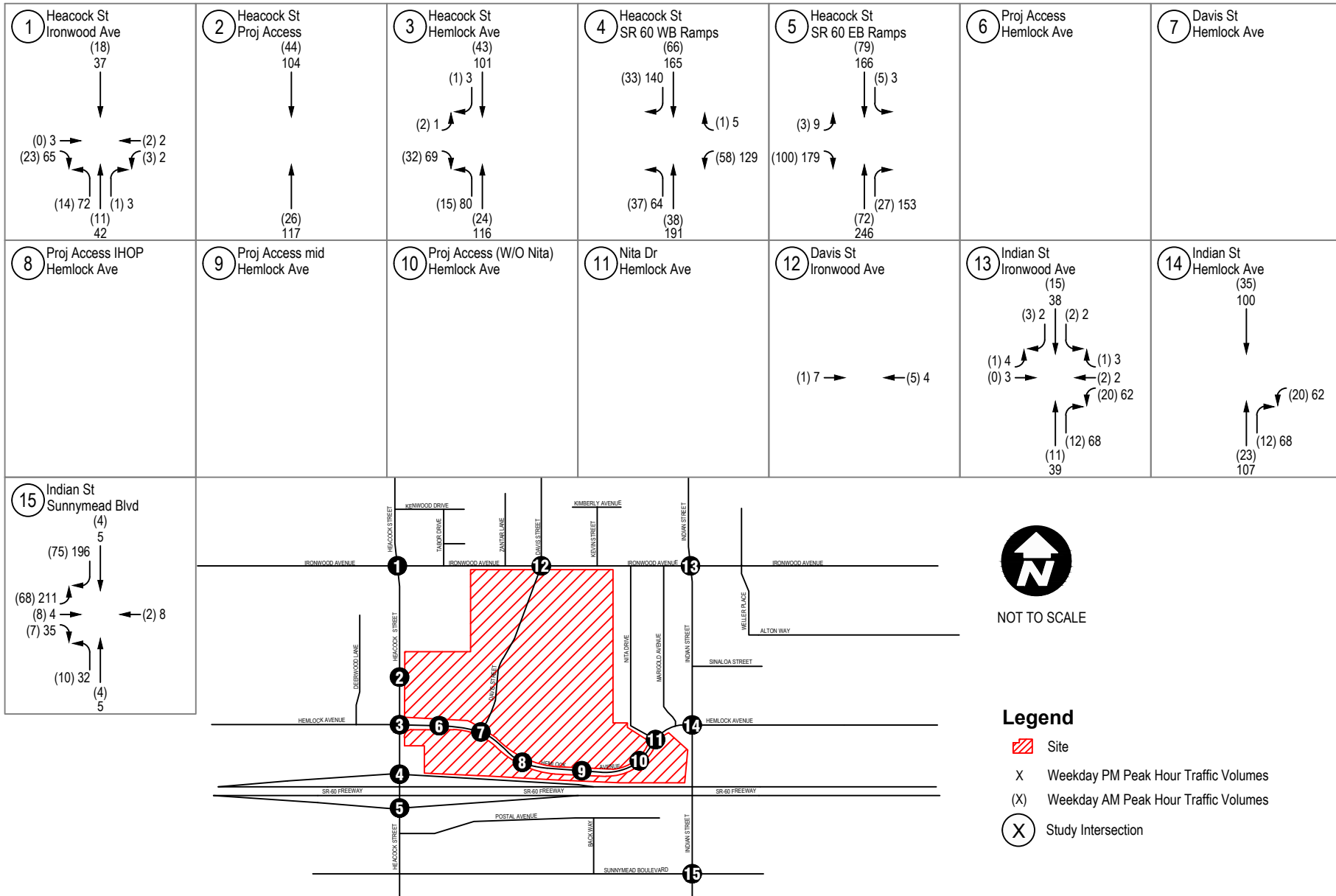
Source: City of Moreno Valley, November 2017.

Locations of Cumulative Projects

Festival at Moreno Valley

FIGURE

11



Cumulative Projects Trip Assignment

Festival at Moreno Valley

FIGURE

12

IV. Traffic Analysis

This section describes analysis results for existing with-project, Near Term Year (2022) baseline, Near Term Year (2022) with-project conditions and the General Plan build-out (2040) without and with project conditions. Operations for existing conditions were illustrated earlier in Section II and also are summarized in this section as part of the comparison to existing plus project conditions.

Operations for both intersections and roadway segments are described along with signal warrant analysis. Mitigation measures are discussed in Section V.

Existing With-Project

Intersection Operations

Level of Service Analysis

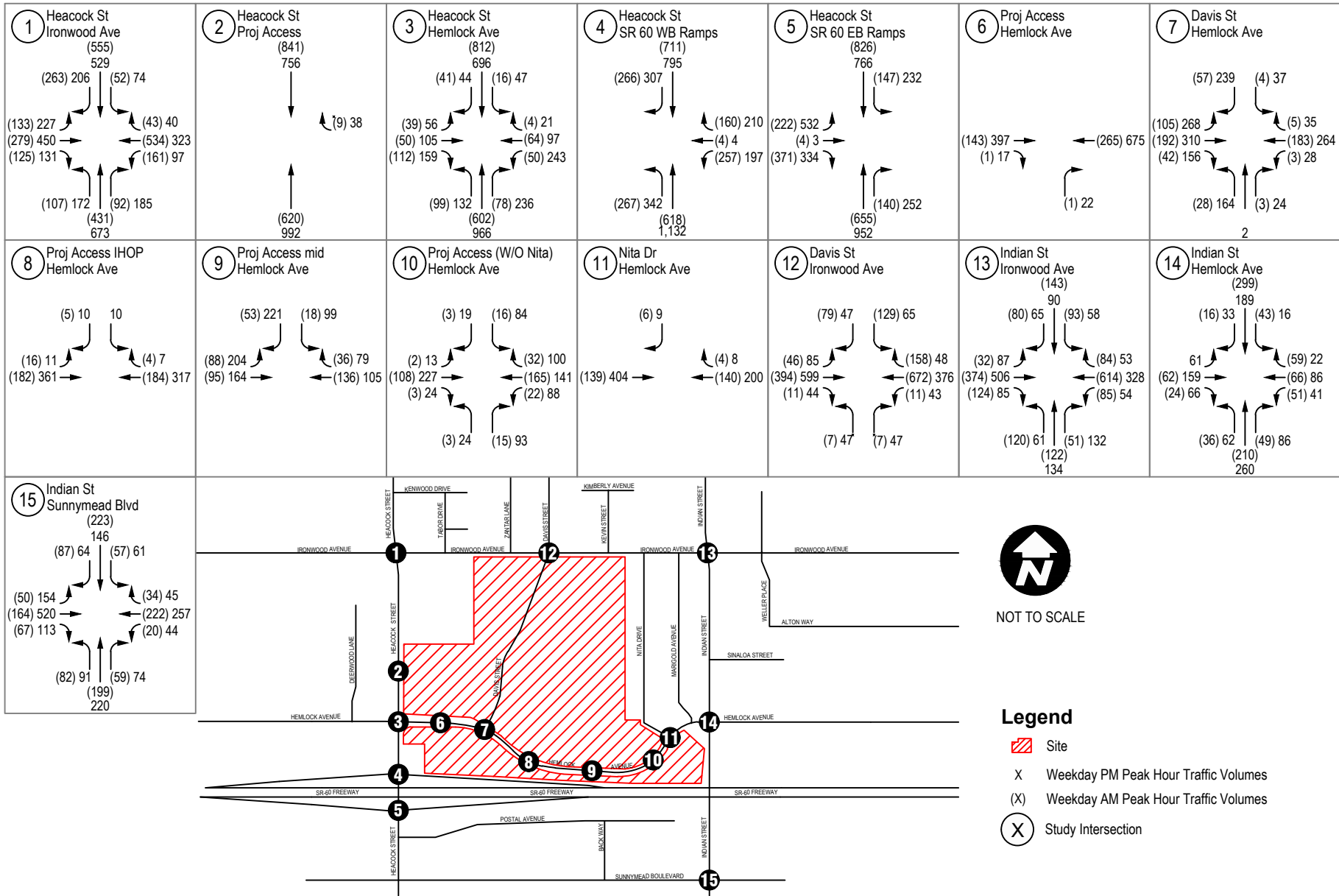
Intersection with-project traffic volumes were obtained by adding the project trip assignments (shown in Figure 10) during the AM and PM peak hours to the existing volumes at the intersection. Figure 13 illustrates the existing with-project traffic volumes at the study area intersections. An intersection operations analysis was conducted for the study area to evaluate the Existing with-Project weekday AM and PM peak hour conditions with the project. Intersection operations were calculated using the LOS methodology described previously. Table 13 provides a comparison between the Existing without and with-project conditions for the weekday AM and PM peak hours. Detailed LOS worksheets are included in Appendix C.

As shown in the Table 13, the Davis Street/Hemlock Avenue intersection is forecast to operate at LOS F during the PM peak hour with the project. The addition of project traffic is expected to increase the delay at the intersection leading to a LOS F under Existing with-Project PM peak hour conditions. This increase is considered a significant impact per the City's unsignalized intersection significance criteria (LOS C). Mitigation measures are discussed in the following section.

Queuing Analysis

A queuing analysis was conducted at the study area intersections to determine if the left turn pocket (storage) lengths are able to accommodate queues. The 95th percentile queue calculations were calculated using Synchro for the weekday AM and weekday PM peak hours and results summary is presented in Table 14 with detailed calculation in Appendix C.

Table 13 shows that the existing 95th percentile queue lengths that exceed storage space under Existing with-Project conditions. As mentioned earlier, the 95th percentile queue is not necessarily ever observed, it is simply based on statistical calculations. It is however used by many jurisdictions as the basis for calculating storage lengths. When Synchro yielded "95th percentile volume exceeds capacity, queue maybe longer", the queues were evaluated in Simtraffic. Mitigation measures are illustrated in Section V.



Existing Plus Project AM and PM Peak Hour Traffic Volumes

Festival at Moreno Valley

FIGURE

13

Table 13. Existing and Existing with-Project Peak Hour Intersection LOS

Intersection	Traffic Control	City LOS Standard	Existing				Existing with-Project				Delay Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²				
1. Heacock Street/Ironwood Avenue	Signal	LOS D	C	26.9	C	28	C	26.7	C	28.9	-0.2	0.9	NO	NO
2. Heacock Street/(new) Project Access	OWSC	LOS D	A	0	A	0	B	10.5	B	12.6	10.5	12.6	NO	NO
3. Heacock Street/Hemlock Avenue	Signal	LOS D	B	18.9	C	22.3	B	18.0	C	31.5	-0.9	9.2	NO	NO
4. Heacock Street/State Route (SR 60) WB Ramps	Signal	LOS D	C	21.8	B	19.6	C	21.7	C	22.6	-0.1	3.0	NO	NO
5. Heacock Street/State Route (SR 60) EB Ramps	Signal	LOS D	C	21.9	C	21.8	C	21.9	C	23.8	0.0	2.0	NO	NO
6. Project Access/Hemlock Avenue	OWSC	LOS C	A	8.7	A	9.9	A	8.7	A	9.7	0.0	-0.2	NO	NO
7. Davis Street/Hemlock Avenue	TWSC	LOS C	B	11.1	B	13.5	C	18.4	F	1371.9	7.3	1358.4	NO	YES
8. Project Access IHOP/Hemlock Avenue	OWSC	LOS C	A	9.1	B	10	A	9.4	B	11.7	0.3	1.7	NO	NO
9. Project Access (middle dwy)/Hemlock Avenue	OWSC	LOS C	A	9.7	B	10.3	B	10.2	C	18.1	0.5	7.8	NO	NO
10. Project Access (w/o Nita Dr)/Hemlock Avenue	OWSC	LOS C	A	9.2	A	9.1	B	11.6	C	22.8	2.4	13.7	NO	NO
11. Nita Drive/Hemlock Avenue	OWSC	LOS C	A	9.2	A	9.2	A	9.1	A	9.4	-0.1	0.2	NO	NO
12. Davis Street/Ironwood Avenue	Signal	LOS C	C	25.8	C	33	C	25.9	C	28.4	0.1	-4.6	NO	NO
13. Indian Street/Ironwood Avenue	Signal	LOS D	C	32.1	C	25.9	C	32.0	C	26.3	-0.1	0.4	NO	NO
14. Indian Street/Hemlock Avenue	Signal	LOS D	C	22.3	C	22.1	C	21.4	C	23.6	-0.9	1.5	NO	NO
15. Indian Street/Sunnymead Boulevard	Signal	LOS D	C	21.2	C	27.3	C	21.2	C	27.2	0.0	-0.1	NO	NO

1. Level of Service
 2. Delay measured in seconds/vehicle
 3. Delay and LOS are based on Highway Capacity Manual 2010
 4. Signal = Traffic Signal (evaluated using the HCM Methodology)
 5. TWSC = Two Way Stop Controlled (evaluated using the HCM Methodology)
 6. OWSC = One Way Stop Controlled (evaluated using the HCM Methodology)
 7. The decrease (in delay per vehicle) with project is not unusual when trips are added to the minor approach

Table 14. Existing With-Project Weekday Peak Hour Queuing Analysis

Intersection	Movement	Existing Pocket Length (ft)	Existing 95 th Percentile Queue ¹		Existing With-Project 95 th Percentile Queue ¹		Exceeds Existing Pocket Length?	
			AM	PM	AM	PM	AM	PM
1. Heacock Street/Ironwood Avenue	EBL	90	149	287	149	128	Yes	Yes
	WBL	135	198	107	180	108	Yes	No
	NBL	140	127	172	124	188	No	Yes
	SBL	100	70	87	70	88	No	No
2. Heacock Street/(new) Project Access		No pocket Lanes and/or No Queues						
3. Heacock Street/Hemlock Avenue	EBL	70	50	70	49	71	No	Yes
	WBL	360	66	92	59	337	No	No
	NBL	100	98	136	95	138	No	Yes
	SBL	95	31	39	27	62	No	No
4. Heacock Street/State Route (SR 60) WB Ramps	NBL	200	239	329	230	262	Yes	Yes
5. Heacock Street/State Route (SR 60) EB Ramps	EBL	0	101	213	106	243	Yes	Yes
	SBL	190	150	160	147	212	No	Yes
6. Project Access/Hemlock Avenue		No pocket Lanes and/or No Queues						
7. Davis Street/Hemlock Avenue	EBL	180	0	3	0	0	No	No
8. Project Access IHOP/Hemlock Avenue		No pocket Lanes and/or No Queues						
9. Project Access (middle dwy)/Hemlock Avenue		No pocket Lanes and/or No Queues						
10. Project Access (w/o Nita Dr)/Hemlock		No pocket Lanes and/or No Queues						
11. Nita Drive/Hemlock Avenue		No pocket Lanes and/or No Queues						
12. Davis Street/Ironwood Avenue	EBL	150	93	182	82	146	No	Yes
	SBL	40	109	61	112	46	Yes	Yes
13. Indian Street/Ironwood Avenue	EBL	95	51	102	51	104	No	Yes
	WBL	100	109	64	104	72	Yes	No
	NBL	110	139	78	140	78	Yes	No
	SBL	80	112	75	113	76	Yes	No
14. Indian Street/Hemlock Avenue	EBL	150	19	46	0	68	No	No
	WBL	80	56	50	57	50	No	No
	NBL	145	50	62	50	76	No	No
	SBL	100	54	28	53	29	No	No
15. Indian Street/Sunnymead Boulevard	EBL	90	62	172	62	138	No	Yes
	WBL	100	33	61	33	61	No	No
	NBL	145	89	104	89	104	No	No
	SBL	90	68	77	68	77	No	No

1. Calculated using Synchro – bold numbers indicate where Synchro yielded “95th percentile volume exceeds capacity, queue maybe longer.” The queues were evaluated in Simtraffic at these locations.

Signal Warrant Analysis

The signal warrant analysis as per the latest edition of the Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), was used for all study area intersections. It was found that the Hemlock Ave / Davis St intersection meets the 8-Hour, 4-Hour, and Peak-Hour signal warrants and as such signalization is recommended. The detailed worksheets are provided in Appendix C.

Roadway Operations

Based on the analysis methodology described in Section I, the existing with-project traffic daily traffic volumes at the study area roadway segments were compared to the City's roadway segment LOS values (presented in Table 4) and the existing traffic daily volumes LOS values. Table 15 presents the results of the existing with-project roadway segment LOS analysis.

Based on the existing with-project roadway segment analysis, all study area roadway segments currently operate with LOS D or better.

Table 15. Existing Condition Roadway Segment LOS Summary

Roadway Segment	Existing Classification	Maximum Capacity ADT ³	Existing ADT ¹	Existing V/C Ratio	Existing LOS ²	Existing with-Project ADT ⁵	Existing with-Project V/C Ratio	Existing with Project LOS ²	V/C Ratio Change	Impact
1. Heacock Street - Ironwood Avenue to Hemlock Avenue	Arterial	37,500	23,701	0.632	B	24,768	0.660	B	0.028	No
2. Heacock Street - Hemlock Avenue to SR 60 WB Ramps	Arterial	37,500	26,802	0.715	C	33,124	0.883	D	0.169	No
3. Indian Street - Ironwood Avenue to Hemlock Avenue	Minor Arterial	12,500	6,632	0.531	A	7,483	0.599	A	0.068	No
4. Indian Street - South of Hemlock Avenue	Minor Arterial	12,500	7,667	0.613	B	8,202	0.656	B	0.043	No
5. Ironwood Avenue - West of Heacock Street	Minor Arterial	37,500	15,447	0.412	A	16,299	0.435	A	0.023	No
6. Ironwood Avenue - Heacock Street to Davis Street	Minor Arterial	37,500	13,752	0.367	A	14,070	0.375	A	0.008	No
7. Ironwood Avenue - East of Indian Street	Minor Arterial	37,500	13,016	0.347	A	13,527	0.361	A	0.014	No
8. Hemlock Avenue - West of Heacock Street ⁴	Minor Arterial	12,500	5,441	0.435	A	6,077	0.486	A	0.051	No
9. Hemlock Avenue - Heacock Street to Davis Street ⁴	Minor Arterial	37,500	5,832	0.156	A	13,715	0.366	A	0.210	No
10. Hemlock Avenue - East of Indian Street ⁴	Minor Arterial	12,500	5,176	0.414	A	5,812	0.465	A	0.051	No

1. ADT: Average Daily Traffic

2. LOS based on City of Moreno Valley Roadway Segment LOS Values (Table 4)

3. Based on City of Moreno Valley Guidelines daily service volume standards table (LOS E). Four Lane Divided Arterial and Two Lane Industrial Collector used as classifications.

4. Roadway classification and LOS standard not listed in City Guidelines, assumed to be Minor Arterial, Two Lane Industrial Collector, with LOS Standard C.

Near Term Year (2022) Without-Project

Intersection Operations

Level of Service Analysis

Traffic volumes for the Near Term Year (2022) without-project (baseline) scenario were obtained by adding existing traffic, ambient growth (assuming 2% growth per year) and cumulative traffic volumes. Figure 14 shows the AM and PM Near Term Year (2022) AM and PM traffic volumes at study area intersections and Table 16 illustrates the Peak Hour Level of Service Analysis.

As shown in the table, the Heacock Street/State Route (SR 60) WB Ramps intersection as well as the Indian Street/Sunnymead Boulevard are forecast to operate at LOS E during the PM peak hour without the project. Both intersections are considered to be sub-standard per the City's guidelines.

Table 16. Near Term Year Without-Project Weekday Peak Hour Intersection LOS

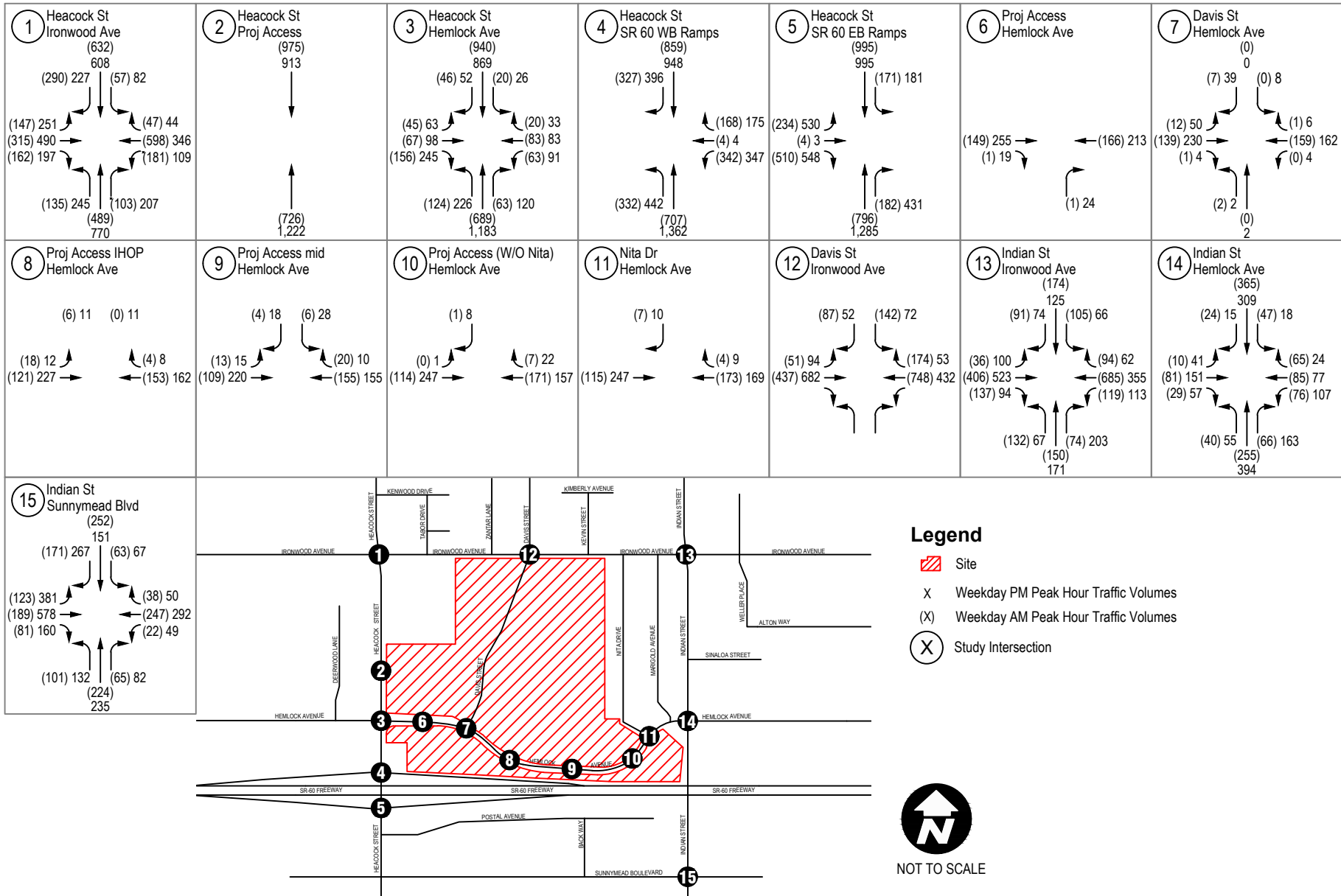
Intersection	Traffic Control	City's LOS Standard	AM Peak		PM Peak	
			LOS ¹	Delay ²	LOS ¹	Delay ²
1. Heacock Street/Ironwood Avenue	Signal	LOS D	C	30.3	D	35.1
2. Heacock Street/(new) Project Access	OWSC	LOS D	A	0.0	A	0.0
3. Heacock Street/Hemlock Avenue	Signal	LOS D	C	22.6	C	33.4
4. Heacock Street/State Route (SR 60) WB Ramps	Signal	LOS D	C	34.8	E	58.6
5. Heacock Street/State Route (SR 60) EB Ramps	Signal	LOS D	C	34.3	D	42.0
6. (new) Project Access/Hemlock Avenue	OWSC	LOS C	A	8.8	B	10.0
7. Davis Street/Hemlock Avenue	TWSC	LOS C	B	11.5	B	14.2
8. Project Access IHOP/Hemlock Avenue	OWSC	LOS C	A	9.2	B	10.2
9. Project Access (middle dwy)/Hemlock Avenue	OWSC	LOS C	A	9.9	B	10.6
10. Project Access (w/o Nita Dr)/Hemlock Avenue	OWSC	LOS C	A	9.3	A	9.2
11. Nita Drive/Hemlock Avenue	OWSC	LOS C	A	9.3	A	9.3
12. Davis Street/Ironwood Avenue	Signal	LOS C	C	27.5	D	36.5
13. Indian Street/Ironwood Avenue	Signal	LOS D	D	36.0	C	28.4
14. Indian Street/Hemlock Avenue	Signal	LOS D	C	23.7	C	24.6
15. Indian Street/Sunnymead Boulevard	Signal	LOS D	C	23.4	E	61.0

1. Level of Service
2. Delay measured in seconds/vehicle
3. Delay and LOS are based on Highway Capacity Manual 2010
4. Signal = Traffic Signal (evaluated using the HCM Methodology)
5. TWSC = Two Way Stop Controlled (evaluated using the HCM Methodology)
6. OWSC = One Way Stop Controlled (evaluated using the HCM Methodology)

Queuing Analysis

A queuing analysis was conducted at the study area intersections to determine if the left turn pocket (storage) lengths are able to accommodate queues. The 95th percentile queue calculations were calculated using Synchro for the weekday AM and weekday PM peak hours and results summary is presented in Table 17 with detailed calculation in Appendix C.

Table 17 shows that the existing 95th percentile queue lengths exceed storage space under Existing with-Project conditions. Mitigation measures are presented in Section V.



Near-Term 2022 Baseline AM and PM Peak Hour Traffic Volumes

FIGURE

Festival at Moreno Valley



Table 17. Near Term Year Without-Project Weekday Peak Hour Queuing Analysis

Intersection	Movement	Existing Pocket Length (ft)	Near Term Year 95 th Percentile Queue ¹		Exceeds Existing Pocket Length?	
			AM	PM	AM	PM
1. Heacock Street/Ironwood Avenue	EBL	90	128	132	Yes	Yes
	WBL	135	187	122	Yes	No
	NBL	140	152	208	Yes	Yes
	SBL	100	76	96	No	No
2. Heacock Street/(new) Project Access		No pocket Lanes and/or No Queues				
3. Heacock Street/Hemlock Avenue	EBL	70	57	79	No	Yes
	WBL	360	73	104	No	No
	NBL	100	124	170	Yes	Yes
	SBL	95	34	42	No	No
4. Heacock Street/State Route (SR 60) WB Ramps	NBL	200	254	246	Yes	Yes
5. Heacock Street/State Route (SR 60) EB Ramps	EBL	0	111	243	Yes	Yes
	SBL	190	165	176	No	No
6. Project Access/Hemlock Avenue		No pocket Lanes and/or No Queues				
7. Davis Street/Hemlock Avenue	EBL	180	0	3	No	No
8. Project Access IHOP/Hemlock Avenue		No pocket Lanes and/or No Queues				
9. Project Access (middle dwy)/Hemlock Avenue		No pocket Lanes and/or No Queues				
10. Project Access (w/o Nita Dr)/Hemlock Avenue		No pocket Lanes and/or No Queues				
11. Nita Drive/Hemlock Avenue		No pocket Lanes and/or No Queues				
12. Davis Street/Ironwood Avenue	EBL	150	92	209	No	Yes
	SBL	40	122	66	Yes	Yes
13. Indian Street/Ironwood Avenue	EBL	95	56	119	No	Yes
	WBL	100	139	132	Yes	Yes
	NBL	110	152	86	Yes	No
	SBL	80	124	85	Yes	Yes
14. Indian Street/Hemlock Avenue	EBL	150	21	51	No	No
	WBL	80	77	106	No	Yes
	NBL	145	55	69	No	No
	SBL	100	59	31	No	No
15. Indian Street/Sunymead Boulevard	EBL	90	130	115	Yes	Yes
	WBL	100	38	66	No	No
	NBL	145	110	143	No	No
	SBL	90	77	25	No	No

1. Calculated using Synchro –bold numbers indicate where Synchro yielded “95th percentile volume exceeds capacity, queue maybe longer.” The queues were evaluated in Simtraffic at these locations.

Signal Warrant Analysis

The signal warrant analysis as per the latest edition of the Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), was used for all study area intersections. No unsignalized intersection was found to meet the warrants for signalization under without-project conditions. The signal warrant analysis sheets are provided in Appendix C.

Roadway Operations

Roadway traffic volumes were calculated by adding existing volumes to ambient growth and cumulative projects daily volumes. Based on the analysis methodology described in Section I, the Near Term Year (2022) without-project traffic daily traffic volumes at the study area roadway segments yield the LOS values illustrated in Table 18.

Based on the Near Term Year (2022) without-project segment analysis, all study area roadway segments currently operate with LOS D or better with the exception of Heacock Street between Hemlock and the SR 60 WB Ramps and Indian Street South of Hemlock Avenue which operate at a LOS E.

Table 18. Near Term Year With-out Project Roadway Segment LOS Summary

Roadway Segment	Existing Classification	Maximum Capacity ADT ³	LOS Standard ²	ADT ¹	V/C	LOS	Exceeds Threshold?
1. Heacock Street - Ironwood Avenue to Hemlock Avenue	Arterial	37,500	LOS D	29,320	0.782	C	No
2. Heacock Street - Hemlock Avenue to SR 60 WB Ramps	Arterial	37,500	LOS D	34,101	0.909	E	Yes
3. Indian Street - Ironwood Avenue to Hemlock Avenue	Minor Arterial	12,500	LOS D	9,206	0.737	C	No
4. Indian Street - South of Hemlock Avenue	Minor Arterial	12,500	LOS D	11,507	0.921	E	Yes
5. Ironwood Avenue - West of Heacock Street	Minor Arterial	37,500	LOS C	18,329	0.489	A	No
6. Ironwood Avenue - Heacock Street to Davis Street	Minor Arterial	37,500	LOS C	15,284	0.408	A	No
7. Ironwood Avenue - East of Indian Street	Minor Arterial	37,500	LOS C	15,618	0.416	A	No
8. Hemlock Avenue - West of Heacock Street ⁴	Minor Arterial	12,500	LOS C	7,450	0.596	A	No
9. Hemlock Avenue - Heacock Street to Davis Street ⁴	Minor Arterial	37,500	LOS C	6,439	0.172	A	No
10. Hemlock Avenue - East of Indian Street ⁴	Minor Arterial	12,500	LOS C	6,873	0.550	A	No

1. ADT: Average Daily Traffic Calculated by growing existing volumes by 2% per year and adding cumulative projects traffic
2. LOS based on City of Moreno Valley Roadway Segment LOS Values (Table 4)
3. Based on City of Moreno Valley Guidelines daily service volume standards table (LOS E). Four Lane Divided Arterial and Two Lane Industrial Collector used as classifications.
4. Roadway classification and LOS standard not listed in City Guidelines, assumed to be Minor Arterial, Two Lane Industrial Collector, with LOS Standard C.

Near Term Year (2022) With-Project

Intersection Operations

Level of Service Analysis

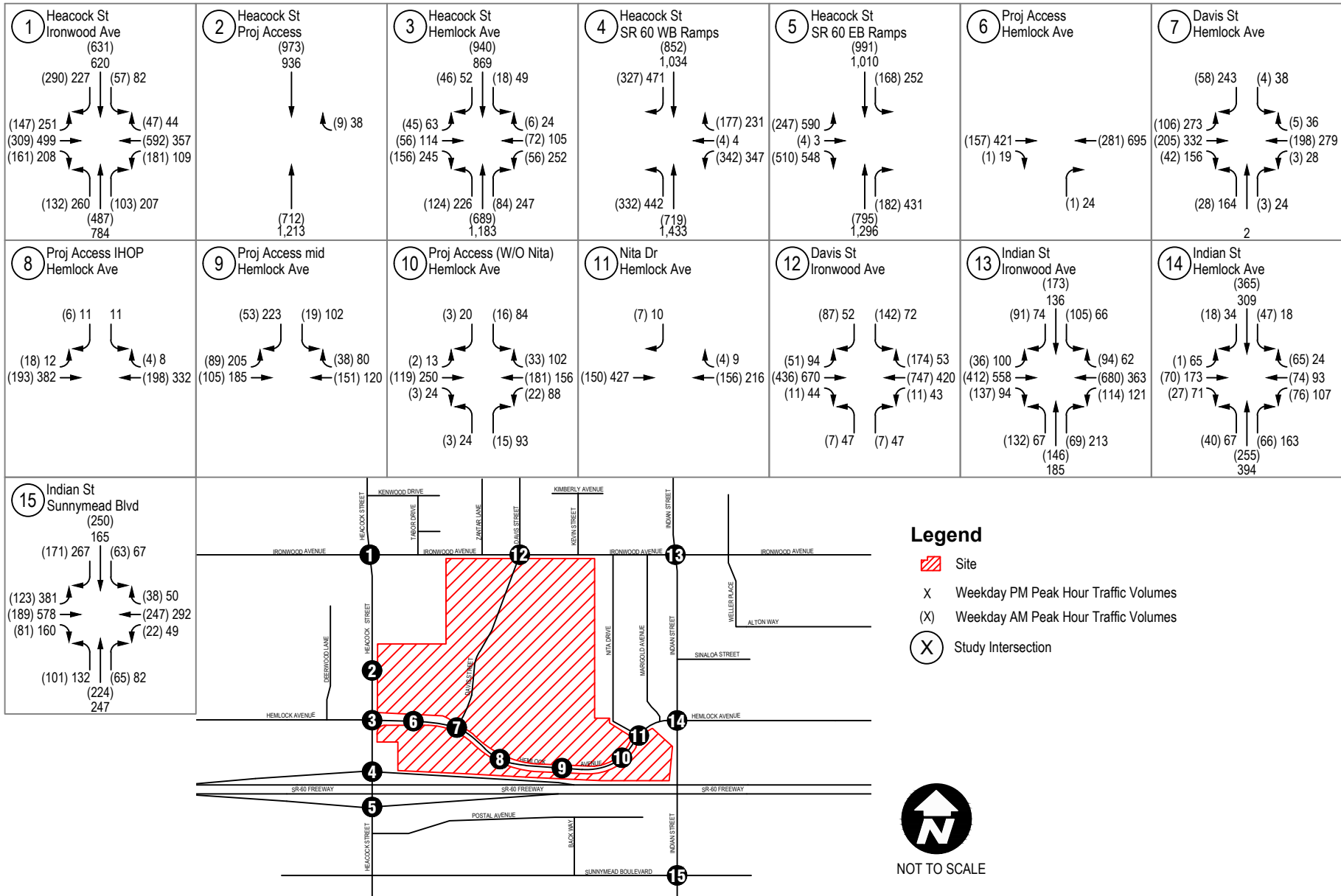
Traffic volumes for the Near Term Year (2022) with-project scenario were obtained by adding project traffic volumes (shown in Figure 10) to the Near Term (2022) without-project volumes. Figure 15 shows the AM and PM Near Term Year (2022) with-project AM and PM traffic volumes at study area intersections and Table 19 illustrates the Peak Hour intersection Level of Service Analysis.

As shown in the table, the Heacock Street/State Route (SR 60) WB Ramps intersection as well as the Davis Street/Hemlock Avenue are forecast to operate at LOS F during the PM peak hour with project. Davis Street/Ironwood Avenue and Indian Street/Sunnymead Boulevard are forecast to operate at LOS D and LOS E respectively during the PM peak hour with project. All these intersections are considered to be sub-standard per the City's guidelines. Mitigation measures will be discussed in the following section.

Queuing Analysis

A queuing analysis was conducted at the study area intersections to determine if the left turn pocket (storage) lengths are able to accommodate queues. The 95th percentile queue calculations were calculated using Synchro for the weekday AM and weekday PM peak hours and results summary is presented in Table 20 with detailed calculation in Appendix C.

Table 20 shows that the existing 95th percentile queue lengths exceed storage space under Near Term with-Project conditions. Mitigations are presented in the following section.



Near-Term 2022 plus Project AM and PM Peak Hour Traffic Volumes

FIGURE

Table 19. Near Term with-Project Peak Hour Intersection LOS

Intersection	Traffic Control	City LOS Standard	Near Term (2022) without-Project				Near Term (2022) with-Project				Delay Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²				
1. Heacock Street/Ironwood Avenue	Signal	LOS D	C	30.3	D	35.1	C	30.0	D	36.7	-0.3	1.6	NO	NO
2. Heacock Street/(new) Project Access	OWSC	LOS D	A	0.0	A	0.0	B	10.9	B	14.2	10.9	14.2	NO	NO
3. Heacock Street/Hemlock Avenue	Signal	LOS D	C	22.6	C	33.4	C	21.7	D	49.5	-0.9	16.1	NO	NO
4. Heacock Street/State Route (SR 60) WB Ramps	Signal	LOS D	C	34.8	E	58.6	C	34.4	F	81.1	-0.4	22.5	NO	YES
5. Heacock Street/State Route (SR 60) EB Ramps	Signal	LOS D	C	34.3	D	42.0	C	34.2	D	46.1	-0.1	4.1	NO	NO
6. Project Access/Hemlock Avenue	OWSC	LOS C	A	8.8	B	10.0	A	8.8	B	10.7	0.0	0.7	NO	NO
7. Davis Street/Hemlock Avenue	TWSC	LOS C	B	11.5	B	14.2	C	19.4	F	1617.9	7.9	1603.7	NO	YES
8. Project Access IHOP/Hemlock Avenue	OWSC	LOS C	A	9.2	B	10.2	A	9.5	B	11.9	0.3	1.7	NO	NO
9. Project Access (middle dwy)/Hemlock Avenue	OWSC	LOS C	A	9.9	B	10.6	B	10.4	C	19.5	0.5	8.9	NO	NO
10. Project Access (w/o Nita Dr)/Hemlock Avenue	OWSC	LOS C	A	9.3	A	9.2	B	11.9	C	24.7	2.6	15.5	NO	NO
11. Nita Drive/Hemlock Avenue	OWSC	LOS C	A	9.3	A	9.3	A	9.2	A	9.5	-0.1	0.2	NO	NO
12. Davis Street/Ironwood Avenue	Signal	LOS C	C	27.5	D	36.5	C	27.7	D	35.7	0.2	-0.8	NO	YES
13. Indian Street/Ironwood Avenue	Signal	LOS D	D	36.0	C	28.4	D	35.8	C	29.1	-0.2	0.7	NO	NO
14. Indian Street/Hemlock Avenue	Signal	LOS D	C	23.7	C	24.6	C	22.9	C	26.2	-0.8	1.6	NO	NO
15. Indian Street/Sunnymead Boulevard	Signal	LOS D	C	23.4	E	61.0	C	23.4	E	60.6	0.0	-0.4	NO	YES

1. Level of Service
 2. Delay measured in seconds/vehicle
 3. Delay and LOS are based on Highway Capacity Manual 2010
 4. Signal = Traffic Signal (evaluated using the HCM Methodology)
 5. TWSC = Two Way Stop Controlled (evaluated using the HCM Methodology)
 6. OWSC = One Way Stop Controlled (evaluated using the HCM Methodology)
 7. The decrease (in delay per vehicle) with project is not unusual when trips are added to the minor approach

Table 20. Near Term With-Project Weekday Peak Hour Queuing Analysis

Intersection	Movement	Existing Pocket Length (ft)	Near Term With-out Project 95 th Percentile Queue ¹		Near Term With-Project 95 th Percentile Queue ¹		Exceeds Existing Pocket Length?	
			AM	PM	AM	PM	AM	PM
1. Heacock Street/Ironwood Avenue	EBL	90	128	132	129	117	Yes	Yes
	WBL	135	187	122	187	122	Yes	No
	NBL	140	152	208	148	194	Yes	Yes
	SBL	100	76	96	76	96	No	No
2. Heacock Street/(new) Project Access		No pocket Lanes and/or No Queues						
3. Heacock Street/Hemlock Avenue	EBL	70	57	79	56	79	No	Yes
	WBL	360	73	104	65	327	No	Yes
	NBL	100	124	170	120	151	Yes	Yes
	SBL	95	34	42	31	65	No	No
4. Heacock Street/State Route (SR 60) WB Ramps	NBL	200	254	246	260	264	Yes	Yes
5. Heacock Street/State Route (SR 60) EB Ramps	EBL	0	111	243	116	272	Yes	Yes
	SBL	190	165	176	162	226	No	Yes
6. Project Access/Hemlock Avenue		No pocket Lanes and/or No Queues						
7. Davis Street/Hemlock Avenue	EBL	180	0	3	7.5	25	No	No
8. Project Access IHOP/Hemlock Avenue		No pocket Lanes and/or No Queues						
9. Project Access (middle dwy)/Hemlock		No pocket Lanes and/or No Queues						
10. Project Access (w/o Nita Dr)/Hemlock		No pocket Lanes and/or No Queues						
11. Nita Drive/Hemlock Avenue		No pocket Lanes and/or No Queues						
12. Davis Street/Ironwood Avenue	EBL	150	92	209	102	210	No	Yes
	SBL	40	122	66	122	66	Yes	Yes
13. Indian Street/Ironwood Avenue	EBL	95	56	119	56	119	No	Yes
	WBL	100	139	132	134	140	Yes	Yes
	NBL	110	152	86	152	86	Yes	No
	SBL	80	124	85	124	85	Yes	Yes
14. Indian Street/Hemlock Avenue	EBL	150	21	51	5	72	No	No
	WBL	80	77	106	77	109	No	Yes
	NBL	145	55	69	54	85	No	No
	SBL	100	59	31	58	32	No	No
15. Indian Street/Sunnymead Boulevard	EBL	90	130	115	130	124	Yes	Yes
	WBL	100	38	66	38	66	No	No
	NBL	145	110	143	110	143	No	No
	SBL	90	77	25	21	83	No	No

1. Calculated using Synchro –bold numbers indicate where Synchro yielded “95th percentile volume exceeds capacity, queue maybe longer.” The queues were evaluated in Simtraffic at these locations.

Signal Warrant Analysis

The signal warrant analysis as per the latest edition of the Federal Highway Administration’s (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), was used for all study area intersections. It was found that the Hemlock Ave / Davis St intersection meets the 8-Hour, 4-Hour, and Peak-Hour signal warrants and as such signalization is recommended. The signal warrant analysis sheets are provided in Appendix C.

Roadway Operations

Based on the analysis methodology described in Section I, the Near Term Year (2022) with-project traffic daily traffic volumes at the study area roadway segments were compared to the City's roadway segment LOS values and the with-out project traffic daily volumes LOS values. Table 21 presents the results of the Near Term Year (2022) with-project roadway segment LOS analysis.

Table 21 shows that, all study area roadway segments operate with an acceptable LOS except Heacock Street (Hemlock Avenue to SR 60 WB Ramps) and Indian Street (South of Hemlock Avenue). Mitigation measures are illustrated in Section V.

Table 21. Near Term Year Roadway Segment LOS Summary

Roadway Segment	Existing Classification	Maximum Capacity ADT ³	Near Term With-out Project ADT ¹	Near Term With-out Project V/C Ratio	Near Term With-out Project LOS ²	Near Term With Project ADT ⁵	Near Term with-Project V/C Ratio	Near Term with-Project LOS ²	V/C Ratio Change	Impact
1. Heacock Street - Ironwood Avenue to Hemlock Avenue	Arterial	37,500	29,320	0.782	C	30,387	0.810	D	0.028	No
2. Heacock Street - Hemlock Avenue to SR 60 WB Ramps	Arterial	37,500	34,101	0.909	E	40,423	1.078	F	0.169	Yes
3. Indian Street - Ironwood Avenue to Hemlock Avenue	Minor Arterial	12,500	9,206	0.737	C	10,057	0.805	D	0.068	No
4. Indian Street - South of Hemlock Avenue	Minor Arterial	12,500	11,507	0.921	E	12,042	0.963	E	0.043	Yes
5. Ironwood Avenue - West of Heacock Street	Minor Arterial	37,500	18,329	0.489	A	19,181	0.511	A	0.023	No
6. Ironwood Avenue - Heacock Street to Davis Street	Minor Arterial	37,500	15,284	0.408	A	15,602	0.416	A	0.008	No
7. Ironwood Avenue - East of Indian Street	Minor Arterial	37,500	15,618	0.416	A	16,129	0.430	A	0.014	No
8. Hemlock Avenue - West of Heacock Street ⁴	Minor Arterial	12,500	7,450	0.596	A	8,086	0.647	B	0.051	No
9. Hemlock Avenue - Heacock Street to Davis Street ⁴	Minor Arterial	37,500	6,439	0.172	A	14,322	0.382	A	0.210	No
10. Hemlock Avenue - East of Indian Street ⁴	Minor Arterial	12,500	6,873	0.550	A	7,509	0.601	B	0.051	No

1. ADT: Average Daily Traffic

2. LOS based on City of Moreno Valley Roadway Segment LOS Values (Table 4)

3. Based on City of Moreno Valley Guidelines daily service volume standards table (LOS E). Four Lane Divided Arterial and Two Lane Industrial Collector used as classifications.

4. Roadway classification and LOS standard not listed in City Guidelines, assumed to be Minor Arterial, Two Lane Industrial Collector, with LOS Standard C.

General Plan Buildout Year (2040) Without-Project

Intersection Operations

Traffic volumes for the General Plan Buildout Year (2040) without-project (baseline) scenario were obtained from the Moreno Valley Transportation Analysis Model. The model results were post-processed using the 2007 model data, the existing 2017 traffic counts, and the 2035 model outputs. Figure 16 shows the AM and PM General Plan Buildout Year (2040) without-project AM and PM traffic volumes at study area intersections and Table 22 illustrates the Peak Hour Level of Service Analysis.

As shown in the table, the Indian Street/Ironwood Avenue is forecast to operate at LOS E during the AM peak hour with-out the project (City's LOS Standard is D). Indian Street/Ironwood and Indian Street/Sunnymead Boulevard are forecast to operate at LOS E during the AM and PM peak hour respectively with-out the project (City's LOS Standard is D). Mitigation measures will be discussed in the following section.

Table 22. General Plan Buildout Year Without-Project Peak Hour Intersection LOS

Intersection	Traffic Control	City's LOS Standard	AM Peak		PM Peak	
			LOS ¹	Delay ²	LOS ¹	Delay ²
1. Heacock Street/Ironwood Avenue	Signal	LOS D	D	36.7	D	35.7
2. Heacock Street/(new) Project Access	OWSC	LOS D	A	0.0	A	0.0
3. Heacock Street/Hemlock Avenue	Signal	LOS D	C	22.9	D	40.0
4. Heacock Street/State Route (SR 60) WB Ramps	Signal	LOS D	C	34.7	C	33.0
5. Heacock Street/State Route (SR 60) EB Ramps	Signal	LOS D	C	29.0	C	21.3
6. (new) Project Access/Hemlock Avenue	OWSC	LOS C	A	8.8	B	10.3
7. Davis Street/Hemlock Avenue	TWSC	LOS C	A	9.8	C	16.1
8. Project Access IHOP/Hemlock Avenue	OWSC	LOS C	A	9.4	B	10.6
9. Project Access (middle dwy)/Hemlock Avenue	OWSC	LOS C	B	10.1	B	11.0
10. Project Access (w/o Nita Dr)/Hemlock Avenue	OWSC	LOS C	A	9.5	A	9.4
11. Nita Drive/Hemlock Avenue	OWSC	LOS C	A	9.5	A	9.4
12. Davis Street/Ironwood Avenue	Signal	LOS C	C	25.2	B	16.0
13. Indian Street/Ironwood Avenue	Signal	LOS D	E	56.5	D	36.8
14. Indian Street/Hemlock Avenue	Signal	LOS D	D	38.2	D	40.1
15. Indian Street/Sunnymead Boulevard	Signal	LOS D	D	46.0	E	66.8

1. Level of Service

2. Delay measured in seconds/vehicle

3. Delay and LOS are based on Highway Capacity Manual 2010

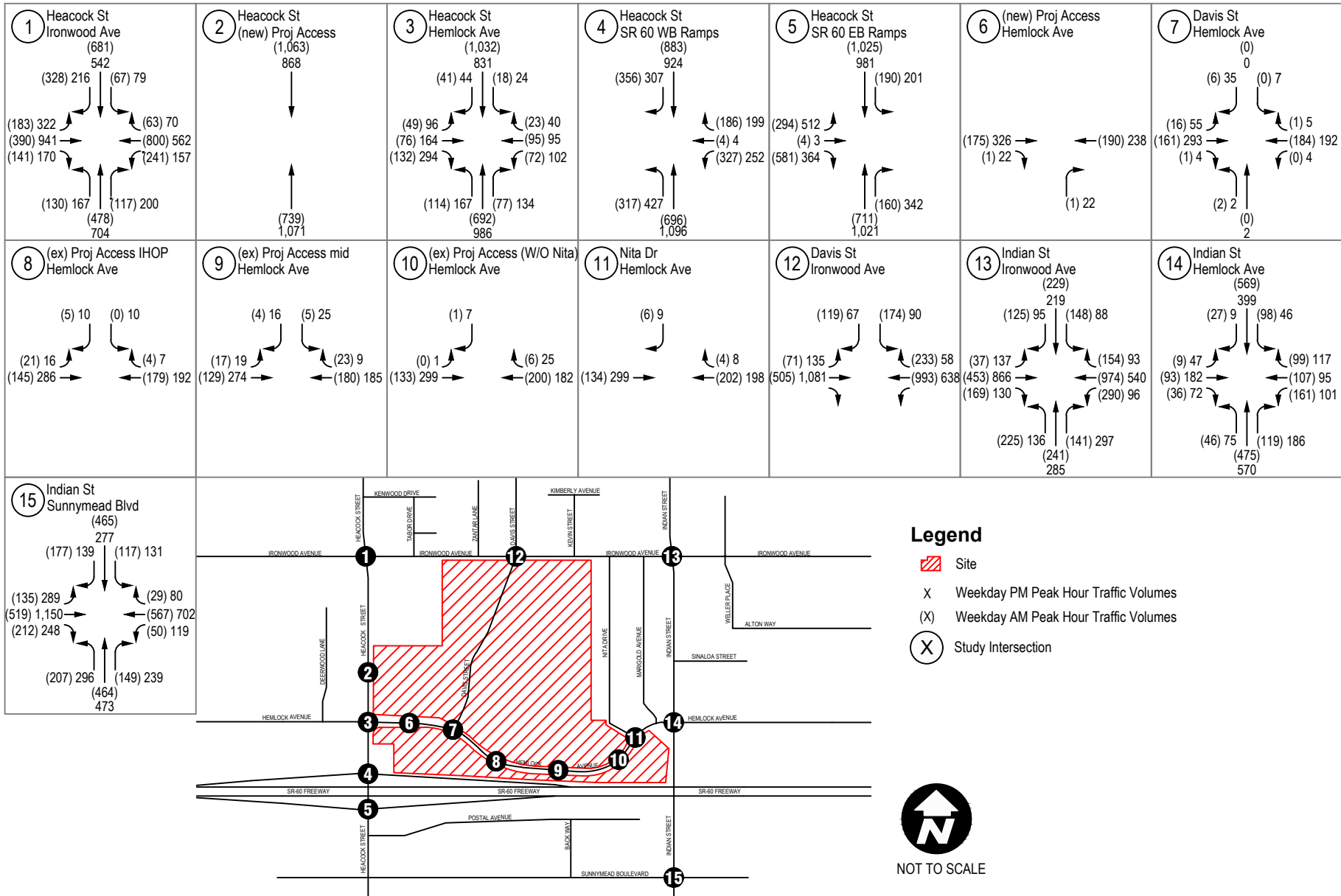
4. Signal = Traffic Signal (evaluated using the HCM Methodology)

5. TWSC = Two Way Stop Controlled (evaluated using the HCM Methodology)

6. OWSC = One Way Stop Controlled (evaluated using the HCM Methodology)

Queuing Analysis

A queuing analysis was conducted at the study area intersections to determine if the left turn pocket (storage) lengths are able to accommodate queues. The 95th percentile queue calculations were calculated using Synchro for the weekday AM and weekday PM peak hours and results summary is presented in Table 23 with detailed calculations in Appendix C.



General Plan Build-out (2040) Baseline AM and PM Peak Hour Traffic Volumes

FIGURE

Table 23 shows that the build-out year 95th percentile queue lengths exceed storage space under without-Project conditions. As mentioned earlier, the 95th percentile queue is not necessarily ever observed, it is simply based on statistical calculations. It is however used by many jurisdictions as the basis for calculating storage lengths. Mitigation measures are presented in the following section.

Table 23. General Plan Without-Project Weekday Peak Hour Queuing Analysis

Intersection	Movement	Existing Pocket Length (ft)	Build-out Year 95 th Percentile Queue ¹		Exceeds Existing Pocket Length?	
			AM	PM	AM	PM
1. Heacock Street/Ironwood Avenue	EBL	90	134	119	Yes	Yes
	WBL	135	193	170	Yes	Yes
	NBL	140	161	199	Yes	Yes
	SBL	100	75	124	No	Yes
2. Heacock Street/(new) Project Access		No pocket Lanes and/or No Queues				
3. Heacock Street/Hemlock Avenue	EBL	70	57	171	No	Yes
	WBL	360	76	135	No	No
	NBL	100	119	149	Yes	Yes
	SBL	95	28	74	No	No
4. Heacock Street/State Route (SR 60) WB Ramps	NBL	200	250	248	Yes	Yes
5. Heacock Street/State Route (SR 60) EB Ramps	EBL	0	100	183	Yes	Yes
	SBL	190	148	136	No	No
6. Project Access/Hemlock Avenue		No pocket Lanes and/or No Queues				
7. Davis Street/Hemlock Avenue	EBL	180	0	3	No	No
8. Project Access IHOP/Hemlock Avenue		No pocket Lanes and/or No Queues				
9. Project Access (middle dwy)/Hemlock Avenue		No pocket Lanes and/or No Queues				
10. Project Access (w/o Nita Dr)/Hemlock Avenue		No pocket Lanes and/or No Queues				
11. Nita Drive/Hemlock Avenue		No pocket Lanes and/or No Queues				
12. Davis Street/Ironwood Avenue	EBL	150	92	100	No	No
	SBL	40	119	59	Yes	Yes
13. Indian Street/Ironwood Avenue	EBL	95	54	144	No	Yes
	WBL	100	132	125	Yes	Yes
	NBL	110	155	154	Yes	Yes
	SBL	80	125	115	Yes	Yes
14. Indian Street/Hemlock Avenue	EBL	150	23	77	No	No
	WBL	80	196	143	Yes	Yes
	NBL	145	76	118	No	No
	SBL	100	126	80	Yes	No
15. Indian Street/Sunnymead Boulevard	EBL	90	138	119	Yes	Yes
	WBL	100	62	153	No	Yes
	NBL	145	205	192	Yes	Yes
	SBL	90	136	140	Yes	Yes

1. Calculated using Synchro –bold numbers indicate where Synchro yielded “95th percentile volume exceeds capacity, queue maybe longer.” The queues were evaluated in Simtraffic at these locations.

Signal Warrant Analysis

The signal warrant analysis as per the latest edition of the Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), was used for all study area intersections. No unsignalized intersection was found to meet the warrants for signalization. The signal warrant analysis sheets are provided in Appendix C.

Roadway Operations

Roadway traffic volumes were also obtained from the Moreno Valley Transportation Analysis Model. The model plots are presented in Appendix D. Based on the analysis methodology described in Section I, the General Plan Buildout Year (2040) without-project traffic daily traffic volumes at the study area roadway segments yield the LOS values illustrated in Table 24.

Table 24 shows that, all study area roadway segments operate with an acceptable LOS except for Indian Street between Ironwood and Hemlock and south of Hemlock.

Table 24. General Plan With-out Project Roadway Segment LOS Summary

Roadway Segment	Existing Classification	Maximum Capacity ADT ³	LOS Standard ²	ADT ¹	V/C	LOS	Exceeds Threshold?
1. Heacock Street - Ironwood Avenue to Hemlock Avenue	Arterial	37,500	LOS D	26,600	0.709	B	No
2. Heacock Street - Hemlock Avenue to SR 60 WB Ramps	Arterial	37,500	LOS D	32,700	0.872	D	No
3. Indian Street - Ironwood Avenue to Hemlock Avenue	Minor Arterial	12,500	LOS D	18,400	1.472	F	Yes
4. Indian Street - South of Hemlock Avenue	Minor Arterial	12,500	LOS D	20,600	1.648	F	Yes
5. Ironwood Avenue - West of Heacock Street	Minor Arterial	37,500	LOS C	24,900	0.664	B	No
6. Ironwood Avenue - Heacock Street to Davis Street	Minor Arterial	37,500	LOS C	21,200	0.565	A	No
7. Ironwood Avenue - East of Indian Street	Minor Arterial	37,500	LOS C	23,400	0.624	B	No
8. Hemlock Avenue - West of Heacock Street ⁴	Minor Arterial	12,500	LOS C	4,900	0.392	A	No
9. Hemlock Avenue - Heacock Street to Davis Street ⁴	Minor Arterial	37,500	LOS C	20,900	0.557	A	No
10. Hemlock Avenue - East of Indian Street ⁴	Minor Arterial	12,500	LOS C	5,800	0.464	A	No

1. ADT: Average Daily Traffic calculated by growing the 2017 volumes using the model growth rates derived from 2007 and 2035 model volumes

2. LOS based on City of Moreno Valley Roadway Segment LOS Values (Table 4)

3. Based on City of Moreno Valley Guidelines daily service volume standards table (LOS E). Four Lane Divided Arterial and Two Lane Industrial Collector used as classifications.

4. Roadway classification and LOS standard not listed in City Guidelines, assumed to be Minor Arterial, Two Lane Industrial Collector, with LOS Standard C.

General Plan Buildout Year (2040) With-Project

Intersection Operations

Traffic volumes for the General Plan Buildout Year (2040) with-project scenario were obtained by adding project traffic volumes (shown in Figure 10) to the General Plan Buildout Year (2040) without-project volumes. Figure 17 shows the AM and PM General Plan Buildout Year (2040) with-project AM and PM traffic volumes at study area intersections and Table 25 illustrates the Peak Hour intersection Level of Service Analysis.

As shown in the table, the Davis Street/Hemlock Avenue and Indian Street/Sunnymead Blvd intersections are forecast to operate at LOS F during the PM peak hour with project. Heacock Street/Hemlock Avenue, the Project Access (w/o Nita Dr)/Hemlock Avenue and Indian Street/Ironwood Avenue intersections are also forecast to operate at sub-standard levels of services during the peak hour periods with project. Mitigation measures will be discussed in the following section.

Queuing Analysis

A queuing analysis was conducted at the study area intersections to determine if the left turn pocket (storage) lengths are able to accommodate queues. The 95th percentile queue calculations were calculated using Synchro for the weekday AM and weekday PM peak hours and results summary is presented in Table 26 with detailed calculation in Appendix C.

Table 26 shows that the existing 95th percentile queue lengths exceed storage space under the General Plan with-Project conditions.

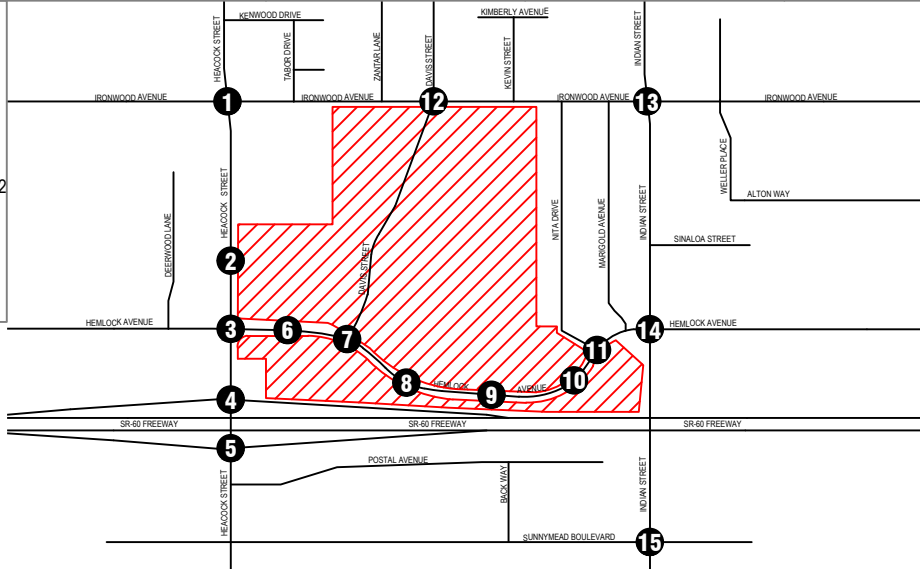
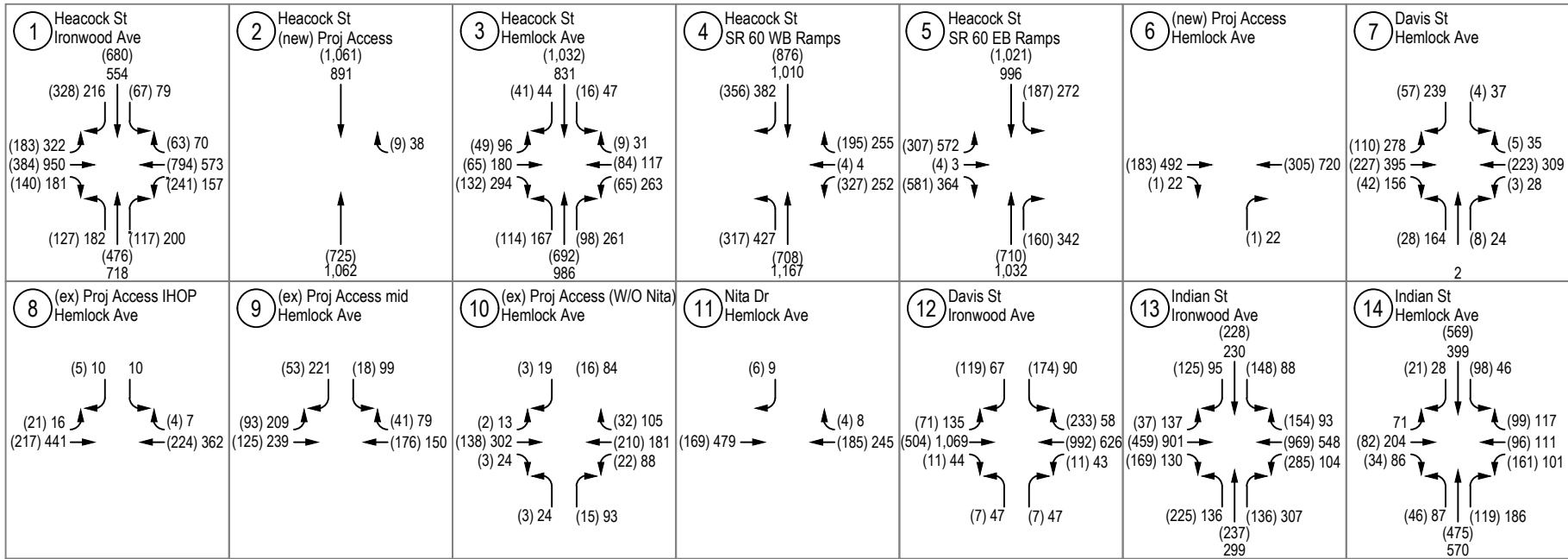
Signal Warrant Analysis

The signal warrant analysis as per the latest edition of the Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), was used for all study area intersections. It was found that the Hemlock Ave / Davis St intersection meets the 8-Hour, 4-Hour, and Peak-Hour signal warrants and as such signalization is recommended. It was also found that the 4-Hour warrants for the Middle Access and Hemlock (Intersection 9) are also met. The signal warrant analysis sheets are provided in Appendix C.

Roadway Operations

Based on the analysis methodology described in Section I, the General Plan Buildout Year (2040) with-project traffic daily traffic volumes at the study area roadway segments were compared to the City's roadway segment LOS values in Table 4 and the with-out project traffic daily volumes LOS values. Table 27 presents the results of the General Plan Buildout Year (2040) with-project roadway segment LOS analysis.

Based on the capacity analysis, all study area roadway segments operate with an acceptable LOS except for Indian Street (south and north of Hemlock) as well as Heacock St between Hemlock Ave and SR 60 WB Ramps.



Legend

- Site
- X Weekday PM Peak Hour Traffic Volumes
- (X) Weekday AM Peak Hour Traffic Volumes
- Study Intersection



General Plan Build-out (2040) plus Project AM and PM Peak Hour Traffic Volumes FIGURE

Table 25. General Plan Buildout with-Project Peak Hour Intersection LOS

Intersection	Traffic Control	City LOS Standard	General Plan Buildout without-Project				General Plan Buildout with-Project				Delay Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²				
1. Heacock Street/Ironwood Avenue	Signal	LOS D	D	36.7	D	35.7	D	36.4	D	37.1	-0.3	1.4	NO	NO
2. Heacock Street/(new) Project Access	OWSC	LOS D	A	0.0	A	0.0	B	11.0	B	13.1	11.0	13.1	NO	NO
3. Heacock Street/Hemlock Avenue	Signal	LOS D	C	22.9	D	40.0	C	22.0	E	55.8	-0.9	15.8	NO	YES
4. Heacock Street/State Route (SR 60) WB Ramps	Signal	LOS D	C	34.7	C	33.0	C	34.2	D	44.5	-0.5	11.5	NO	NO
5. Heacock Street/State Route (SR 60) EB Ramps	Signal	LOS D	C	29.0	C	21.3	C	28.9	C	23.9	-0.1	2.6	NO	NO
6. Project Access/Hemlock Avenue	OWSC	LOS C	A	8.8	B	10.3	A	8.9	B	11.1	0.1	0.8	NO	NO
7. Davis Street/Hemlock Avenue	TWSC	LOS C	A	9.8	C	16.1	C	19.8	F	2178.9	10.0	2162.8	NO	YES
8. Project Access IHOP/Hemlock Avenue	OWSC	LOS C	A	9.4	B	10.6	A	9.7	B	12.4	0.3	1.8	NO	NO
9. Project Access (middle dwy)/Hemlock Avenue	OWSC	LOS C	B	10.1	B	11.0	B	10.6	C	21.8	0.5	10.8	NO	NO
10. Project Access (w/o Nita Dr)/Hemlock Avenue	OWSC	LOS C	A	9.5	A	9.4	B	12.5	D	29.9	3.0	20.5	NO	YES
11. Nita Drive/Hemlock Avenue	OWSC	LOS C	A	9.5	A	9.4	A	9.4	A	9.7	-0.1	0.3	NO	NO
12. Davis Street/Ironwood Avenue	Signal	LOS C	C	25.2	B	16.0	C	21.2	B	18.2	-4.0	2.2	NO	NO
13. Indian Street/Ironwood Avenue	Signal	LOS D	E	56.5	D	36.8	E	56.0	D	39.0	-0.5	2.2	YES	NO
14. Indian Street/Hemlock Avenue	Signal	LOS D	D	38.2	D	40.1	D	36.3	D	42.4	-1.9	2.3	NO	NO
15. Indian Street/Sunnymead Boulevard	Signal	LOS D	D	46.0	E	66.8	D	41.2	F	120.0	-4.8	53.2	NO	YES

1. Level of Service
 2. Delay measured in seconds/vehicle
 3. Delay and LOS are based on Highway Capacity Manual 2010
 4. Signal = Traffic Signal (evaluated using the HCM Methodology)
 5. TWSC = Two Way Stop Controlled (evaluated using the HCM Methodology)
 6. OWSC = One Way Stop Controlled (evaluated using the HCM Methodology)
 7. The decrease (in delay per vehicle) with project is not unusual when trips are added to the minor approach

Table 26. General Plan Build-out With-Project Weekday Peak Hour Queuing Analysis

Intersection	Movement	Existing Pocket Length (ft)	Build-out With-out Project 95 th Percentile Queue ¹		Build-out With-Project 95 th Percentile Queue ¹		Exceeds Existing Pocket Length?	
			AM	PM	AM	PM	AM	PM
1. Heacock Street/Ironwood Avenue	EBL	90	134	119	137	116	Yes	Yes
	WBL	135	193	170	187	188	Yes	Yes
	NBL	140	161	199	153	194	Yes	Yes
	SBL	100	75	124	75	131	No	Yes
2. Heacock Street/(new) Project Access		No pocket Lanes and/or No Queues						
3. Heacock Street/Hemlock Avenue	EBL	70	57	171	56	102	No	Yes
	WBL	360	76	135	28	291	No	No
	NBL	100	119	149	116	154	Yes	Yes
	SBL	95	28	74	25	60	No	No
4. Heacock Street/State Route (SR 60) WB Ramps	NBL	200	250	248	256	242	Yes	Yes
5. Heacock Street/State Route (SR 60) EB Ramps	EBL	0	100	183	104	403	Yes	Yes
	SBL	190	148	136	146	183	No	No
6. Project Access/Hemlock Avenue		No pocket Lanes and/or No Queues						
7. Davis Street/Hemlock Avenue	EBL	180	0	3	8	28	No	No
8. Project Access IHOP/Hemlock Avenue		No pocket Lanes and/or No Queues A						
9. Project Access (middle dwy)/Hemlock		No pocket Lanes and/or No Queues A						
10. Project Access (w/o Nita Dr)/Hemlock		No pocket Lanes and/or No Queues A						
11. Nita Drive/Hemlock Avenue		No pocket Lanes and/or No Queues A						
12. Davis Street/Ironwood Avenue	EBL	150	92	100	98	151	No	Yes
	SBL	40	119	59	74	59	Yes	Yes
13. Indian Street/Ironwood Avenue	EBL	95	54	144	54	148	No	Yes
	WBL	100	132	125	131	128	Yes	Yes
	NBL	110	155	154	155	156	Yes	Yes
	SBL	80	125	115	126	118	Yes	Yes
14. Indian Street/Hemlock Avenue	EBL	150	23	77	0	100	No	No
	WBL	80	196	143	194	133	Yes	Yes
	NBL	145	76	118	76	124	No	No
	SBL	100	126	80	126	74	Yes	No
15. Indian Street/Sunymead Boulevard	EBL	90	138	119	141	129	Yes	Yes
	WBL	100	62	153	71	134	No	Yes
	NBL	145	205	192	204	187	Yes	Yes
	SBL	90	136	140	137	145	Yes	Yes

2. Calculated using Synchro –bold numbers indicate where Synchro yielded “95th percentile volume exceeds capacity, queue maybe longer.” The queues were evaluated in Simtraffic at these locations.

Table 27. General Plan Buildout Condition Roadway Segment LOS Summary

Roadway Segment	Existing Classification	Maximum Capacity ADT ³	Buildout With-out Project ADT ¹	Buildout With-out Project V/C Ratio	Buildout With-out Project LOS ²	Buildout With Project ADT ⁵	Buildout with-Project V/C Ratio	Buildout with-Project LOS ²	V/C Ratio Change	Impact
1. Heacock Street - Ironwood Avenue to Hemlock Avenue	Arterial	37,500	26,600	0.709	B	27,667	0.738	C	0.028	No
2. Heacock Street - Hemlock Avenue to SR 60 WB Ramps	Arterial	37,500	32,700	0.872	D	39,022	1.041	F	0.169	Yes
3. Indian Street - Ironwood Avenue to Hemlock Avenue	Minor Arterial	12,500	18,400	1.472	F	19,251	1.540	F	0.068	Yes
4. Indian Street - South of Hemlock Avenue	Minor Arterial	12,500	20,600	1.648	F	21,135	1.691	F	0.043	Yes
5. Ironwood Avenue - West of Heacock Street	Minor Arterial	37,500	24,900	0.664	B	25,752	0.687	B	0.023	No
6. Ironwood Avenue - Heacock Street to Davis Street	Minor Arterial	37,500	21,200	0.565	A	21,518	0.574	A	0.008	No
7. Ironwood Avenue - East of Indian Street	Minor Arterial	37,500	23,400	0.624	B	23,911	0.638	A	0.014	No
8. Hemlock Avenue - West of Heacock Street ⁴	Minor Arterial	12,500	4,900	0.392	A	5,536	0.443	A	0.051	No
9. Hemlock Avenue - Heacock Street to Davis Street ⁴	Minor Arterial	37,500	20,900	0.557	A	28,783	0.768	B	0.210	No
10. Hemlock Avenue - East of Indian Street ⁴	Minor Arterial	12,500	5,800	0.464	A	6,436	0.515	A	0.051	No

1. ADT: Average Daily Traffic

2. LOS based on City of Moreno Valley Roadway Segment LOS Values (Table 4)

3. Based on City of Moreno Valley Guidelines daily service volume standards table (LOS E). Four Lane Divided Arterial and Two Lane Industrial Collector used as classifications.

4. Roadway classification and LOS standard not listed in City Guidelines, assumed to be Minor Arterial, Two Lane Industrial Collector, with LOS Standard C.

V. Mitigation Measures

This section provides a summary of recommended mitigation measures necessary to address the cumulative traffic impacts. A summary of the operationally deficient study area intersections and roadway segments and recommended improvements required to achieve acceptable circulation system operational conditions are described below. It is important to note that Cumulative impacts are deficiencies that would not be directly caused by the project. The project would, however, contribute traffic to these deficient facilities along with other cumulative development projects, resulting in a cumulatively considerable impact.

The recommended mitigation measures necessary to reduce project impacts to less-than-significant are discussed below.

Intersections

Level of Service Mitigations

Based on the traffic analysis presented in the earlier sections, the following four intersections were observed to perform at a LOS below the City's standards.

1. Davis Street and Hemlock Avenue under all with-Project scenarios in the PM Peak Hour

A warrant analysis was performed for this intersection and it was found that the 8-hour, 4-hour, and peak-hour warrants are all met. As such it is recommended that this intersection be signalized. Installing a signal improved the LOS at this intersection to LOS B during the PM peak hours for all scenarios (cycle length is assumed at 60 seconds as per the City's guidelines). Signal warrant worksheets and LOS worksheets are attached in Appendix C.

Mitigation: It is recommended to install a traffic signal at the Davis Street / Hemlock Avenue intersection.

2. Heacock Street and SR 60 WB Ramps under Near Term with-Project scenario in the PM Peak Hour

Mitigation: Optimizing the cycle length (90s cycle length), splits, and offsets and restriping the defacto right-turn lane to a SB right-turn lane with 50ft storage and a SB through lane improves the LOS to C

3. Davis Street and Ironwood Avenue under the Near Term PM peak hour scenario can be mitigated by optimizing the cycle length. LOS worksheets are attached in Appendix C.

Mitigation: Optimizing the cycle length (60s cycle length), splits, and offsets yields a LOS B

4. Indian Street and Sunnymead Blvd under the Near Term PM peak and the General Plan PM peak hour scenarios. Under the Near Term Conditions this could be mitigated by optimizing the cycle length (80s cycle length), splits, and offsets and yields a LOS C. Under the General Plan Conditions, restriping of the defacto right-turn lanes in the EB and a WB directions to provide 50ft right turn pocket lanes yield a LOS D. Analysis worksheets are provided in Appendix C.

Mitigation: Optimizing the cycle length (80s cycle length), splits, and offsets yields under Near Term (2022) conditions and restriping to provide a EBR and a WBR turn lanes under General Plan (2040) conditions

5. Heacock St Hemlock Ave under the General Plan Build-out with-project PM peak yields a LOS E. Restriping the defacto right-turn to provide a SBR lane yields a LOS D. Analysis worksheets are provided in Appendix C.

Mitigation: Restripe the defacto SB right-turn lane to provide a right turn pocket lane

6. Project Access (w/o Nita Dr)/Hemlock Avenue (Intersection 10) under the General Plan Build-out with-project PM peak yields a LOS D. Converting to an all-way-stop control brings the LOS back to C. Analysis worksheets are provided in Appendix C.

Mitigation: Convert to an all-way stop control

7. Indian Street/Ironwood Avenue under the General Plan Build-out with-project AM peak yields a LOS E. Increasing the cycle length to 120s (maximum length per Moreno Valley standards) yields a LOS D. Analysis worksheets are provided in Appendix C.

Mitigation: Optimizing the cycle length (120s cycle length), splits, and offsets yields a LOS D

Queuing Mitigations

Based on the queuing analysis, Table 28 presents a set of recommended measures to address storage lengths at the various approaches of the study area intersections. It is important to note that much of the analysis is based on the 95th percentile queue lengths which has a low (5%) probability of occurring.

Table 28. General Plan Build-out With-Project Weekday Peak Hour Queuing Analysis

Intersection	Movement	Existing Pocket Length (ft)	Maximum Queue Length ¹ (ft)	Proposed Mitigation to accommodate 95th percentile queues
1. Heacock Street/Ironwood Avenue	EBL	90	149	Restripe left turn lanes to provide 150 ft storage
	WBL	135	193	Restripe left turn lanes to provide 200 ft storage
	NBL	140	208	Restripe left turn lanes to provide 210 ft storage
	SBL	100	131	Restripe left turn lanes to provide 135 ft storage
3. Heacock Street/Hemlock Avenue	EBL	70	171	Restripe left turn lanes to provide 175 ft storage
	NBL	100	170	Restripe left turn lanes to provide 170 ft storage
4. Heacock Street/State Route (SR 60) WB Ramps	NBL	200	264	A storage lane is provided south of the Heacock/ SR 60 EB ramps intersection. No further mitigation is recommended.
5. Heacock Street/State Route (SR 60) EB Ramps	EBL	0	403	Length of the left tun lane is over 600ft. No further mitigation is recommended.
	SBL	190	226	Restripe 50ft of the TWLT lane north of the Heacock/ SR 60 WB ramps intersection as "Freeway Only" lane.
12. Davis Street/Ironwood Avenue	EBL	150	210	Restripe left turn lanes to provide 210 ft storage
	SBL	40	122	Restripe left turn lanes to provide 125 ft storage
13. Indian Street/Ironwood Avenue	EBL	95	148	Restripe left turn lanes to provide 150 ft storage
	WBL	100	140	Restripe left turn lanes to provide 140 ft storage
	NBL	110	156	Restripe left turn lanes to provide 105 ft storage
	SBL	80	126	Restripe left turn lanes to provide 130 ft storage.
14. Indian Street/Hemlock Avenue	WBL	80	100	Restripe left turn lanes to provide 100 ft storage
	NBL	145	196	Restripe left turn lanes to provide 200 ft storage
	SBL	100	126	Restripe left turn lanes to provide 130 ft storage
15. Indian Street/Sunnymead Boulevard	EBL	90	141	Restripe left turn lanes to provide 145 ft storage to accommodate 95 th percentile queues. This might require replacing the concrete island with stripping.
	WBL	100	153	Restripe left turn lanes to provide 155 ft storage
	NBL	145	205	Restripe left turn lanes to provide 205 ft storage
	SBL	90	145	Restripe left turn lanes to provide 145 ft storage

1. Maximum for all scenarios

Roadway Operations

The roadway capacity analysis identified three segments that do not meet the City LOS standards. These segments are:

1. Heacock Street from Hemlock Avenue to SR 60 WB Ramps in the Near Term Year with-out and with-Project as well as General Plan with-Project conditions
2. Indian Street from Ironwood Avenue to Hemlock Avenue in the Near Term Year with-Project as well as General Plan with-out and with-Project conditions
3. Indian Street South of Hemlock Avenue in the Near Term Year with-out and with-Project as well as General Plan with-out and with-Project conditions

As noted in both the City of Moreno Valley's traffic study guidelines, these roadway capacities are "rule of thumb" estimates for planning purposes and are affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic. In other words, while using average daily traffic (ADT) for planning purposes is suitable with regards to evaluating potential volume to capacity with future forecasts, it is not suitable for operational analysis because it does not account for the factors listed previously. As such, where the ADT based roadway segment analysis indicates a deficiency (unacceptable LOS), a review of the more detailed peak hour intersection analysis and progression analysis are undertaken. The more detailed peak hour intersection analysis explicitly accounts for factors that affect roadway capacity. Therefore, roadway segment widening is typically only recommended if the peak hour intersection analysis indicates the need for additional through lanes.

However, examining the intersections on both ends of these roadway segments shows that the operations of the intersections is within acceptable level of service standards. As such roadway segment widening does not appear necessary to address the deficiencies at the identified roadway segments based on the peak hour intersection operations analysis along these roadway segments.

Traffic Calming Options for Davis Street

It is our understanding that once Davis Street is completed, thereby connecting Hemlock Avenue to Ironwood Avenue, it will provide an alternative for traffic trying to avoid Heacock St which in turn could potentially contribute to increased speeds along Davis St and cut-through traffic.

As such we are recommending traffic calming measures that could be implemented in case the need arises because of excessive speeds or cut-through traffic.

It should be noted that traffic calming has impacts not only on vehicular travel, but can also provide preferential corridors for cyclists and pedestrians. This is especially important for Davis Street which is envisioned in the City's Bicycle Master Plan as a Class 3 bicycle route.

Since the 660 ft section of Davis Street just south of Ironwood is yet to be constructed and knowing that the existing Davis Street has a 54 ft width curb to curb (travel lanes at 20 ft and a 14 ft two-way-left-turn-lane), we offer the following traffic calming options to be considered:

1. Providing parallel parking on both sides of Davis could reduce the street width between intersections (where parking is introduced) from 20 ft per direction to 12 ft per direction which changes both the perception and the function of the street. It is important to note that this option needs to be studied further to address turning movements at access points.
2. As the project develops providing mid-block crossing(s) on Davis Street might be desirable to connect the various uses (business park to commercial/retail/restaurants). These should come with necessary signage, striping and possibly curb bulb-ous where mid-block crossing(s) are needed

3. Speed feedback signs could be installed along Davis St. These signs display the speed at which a vehicle is traveling in contrast with the posted speed limit for the area. These units have been proven to be effective in reducing vehicular speeds in many areas.
4. Other measures such as raised medians, curb extensions, street trees and landscaping could be used for traffic calming. This is especially applicable as the new section is constructed. Speed humps have been used in residential areas but given the anticipated truck traffic in this area they might not provide the best results, however, speed tables could be also used as an option if speeding becomes an issue.

Hemlock Ave and Davis Street Classifications

To ensure that the proposed changes in land use (leading to additional truck traffic) will not significantly impact the structural integrity of the existing street segments within the specific plan area, an analysis of the pavement section on certain segments of Hemlock Avenue and Davis Street should be prepared for future plot plans in Planning Areas 1, 2, and 3 and any needed improvements are recommended to be completed per the Conditions of Approval of those plot plans.

Appendix A: Scoping Agreement



SCOPING AGREEMENT FOR TRAFFIC ANALYSIS STUDY

Date: October 30, 2017

This letter acknowledges the City of Moreno Valley Transportation Engineering Division requirements for the traffic impact analysis of the following project.

Case No. PEN16-0015
Project Name: Moreno Valley Festival
Project Address: East of Heacock Street between Ironwood Avenue and Hemlock Avenue
Project Description: 348,000 SF of business park and 325,000 SF of commercial retail.
Related Cases: PA15-0053, PA15-0054, P15-124

Name:	<u>Consultant</u> Transpo Group, Inc.	<u>Developer</u> BlackRidge Real Estate Group, LLC
Address:	603 North Park Center Drive Suite 108 Santa Ana, CA 92705	16901 Millikan Avenue Irvine, CA 92606
Telephone:	949-656-7925	303-419-6780

I. Background

The proposed specific plan will review modifying the existing 180,000 square feet of retail land use to a business park and retail uses.

The project site will have access to Ironwood Avenue from Davis Street, Hemlock Avenue from Davis Street, Heacock Avenue via new project access drive and retail project accesses.

II. Trip Geographic Distribution and Assignment*

N: *% **S:** *% **E:** *% **W:** *%

***Please see attached trip distribution diagram.**

III. Site Trip Generation Forecast

- A. ITE Trip Generation Manual (*10th Edition, 2017*)
- B. AM Peak: 7:00-9:00 AM (based upon existing 24-hour traffic counts)
- C. PM Peak: 4:00-6:00 PM (based upon existing 24-hour traffic counts)
- D. Intersection and link acceptable Level of Service “D” for some intersections and links and Level of Service “C” for others based upon the current City policy. (Use Highway Capacity Manual - latest edition - operations procedures; parameters per County of Riverside Traffic Impact Analysis Guidelines.)

Proposed Use Rates*

Land Use (per unit): Daily:** AM:** PM:**

Existing Use Rates*

Land Use (per unit): Daily:** AM:** PM:**

Internal Trip Allowance: Yes ** No Percentage 7% AM / 4%PM and Daily

Pass-by Trip Allowance: Yes ** No Percentage 34%PM / 17% AM and Daily

**** Please see attached trip generation tables.**

IV. Specific Project Issues to be Analyzed

- A. The focus of this traffic study will be on addressing the adequacy of site access and identifying specific near-term and future circulation improvements required in the study area to maintain acceptable peak hour and daily Levels of Service (LOS).
- B. The traffic study shall address the project traffic impacts at all study intersections listed in Section VI and provide appropriate mitigation measures if applicable. Peak-hour traffic signal warrants shall be evaluated for all intersections that are not currently signalized.

- C. The traffic study shall include a section that discusses the difference in trip generation between the previous proposed or existing use and the proposed project.
- D. Assess adequacy of non-motorized transportation between project and surrounding area.
- E. Provide traffic calming options for Davis Street, between Ironwood Ave and Hemlock Ave.
- F. The traffic study shall review the current roadway classifications of Hemlock Avenue and Davis Street within the Specific Plan and recommend the appropriate roadway classifications (per current City standards) for these streets to support commercial truck traffic generated by warehousing and manufacturing facilities.
- G. Using Synchro software, the traffic study shall provide a Queuing Analysis section to determine the 95th percentile queues and the minimum requirement of storage length for the left-turn lanes of all studied intersections based on forecasted E+P (V.B), Opening Year + Project (V.D) and GP Buildout (V.E) traffic volumes.

V. Study of Horizon Years

- A. Existing
- B. Existing + Project
- C. Existing + Ambient Growth + Cumulative (Assume growth rate of 2% per year)
- D. Existing + Ambient Growth + Cumulative + Project
- E. General Plan Build Out (with and without project) – Buildout data will be obtained from City’s traffic forecast model

*****Opening year should have five (5) year minimum horizon**

VI. Facilities to be Studied

A. Intersections

1. Heacock Street (NS) at Ironwood Avenue (EW)
2. Heacock Street (NS) at Project Access (EW)
3. Heacock Street (NS) at Hemlock Avenue (EW)
4. Heacock Street (NS) at SR-60 Freeway WB Ramps (EW)
5. Heacock Street (NS) at SR-60 Freeway EB Ramps (EW)
6. Project Access (NS) at Hemlock Avenue (EW)
7. Davis Street (NS) at Hemlock Avenue (EW)
8. Project Access (NS) at Hemlock Avenue (EW)
9. Project Access (NS) at Hemlock Avenue (EW)
10. Project Access (NS) at Hemlock Avenue (EW)
11. Nita Drive (NS) at Hemlock Avenue (EW)
12. Davis Street (NS) at Ironwood Avenue (EW)
13. Indian Street (NS) at Ironwood Avenue (EW)
14. Indian Street (NS) at Hemlock Avenue (EW)
15. Indian Street (NS) at Sunnymead Boulevard (EW)

B. Roadway Segments

1. Heacock Street – Ironwood Avenue to Hemlock Avenue
2. Heacock Street – Hemlock Avenue to SR-60 Freeway WB Ramps
3. Indian Street – Ironwood Avenue to Hemlock Avenue
4. Indian Street south of Hemlock Avenue
5. Ironwood Avenue west of Heacock Street
6. Ironwood Avenue – Heacock Street to Indian Street
7. Ironwood Avenue – east of Indian Street
8. Hemlock Avenue west of Heacock Street
9. Hemlock Avenue – Heacock Street to Indian Street
10. Hemlock Avenue – east of Indian Street

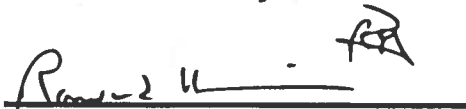
VII. Deliverables

- A. Draft traffic impact study (2 copies) and a PDF file (on flash drive)
- B. Final traffic impact study (4 copies) and a PDF file (on flash drive)

A signed copy of this Scoping Agreement must be included in the submitted draft and final traffic impact studies. All draft and final traffic impact studies shall be delivered with the appropriate review fee to the Permit Technician, Land Development Division, Moreno Valley City Hall, 14177 Frederick Street, Moreno Valley, CA 92552. Please contact the Land Development Division at 951-413-3110 prior to the delivery of the traffic study.

If you have any questions regarding this *Scoping Agreement*, please contact Eric Lewis at (951) 413-3140.

Recommended By:



Rawad Hani, P.E.
Transpo Group, Inc.

Approved By:



Eric Lewis, P.E., T.E.
City Traffic Engineer

NOTE: This scoping agreement was reviewed and approved based on the information submitted by Transpo Group on 10/30/2017. Transpo Group and the project applicant acknowledge that any changes to the project (zoning, size, type of use, number or location of access points, project phasing, etc.) after 10/30/2017 may require this scoping agreement to be revised and resubmitted for review and approval by the City of Moreno Valley.

Table XX. Proposed Project Trip Generation (Based on Land Use Table 2-3, October 12, 2017)

Land Use	LU Code	Units	Daily	AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
Trip Rates										
Shopping Center ¹	820	TSF	37.75	0.58	0.36	0.94	1.83	1.98	3.81	
Business Park ²	770	TSF	12.44	0.24	0.16	0.40	0.19	0.23	0.42	
Project Trip Generation										
			Units	Daily	In	Out	Total	In	Out	Total
Planning Area 1										
Business Park	135,000	TSF	1,679	33	21	54	26	31	57	
Subtotal			1,679	33	21	54	26	31	57	
Planning Area 2										
Business Park	35,000	TSF	435	9	5	14	7	8	15	
Subtotal			435	9	5	14	7	8	15	
Planning Area 3										
Business Park	178,000	TSF	2,214	43	28	71	34	40	75	
Retail	15,000	TSF	566	9	5	14	27	30	57	
Subtotal			2,781	52	33	85	62	70	132	
Planning Area 4										
Retail	255,000	TSF	9,626	149	91	240	466	505	972	
Subtotal			9,626	149	91	240	466	505	972	
Planning Area 6										
Retail	35,000	TSF	1,321	20	13	33	64	69	133	
Subtotal			1,321	20	13	33	64	69	133	
Planning Area 7										
Retail	40,000	TSF	1,510	23	14	38	73	79	152	
Subtotal			1,510	23	14	38	73	79	152	
Planning Area 8										
Retail	20,000	TSF	755	12	7	19	37	40	76	
Subtotal			755	12	7	19	37	40	76	
Total Trip Generation			18,108	298	185	482	735	802	1,537	
Internal Trip Capture (AM = 7%, PM/Daily = 4%) ³			-724	-21	-13	-34	-29	-32	-61	
Net Trip Generation With Internal Trip Capture			17,384	277	172	449	705	770	1,475	
Pass-By Trips For Commercial Retail (AM / Daily = 17%, PM = 34%) ⁴			-2,342	-36	-22	-58	-227	-246	-473	
Total Pass-by Trips			-2,342	-36	-22	-58	-227	-246	-473	
Net Trip Generation With Internal Trip Capture and Pass By			15,041	241	150	390	478	524	1,003	

TSF = Thousand Square Feet

¹ Trip rates from the Institute of Transportation Engineers, *Trip Generation, 10th Edition*, 2017. Land Use Code 820 - Shopping Center.

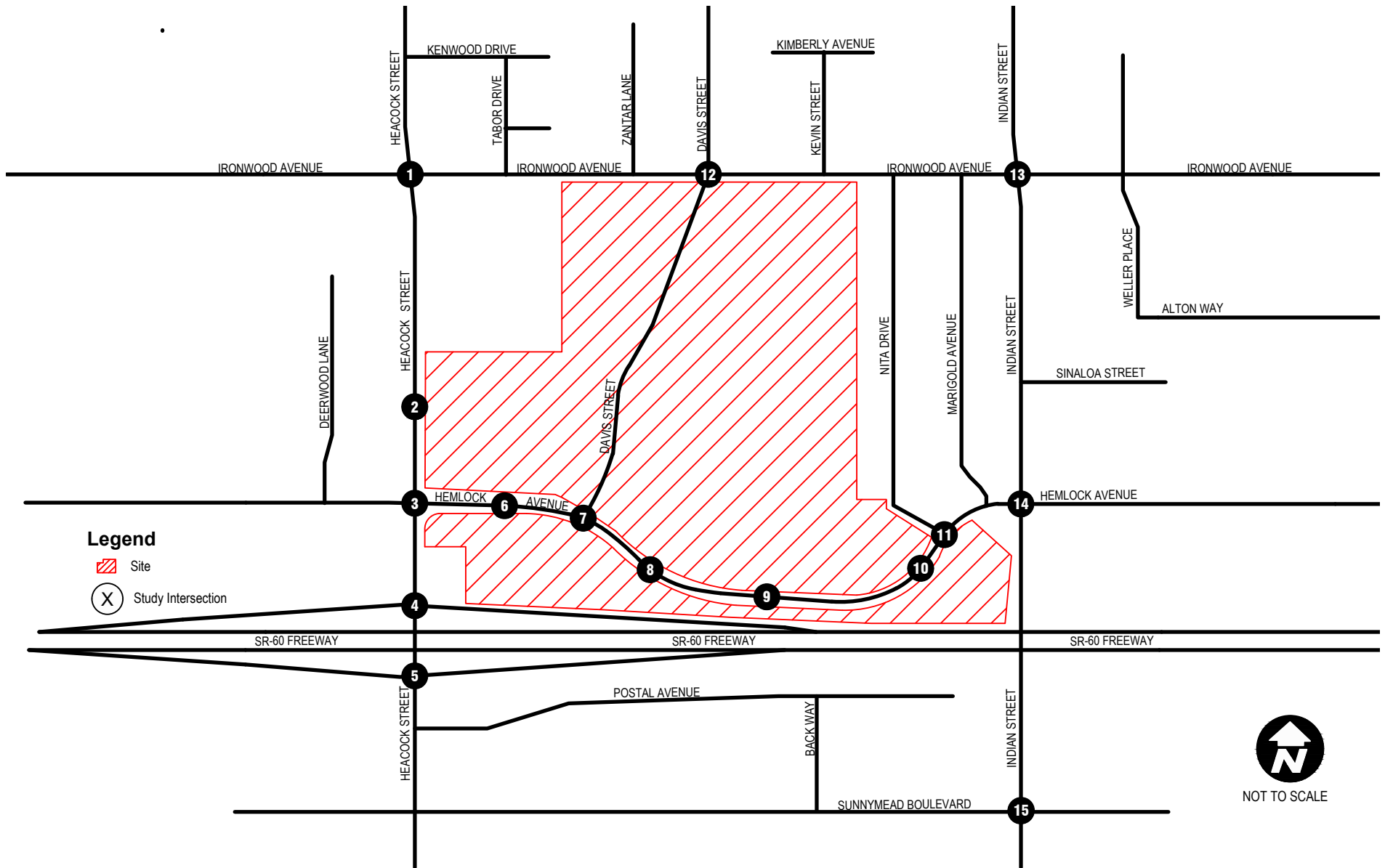
² Trip rates from the Institute of Transportation Engineers, *Trip Generation, 10th Edition*, 2017. Land Use Code 770 - Business Park.

³ Internal capture calculated using methodology from NCHRP 684 Mixed Use Spreadsheet

⁴ Pass-by trip rate (34% during PM peak hour, 17% during the AM peak hour and Daily based on weekend mid-day) from the Institute of Transportation Engineers, *Trip Generation, 10th Edition*, 2017. Land Use Code 820 - Shopping Center.

Table XX. Proposed Project Trip Generation Comparison (Based on Updated Table 2-3, October 12, 2017) -

Project Trip Generation Comparison	Units	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Proposed Project vs. Greiner Engineering Study (Table 3)								
Proposed Project Total Traffic (No Internal Trip Capture or Pass-by Reductions)		18,108	298	185	482	735	802	1,537
Greiner Engineering Study (Table 3) (No Internal Trip Capture or Pass-by Reductions)		18,322	--	--	--	1,081	1,356	2,437
Difference (Proposed Project - Greiner Engineering Study Table 3)		-214	298	185	482	-346	-554	-900
Proposed Project minus Existing Land Uses (New Project Trips)								
Proposed Project New Trips (includes Internal Trip Capture and Pass-By Reductions)		15,041	241	150	390	478	524	1,003
Existing Land Uses (includes Internal Trip Capture and Pass-By Reductions)		6,426	310	239	549	231	233	464
New Trips (Proposed Project - Existing Land Uses)		8,616	-70	-89	-159	247	292	538



NOT TO SCALE

Source: Google Maps, 09/2017.

Project Site Location and Study Area

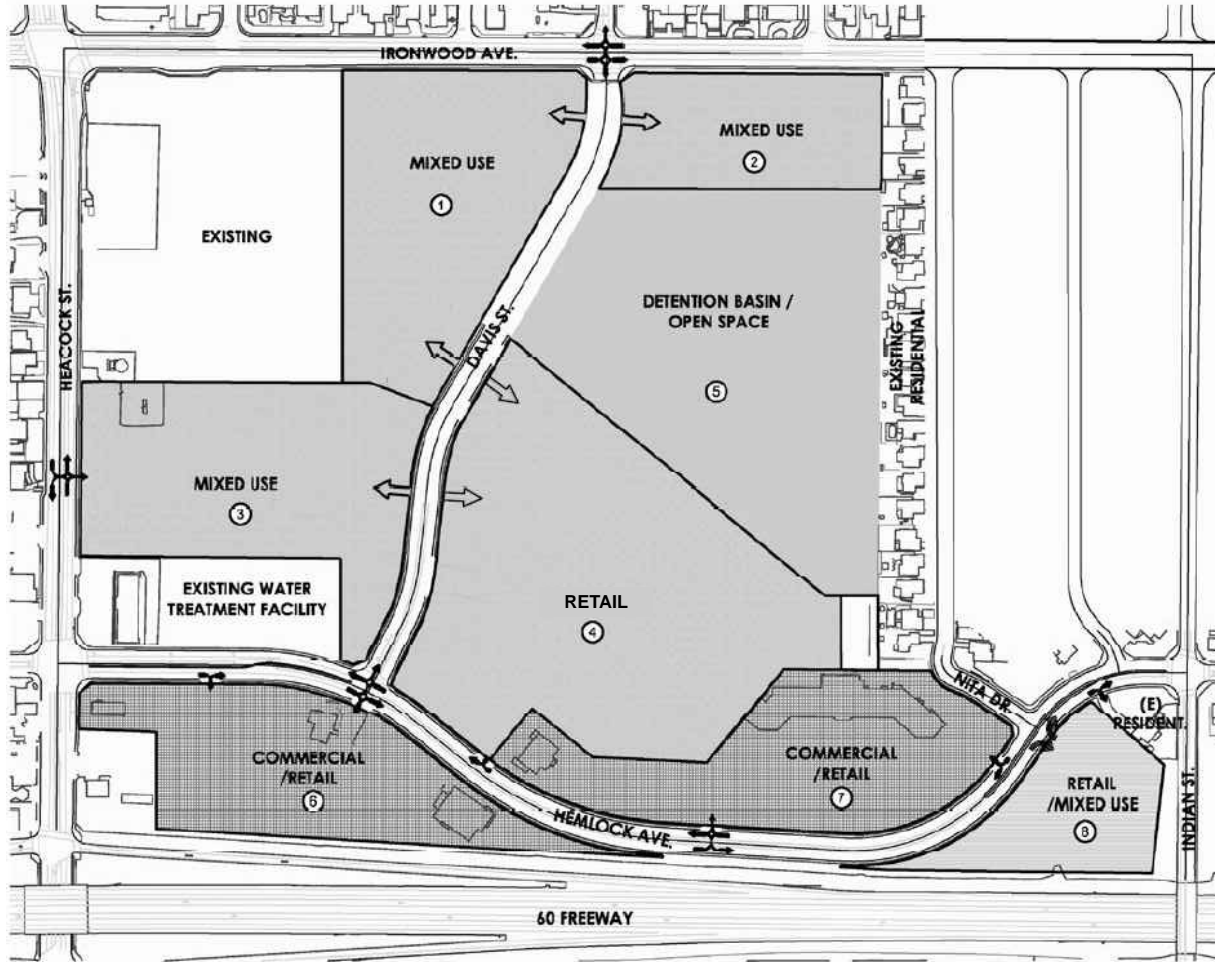
Festival at Moreno Valley

FIGURE
1





NOT TO SCALE

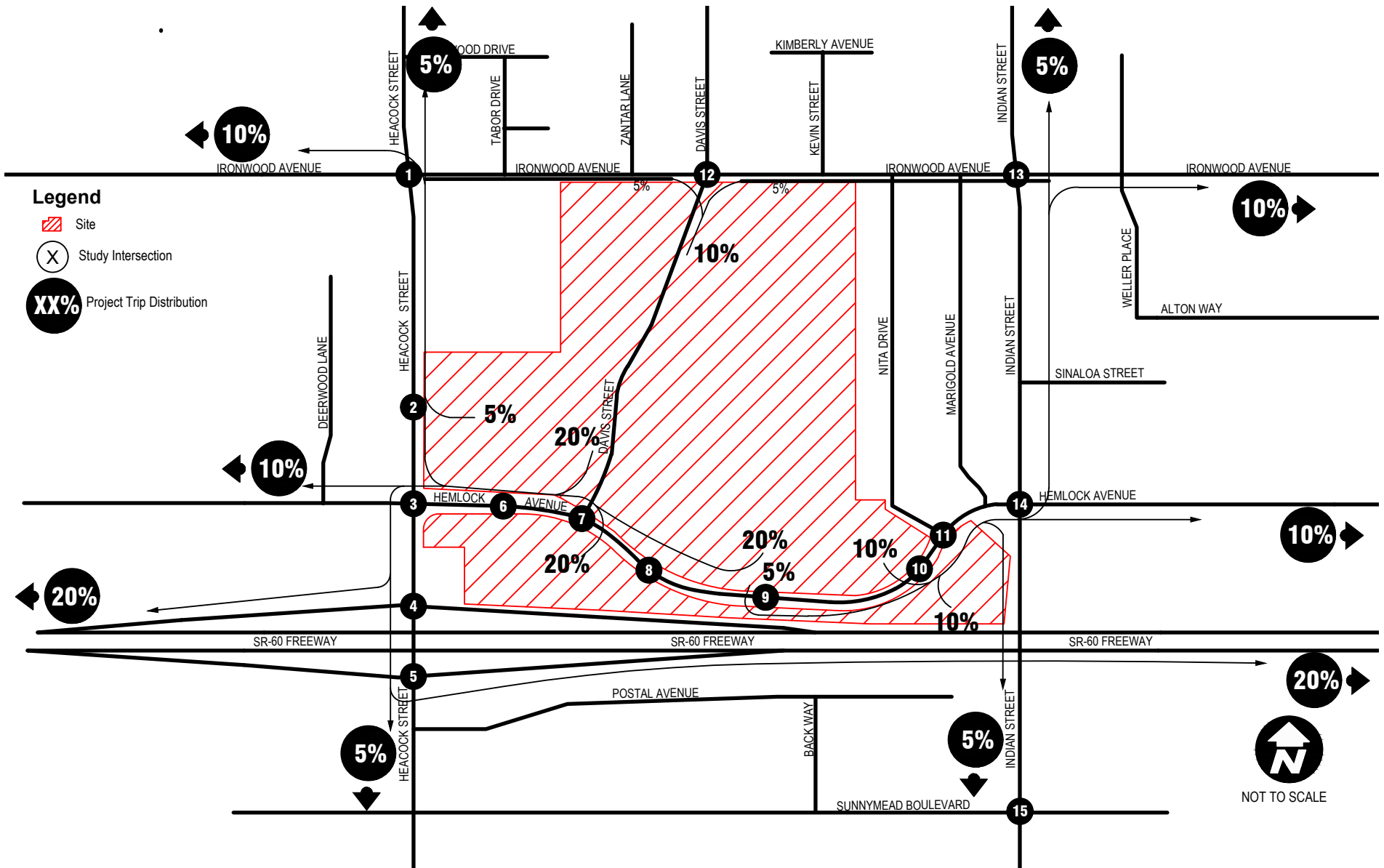


Project Plan

Festival at Moreno Valley

FIGURE

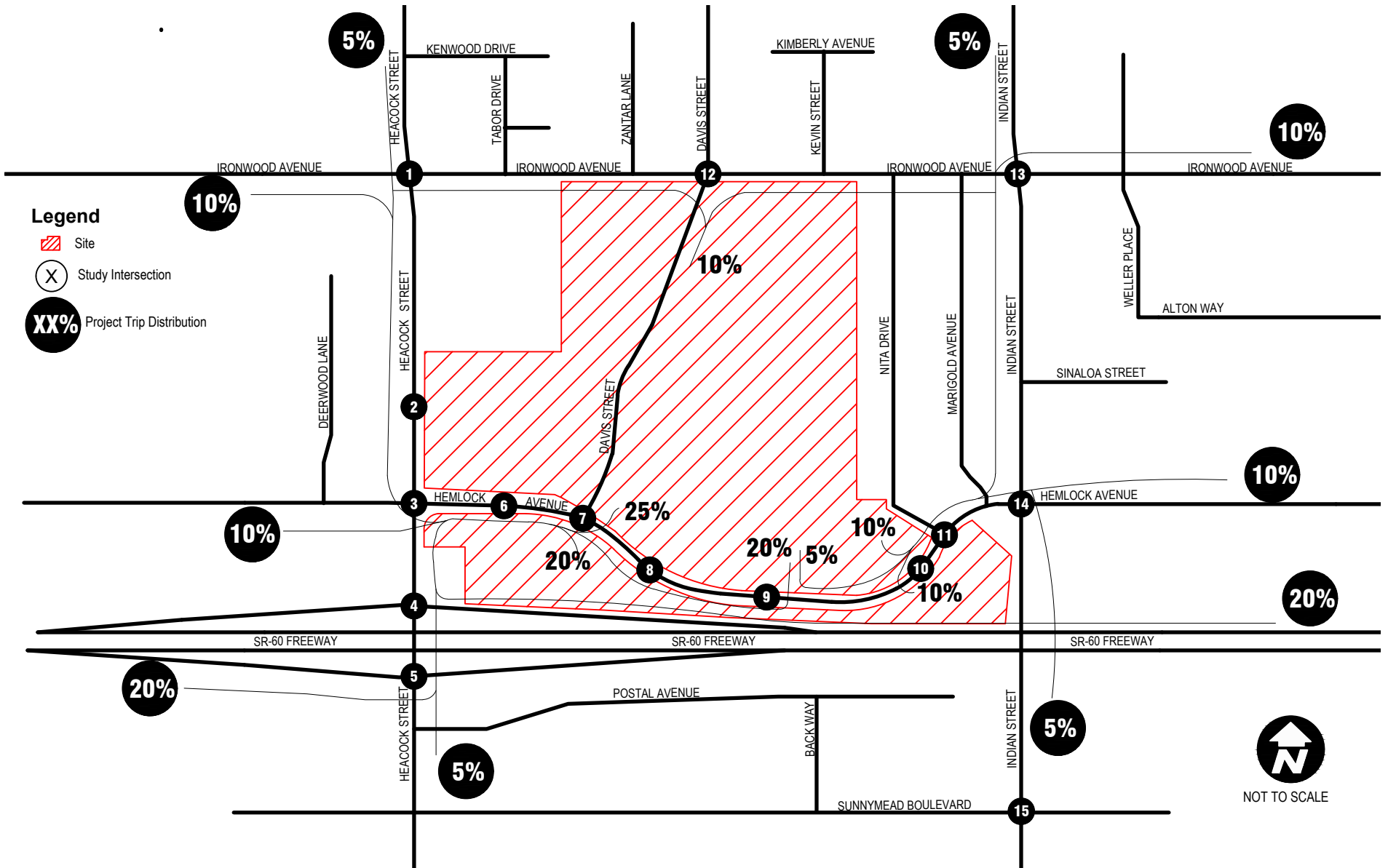
2



Retail Distribution Outbound

Festival at Moreno Valley

FIGURE



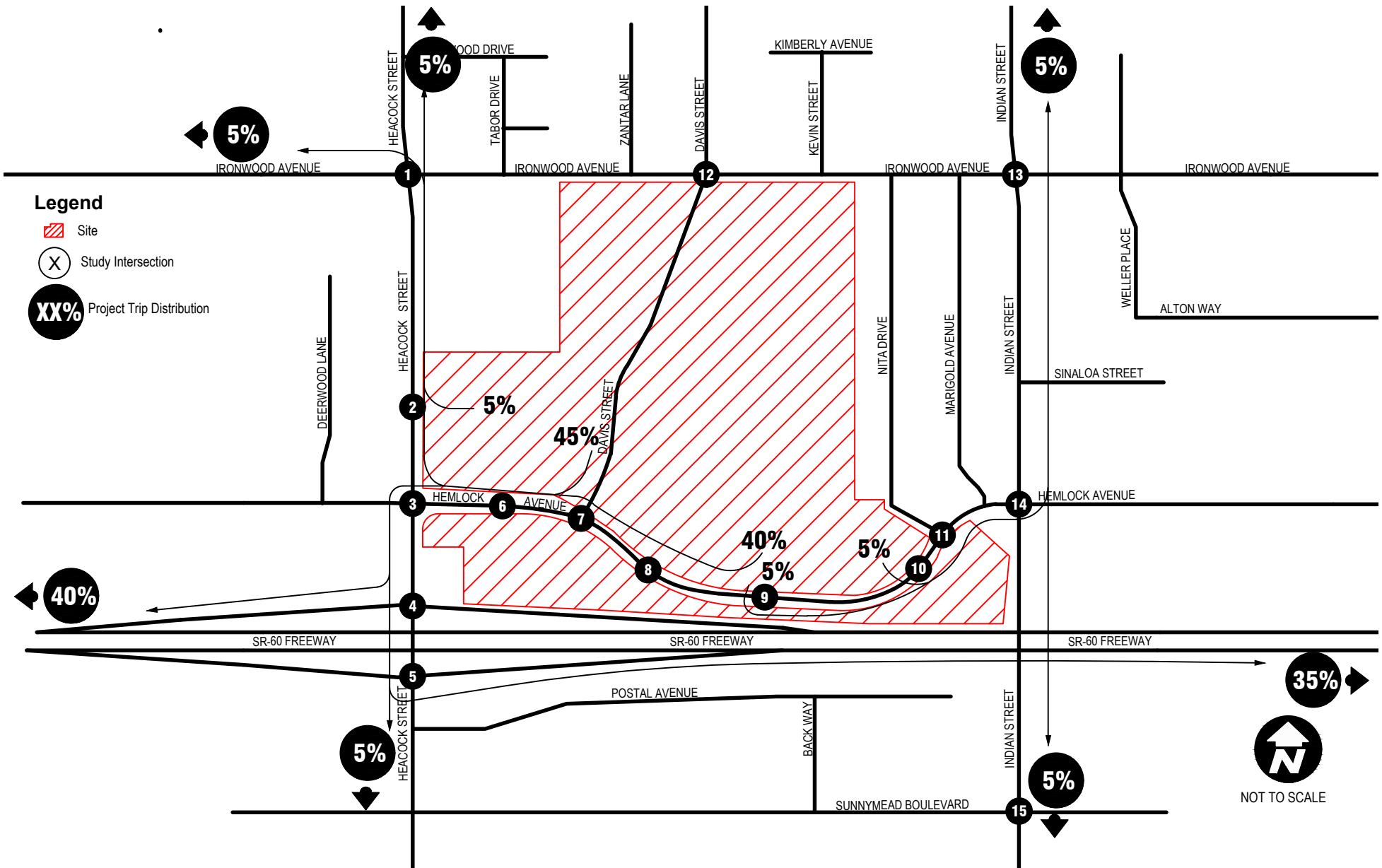
Source: Google Maps, 09/2017.

Retail Distribution Inbound

Festival at Moreno Valley

FIGURE





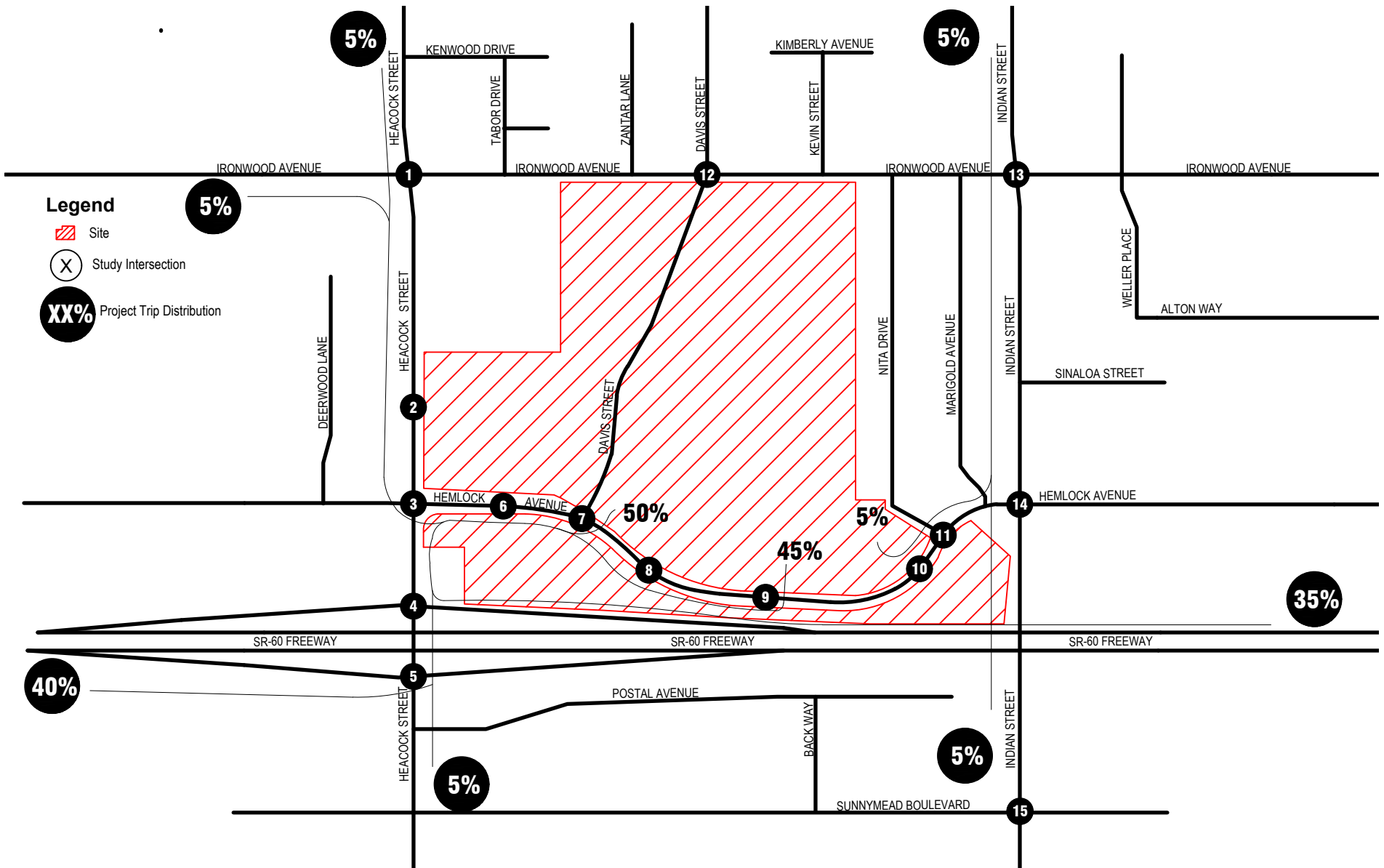
Source: Google Maps, 09/2017.

Business Park Distribution Outbound

Festival at Moreno Valley

FIGURE

5



Source: Google Maps, 09/2017.

Business Park Distribution Inbound

Festival at Moreno Valley

FIGURE

6

Appendix B: Traffic Counts

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

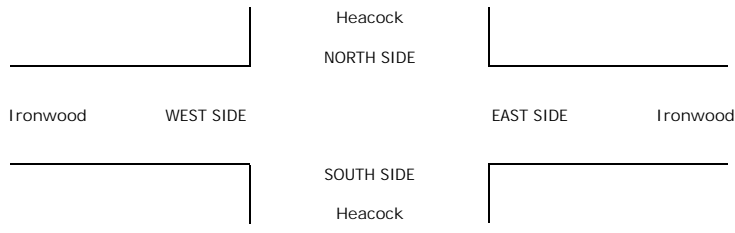
Moreno Valley
Heacock
Ironwood

PROJECT #: SC1422
LOCATION #: 1
CONTROL: SIGNAL

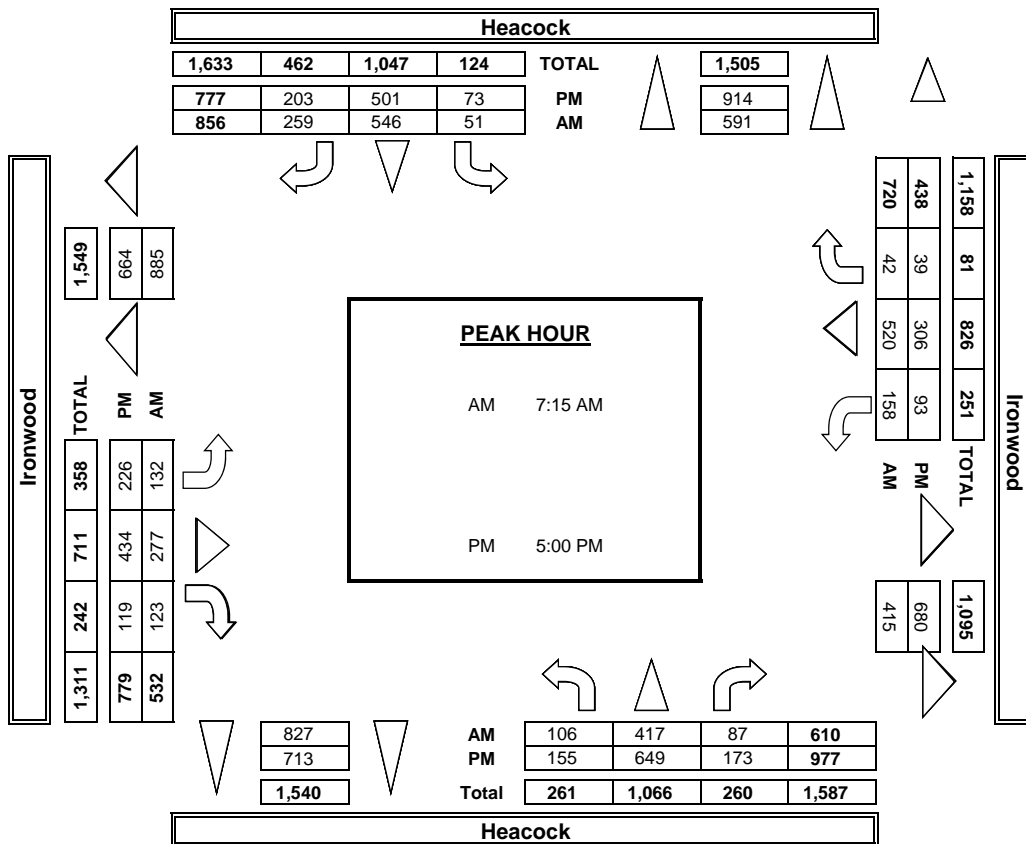
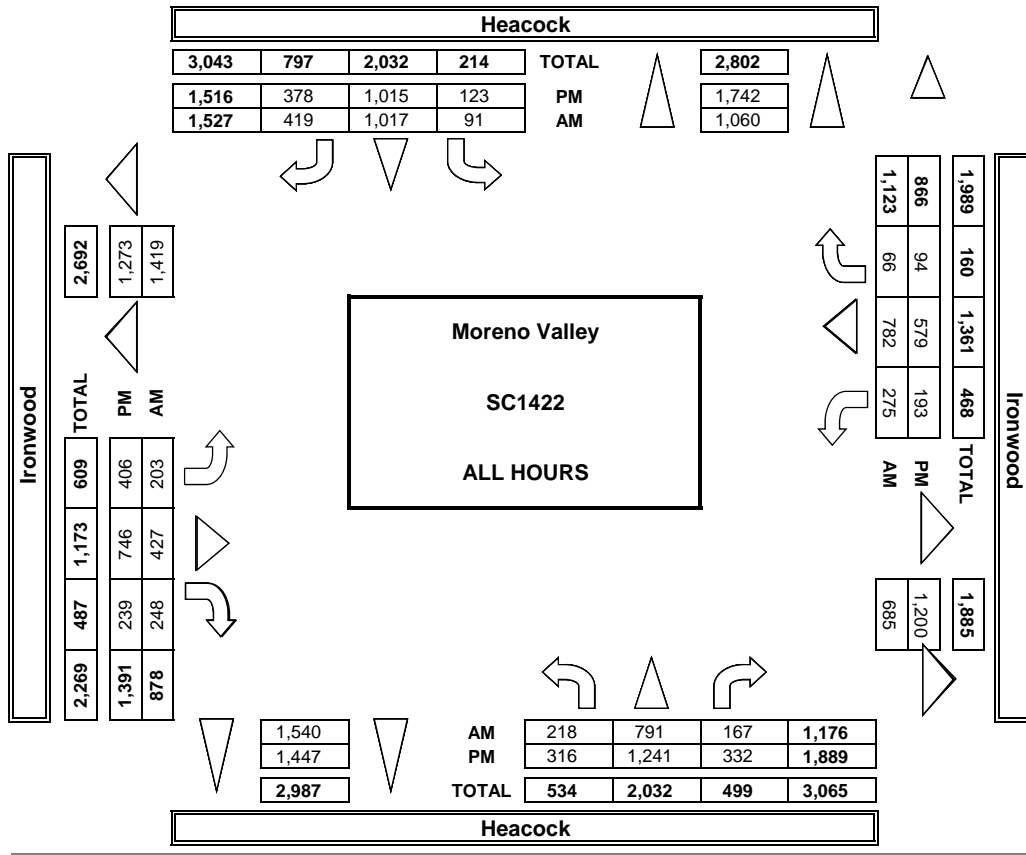
NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	E ▶
--------	----------------------------------	-----	------------	-----



	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	Heacock			Heacock			Ironwood			Ironwood				NB	SB	EB	WB	TTL
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0						
7:00 AM	25	101	21	8	102	50	11	33	22	29	75	5	482	0	0	0	0	0
7:15 AM	27	94	29	8	123	53	34	64	32	26	133	4	627	0	0	0	0	0
7:30 AM	25	112	22	16	142	80	33	101	28	41	119	8	727	0	0	0	0	0
7:45 AM	28	101	17	14	144	67	40	60	26	45	148	17	707	0	0	0	0	0
8:00 AM	26	110	19	13	137	59	25	52	37	46	120	13	657	0	0	0	0	0
8:15 AM	31	107	15	9	144	50	25	35	32	28	83	10	569	0	0	0	0	0
8:30 AM	26	96	19	13	119	36	17	43	44	29	50	6	498	0	0	0	0	0
8:45 AM	30	70	25	10	106	24	18	39	27	31	54	3	437	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	218	791	167	91	1,017	419	203	427	248	275	782	66	4,704	0	0	0	0	0
APPROACH %	19%	67%	14%	6%	67%	27%	23%	49%	28%	24%	70%	6%						
APP/DEPART	1,176	/	1,060	1,527	/	1,540	878	/	685	1,123	/	1,419	0					
BEGIN PEAK HR	7:15 AM																	
VOLUMES	106	417	87	51	546	259	132	277	123	158	520	42	2,718					
APPROACH %	17%	68%	14%	6%	64%	30%	25%	52%	23%	22%	72%	6%						
PEAK HR FACTOR	0.959			0.899			0.821			0.857			0.935					
APP/DEPART	610	/	591	856	/	827	532	/	415	720	/	885	0					
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	35	145	29	14	123	42	41	66	29	21	70	10	625	0	0	0	0	0
4:15 PM	39	126	47	12	110	42	46	86	34	29	72	19	662	0	0	0	0	0
4:30 PM	42	183	31	9	151	49	51	77	29	20	58	8	708	0	1	0	0	1
4:45 PM	45	138	52	15	130	42	42	83	28	30	73	18	696	0	0	0	0	0
5:00 PM	42	170	39	14	113	60	54	110	31	24	90	11	758	0	0	0	0	0
5:15 PM	47	182	35	17	140	49	56	86	25	19	58	8	722	0	0	0	0	0
5:30 PM	33	157	52	20	108	45	55	131	26	32	86	11	756	0	0	0	0	0
5:45 PM	33	140	47	22	140	49	61	107	37	18	72	9	735	0	0	0	0	0
VOLUMES	316	1,241	332	123	1,015	378	406	746	239	193	579	94	5,662	0	1	0	0	1
APPROACH %	17%	66%	18%	8%	67%	25%	29%	54%	17%	22%	67%	11%						
APP/DEPART	1,889	/	1,742	1,516	/	1,447	1,391	/	1,200	866	/	1,273	0					
BEGIN PEAK HR	5:00 PM																	
VOLUMES	155	649	173	73	501	203	226	434	119	93	306	39	2,971					
APPROACH %	16%	66%	18%	9%	64%	26%	29%	56%	15%	21%	70%	9%						
PEAK HR FACTOR	0.925			0.921			0.919			0.849			0.980					
APP/DEPART	977	/	914	777	/	713	779	/	680	438	/	664	0					



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

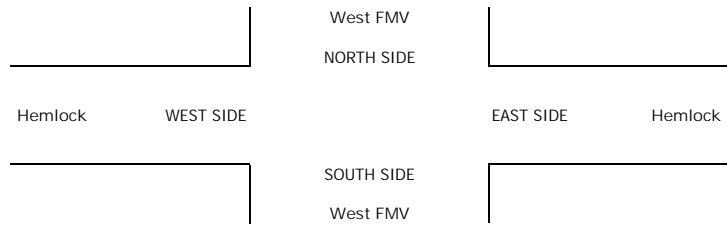
Moreno Valley
West FMV
Hemlock

PROJECT #: SC1422
LOCATION #: 2
CONTROL: STOP S

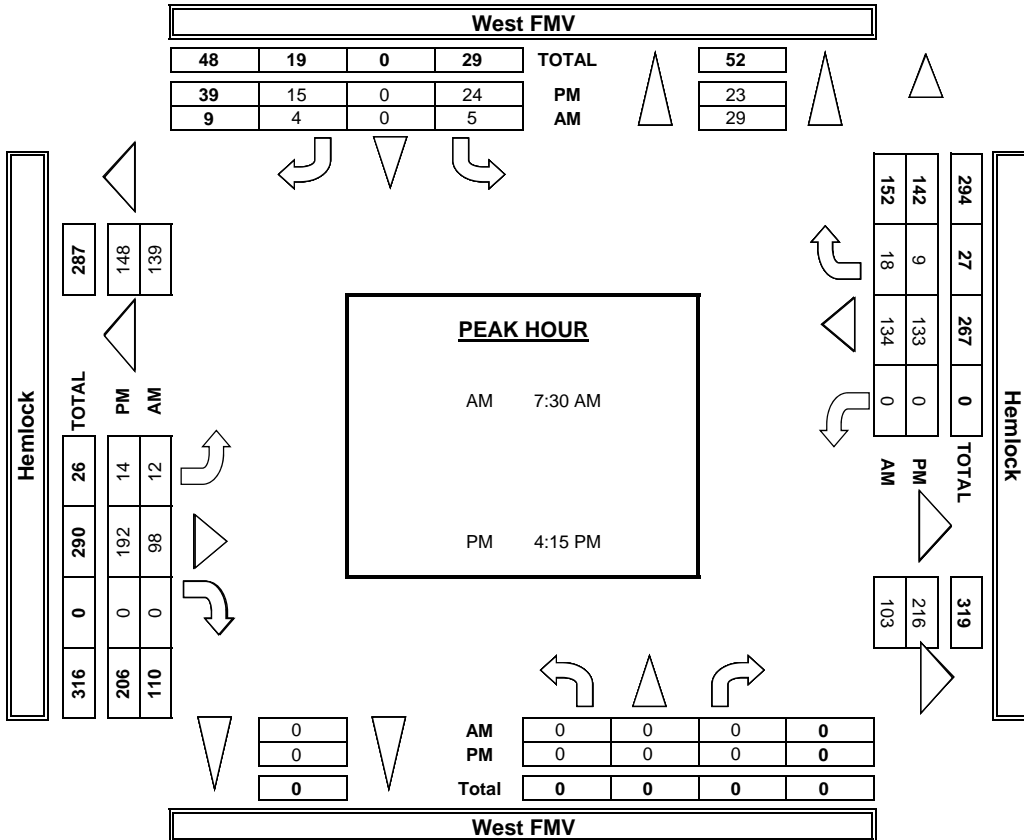
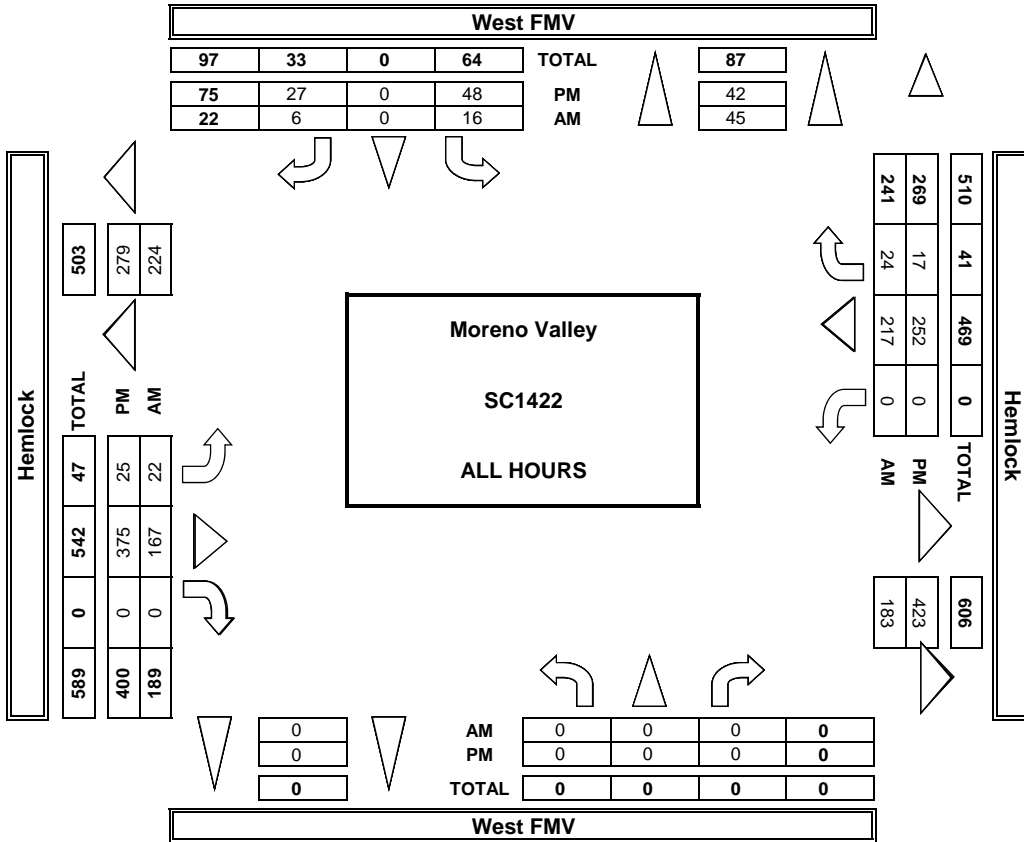
NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	E ▶
--------	----------------------------------	-----	------------	-----



	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS					
	West FMV			West FMV			Hemlock			Hemlock				NB	SB	EB	WB	TTL	
LANES:	NL X	NT X	NR X	SL 0	ST X	SR 0	EL 0	ET 1	ER X	WL X	WT 1	WR 0							
AM	7:00 AM	0	0	0	2	0	0	3	14	0	0	16	1	36	0	0	0	0	0
	7:15 AM	0	0	0	0	0	1	1	15	0	0	18	0	35	0	0	0	0	0
	7:30 AM	0	0	0	1	0	1	3	33	0	0	29	5	72	0	0	1	0	1
	7:45 AM	0	0	0	0	0	0	2	34	0	0	35	4	75	0	0	0	0	0
	8:00 AM	0	0	0	2	0	0	3	16	0	0	31	4	56	0	0	0	0	0
	8:15 AM	0	0	0	2	0	3	4	15	0	0	39	5	68	0	0	0	0	0
	8:30 AM	0	0	0	3	0	0	3	18	0	0	24	1	49	0	0	0	0	0
	8:45 AM	0	0	0	6	0	1	3	22	0	0	25	4	61	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	16	0	6	22	167	0	0	217	24	452	0	0	1	0	1	
APPROACH %	0%	0%	0%	73%	0%	27%	12%	88%	0%	0%	90%	10%							
APP/DEPART	0	/	45	22	/	0	189	/	183	241	/	224	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	0	0	0	5	0	4	12	98	0	0	134	18	271						
APPROACH %	0%	0%	0%	56%	0%	44%	11%	89%	0%	0%	88%	12%							
PEAK HR FACTOR	0.000			0.450			0.764			0.864			0.903						
APP/DEPART	0	/	29	9	/	0	110	/	103	152	/	139	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	5	0	1	7	44	0	0	27	2	86	0	0	0	0	0
	4:15 PM	0	0	0	4	0	4	4	40	0	0	33	3	88	0	0	0	0	0
	4:30 PM	0	0	0	7	0	2	0	53	0	0	32	3	97	0	0	0	0	0
	4:45 PM	0	0	0	8	0	8	9	47	0	0	35	0	107	0	0	0	0	0
	5:00 PM	0	0	0	5	0	1	1	52	0	0	33	3	95	0	0	0	0	0
	5:15 PM	0	0	0	5	0	1	0	36	0	0	26	4	72	0	0	0	0	0
	5:30 PM	0	0	0	2	0	1	3	52	0	0	29	1	88	0	0	0	0	0
	5:45 PM	0	0	0	12	0	9	1	51	0	0	37	1	111	0	0	0	0	0
VOLUMES	0	0	0	48	0	27	25	375	0	0	252	17	744						
APPROACH %	0%	0%	0%	64%	0%	36%	6%	94%	0%	0%	94%	6%							
APP/DEPART	0	/	42	75	/	0	400	/	423	269	/	279	0						
BEGIN PEAK HR	4:15 PM																		
VOLUMES	0	0	0	24	0	15	14	192	0	0	133	9	387						
APPROACH %	0%	0%	0%	62%	0%	38%	7%	93%	0%	0%	94%	6%							
PEAK HR FACTOR	0.000			0.609			0.920			0.986			0.904						
APP/DEPART	0	/	23	39	/	0	206	/	216	142	/	148	0						



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

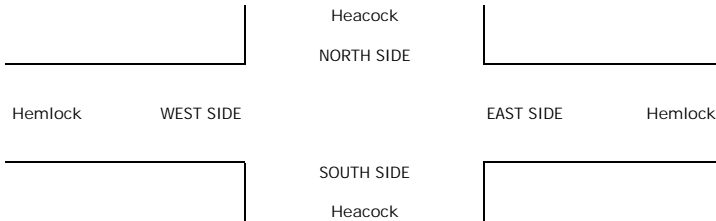
Moreno Valley
Heacock
Hemlock

PROJECT #: SC1422
LOCATION #: 3
CONTROL: SIGNAL

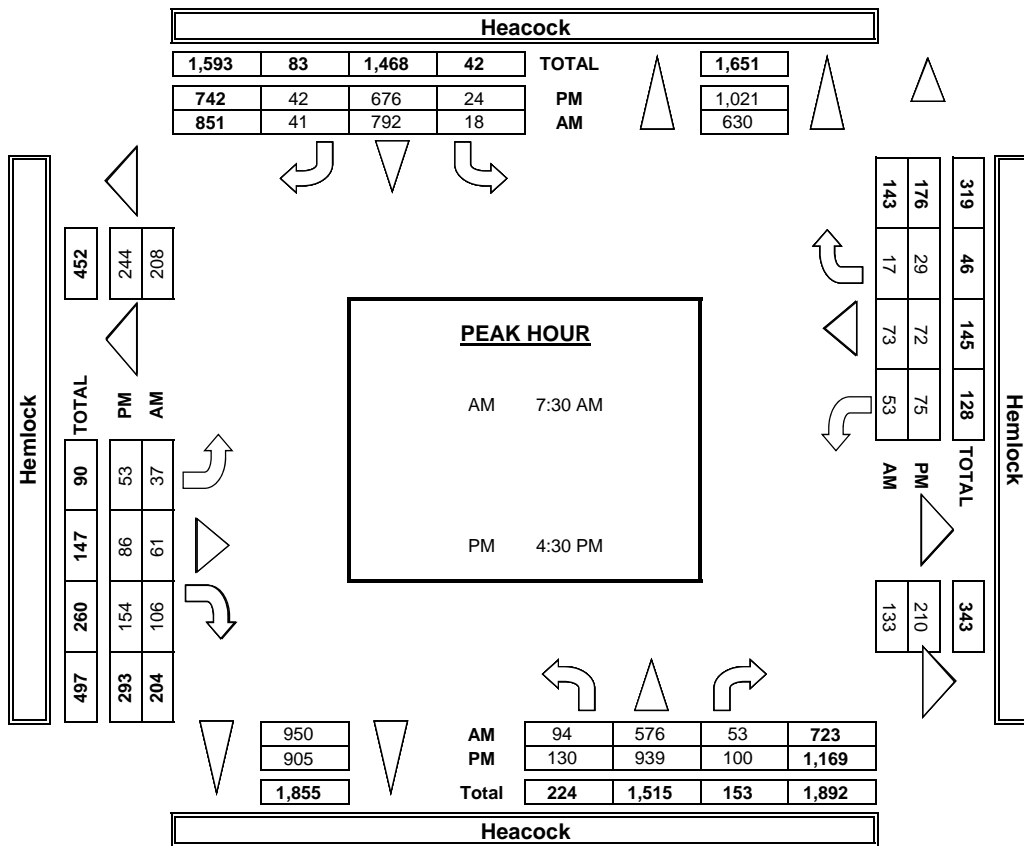
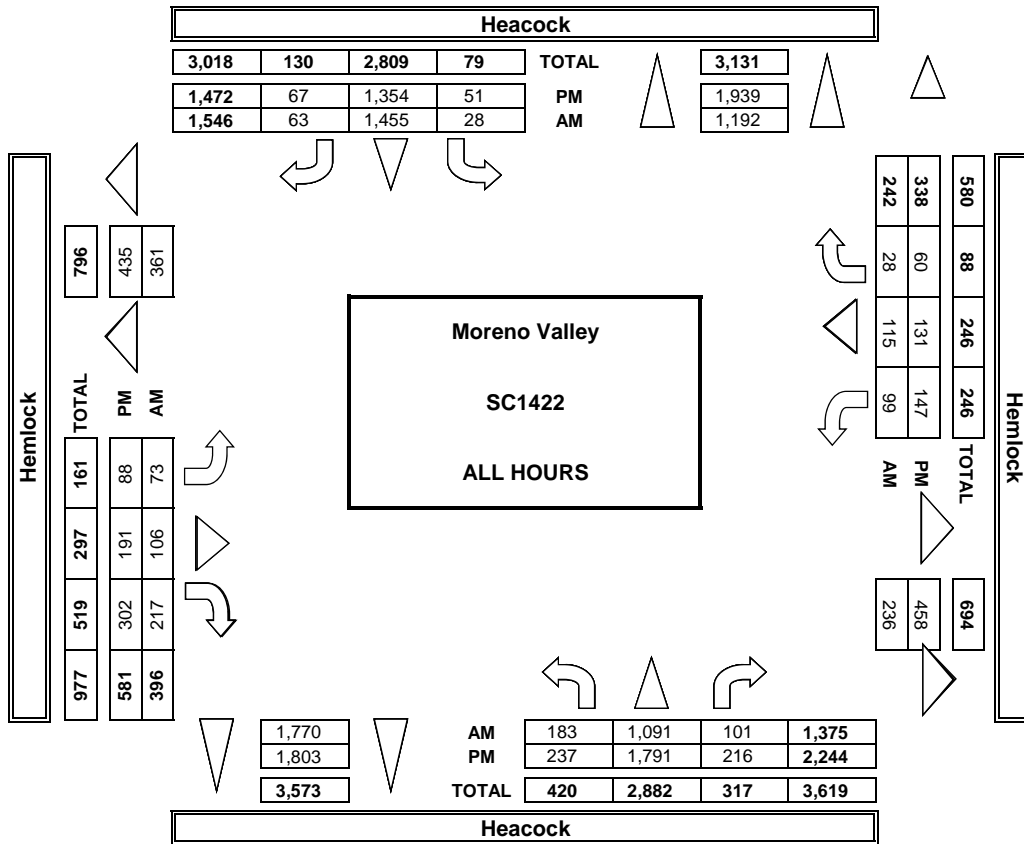
NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	E ▶
--------	----------------------------------	-----	------------	-----



	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS					
	Heacock			Heacock			Hemlock			Hemlock				NB	SB	EB	WB	TTL	
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1							
7:00 AM	18	142	11	0	140	6	8	6	23	5	11	1	371	0	0	0	0	0	
7:15 AM	29	124	4	2	181	3	14	13	29	8	11	1	419	0	0	0	0	0	
7:30 AM	33	159	11	5	184	6	6	27	32	13	16	2	494	0	0	0	0	0	
7:45 AM	16	154	15	3	212	14	11	15	21	7	24	4	496	0	0	0	0	0	
8:00 AM	26	135	16	4	203	11	9	9	26	13	13	5	470	0	0	0	0	0	
8:15 AM	19	128	11	6	193	10	11	10	27	20	20	6	461	0	0	0	1	1	
8:30 AM	22	119	14	5	179	7	10	9	31	23	6	4	429	0	0	0	0	0	
8:45 AM	20	130	19	3	163	6	4	17	28	10	14	5	419	0	0	0	0	0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUMES	183	1,091	101	28	1,455	63	73	106	217	99	115	28	3,559	0	0	0	1	1	
APPROACH %	13%	79%	7%	2%	94%	4%	18%	27%	55%	41%	48%	12%							
APP/DEPART	1,375	/	1,192	1,546	/	1,770	396	/	236	242	/	361	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	94	576	53	18	792	41	37	61	106	53	73	17	1,921						
APPROACH %	13%	80%	7%	2%	93%	5%	18%	30%	52%	37%	51%	12%							
PEAK HR FACTOR	0.890												0.968						
APP/DEPART	723	/	630	851	/	950	204	/	133	143	/	208	0						
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	27	230	31	6	161	1	5	23	33	20	12	5	554	0	0	0	0	0	
4:15 PM	25	195	28	10	173	6	10	26	37	17	15	9	551	0	0	0	0	0	
4:30 PM	27	239	26	8	174	17	12	21	39	17	18	5	603	0	0	0	0	0	
4:45 PM	34	219	29	6	170	9	5	19	42	23	21	9	586	0	0	0	0	0	
5:00 PM	41	232	29	5	165	7	20	26	38	15	16	11	605	0	0	0	0	0	
5:15 PM	28	249	16	5	167	9	16	20	35	20	17	4	586	0	0	0	0	0	
5:30 PM	24	236	29	8	168	11	11	27	40	14	14	4	586	0	0	0	0	0	
5:45 PM	31	191	28	3	176	7	9	29	38	21	18	13	564	0	0	0	0	0	
VOLUMES	237	1,791	216	51	1,354	67	88	191	302	147	131	60	4,635	0	0	0	0	0	
APPROACH %	11%	80%	10%	3%	92%	5%	15%	33%	52%	43%	39%	18%							
APP/DEPART	2,244	/	1,939	1,472	/	1,803	581	/	458	338	/	435	0						
BEGIN PEAK HR	4:30 PM																		
VOLUMES	130	939	100	24	676	42	53	86	154	75	72	29	2,380						
APPROACH %	11%	80%	9%	3%	91%	6%	18%	29%	53%	43%	41%	16%							
PEAK HR FACTOR	0.968												0.983						
APP/DEPART	1,169	/	1,021	742	/	905	293	/	210	176	/	244	0						



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

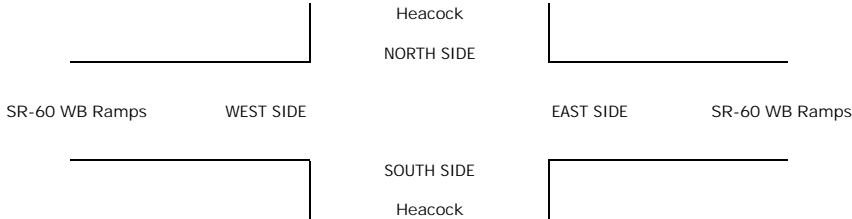
DATE: Wed, Aug 16, 17	LOCATION: NORTH & SOUTH: EAST & WEST:	Moreno Valley Heacock SR-60 WB Ramps	PROJECT #: SC1422 LOCATION #: 4 CONTROL: SIGNAL
---------------------------------	--	---	--

NOTES: AM SB queue. PM NB/SB queue	AM PM MD OTHER OTHER	◀ W	▲ N S ▼	E ▶
--	----------------------------------	-----	------------	-----

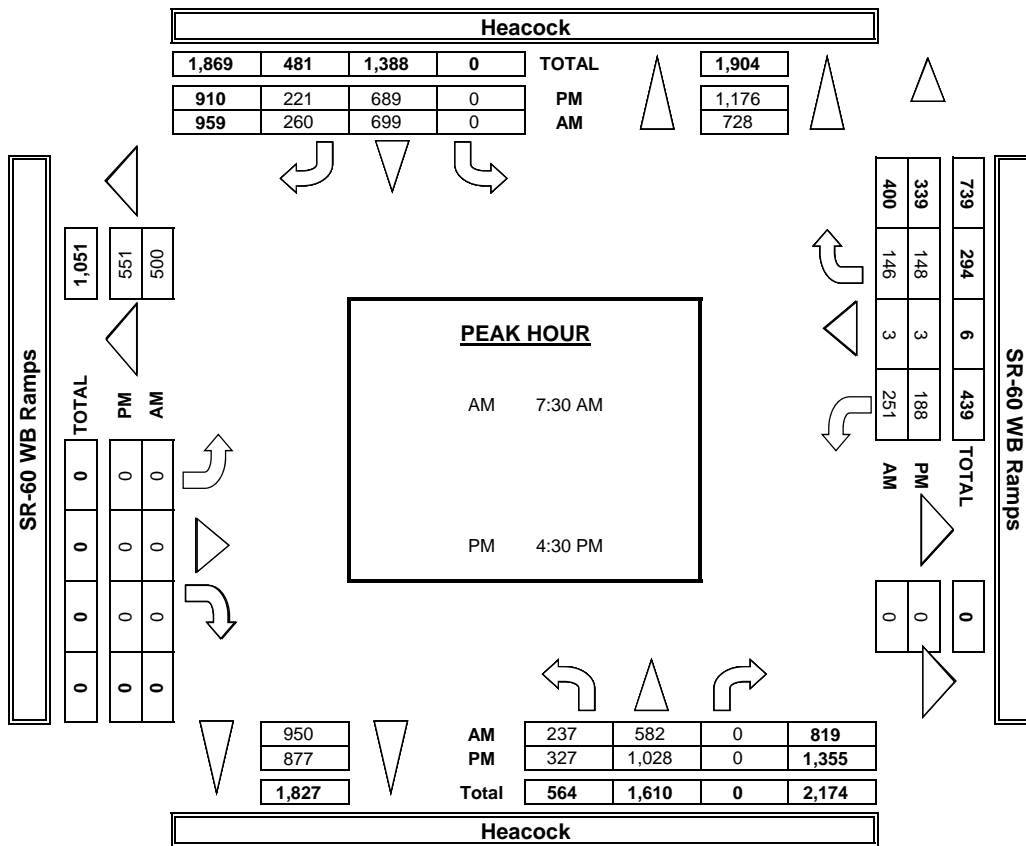
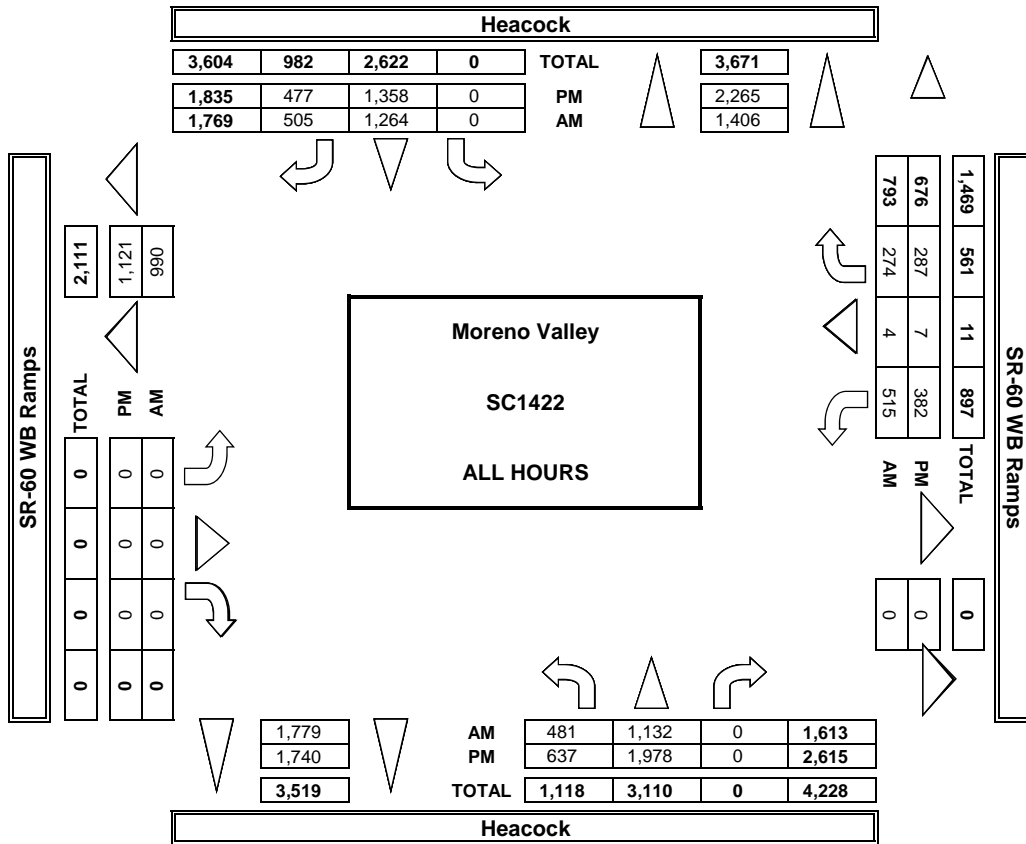
Add U-Turns to Left Turns

LANES:	NORTHBOUND <small>Heacock</small>			SOUTHBOUND <small>Heacock</small>			EASTBOUND <small>SR-60 WB Ramps</small>			WESTBOUND <small>SR-60 WB Ramps</small>			TOTAL	U-TURNS				
	NL 1	NT 2	NR X	SL X	ST 2	SR 0	EL X	ET X	ER X	WL 1	WT 0	WR 1		NB	SB	EB	WB	TTL

AM	7:00 AM	56	139	0	0	106	62	0	0	0	59	1	40	463	0	0	0	0	0
	7:15 AM	56	129	0	0	151	62	0	0	0	66	0	37	501	0	0	0	0	0
	7:30 AM	63	148	0	0	172	62	0	0	0	75	0	50	570	0	0	0	0	0
	7:45 AM	49	153	0	0	181	59	0	0	0	70	1	41	554	0	0	0	0	0
	8:00 AM	62	147	0	0	176	71	0	0	0	58	0	26	540	0	0	0	0	0
	8:15 AM	63	134	0	0	170	68	0	0	0	48	2	29	514	0	0	0	0	0
	8:30 AM	67	129	0	0	161	62	0	0	0	85	0	30	534	0	0	0	0	0
	8:45 AM	65	153	0	0	147	59	0	0	0	54	0	21	499	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUMES	481	1,132	0	0	1,264	505	0	0	0	515	4	274	4,175	0	0	0	0	0	
APPROACH %	30%	70%	0%	0%	71%	29%	0%	0%	0%	65%	1%	35%							
APP/DEPART	1,613	/	1,406	1,769	/	1,779	0	/	0	793	/	990	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	237	582	0	0	699	260	0	0	0	251	3	146	2,178						
APPROACH %	29%	71%	0%	0%	73%	27%	0%	0%	0%	63%	1%	37%							
PEAK HR FACTOR	0.970				0.971			0.000		0.800			0.955						
APP/DEPART	819	/	728	959	/	950	0	/	0	400	/	500	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	83	254	0	0	151	56	0	0	0	57	0	40	641	0	0	0	0	0
	4:15 PM	72	219	0	0	170	76	0	0	0	43	1	33	614	0	0	0	0	0
	4:30 PM	82	257	0	0	173	61	0	0	0	61	0	45	679	0	0	0	0	0
	4:45 PM	66	244	0	0	185	48	0	0	0	47	1	38	629	0	0	0	0	0
	5:00 PM	88	278	0	0	163	52	0	0	0	45	0	27	653	0	0	0	0	0
	5:15 PM	91	249	0	0	168	60	0	0	0	35	2	38	643	0	0	0	0	0
	5:30 PM	77	257	0	0	172	58	0	0	0	45	2	38	649	0	0	0	0	0
5:45 PM	78	220	0	0	176	66	0	0	0	49	1	28	618	0	0	0	0	0	
VOLUMES	637	1,978	0	0	1,358	477	0	0	0	382	7	287	5,126	0	0	0	0	0	
APPROACH %	24%	76%	0%	0%	74%	26%	0%	0%	0%	57%	1%	42%							
APP/DEPART	2,615	/	2,265	1,835	/	1,740	0	/	0	676	/	1,121	0						
BEGIN PEAK HR	4:30 PM																		
VOLUMES	327	1,028	0	0	689	221	0	0	0	188	3	148	2,604						
APPROACH %	24%	76%	0%	0%	76%	24%	0%	0%	0%	55%	1%	44%							
PEAK HR FACTOR	0.926				0.972			0.000		0.800			0.959						
APP/DEPART	1,355	/	1,176	910	/	877	0	/	0	339	/	551	0						



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

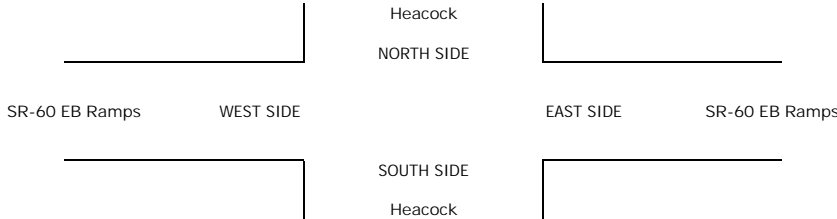
Moreno Valley
Heacock
SR-60 EB Ramps

PROJECT #: SC1422
LOCATION #: 5
CONTROL: SIGNAL

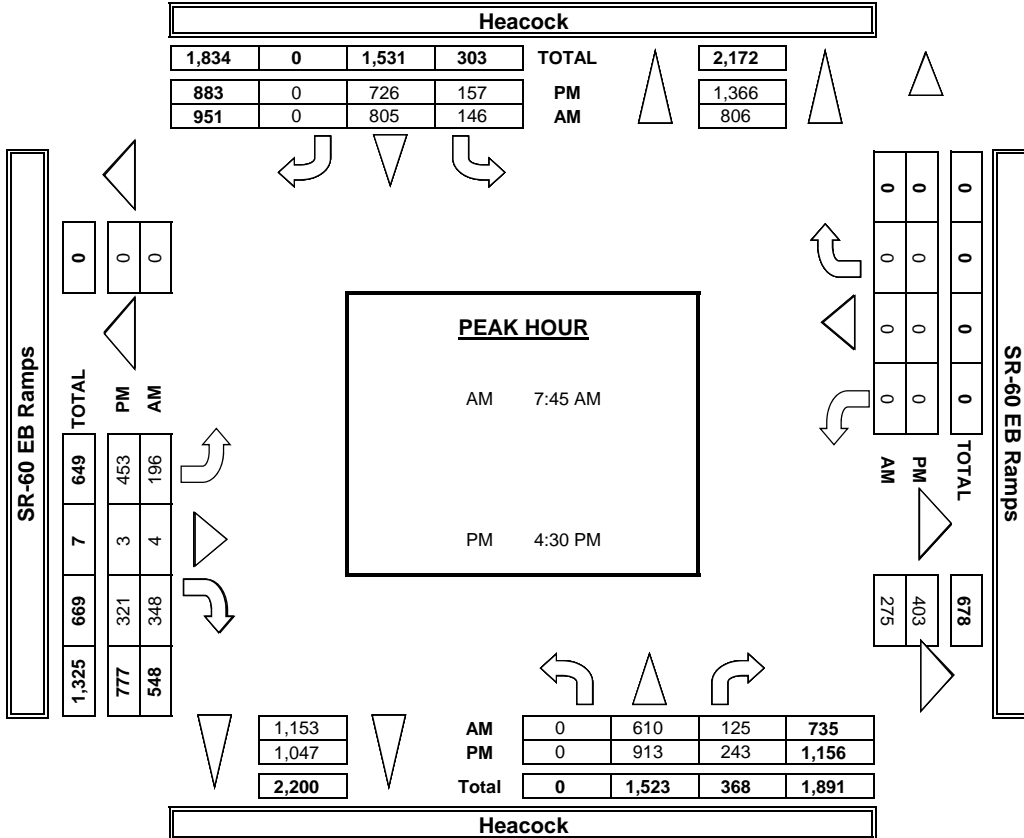
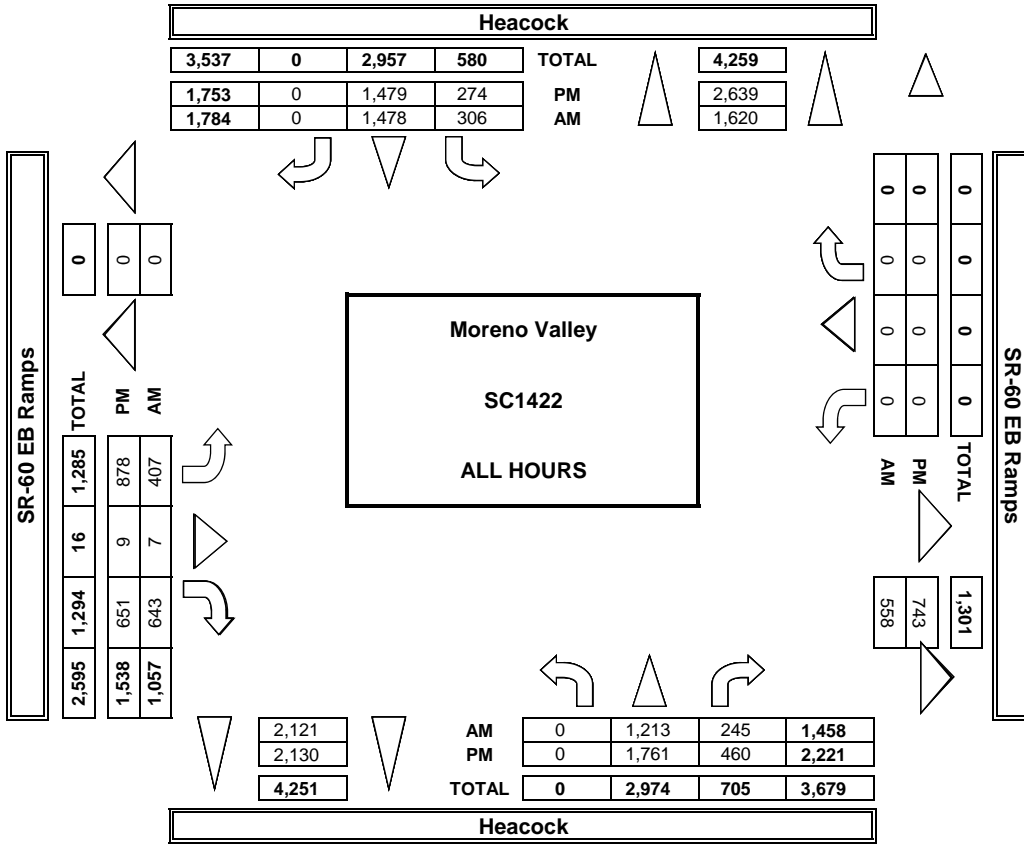
NOTES: <div style="text-align: center; margin-top: 10px;">PM NB queue</div>	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼	<input checked="" type="checkbox"/> Add U-Turns to Left Turns
--	----------------------------------	--------------------------------	---

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		NB	SB	EB	WB	TTL

AM	7:00 AM	0	143	29	31	134	0	54	0	55	0	0	0	446	0	0	0	0	0
	7:15 AM	0	132	38	47	172	0	52	0	70	0	0	0	511	0	0	0	0	0
	7:30 AM	0	163	24	55	194	0	50	1	71	0	0	0	558	0	0	0	0	0
	7:45 AM	0	167	33	59	194	0	34	1	83	0	0	0	571	0	0	0	0	0
	8:00 AM	0	151	33	27	206	0	60	1	79	0	0	0	557	0	0	0	0	0
	8:15 AM	0	143	28	35	185	0	56	0	96	0	0	0	543	0	0	0	0	0
	8:30 AM	0	149	31	25	220	0	46	2	90	0	0	0	563	0	0	0	0	0
	8:45 AM	0	165	29	27	173	0	55	2	99	0	0	0	550	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUMES	0	1,213	245	306	1,478	0	407	7	643	0	0	0	4,299	0	0	0	0	0	
APPROACH %	0%	83%	17%	17%	83%	0%	39%	1%	61%	0%	0%	0%		0	0	0	0	0	
APP/DEPART	1,458	/	1,620	1,784	/	2,121	1,057	/	558	0	/	0	0	0	0	0	0	0	
BEGIN PEAK HR	7:45 AM																		
VOLUMES	0	610	125	146	805	0	196	4	348	0	0	0	2,234	0	0	0	0	0	
APPROACH %	0%	83%	17%	15%	85%	0%	36%	1%	64%	0%	0%	0%		0	0	0	0	0	
PEAK HR FACTOR	0.919			0.940			0.901			0.000			0.978						
APP/DEPART	735	/	806	951	/	1,153	548	/	275	0	/	0	0	0	0	0	0	0	
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	234	48	23	180	0	105	2	100	0	0	0	692	0	0	0	0	0
	4:15 PM	0	191	58	26	191	0	104	1	82	0	0	0	653	0	0	0	0	0
	4:30 PM	0	215	56	34	204	0	126	2	101	0	0	0	738	0	0	0	0	0
	4:45 PM	0	201	58	36	191	0	112	1	90	0	0	0	689	0	0	0	0	0
	5:00 PM	0	264	68	40	172	0	106	0	64	0	0	0	714	0	0	0	0	0
	5:15 PM	0	233	61	47	159	0	109	0	66	0	0	0	675	0	0	0	0	0
5:30 PM	0	223	53	26	196	0	115	2	84	0	0	0	699	0	0	0	0	0	
5:45 PM	0	200	58	42	186	0	101	1	64	0	0	0	652	0	0	0	0	0	
VOLUMES	0	1,761	460	274	1,479	0	878	9	651	0	0	0	5,512	0	0	0	0	0	
APPROACH %	0%	79%	21%	16%	84%	0%	57%	1%	42%	0%	0%	0%		0	0	0	0	0	
APP/DEPART	2,221	/	2,639	1,753	/	2,130	1,538	/	743	0	/	0	0	0	0	0	0	0	
BEGIN PEAK HR	4:30 PM																		
VOLUMES	0	913	243	157	726	0	453	3	321	0	0	0	2,816	0	0	0	0	0	
APPROACH %	0%	79%	21%	18%	82%	0%	58%	0%	41%	0%	0%	0%		0	0	0	0	0	
PEAK HR FACTOR	0.870			0.928			0.848			0.000			0.954						
APP/DEPART	1,156	/	1,366	883	/	1,047	777	/	403	0	/	0	0	0	0	0	0	0	



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Moreno Valley
East FMV
Hemlock

PROJECT #: SC1422
LOCATION #: 6
CONTROL: STOP S

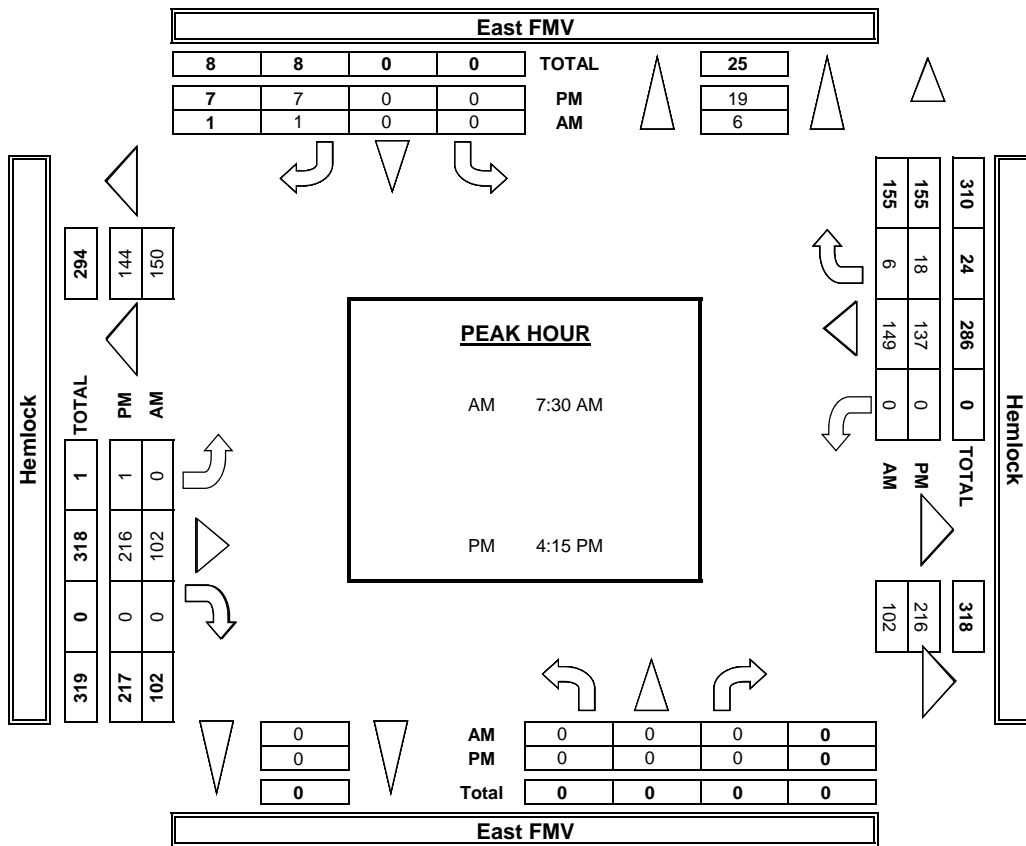
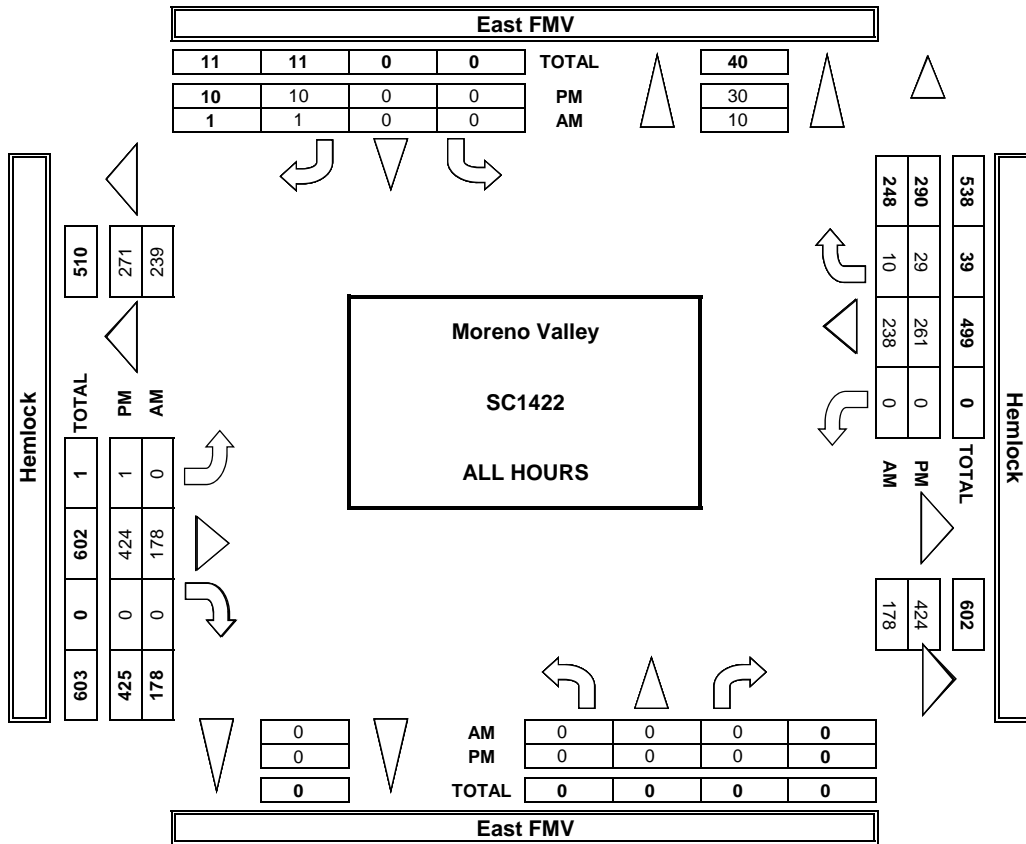
NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	E ▶
--------	----------------------------------	-----	------------	-----



	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS					
	East FMV			East FMV			Hemlock			Hemlock				NB	SB	EB	WB	TTL	
LANES:	NL X	NT X	NR X	SL X	ST X	SR 0	EL X	ET 1	ER X	WL X	WT 1	WR 0							
7:00 AM	0	0	0	0	0	0	0	16	0	0	17	0	33	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	15	0	0	18	0	33	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	33	0	0	34	1	68	0	0	0	0	0	
7:45 AM	0	0	0	0	0	1	0	34	0	0	38	2	75	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	18	0	0	35	1	54	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	17	0	0	42	2	61	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	21	0	0	25	3	49	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	24	0	0	29	1	54	0	0	0	0	0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUMES	0	0	0	0	0	1	0	178	0	0	238	10	427	0	0	0	0	0	
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	96%	4%							
APP/DEPART	0	/	10	1	/	0	178	/	178	248	/	239	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	0	0	0	0	0	1	0	102	0	0	149	6	258	0	0	0	0	0	
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	96%	4%							
PEAK HR FACTOR	0.000			0.250			0.750			0.881			0.860						
APP/DEPART	0	/	6	1	/	0	102	/	102	155	/	150	0						
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	0	0	0	0	0	0	0	48	0	0	27	4	79	0	0	0	0	0	
4:15 PM	0	0	0	0	0	1	1	50	0	0	32	2	86	0	0	0	0	0	
4:30 PM	0	0	0	0	0	1	0	55	0	0	36	2	94	0	0	0	0	0	
4:45 PM	0	0	0	0	0	4	0	52	0	0	31	9	96	0	0	0	0	0	
5:00 PM	0	0	0	0	0	1	0	59	0	0	38	5	103	0	0	0	0	0	
5:15 PM	0	0	0	0	0	2	0	44	0	0	28	1	75	0	0	0	0	0	
5:30 PM	0	0	0	0	0	1	0	54	0	0	28	4	87	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	62	0	0	41	2	105	0	0	0	0	0	
VOLUMES	0	0	0	0	0	10	1	424	0	0	261	29	725	0	0	0	0	0	
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	90%	10%							
APP/DEPART	0	/	30	10	/	0	425	/	424	290	/	271	0						
BEGIN PEAK HR	4:15 PM																		
VOLUMES	0	0	0	0	0	7	1	216	0	0	137	18	379	0	0	0	0	0	
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	88%	12%							
PEAK HR FACTOR	0.000			0.438			0.919			0.901			0.920						
APP/DEPART	0	/	19	7	/	0	217	/	216	155	/	144	0						



AimTD LLC
TURNING MOVEMENT COUNTS

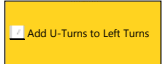


INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Aug 16, 17	LOCATION: NORTH & SOUTH: EAST & WEST:	Moreno Valley Davis Hemlock	PROJECT #: LOCATION #: CONTROL:	SC1422 7 STOP N/S
--------------------------	---	-----------------------------------	---------------------------------------	-------------------------

NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	E ▶
--------	----------------------------------	-----	------------	-----

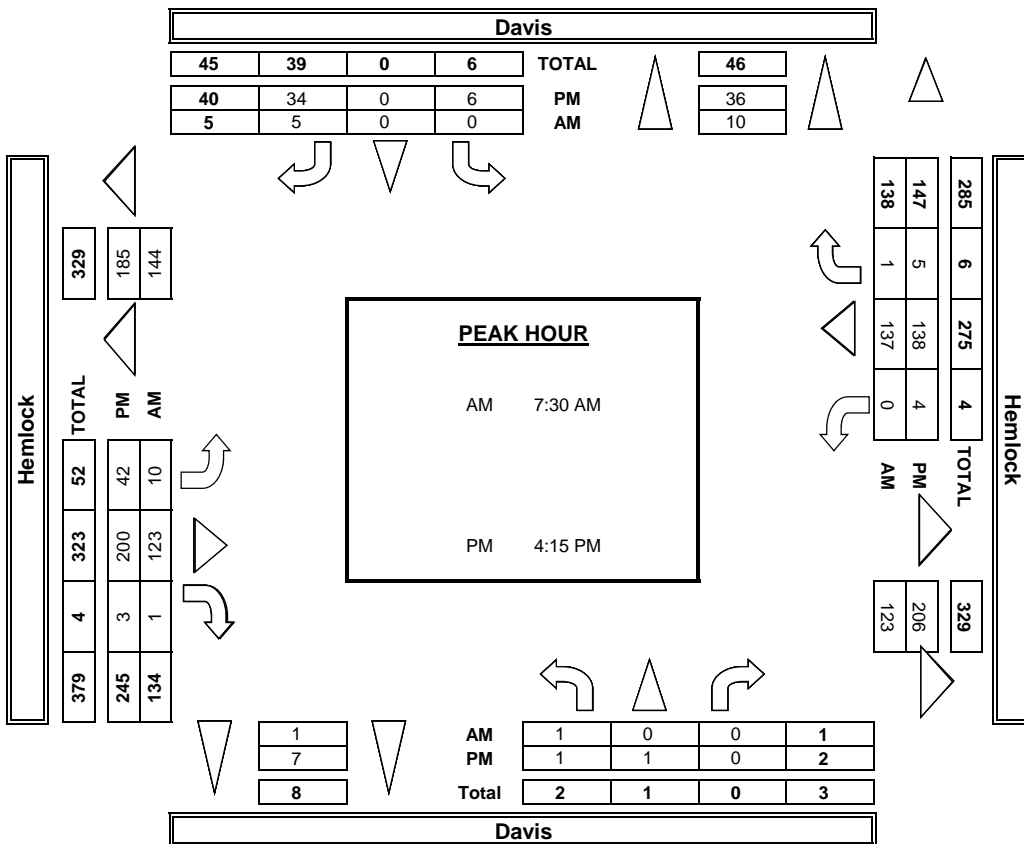
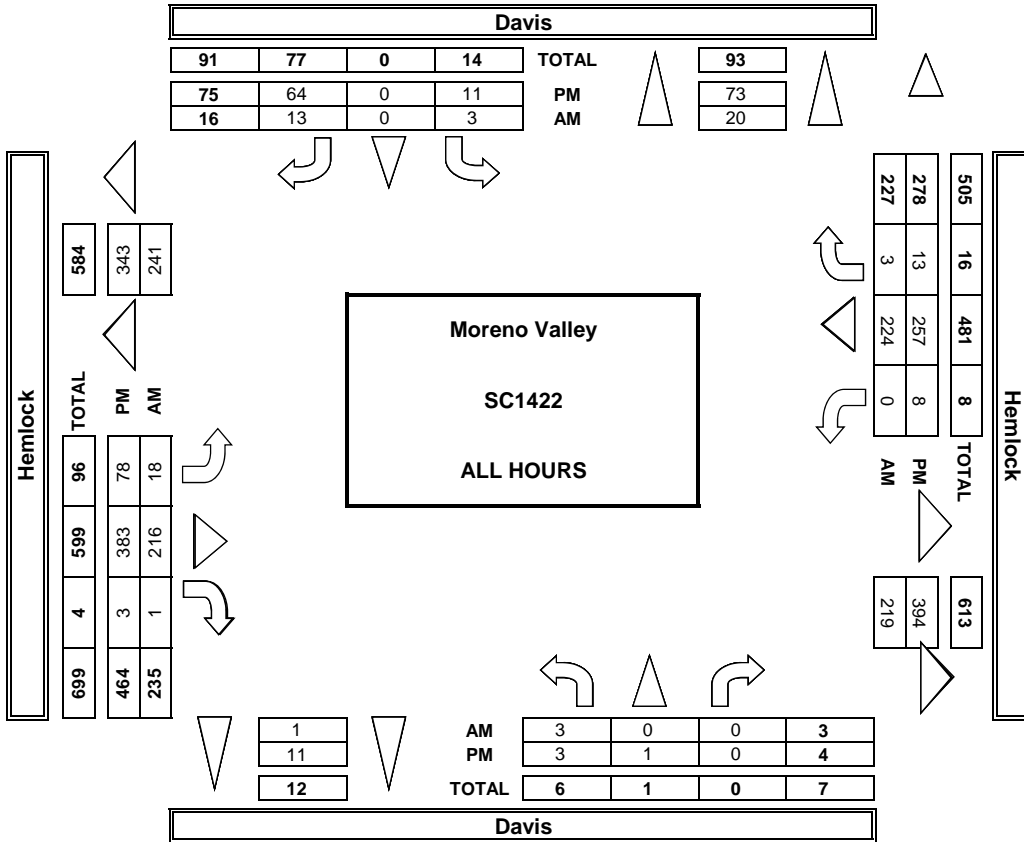


LANES:	NORTHBOUND Davis			SOUTHBOUND Davis			EASTBOUND Hemlock			WESTBOUND Hemlock			TOTAL	U-TURNS				
	NL 0	NT 1	NR 0	SL 0	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 1	WR 0		NB 0	SB 0	EB 0	WB 0	TTL

AM	7:00 AM	0	0	0	0	0	0	1	18	0	0	16	0	35	0	0	0	0	0
	7:15 AM	1	0	0	1	0	0	1	13	0	0	18	0	34	0	0	0	0	0
	7:30 AM	0	0	0	0	0	2	1	37	0	0	31	0	71	0	0	0	0	0
	7:45 AM	1	0	0	0	0	0	1	42	1	0	36	0	81	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	4	23	0	0	30	0	57	0	0	1	0	1
	8:15 AM	0	0	0	0	0	3	4	21	0	0	40	1	69	0	0	0	0	0
	8:30 AM	1	0	0	1	0	2	3	27	0	0	28	0	62	0	0	0	0	0
	8:45 AM	0	0	0	1	0	6	3	35	0	0	25	2	72	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	3	0	0	3	0	13	18	216	1	0	224	3	481	0	0	1	0	1	
APPROACH %	100%	0%	0%	19%	0%	81%	8%	92%	0%	0%	99%	1%							
APP/DEPART	3	/	20	16	/	1	235	/	219	227	/	241	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	1	0	0	0	0	5	10	123	1	0	137	1	278						
APPROACH %	100%	0%	0%	0%	0%	100%	7%	92%	1%	0%	99%	1%							
PEAK HR FACTOR	0.250			0.417			0.761			0.841			0.858						
APP/DEPART	1	/	10	5	/	1	134	/	123	138	/	144	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	1	0	10	9	50	0	2	24	1	97	0	0	1	0	1
	4:15 PM	0	0	0	3	0	9	9	49	0	1	34	0	105	0	0	2	0	2
	4:30 PM	0	0	0	1	0	7	6	48	1	1	33	1	98	0	0	2	0	2
	4:45 PM	0	1	0	0	0	10	15	55	0	2	41	1	125	0	0	2	0	2
	5:00 PM	1	0	0	2	0	8	12	48	2	0	30	3	106	0	0	6	0	6
	5:15 PM	2	0	0	2	0	4	7	30	0	0	27	2	74	0	0	5	0	5
	5:30 PM	0	0	0	1	0	6	9	52	0	1	28	2	99	0	0	0	0	0
	5:45 PM	0	0	0	1	0	10	11	51	0	1	40	3	117	0	0	1	0	1
VOLUMES	3	1	0	11	0	64	78	383	3	8	257	13	821	0	0	19	0	19	
APPROACH %	75%	25%	0%	15%	0%	85%	17%	83%	1%	3%	92%	5%							
APP/DEPART	4	/	73	75	/	11	464	/	394	278	/	343	0						
BEGIN PEAK HR	4:15 PM																		
VOLUMES	1	1	0	6	0	34	42	200	3	4	138	5	434						
APPROACH %	50%	50%	0%	15%	0%	85%	17%	82%	1%	3%	94%	3%							
PEAK HR FACTOR	0.500			0.833			0.875			0.835			0.868						
APP/DEPART	2	/	36	40	/	7	245	/	206	147	/	185	0						



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

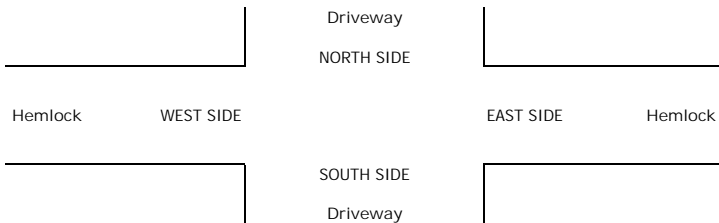
Moreno Valley
Driveway
Hemlock

PROJECT #: SC1422
LOCATION #: 8
CONTROL: STOP N

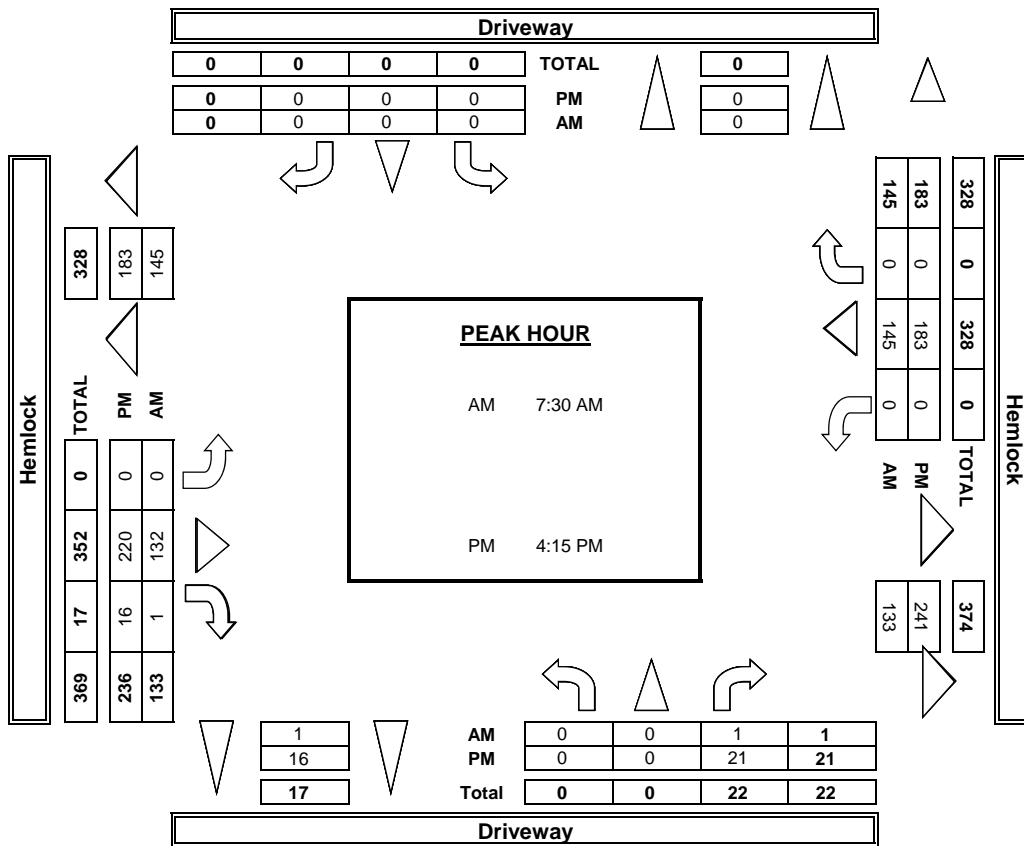
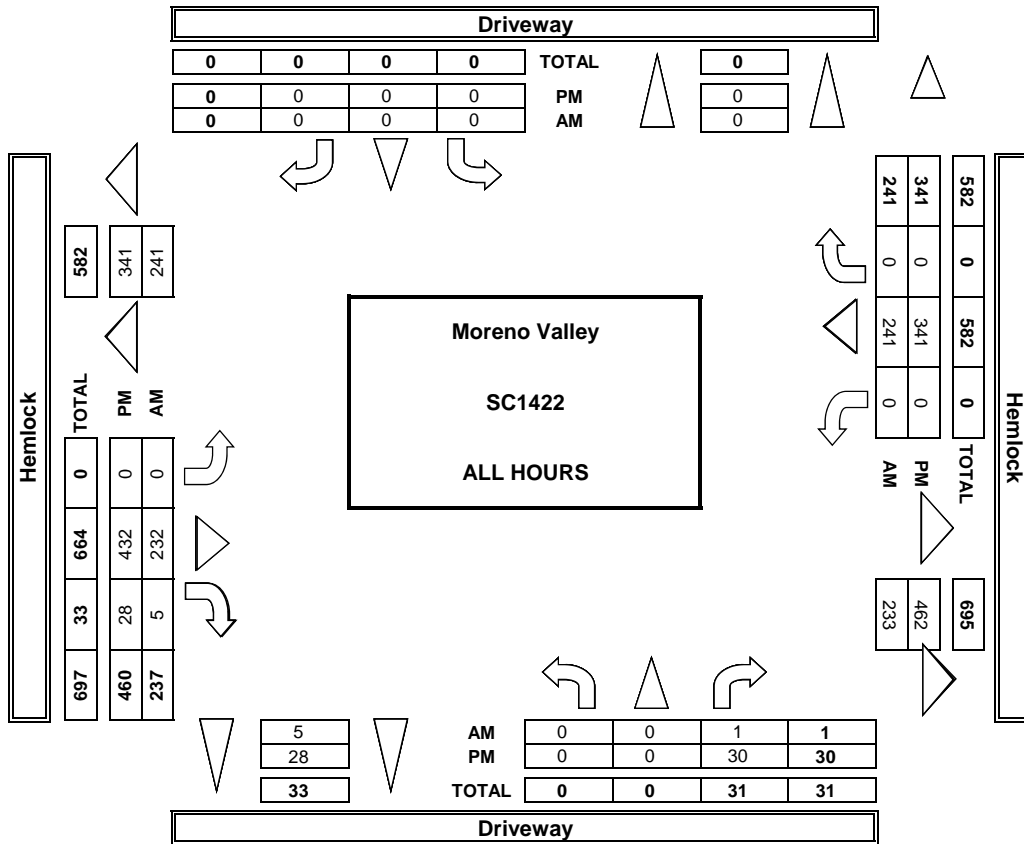
NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	E ▶
--------	----------------------------------	-----	------------	-----



	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS					
	Driveway			Driveway			Hemlock			Hemlock				NB	SB	EB	WB	TTL	
LANES:	NL X	NT X	NR 1	SL X	ST X	SR X	EL X	ET 2	ER 0	WL X	WT 3	WR X							
AM	7:00 AM	0	0	0	0	0	0	15	2	0	19	0	36	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	19	0	0	18	0	37	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	43	0	0	33	0	76	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	38	0	0	39	0	77	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	24	0	0	31	0	55	0	0	0	0	0	
	8:15 AM	0	0	1	0	0	0	27	1	0	42	0	71	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	29	0	0	32	0	61	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	37	2	0	27	0	66	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	VOLUMES	0	0	1	0	0	0	232	5	0	241	0	479	0	0	0	0	0	
	APPROACH %	0%	0%	100%	0%	0%	0%	98%	2%	0%	100%	0%		0	0	0	0	0	
	APP/DEPART	1	/	0	0	/	5	237	/	233	241	/	241	0					
	BEGIN PEAK HR	7:30 AM																	
	VOLUMES	0	0	1	0	0	0	132	1	0	145	0	279	0	0	0	0	0	
	APPROACH %	0%	0%	100%	0%	0%	0%	99%	1%	0%	100%	0%		0	0	0	0	0	
	PEAK HR FACTOR	0.250			0.000			0.773			0.863			0.906					
	APP/DEPART	1	/	0	0	/	1	133	/	133	145	/	145	0					
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	2	0	0	0	55	3	0	35	0	95	0	0	0	0	0	
	4:15 PM	0	0	3	0	0	0	58	6	0	45	0	112	0	0	0	0	0	
	4:30 PM	0	0	3	0	0	0	53	4	0	41	0	101	0	0	0	0	0	
	4:45 PM	0	0	6	0	0	0	53	2	0	50	0	111	0	0	0	0	0	
	5:00 PM	0	0	9	0	0	0	56	4	0	47	0	116	0	0	0	0	0	
	5:15 PM	0	0	4	0	0	0	38	4	0	37	0	83	0	0	0	0	0	
	5:30 PM	0	0	1	0	0	0	59	4	0	32	0	96	0	0	0	0	0	
	5:45 PM	0	0	2	0	0	0	60	1	0	54	0	117	0	0	0	0	0	
	VOLUMES	0	0	30	0	0	0	432	28	0	341	0	831	0	0	0	0	0	
	APPROACH %	0%	0%	100%	0%	0%	0%	94%	6%	0%	100%	0%		0	0	0	0	0	
	APP/DEPART	30	/	0	0	/	28	460	/	462	341	/	341	0					
	BEGIN PEAK HR	4:15 PM																	
	VOLUMES	0	0	21	0	0	0	220	16	0	183	0	440	0	0	0	0	0	
	APPROACH %	0%	0%	100%	0%	0%	0%	93%	7%	0%	100%	0%		0	0	0	0	0	
	PEAK HR FACTOR	0.583			0.000			0.922			0.915			0.948					
	APP/DEPART	21	/	0	0	/	16	236	/	241	183	/	183	0					



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

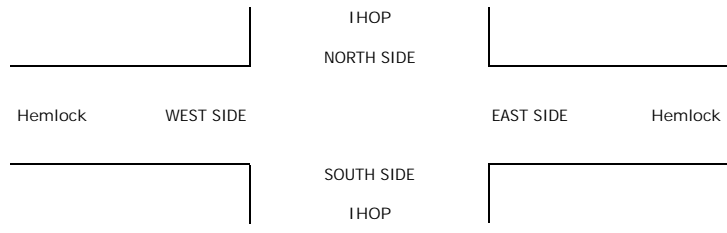
Moreno Valley
IHOP
Hemlock

PROJECT #: SC1422
LOCATION #: 9
CONTROL: STOP S

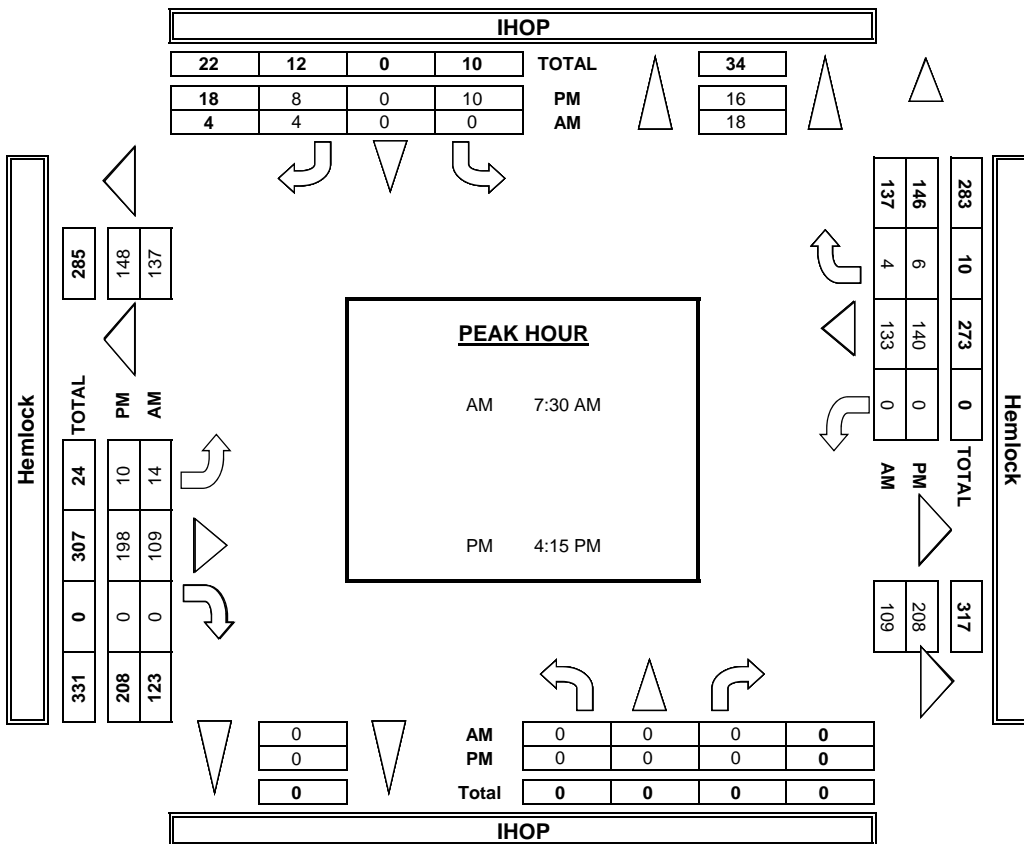
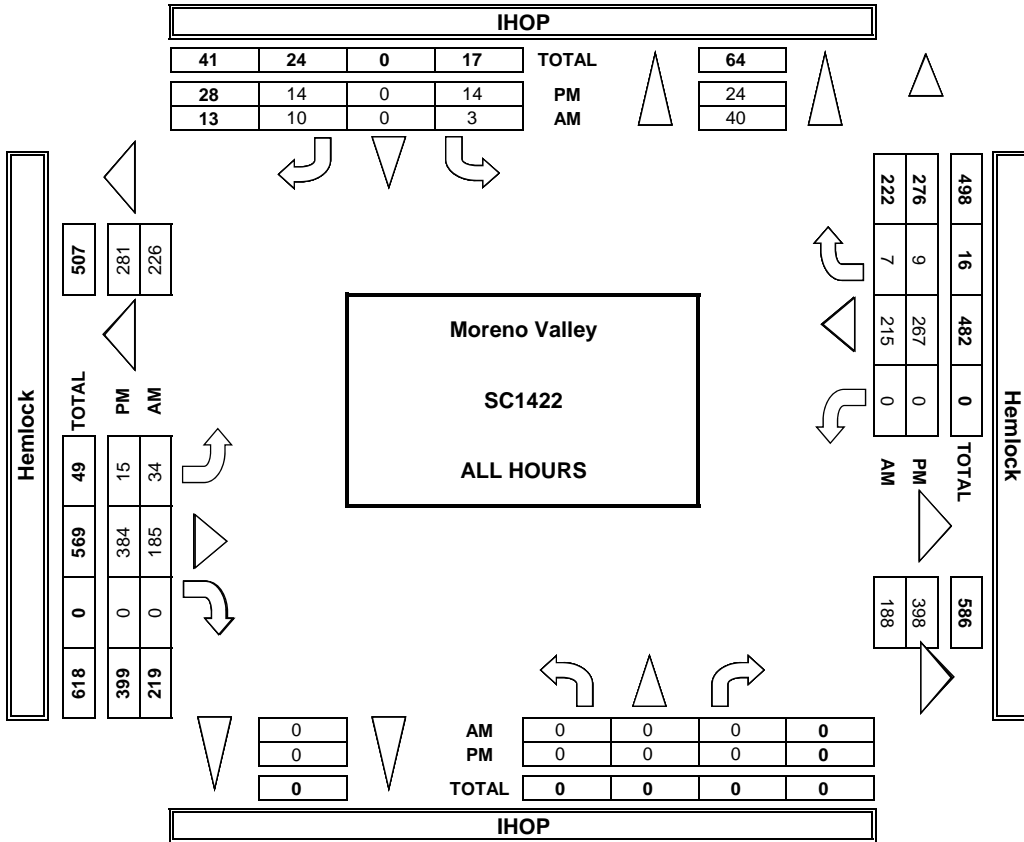
NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	E ▶
--------	----------------------------------	-----	------------	-----



	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS					
	IHOP			IHOP			Hemlock			Hemlock				NB	SB	EB	WB	TTL	
LANES:	NL X	NT X	NR X	SL 0	ST X	SR 0	EL 0	ET 1	ER X	WL X	WT 1	WR 0							
7:00 AM	0	0	0	1	0	1	2	16	0	0	15	1	36	0	0	0	0	0	
7:15 AM	0	0	0	2	0	0	0	14	0	0	18	1	35	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	1	36	0	0	31	0	68	0	0	0	0	0	
7:45 AM	0	0	0	0	0	2	6	36	0	0	34	1	79	0	0	0	0	0	
8:00 AM	0	0	0	0	0	1	5	18	0	0	29	1	54	0	0	0	0	0	
8:15 AM	0	0	0	0	0	1	2	19	0	0	39	2	63	0	0	0	0	0	
8:30 AM	0	0	0	0	0	4	7	21	0	0	24	0	56	0	0	0	0	0	
8:45 AM	0	0	0	0	0	1	11	25	0	0	25	1	63	0	0	1	0	1	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUMES	0	0	0	3	0	10	34	185	0	0	215	7	454	0	0	1	0	1	
APPROACH %	0%	0%	0%	23%	0%	77%	16%	84%	0%	0%	97%	3%							
APP/DEPART	0	/	40	13	/	0	219	/	188	222	/	226	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	0	0	0	0	0	4	14	109	0	0	133	4	264						
APPROACH %	0%	0%	0%	0%	0%	100%	11%	89%	0%	0%	97%	3%							
PEAK HR FACTOR	0.000			0.500			0.732			0.835			0.835						
APP/DEPART	0	/	18	4	/	0	123	/	109	137	/	137	0						
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	0	0	0	1	0	1	1	50	0	0	26	1	80	0	0	0	0	0	
4:15 PM	0	0	0	0	0	2	7	46	0	0	35	2	92	0	0	0	0	0	
4:30 PM	0	0	0	6	0	2	1	48	0	0	32	2	91	0	0	0	0	0	
4:45 PM	0	0	0	3	0	3	2	52	0	0	41	1	102	0	0	0	0	0	
5:00 PM	0	0	0	1	0	1	0	52	0	0	32	1	87	0	0	0	0	0	
5:15 PM	0	0	0	2	0	2	1	35	0	0	26	1	67	0	0	0	0	0	
5:30 PM	0	0	0	0	0	1	0	52	0	0	30	0	83	0	0	0	0	0	
5:45 PM	0	0	0	1	0	2	3	49	0	0	45	1	101	0	0	0	0	0	
VOLUMES	0	0	0	14	0	14	15	384	0	0	267	9	703	0	0	0	0	0	
APPROACH %	0%	0%	0%	50%	0%	50%	4%	96%	0%	0%	97%	3%							
APP/DEPART	0	/	24	28	/	0	399	/	398	276	/	281	0						
BEGIN PEAK HR	4:15 PM																		
VOLUMES	0	0	0	10	0	8	10	198	0	0	140	6	372						
APPROACH %	0%	0%	0%	56%	0%	44%	5%	95%	0%	0%	96%	4%							
PEAK HR FACTOR	0.000			0.563			0.963			0.869			0.912						
APP/DEPART	0	/	16	18	/	0	208	/	208	146	/	148	0						



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

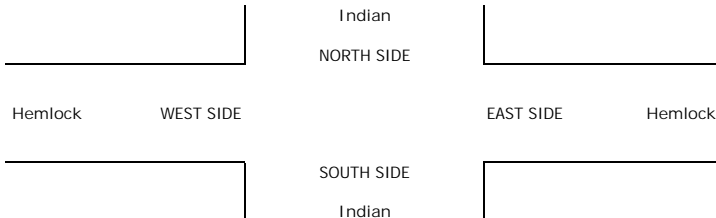
Moreno Valley
Indian
Hemlock

PROJECT #: SC1422
LOCATION #: 13
CONTROL: STOP S

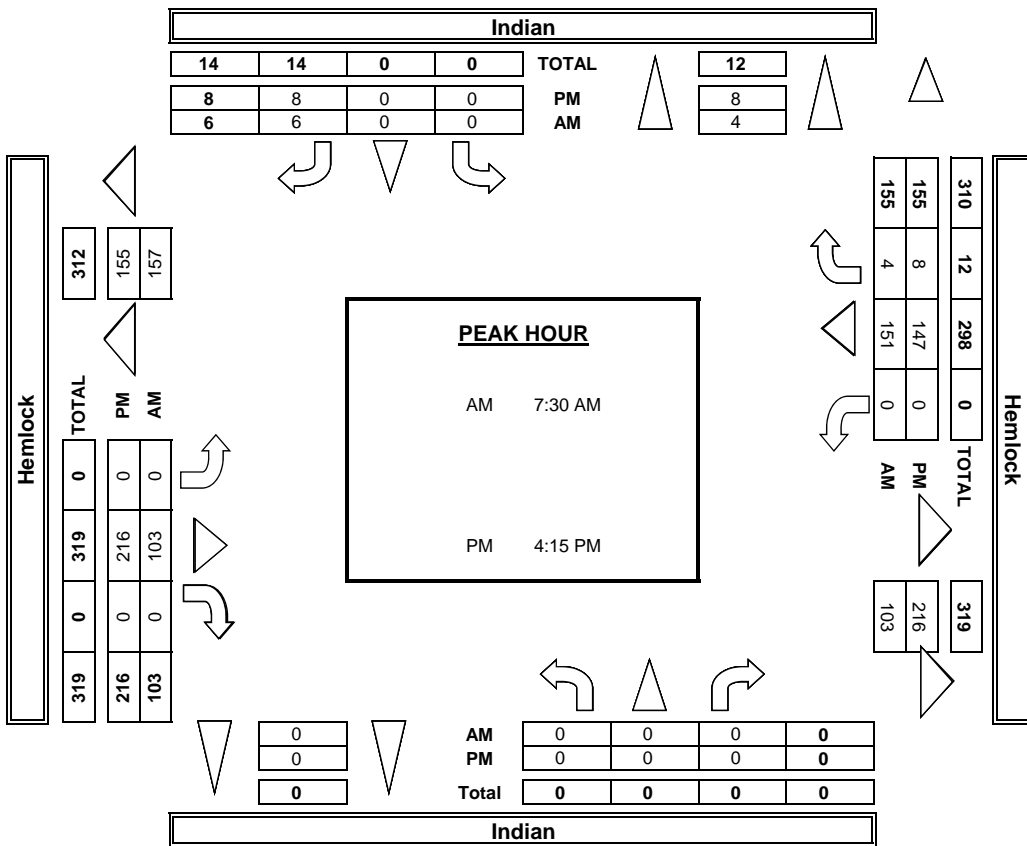
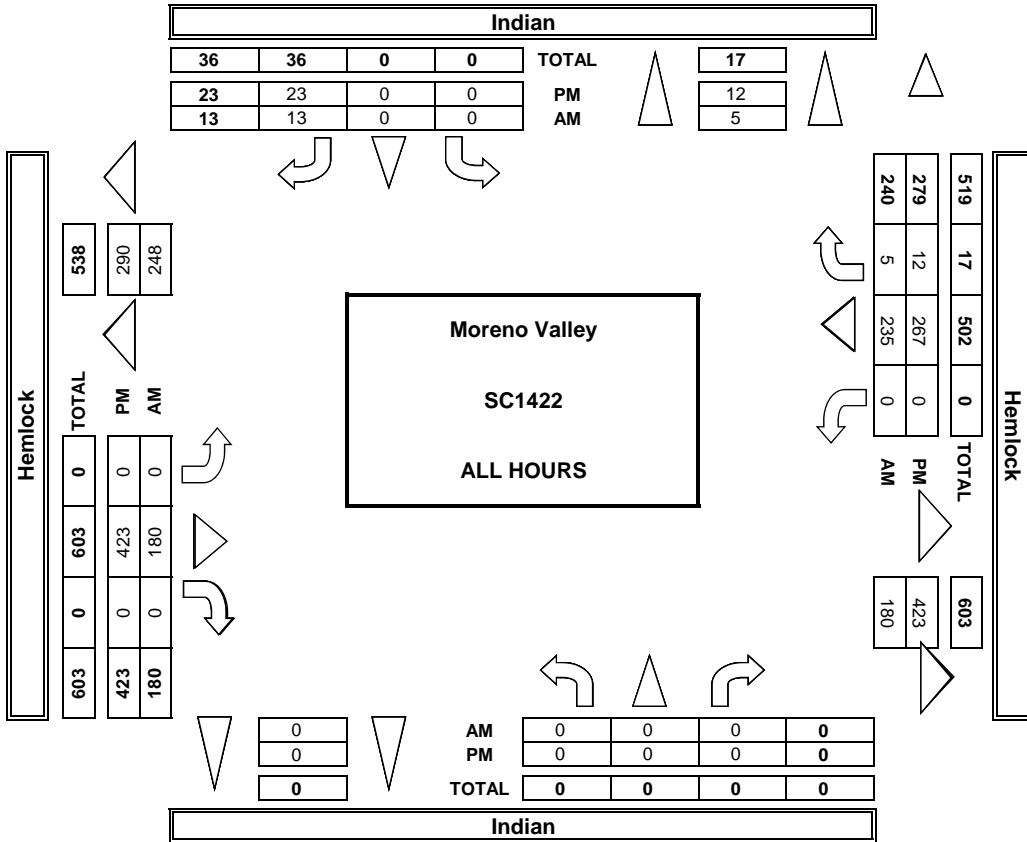
NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	E ▶
--------	----------------------------------	-----	------------	-----



	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS					
	NL X	NT X	NR X	SL X	ST X	SR 0	EL X	ET 1	ER X	WL X	WT 1	WR 0		NB	SB	EB	WB	TTL	
7:00 AM	0	0	0	0	0	2	0	16	0	0	15	0	33	0	0	0	0	0	
7:15 AM	0	0	0	0	0	1	0	15	0	0	17	1	34	0	0	0	0	0	
7:30 AM	0	0	0	0	0	4	0	34	0	0	31	1	70	0	0	0	0	0	
7:45 AM	0	0	0	0	0	1	0	34	0	0	39	2	76	0	0	0	0	0	
8:00 AM	0	0	0	0	0	1	0	18	0	0	35	1	55	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	17	0	0	46	0	63	0	0	0	0	0	
8:30 AM	0	0	0	0	0	2	0	21	0	0	26	0	49	0	0	0	0	0	
8:45 AM	0	0	0	0	0	2	0	25	0	0	26	0	53	0	0	0	0	0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUMES	0	0	0	0	0	13	0	180	0	0	235	5	433	0	0	0	0	0	
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	98%	2%							
APP/DEPART	0	/	5	13	/	0	180	/	180	240	/	248	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	0	0	0	0	0	6	0	103	0	0	151	4	264	0	0	0	0	0	
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	97%	3%							
PEAK HR FACTOR	0.000			0.375			0.757			0.842			0.868						
APP/DEPART	0	/	4	6	/	0	103	/	103	155	/	157	0						
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	0	0	0	0	0	1	0	48	0	0	30	1	80	0	0	0	0	0	
4:15 PM	0	0	0	0	0	4	0	50	0	0	30	4	88	0	0	0	0	0	
4:30 PM	0	0	0	0	0	1	0	55	0	0	37	3	96	0	0	0	0	0	
4:45 PM	0	0	0	0	0	3	0	52	0	0	37	1	93	0	0	0	0	0	
5:00 PM	0	0	0	0	0	0	0	59	0	0	43	0	102	0	0	0	0	0	
5:15 PM	0	0	0	0	0	3	0	44	0	0	26	0	73	0	0	0	0	0	
5:30 PM	0	0	0	0	0	4	0	54	0	0	28	2	88	0	0	0	0	0	
5:45 PM	0	0	0	0	0	7	0	61	0	0	36	1	105	0	0	0	0	0	
VOLUMES	0	0	0	0	0	23	0	423	0	0	267	12	725	0	0	0	0	0	
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	96%	4%							
APP/DEPART	0	/	12	23	/	0	423	/	423	279	/	290	0						
BEGIN PEAK HR	4:15 PM																		
VOLUMES	0	0	0	0	0	8	0	216	0	0	147	8	379	0	0	0	0	0	
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	95%	5%							
PEAK HR FACTOR	0.000			0.500			0.915			0.901			0.929						
APP/DEPART	0	/	8	8	/	0	216	/	216	155	/	155	0						



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

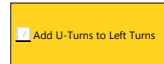
DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Moreno Valley
Davis
Ironwood

PROJECT #: SC1422
LOCATION #: 11
CONTROL: SIGNAL

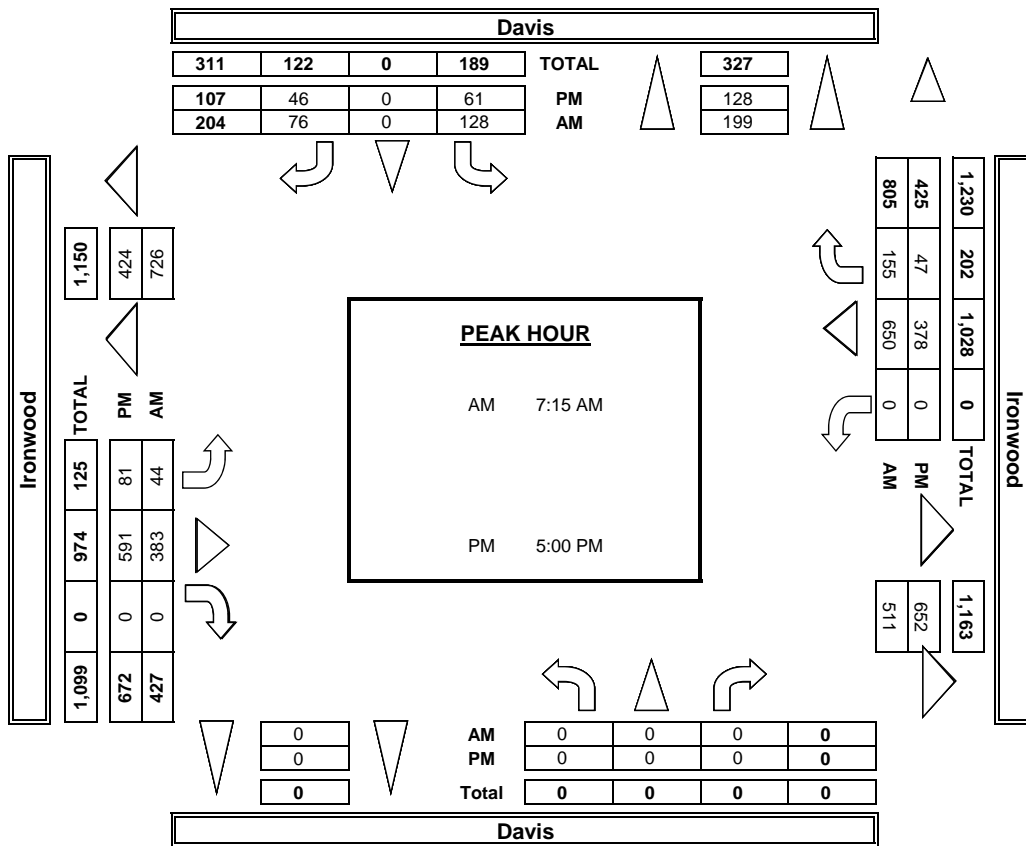
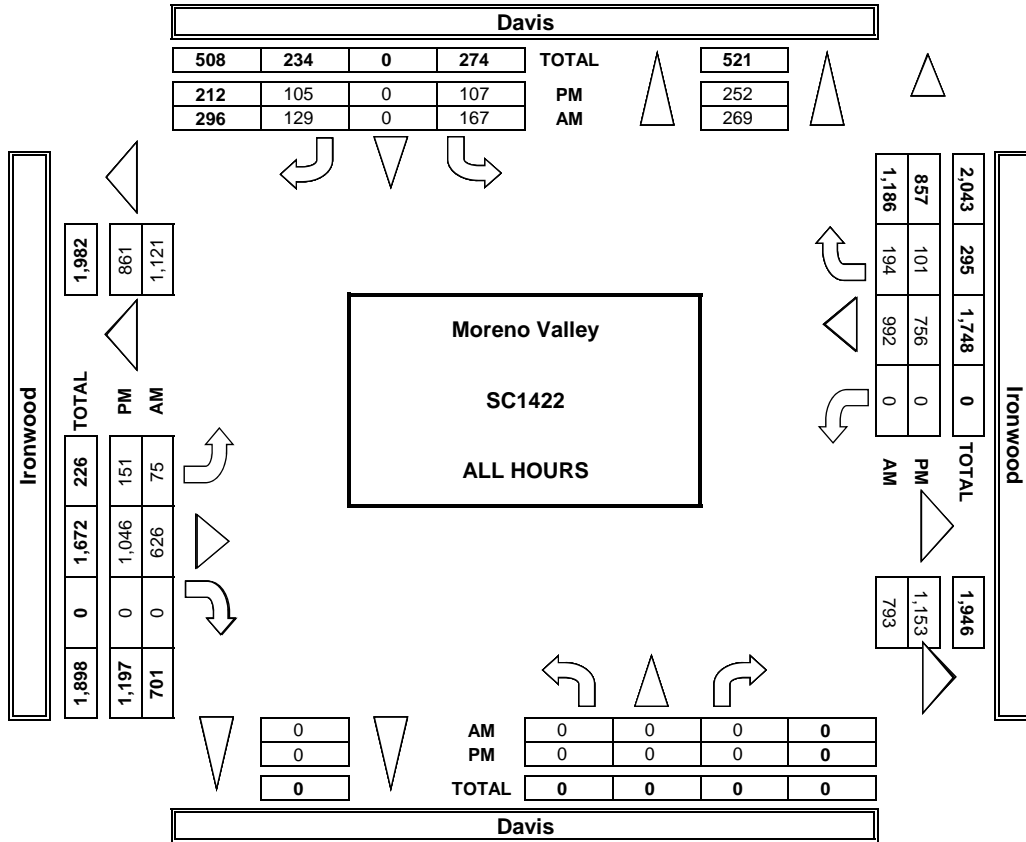
NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	E ▶
--------	----------------------------------	-----	------------	-----



	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS					
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		NB	SB	EB	WB	TTL	
LANES:	X	X	X	1	X	1	1	2	X	X	2	0							
AM	7:00 AM	0	0	0	15	0	13	15	54	0	0	104	21	222	0	0	0	0	0
	7:15 AM	0	0	0	38	0	18	11	96	0	0	140	31	334	0	0	0	0	0
	7:30 AM	0	0	0	29	0	17	14	116	0	0	155	58	389	0	0	0	0	0
	7:45 AM	0	0	0	34	0	21	9	91	0	0	213	44	412	0	0	0	0	0
	8:00 AM	0	0	0	27	0	20	10	80	0	0	142	22	301	0	0	0	0	0
	8:15 AM	0	0	0	12	0	13	3	51	0	0	96	5	180	0	0	0	0	0
	8:30 AM	0	0	0	6	0	10	4	68	0	0	78	5	171	0	0	0	0	0
	8:45 AM	0	0	0	6	0	17	9	70	0	0	64	8	174	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUMES	0	0	0	167	0	129	75	626	0	0	992	194	2,183	0	0	0	0	0	
APPROACH %	0%	0%	0%	56%	0%	44%	11%	89%	0%	0%	84%	16%							
APP/DEPART	0	/	269	296	/	0	701	/	793	1,186	/	1,121	0						
BEGIN PEAK HR	7:15 AM																		
VOLUMES	0	0	0	128	0	76	44	383	0	0	650	155	1,436						
APPROACH %	0%	0%	0%	63%	0%	37%	10%	90%	0%	0%	81%	19%							
PEAK HR FACTOR	0.000			0.911			0.821			0.783			0.871						
APP/DEPART	0	/	199	204	/	0	427	/	511	805	/	726	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	0	13	0	14	14	111	0	0	91	8	251	0	0	0	0	0
	4:15 PM	0	0	0	10	0	20	16	124	0	0	106	14	290	0	0	0	0	0
	4:30 PM	0	0	0	16	0	13	17	93	0	0	75	15	229	0	0	0	0	0
	4:45 PM	0	0	0	7	0	12	23	127	0	0	106	17	292	0	0	0	0	0
	5:00 PM	0	0	0	10	0	14	14	150	0	0	105	7	300	0	0	0	0	0
	5:15 PM	0	0	0	17	0	10	24	114	0	0	78	13	256	0	0	0	0	0
	5:30 PM	0	0	0	24	0	12	23	163	0	0	110	13	345	0	0	0	0	0
5:45 PM	0	0	0	10	0	10	20	164	0	0	85	14	303	0	0	0	0	0	
VOLUMES	0	0	0	107	0	105	151	1,046	0	0	756	101	2,266	0	0	0	0	0	
APPROACH %	0%	0%	0%	50%	0%	50%	13%	87%	0%	0%	88%	12%							
APP/DEPART	0	/	252	212	/	0	1,197	/	1,153	857	/	861	0						
BEGIN PEAK HR	5:00 PM																		
VOLUMES	0	0	0	61	0	46	81	591	0	0	378	47	1,204						
APPROACH %	0%	0%	0%	57%	0%	43%	12%	88%	0%	0%	89%	11%							
PEAK HR FACTOR	0.000			0.743			0.903			0.864			0.872						
APP/DEPART	0	/	128	107	/	0	672	/	652	425	/	424	0						



AimTD LLC
TURNING MOVEMENT COUNTS



Moreno Valley
SC1422
ALL HOURS

PEAK HOUR

AM 7:15 AM

PM 5:00 PM

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Moreno Valley
Indian
Ironwood

PROJECT #: SC1422
LOCATION #: 12
CONTROL: SIGNAL

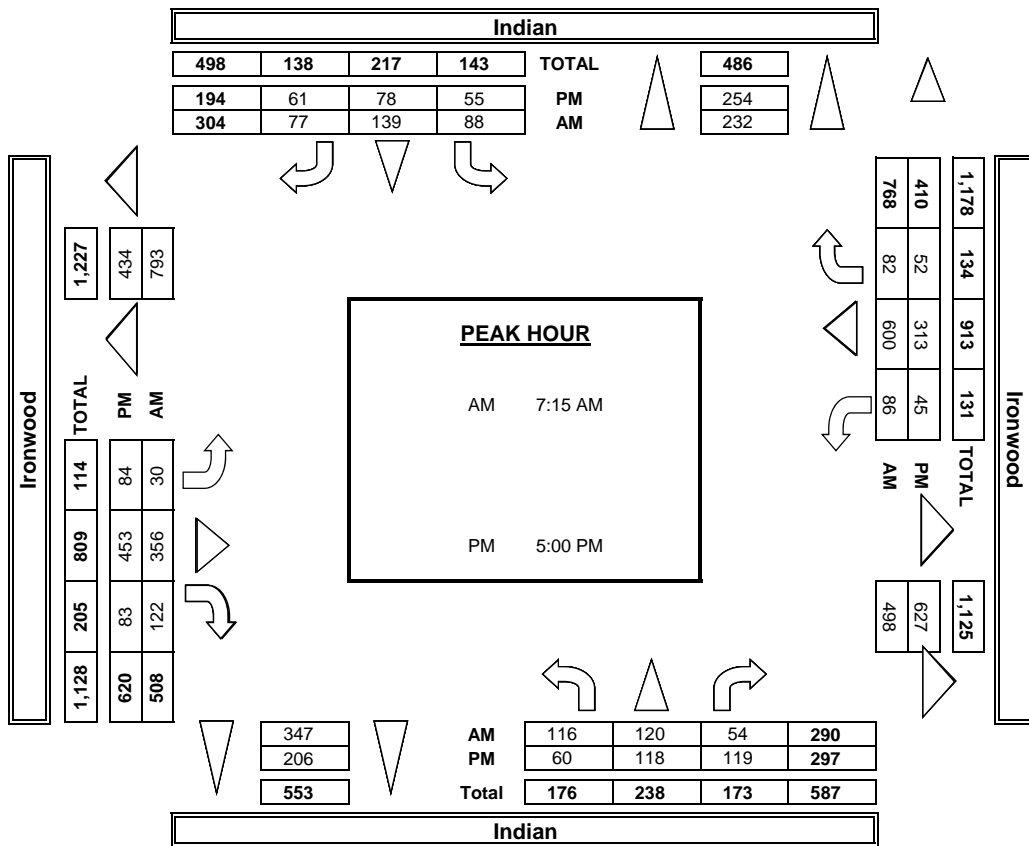
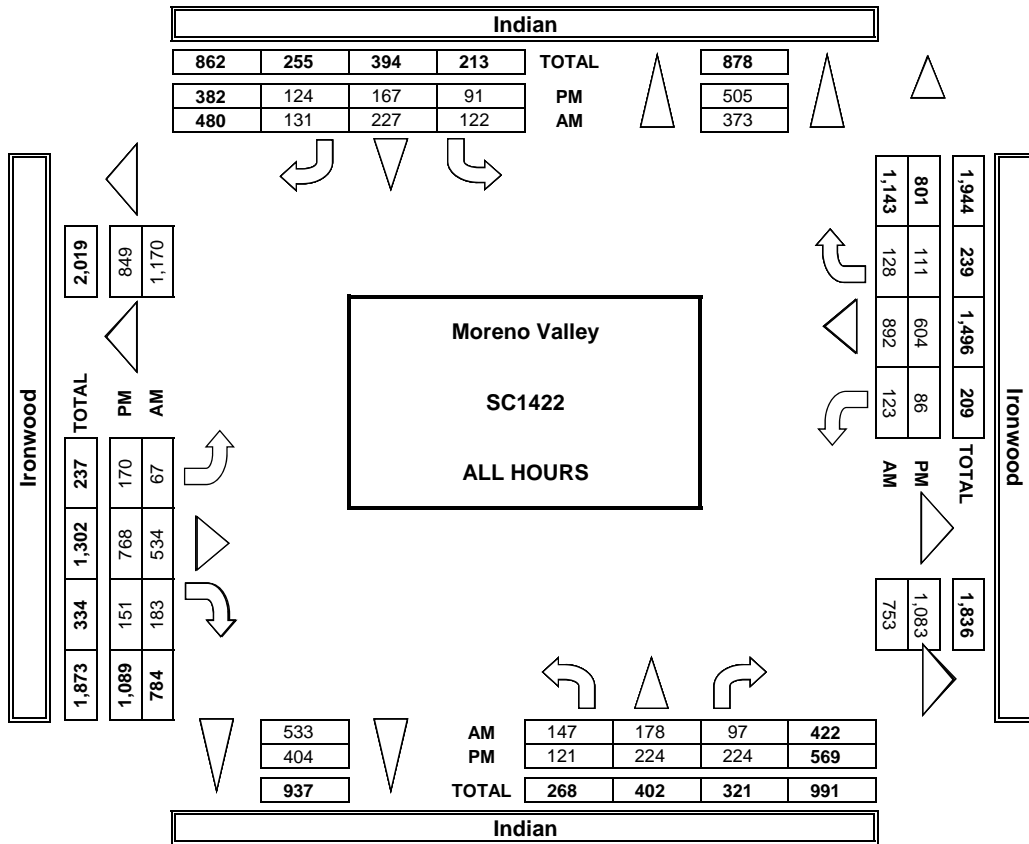
NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	E ▶
--------	----------------------------------	-----	------------	-----



	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0		NB 0	SB 0	EB 0	WB 0	TTL
7:00 AM	9	18	16	9	19	15	3	52	11	9	95	13	269	0	0	0	0	0
7:15 AM	29	33	13	25	25	23	5	101	20	11	105	12	402	0	0	0	0	0
7:30 AM	37	21	18	27	49	18	9	105	31	19	151	30	515	0	0	0	0	0
7:45 AM	28	34	12	23	39	21	3	86	36	43	211	27	563	0	0	0	0	0
8:00 AM	22	32	11	13	26	15	13	64	35	13	133	13	390	0	0	0	0	0
8:15 AM	10	13	12	8	30	13	6	43	22	5	78	9	249	0	0	0	0	0
8:30 AM	6	7	6	8	18	15	8	50	14	6	60	7	205	0	0	0	0	0
8:45 AM	6	20	9	9	21	11	20	33	14	17	59	17	236	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	147	178	97	122	227	131	67	534	183	123	892	128	2,829	0	0	0	0	0
APPROACH %	35%	42%	23%	25%	47%	27%	9%	68%	23%	11%	78%	11%						
APP/DEPART	422	/	373	480	/	533	784	/	753	1,143	/	1,170	0					
BEGIN PEAK HR	7:15 AM																	
VOLUMES	116	120	54	88	139	77	30	356	122	86	600	82	1,870					
APPROACH %	40%	41%	19%	29%	46%	25%	6%	70%	24%	11%	78%	11%						
PEAK HR FACTOR	0.954			0.809			0.876			0.683			0.830					
APP/DEPART	290	/	232	304	/	347	508	/	498	768	/	793	0					
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	14	31	20	9	22	11	18	73	16	12	68	14	308	0	0	0	0	0
4:15 PM	20	23	21	10	22	18	21	92	21	8	80	13	349	0	0	0	0	0
4:30 PM	12	24	27	7	18	14	27	62	16	13	59	12	291	0	0	0	0	0
4:45 PM	15	28	37	10	27	20	20	88	15	8	84	20	372	0	0	0	0	0
5:00 PM	19	33	31	19	22	15	20	97	24	12	79	13	384	0	0	0	0	0
5:15 PM	16	34	34	11	15	14	18	98	17	6	63	17	343	0	0	0	0	0
5:30 PM	14	23	30	10	21	18	27	128	22	11	95	10	409	0	0	0	0	0
5:45 PM	11	28	24	15	20	14	19	130	20	16	76	12	385	0	0	0	0	0
VOLUMES	121	224	224	91	167	124	170	768	151	86	604	111	2,841	0	0	0	0	0
APPROACH %	21%	39%	39%	24%	44%	32%	16%	71%	14%	11%	75%	14%						
APP/DEPART	569	/	505	382	/	404	1,089	/	1,083	801	/	849	0					
BEGIN PEAK HR	5:00 PM																	
VOLUMES	60	118	119	55	78	61	84	453	83	45	313	52	1,521					
APPROACH %	20%	40%	40%	28%	40%	31%	14%	73%	13%	11%	76%	13%						
PEAK HR FACTOR	0.884			0.866			0.876			0.884			0.930					
APP/DEPART	297	/	254	194	/	206	620	/	627	410	/	434	0					



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

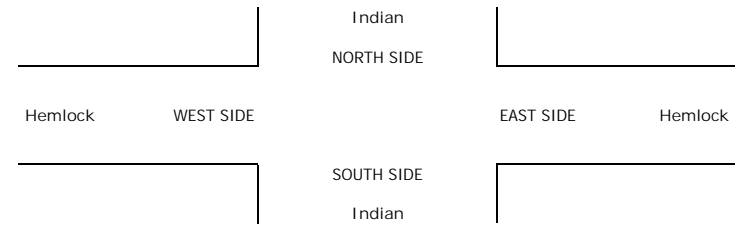
Moreno Valley
Indian
Hemlock

PROJECT #: SC1422
LOCATION #: 13
CONTROL: SIGNAL

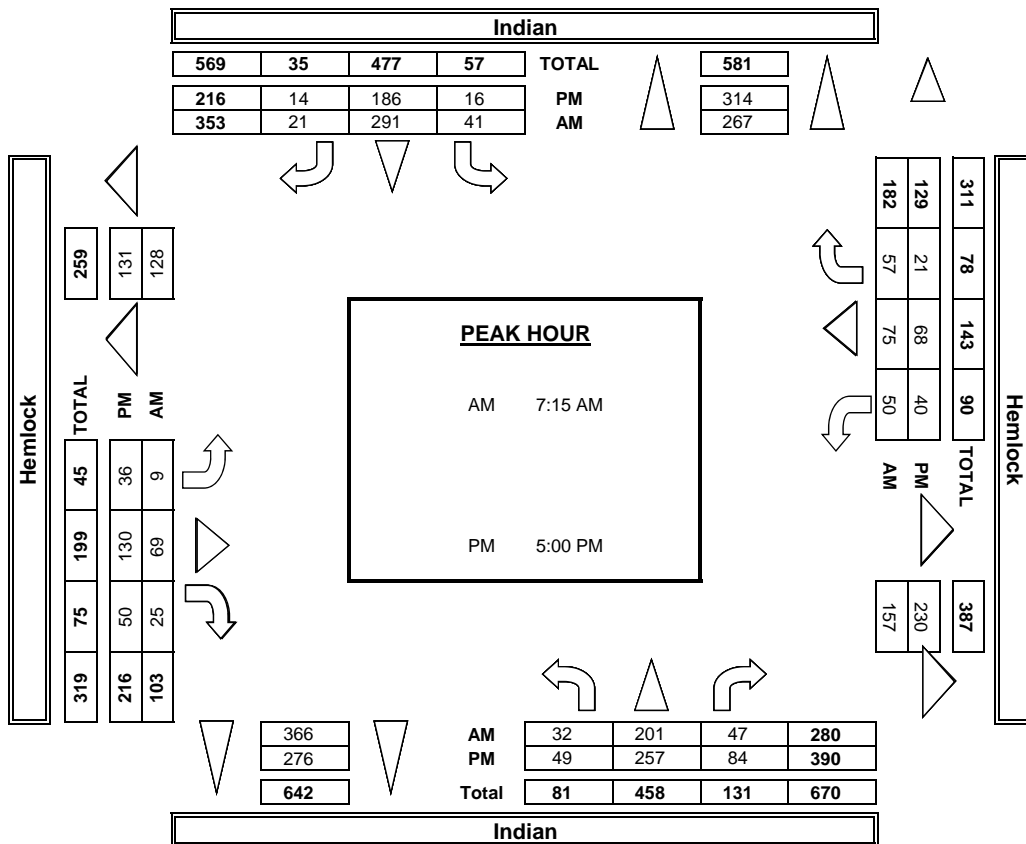
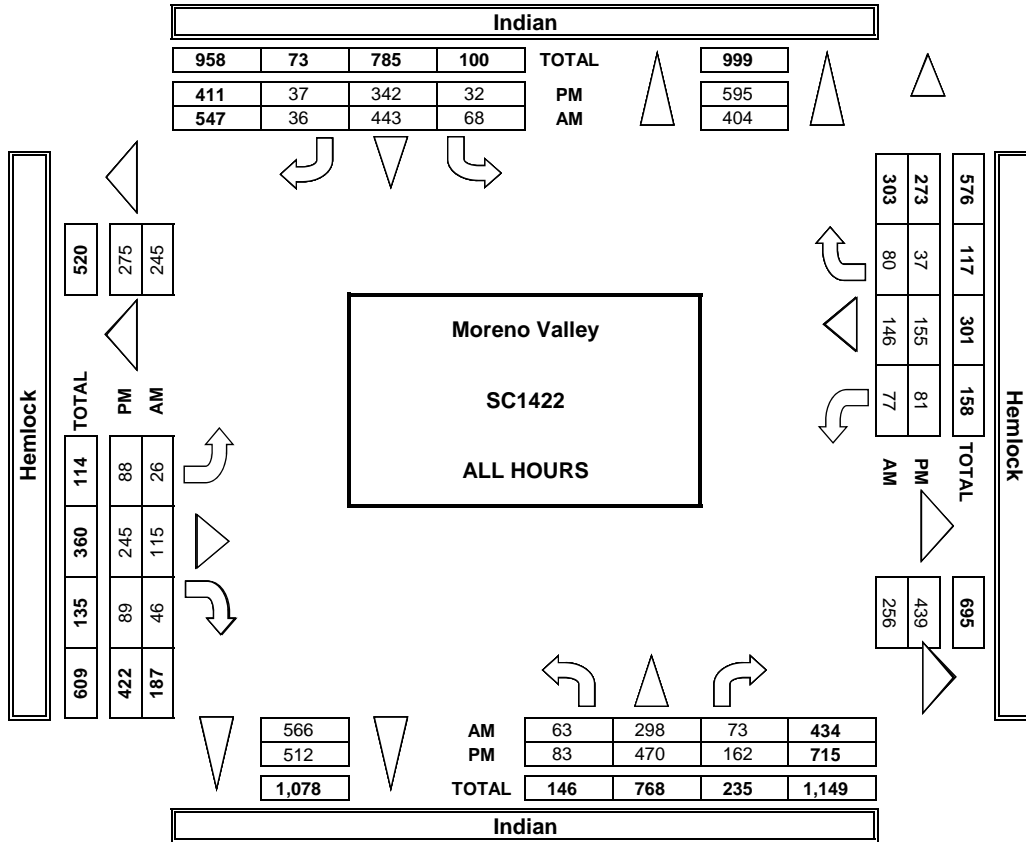
NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	E ▶
--------	----------------------------------	-----	------------	-----



	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS						
	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0		NB 0	SB 0	EB 0	WB 0	TTL		
AM	7:00 AM	6	31	9	5	27	2	1	10	6	7	11	14	129	0	0	0	0	0	
	7:15 AM	4	43	7	8	53	4	1	13	1	11	8	17	170	0	0	0	0	0	
	7:30 AM	13	50	14	2	93	2	4	24	8	8	16	18	252	0	0	0	0	0	
	7:45 AM	8	57	13	15	99	5	2	22	10	18	29	10	288	0	0	0	0	0	
	8:00 AM	7	51	13	16	46	10	2	10	6	13	22	12	208	0	0	0	0	0	
	8:15 AM	9	27	6	11	49	7	4	11	2	10	30	2	168	0	0	0	0	0	
	8:30 AM	6	12	5	8	29	2	6	13	4	4	18	2	109	0	0	0	0	0	
	8:45 AM	10	27	6	3	47	4	6	12	9	6	12	5	147	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	VOLUMES	63	298	73	68	443	36	26	115	46	77	146	80	1,471	0	0	0	0	0	
	APPROACH %	15%	69%	17%	12%	81%	7%	14%	61%	25%	25%	48%	26%							
	APP/DEPART	434	/	404	547	/	566	187	/	256	303	/	245	0						
	BEGIN PEAK HR	7:15 AM																		
	VOLUMES	32	201	47	41	291	21	9	69	25	50	75	57	918						
	APPROACH %	11%	72%	17%	12%	82%	6%	9%	67%	24%	27%	41%	31%							
	PEAK HR FACTOR	0.897			0.742			0.715			0.798			0.797						
	APP/DEPART	280	/	267	353	/	366	103	/	157	182	/	128	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	8	45	22	6	43	1	12	25	10	7	23	4	206	0	0	0	0	0	
	4:15 PM	6	57	17	4	35	9	8	30	6	13	21	7	213	0	0	0	0	0	
	4:30 PM	9	43	21	3	40	3	17	29	13	10	23	1	212	0	0	0	0	0	
	4:45 PM	11	68	18	3	38	10	15	31	10	11	20	4	239	0	0	0	0	0	
	5:00 PM	13	64	17	5	53	5	13	31	12	12	19	2	246	0	0	0	0	0	
	5:15 PM	11	77	23	2	34	1	5	27	11	7	16	7	221	0	0	0	0	0	
	5:30 PM	12	65	17	6	50	4	7	34	12	7	13	6	233	0	0	0	0	0	
	5:45 PM	13	51	27	3	49	4	11	38	15	14	20	6	251	0	0	0	0	0	
	VOLUMES	83	470	162	32	342	37	88	245	89	81	155	37	1,821	0	0	0	0	0	
	APPROACH %	12%	66%	23%	8%	83%	9%	21%	58%	21%	30%	57%	14%							
	APP/DEPART	715	/	595	411	/	512	422	/	439	273	/	275	0						
	BEGIN PEAK HR	5:00 PM																		
	VOLUMES	49	257	84	16	186	14	36	130	50	40	68	21	951						
	APPROACH %	13%	66%	22%	7%	86%	6%	17%	60%	23%	31%	53%	16%							
	PEAK HR FACTOR	0.878			0.857			0.844			0.806			0.947						
	APP/DEPART	390	/	314	216	/	276	216	/	230	129	/	131	0						



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Aug 16, 17

LOCATION:
NORTH & SOUTH:
EAST & WEST:

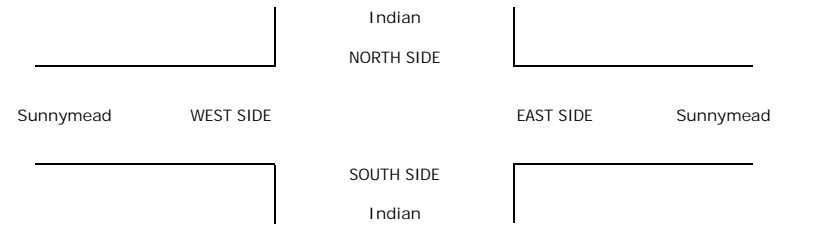
Moreno Valley
Indian
Sunnymead

PROJECT #: SC1422
LOCATION #: 14
CONTROL: SIGNAL

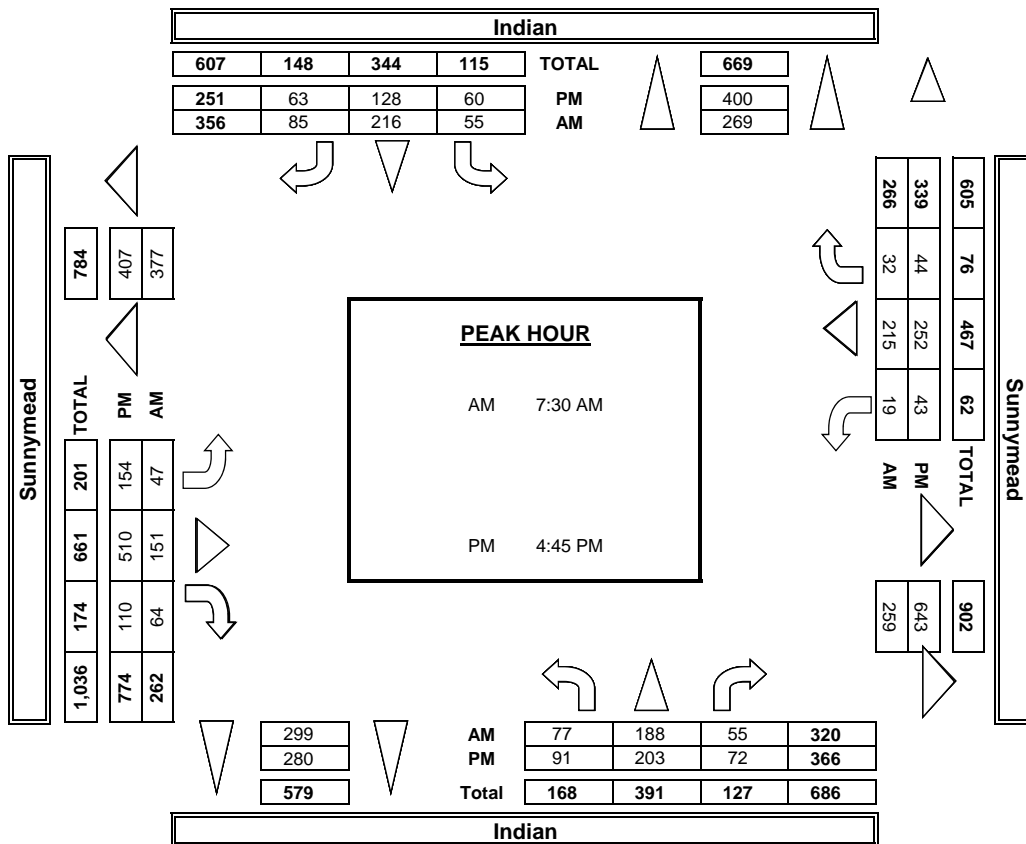
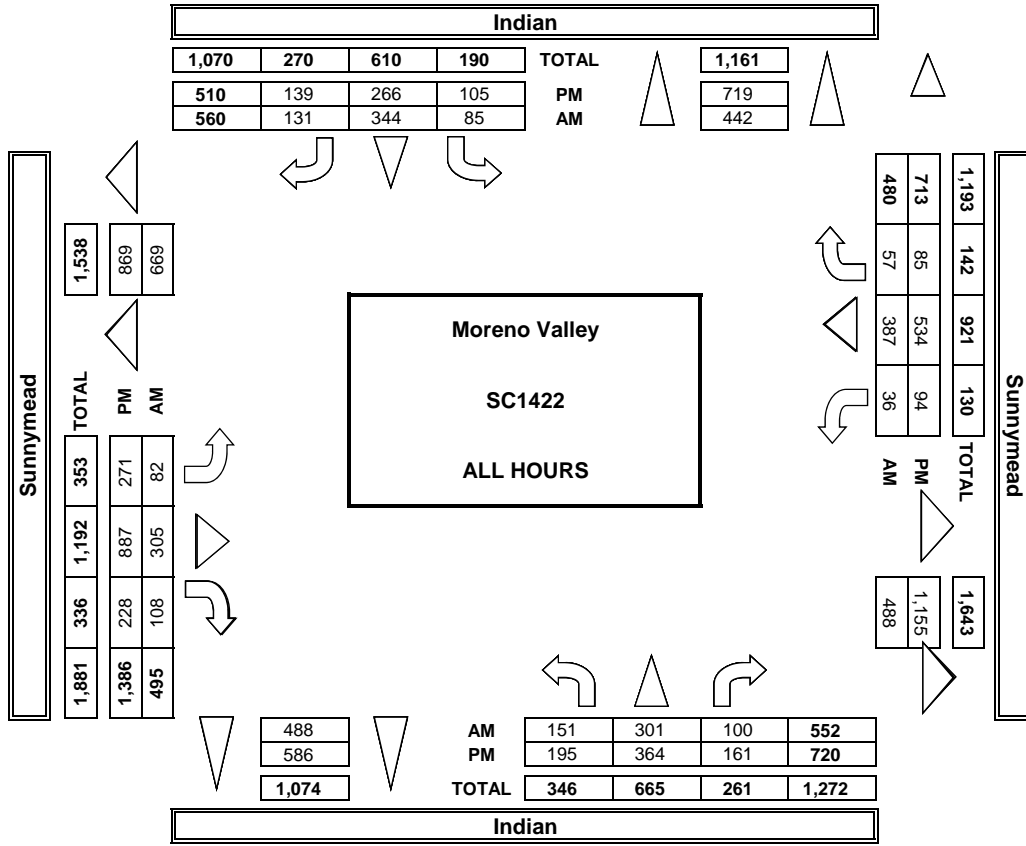
NOTES: <div style="text-align: center; color: blue; font-weight: bold;">N-leg construction</div>	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼	<input checked="" type="checkbox"/> Add U-Turns to Left Turns
---	----------------------------------	-------------------------------	---

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0		NB	SB	EB	WB	TTL

AM	7:00 AM	11	35	5	3	29	7	7	17	8	4	19	7	152	0	0	0	0	0	
	7:15 AM	15	43	10	8	45	12	7	24	7	2	32	4	209	0	0	0	0	0	
	7:30 AM	18	61	10	23	71	19	10	29	14	3	52	5	315	0	0	0	0	0	
	7:45 AM	18	61	14	15	77	30	10	36	15	1	52	10	339	0	0	0	0	0	
	8:00 AM	28	48	19	6	37	19	16	46	21	10	54	6	310	0	0	0	0	0	
	8:15 AM	13	18	12	11	31	17	11	40	14	5	57	11	240	0	2	0	0	2	
	8:30 AM	24	14	18	9	22	6	9	58	18	8	47	6	239	0	0	0	0	0	
	8:45 AM	24	21	12	10	32	21	12	55	11	3	74	8	283	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUMES	151	301	100	85	344	131	82	305	108	36	387	57	2,087	0	2	0	0	2		
APPROACH %	27%	55%	18%	15%	61%	23%	17%	62%	22%	8%	81%	12%								
APP/DEPART	552	/	442	560	/	488	495	/	488	480	/	669	0							
BEGIN PEAK HR	7:30 AM																			
VOLUMES	77	188	55	55	216	85	47	151	64	19	215	32	1,204							
APPROACH %	24%	59%	17%	15%	61%	24%	18%	58%	24%	7%	81%	12%								
PEAK HR FACTOR	0.842			0.730						0.789						0.911				
APP/DEPART	320	/	269	356	/	299	262	/	259	266	/	377	0							
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	31	46	18	7	29	23	22	85	22	13	69	9	374	0	0	0	0	0	
	4:15 PM	29	40	20	10	29	16	27	95	31	8	66	12	383	0	0	0	0	0	
	4:30 PM	24	37	27	8	36	20	28	87	37	16	81	9	410	0	0	0	1	1	
	4:45 PM	23	54	21	13	33	11	39	131	22	13	64	11	435	0	0	0	0	0	
	5:00 PM	25	48	15	21	40	17	36	142	26	6	59	17	452	0	0	0	0	0	
	5:15 PM	21	53	20	12	17	20	35	115	31	14	67	7	412	0	0	0	1	1	
	5:30 PM	22	48	16	14	38	15	44	122	31	10	62	9	431	0	0	1	0	1	
	5:45 PM	20	38	24	20	44	17	40	110	28	14	66	11	432	0	0	0	0	0	
VOLUMES	195	364	161	105	266	139	271	887	228	94	534	85	3,329	0	0	1	2	3		
APPROACH %	27%	51%	22%	21%	52%	27%	20%	64%	16%	13%	75%	12%								
APP/DEPART	720	/	719	510	/	586	1,386	/	1,155	713	/	869	0							
BEGIN PEAK HR	4:45 PM																			
VOLUMES	91	203	72	60	128	63	154	510	110	43	252	44	1,730							
APPROACH %	25%	55%	20%	24%	51%	25%	20%	66%	14%	13%	74%	13%								
PEAK HR FACTOR	0.934			0.804						0.949						0.963				
APP/DEPART	366	/	400	251	/	280	774	/	643	339	/	407	0							



AimTD LLC
TURNING MOVEMENT COUNTS



24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS1 Heacock between Ironwood and Hemlock

AM TIME	NORTHBOUND													TOTAL	PM Time	NORTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	48	2	0	1	0	0	0	0	0	0	0	0	51	12:00	1	146	21	1	6	3	0	0	0	0	0	178		
0:15	1	35	5	0	0	1	0	0	0	0	0	0	0	42	12:15	1	132	29	1	11	1	1	0	0	0	1	177		
0:30	0	28	1	0	1	0	0	0	0	0	0	0	0	30	12:30	0	142	19	0	8	5	0	0	0	0	0	174		
0:45	0	33	2	0	0	0	0	0	0	0	0	0	0	35	12:45	3	150	25	0	4	0	1	1	0	0	0	184		
1:00	0	30	3	0	1	0	0	0	0	0	0	0	0	34	13:00	4	152	17	0	5	2	1	0	0	0	0	181		
1:15	0	25	3	0	0	0	0	0	0	0	0	0	0	28	13:15	7	124	18	1	7	3	0	0	2	0	0	162		
1:30	0	21	2	0	1	0	0	0	0	0	0	0	0	24	13:30	4	139	26	1	8	5	0	0	0	1	0	184		
1:45	0	24	4	0	0	0	0	0	0	0	0	0	0	28	13:45	1	161	18	0	15	2	1	0	0	0	0	198		
2:00	0	12	2	0	0	0	0	0	0	0	0	0	0	14	14:00	4	152	23	0	8	4	0	0	0	1	1	1	194	
2:15	0	23	0	0	0	0	0	0	0	0	0	0	0	23	14:15	2	150	24	0	7	5	1	0	1	1	0	0	191	
2:30	0	14	1	0	0	0	0	0	0	0	0	0	0	15	14:30	2	160	27	0	7	3	1	0	0	0	0	0	200	
2:45	0	24	2	0	0	0	0	0	0	0	0	0	0	26	14:45	3	149	30	0	5	2	0	0	0	1	0	1	192	
3:00	0	10	3	0	1	0	0	0	0	0	0	0	0	14	15:00	1	189	33	0	8	4	0	0	1	0	0	1	237	
3:15	0	13	1	0	1	0	0	0	0	0	0	0	0	15	15:15	1	172	27	0	3	7	1	0	1	0	0	1	213	
3:30	0	16	4	0	0	0	0	0	0	0	0	0	0	20	15:30	1	173	17	1	10	8	0	0	0	0	0	0	210	
3:45	0	20	3	0	0	0	0	0	0	0	0	0	0	23	15:45	3	149	28	0	8	4	0	0	0	0	0	0	192	
4:00	0	19	2	0	2	0	0	0	0	1	0	0	0	24	16:00	3	193	31	0	7	3	0	0	0	0	0	0	237	
4:15	0	14	6	0	0	0	0	0	0	0	0	0	0	20	16:15	2	175	25	0	11	3	1	0	1	0	0	0	218	
4:30	0	23	6	0	2	0	0	0	0	0	0	0	0	31	16:30	4	203	28	0	6	3	1	0	0	0	0	0	245	
4:45	0	25	7	0	1	0	0	0	0	0	0	0	0	33	16:45	4	186	33	0	9	4	1	0	0	1	1	0	239	
5:00	0	40	2	0	1	0	0	1	0	0	0	0	0	44	17:00	6	210	33	2	9	9	0	0	0	1	0	0	270	
5:15	0	33	6	0	0	0	0	0	0	0	0	0	0	39	17:15	3	200	31	0	11	2	0	1	1	0	0	0	249	
5:30	0	30	5	0	2	0	0	0	1	0	0	0	0	38	17:30	6	196	22	0	10	3	1	0	1	0	0	1	241	
5:45	0	33	5	0	5	1	0	0	0	0	0	0	0	44	17:45	3	189	20	0	5	2	2	0	0	0	0	0	221	
6:00	0	64	9	0	1	0	0	0	0	0	0	0	0	74	18:00	7	159	23	0	5	4	0	0	0	0	0	1	0	199
6:15	4	63	10	0	4	0	0	0	0	0	0	0	0	81	18:15	7	169	27	0	6	5	0	0	0	0	1	0	0	215
6:30	0	83	13	0	6	1	1	0	0	0	0	0	0	105	18:30	0	148	23	0	3	4	0	0	0	0	0	1	0	179
6:45	2	77	15	0	2	0	1	0	0	0	0	0	0	97	18:45	3	146	18	0	6	10	1	0	0	0	0	1	0	185
7:00	1	109	12	0	3	2	3	0	0	0	0	0	1	131	19:00	3	160	16	0	8	3	1	1	0	0	0	0	0	192
7:15	2	112	17	0	5	5	1	0	0	0	0	0	0	142	19:15	4	147	20	0	5	5	1	0	0	0	1	0	0	183
7:30	1	129	22	0	5	3	0	0	0	0	0	0	0	160	19:30	0	125	12	0	5	3	1	0	0	0	0	0	0	146
7:45	2	123	22	1	4	1	0	0	0	0	0	0	0	153	19:45	1	160	15	0	6	2	0	0	0	0	0	2	0	186
8:00	2	132	19	0	6	1	0	0	0	0	0	1	0	161	20:00	6	128	22	0	4	3	0	0	0	0	0	0	0	163
8:15	2	121	16	0	9	3	0	0	0	0	1	1	0	153	20:15	2	123	16	0	4	1	1	0	0	0	0	0	0	147
8:30	0	117	17	0	6	0	0	0	0	0	0	1	0	141	20:30	2	128	15	0	3	1	0	0	0	0	0	0	0	149
8:45	0	111	17	0	6	3	0	0	0	0	0	0	0	137	20:45	0	128	11	0	5	1	0	1	0	0	0	0	0	146
9:00	0	94	20	0	8	2	1	0	0	0	0	0	0	125	21:00	3	96	13	0	0	4	0	0	0	0	0	0	0	116
9:15	0	93	19	1	4	2	3	0	0	0	0	0	0	122	21:15	1	122	10	0	2	3	0	0	0	0	0	0	0	138
9:30	0	98	18	0	4	1	0	0	0	0	1	0	0	122	21:30	2	99	13	0	3	2	0	0	0	0	0	0	0	119
9:45	3	100	14	0	3	2	0	0	0	0	1	0	0	123	21:45	0	89	7	0	4	1	0	0	0	0	0	0	0	101
10:00	2	119	7	1	2	1	0	0	0	0	0	0	0	132	22:00	1	78	10	0	3	1	0	0	0	0	0	0	0	93
10:15	2	87	18	1	5	3	1	0	0	1	0	0	0	118	22:15	1	82	9	0	0	2	0	0	0	0	0	0	0	94
10:30	2	118	16	1	1	2	1	0	1	0	0	0	0	142	22:30	2	67	12	0	0	1	0	0	0	0	0	0	0	82
10:45	1	91	17	0	4	0	0	0	0	0	0	0	0	113	22:45	1	71	1	0	0	0	0	0	0	0	0	0	0	73
11:00	4	122	23	0	6	2	1	0	1	0	1	0	0	160	23:00	4	66	4	0	3	1	0	0	0	0	0	0	0	78
11:15	1	131	14	0	5	2	0	1	0	0	0	1	0	155	23:15	0	53	1	0	2	1	0	0	0	0	0	0	0	57
11:30	3	139	15	1	6	6	0	0	0	0	0	0	0	170	23:30	0	58	5	0	0	0	0	0	0	0	0	0	0	63
11:45	2	110	21	0	6	3	1	0	1	0	0	0	0	144	23:45	0	47	2	0	0	0	0	0	0	0	0	0	0	49
TOTAL	37	3,136	468	6	130	47	14	2	5	1	4	4	2	3,856	TOTAL	119	6,641	910	7	265	145	18	4	8	5	5	11	2	8,140

AM PEAK HOUR 11:00 AM
AM PEAK VOLUME 629

PM PEAK HOUR 4:30 PM
PM PEAK VOLUME 1,003

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	156	9,777	1,378	13	395	192	32	6	13	6	9	15	4	11,996
% OF TOTAL	1.3%	81.5%	11.5%	0.1%	3.3%	1.6%	0.3%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
-------	---	---	---	---	---	---	---	---	---	----	----	----	----	--

TOTAL: ALL	318	19,409	2,696	25	710	366	66	10	35	9	16	32	9	23,701
% OF TOTAL	2.7%	161.8%	22.5%	0.2%	5.9%	3.1%	0.6%	0.1%	0.3%	0.1%	0.3%	0.1%	0.3%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS1 Heacock between Ironwood and Hemlock

AM TIME	SOUTHBOUND													TOTAL	PM Time	SOUTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	24	1	0	0	0	0	0	0	0	0	0	0	25	12:00	3	107	18	1	2	2	0	0	1	0	0	0	134	
0:15	0	30	2	0	0	0	0	0	0	0	0	0	0	32	12:15	4	152	15	1	13	6	1	0	1	0	0	1	194	
0:30	0	14	4	0	0	0	0	0	0	0	0	0	0	18	12:30	2	142	14	0	6	3	1	0	0	0	0	0	168	
0:45	0	19	3	0	1	0	0	0	0	0	0	0	0	23	12:45	1	108	17	0	2	3	2	0	0	0	0	0	133	
1:00	0	15	0	0	1	0	0	0	0	0	0	0	0	16	13:00	4	152	15	0	5	3	2	0	0	0	0	0	181	
1:15	0	11	1	0	1	0	0	0	0	0	0	0	0	13	13:15	0	152	22	2	6	2	0	1	0	0	2	0	187	
1:30	0	15	0	0	0	0	0	0	0	0	0	0	0	15	13:30	0	127	11	0	5	6	4	0	1	1	0	0	156	
1:45	0	17	0	0	0	0	0	0	0	0	0	0	0	17	13:45	1	132	18	0	12	4	0	0	1	0	0	0	168	
2:00	0	10	2	0	0	0	0	0	0	0	0	0	0	12	14:00	6	111	23	0	6	4	0	0	0	0	0	0	150	
2:15	0	17	1	0	0	0	0	0	0	1	0	0	0	19	14:15	3	149	19	0	8	1	2	0	0	0	1	1	0	184
2:30	0	14	2	0	0	0	0	0	0	0	0	0	0	16	14:30	5	137	22	0	5	5	2	0	0	0	0	1	0	177
2:45	0	9	1	0	2	0	0	0	0	0	0	0	0	12	14:45	0	129	19	0	10	2	1	0	0	0	0	1	0	162
3:00	0	32	3	0	0	0	0	0	0	0	0	0	0	35	15:00	1	154	20	0	2	0	0	1	0	0	0	1	0	179
3:15	1	26	4	0	0	1	0	0	0	0	0	0	0	32	15:15	3	147	12	0	7	3	0	0	0	0	0	0	172	
3:30	0	46	6	0	0	0	0	0	0	0	0	0	0	52	15:30	5	126	19	0	2	4	0	0	0	0	0	2	0	158
3:45	1	50	8	0	2	1	0	0	0	0	0	0	0	62	15:45	2	131	12	0	4	5	0	0	0	0	0	0	1	155
4:00	0	48	16	0	6	0	0	0	0	0	0	0	0	70	16:00	2	148	19	0	5	0	0	0	0	0	1	0	0	175
4:15	0	77	19	0	7	2	0	0	0	1	0	0	0	106	16:15	3	156	19	0	6	1	0	0	0	0	0	0	0	185
4:30	1	89	16	0	4	0	0	0	0	0	0	0	0	110	16:30	2	158	18	0	2	5	2	0	0	1	0	0	0	188
4:45	2	76	28	0	4	0	0	0	0	0	0	0	0	110	16:45	10	151	18	0	7	5	0	0	1	0	0	0	0	192
5:00	0	93	14	0	3	1	0	0	0	0	0	0	0	111	17:00	3	145	20	0	2	3	0	0	0	0	0	0	0	173
5:15	0	97	21	0	3	1	0	0	0	0	0	0	0	122	17:15	3	155	20	0	1	5	1	0	0	0	1	1	0	187
5:30	0	88	31	0	8	1	0	0	0	0	0	0	0	128	17:30	6	149	22	0	3	0	1	0	0	0	0	0	1	182
5:45	0	81	18	0	3	0	0	0	0	0	0	0	0	102	17:45	4	156	9	0	7	3	0	0	0	0	0	1	0	180
6:00	0	89	14	0	2	1	0	0	0	0	0	0	0	106	18:00	5	173	14	0	4	3	0	0	1	0	0	0	0	200
6:15	3	89	17	0	1	0	0	0	0	1	0	0	1	112	18:15	2	147	12	0	1	2	0	0	1	0	0	0	0	165
6:30	0	116	22	0	2	1	0	0	0	0	0	0	0	141	18:30	2	144	25	0	4	0	0	0	0	1	0	0	0	176
6:45	2	112	18	0	5	4	1	0	0	0	0	0	0	142	18:45	3	162	15	0	3	4	0	0	0	0	0	0	0	187
7:00	2	125	22	1	4	1	3	0	1	0	0	0	0	159	19:00	5	132	19	0	1	3	0	0	0	0	0	0	0	160
7:15	6	164	13	0	2	5	1	0	0	0	0	0	0	191	19:15	3	101	21	0	5	2	1	0	1	0	0	0	0	134
7:30	4	170	19	0	2	3	0	0	0	0	0	0	0	198	19:30	1	119	14	0	3	3	0	0	0	0	1	0	0	141
7:45	3	171	21	1	5	4	0	0	0	0	0	2	0	207	19:45	0	106	15	0	1	2	0	0	0	0	0	0	0	124
8:00	3	175	21	0	4	5	3	0	0	0	0	0	1	212	20:00	0	104	15	0	3	1	1	0	0	0	0	0	0	124
8:15	8	161	18	1	7	3	1	0	1	0	0	0	0	200	20:15	0	93	17	0	2	1	0	0	0	0	0	0	0	113
8:30	4	151	24	0	16	5	0	0	0	0	0	0	0	200	20:30	0	100	13	0	2	0	0	0	0	0	0	1	0	116
8:45	2	142	15	1	3	5	1	0	0	0	0	0	0	169	20:45	0	87	5	0	2	0	0	0	0	0	0	1	0	95
9:00	2	105	16	0	4	2	0	0	1	0	1	0	0	131	21:00	1	74	14	0	1	1	1	0	0	0	0	0	0	92
9:15	0	137	17	1	7	0	1	0	0	0	0	0	0	163	21:15	0	85	10	0	1	1	0	0	1	0	0	0	0	98
9:30	0	131	14	0	8	3	0	0	0	0	1	0	0	157	21:30	1	77	10	0	0	2	0	0	1	0	0	0	0	91
9:45	7	130	17	0	3	2	0	0	0	0	0	1	0	160	21:45	0	68	8	0	0	0	0	0	0	0	0	0	0	76
10:00	1	119	16	0	3	5	0	0	0	0	0	0	0	144	22:00	0	60	3	0	1	1	0	0	0	0	0	0	0	65
10:15	3	122	14	0	3	3	0	0	0	0	0	0	0	145	22:15	0	57	6	1	2	1	0	0	0	0	0	0	0	67
10:30	0	133	23	1	3	3	1	2	1	0	0	0	0	167	22:30	0	45	5	0	1	0	0	0	1	0	0	0	0	52
10:45	2	138	21	0	4	0	0	0	0	0	0	0	0	165	22:45	1	49	9	0	1	0	0	0	0	0	0	0	0	60
11:00	3	118	14	0	3	3	0	0	1	0	0	0	0	142	23:00	0	39	3	0	0	1	0	0	0	0	0	0	0	43
11:15	0	119	11	1	4	2	0	0	0	0	1	0	1	139	23:15	0	20	2	0	2	0	0	0	1	0	0	0	0	25
11:30	0	124	23	0	3	2	0	0	0	0	0	0	0	152	23:30	0	28	2	0	1	0	0	0	0	0	0	0	0	31
11:45	5	116	28	0	3	2	0	0	1	0	0	0	0	155	23:45	0	33	1	0	0	0	0	0	1	0	0	0	0	35
TOTAL	65	4,155	639	7	146	71	12	2	9	0	3	4	2	5,115	TOTAL	97	5,477	679	5	169	103	22	2	13	3	4	13	3	6,590
AM PEAK HOUR														7:45 AM	PM PEAK HOUR														5:15 PM
AM PEAK VOLUME														819	PM PEAK VOLUME														749

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	162	9,632	1,318	12	315	174	34	4	22	3	7	17	5	11,705
% OF TOTAL	1.4%	82.3%	11.3%	0.1%	2.7%	1.5%	0.3%	0.0%	0.2%	0.0%	0.1%	0.1%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
-------	---	---	---	---	---	---	---	---	---	----	----	----	----

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS2 Heacock between Hemlock and SR-60 WB Ramps

AM TIME	NORTHBOUND													TOTAL	PM Time	NORTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	1	50	4	0	2	0	0	0	0	0	0	0	0	57	12:00	15	148	20	1	10	5	0	2	1	0	0	1	203	
0:15	1	39	3	0	0	0	0	0	0	0	0	0	0	43	12:15	1	138	22	1	8	4	1	0	0	3	1	1	181	
0:30	0	38	1	0	2	0	0	0	0	0	0	0	0	41	12:30	9	140	14	3	11	8	0	0	1	0	1	2	1	190
0:45	0	40	3	0	0	0	0	0	0	0	0	0	0	43	12:45	4	142	19	0	6	3	3	1	1	0	0	2	2	183
1:00	0	36	1	0	3	0	0	0	0	0	0	0	0	40	13:00	3	151	21	0	6	2	2	0	0	2	0	0	2	189
1:15	0	23	3	0	0	1	1	0	0	0	0	0	0	28	13:15	9	140	21	2	7	5	3	2	1	0	0	1	1	192
1:30	0	25	2	0	1	0	0	0	0	0	0	0	0	28	13:30	5	167	34	0	11	3	0	0	0	2	1	1	0	224
1:45	0	27	4	0	0	0	0	0	0	0	0	0	0	31	13:45	8	163	21	0	9	9	1	0	1	1	1	0	1	215
2:00	0	16	2	0	0	0	0	0	0	0	0	0	0	18	14:00	8	149	21	2	8	5	1	0	1	1	1	1	1	199
2:15	0	24	1	0	0	1	0	0	0	0	0	0	0	26	14:15	8	147	24	0	11	4	1	3	0	0	1	0	2	201
2:30	0	18	2	0	0	0	0	0	0	0	0	0	0	20	14:30	5	165	21	2	7	7	0	1	0	0	0	2	2	212
2:45	0	28	2	0	0	0	0	0	0	0	0	0	0	30	14:45	4	157	26	0	3	5	3	1	1	0	0	1	2	203
3:00	0	14	4	0	2	0	0	0	0	0	0	0	0	20	15:00	2	189	30	1	11	7	2	1	3	0	1	2	1	250
3:15	0	16	1	0	1	0	0	0	0	0	0	0	0	18	15:15	3	200	27	0	7	4	1	0	1	0	0	0	2	245
3:30	0	17	4	0	0	0	0	0	0	0	0	0	0	21	15:30	2	192	27	2	9	2	3	0	0	0	0	2	3	242
3:45	0	25	3	0	1	0	0	0	0	0	0	0	0	29	15:45	10	153	23	0	6	6	0	0	0	0	1	2	0	201
4:00	0	27	4	0	5	0	0	0	0	1	0	0	0	37	16:00	8	206	25	0	4	5	1	0	2	0	1	0	2	254
4:15	0	16	5	0	1	0	0	0	0	0	0	0	0	22	16:15	8	224	24	1	17	0	1	1	2	1	1	0	0	280
4:30	0	31	9	0	1	0	0	0	0	0	0	0	0	41	16:30	5	247	24	1	9	7	1	0	1	0	0	2	1	298
4:45	0	32	5	0	10	1	0	0	0	0	0	0	0	48	16:45	4	228	21	1	7	1	0	1	2	1	1	1	2	270
5:00	0	43	3	0	2	1	0	1	1	0	0	0	0	51	17:00	5	249	26	0	7	6	5	2	1	0	0	3	4	308
5:15	2	35	8	0	1	1	0	0	0	0	0	0	0	47	17:15	6	236	23	0	12	6	0	2	1	0	2	1	4	293
5:30	0	34	2	0	4	0	0	0	2	0	0	0	0	42	17:30	8	246	20	1	13	8	0	2	0	0	2	1	4	305
5:45	0	38	5	0	6	1	0	0	0	0	0	0	0	50	17:45	12	232	19	0	10	3	2	0	0	0	1	0	3	282
6:00	2	56	10	0	2	0	0	0	1	0	0	1	0	72	18:00	0	167	19	0	5	4	0	2	0	0	1	2	2	202
6:15	4	64	14	0	4	1	0	0	0	0	0	0	0	87	18:15	3	170	19	0	5	8	6	0	0	0	2	2	1	216
6:30	1	89	15	1	6	4	0	1	0	0	0	0	0	118	18:30	1	166	17	1	5	2	1	0	0	0	0	1	1	195
6:45	2	80	15	0	5	2	0	0	0	0	0	0	1	105	18:45	3	164	17	0	8	8	1	0	1	0	0	2	1	205
7:00	5	136	12	2	9	6	3	0	0	0	0	0	1	174	19:00	0	192	19	0	8	8	0	0	0	1	0	0	1	229
7:15	4	133	21	0	5	3	1	0	0	0	0	0	0	167	19:15	8	160	22	0	8	6	0	0	0	1	0	1	1	207
7:30	5	154	20	0	5	2	1	0	0	0	0	2	3	192	19:30	6	147	15	1	7	7	1	1	0	0	0	0	0	185
7:45	0	152	22	1	4	2	2	0	0	0	0	0	0	183	19:45	0	153	14	0	7	4	0	0	0	0	0	0	1	179
8:00	2	138	20	0	5	4	2	0	1	0	0	0	0	172	20:00	3	136	21	0	5	5	2	1	1	0	1	1	0	176
8:15	3	136	12	0	8	1	2	0	1	0	0	0	1	164	20:15	1	153	20	0	4	0	0	0	0	0	0	0	0	178
8:30	2	134	15	0	7	6	1	0	0	0	0	0	0	165	20:30	2	138	17	0	5	1	1	0	0	1	0	1	0	166
8:45	1	137	17	0	10	1	2	0	0	1	0	0	0	169	20:45	1	145	18	0	9	6	1	1	0	0	0	0	0	181
9:00	0	132	23	2	10	4	2	0	0	0	0	1	0	174	21:00	2	121	16	0	4	2	0	1	0	0	0	0	0	146
9:15	5	109	19	1	6	3	2	0	1	0	1	0	1	148	21:15	2	148	15	0	3	2	0	0	0	0	0	0	0	170
9:30	6	115	17	1	6	7	0	0	0	2	0	0	0	154	21:30	1	117	12	1	4	1	1	0	0	0	0	1	0	138
9:45	2	132	15	1	7	3	3	1	2	1	0	0	0	167	21:45	3	101	7	0	6	0	1	0	1	1	1	0	0	121
10:00	3	113	11	2	6	5	1	0	0	0	1	2	0	144	22:00	3	92	11	0	2	3	0	0	0	0	0	0	0	111
10:15	10	103	24	1	6	4	1	0	2	0	2	0	0	153	22:15	0	111	12	0	2	0	0	0	0	0	0	0	0	125
10:30	5	107	11	0	3	5	1	0	0	0	0	1	1	134	22:30	3	87	10	0	0	0	1	0	0	0	0	0	0	101
10:45	2	105	22	2	6	4	1	1	1	0	1	0	1	146	22:45	0	105	8	0	1	0	0	0	0	0	0	0	0	114
11:00	6	145	29	1	10	6	2	1	2	0	0	0	0	202	23:00	2	89	2	0	3	1	0	0	0	0	0	0	0	97
11:15	6	131	14	6	8	3	0	1	2	1	0	0	1	173	23:15	0	67	5	0	3	0	0	0	0	0	0	0	0	75
11:30	6	149	15	1	6	9	1	1	0	0	0	1	0	189	23:30	0	80	8	0	1	0	1	0	0	0	0	0	0	90
11:45	3	137	21	1	6	2	3	0	2	0	0	1	1	177	23:45	0	60	5	0	2	0	0	0	0	0	0	0	0	67
TOTAL	89	3,579	495	23	192	93	32	7	19	5	5	9	12	4,560	TOTAL	196	7,478	882	21	316	183	48	25	23	15	21	36	50	9,294

AM PEAK HOUR 11:00 AM
AM PEAK VOLUME 741

PM PEAK HOUR 5:00 PM
PM PEAK VOLUME 1,188

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	285	11,057	1,377	44	508	276	80	32	42	20	26	45	62	13,854
% OF TOTAL	2.1%	79.8%	9.9%	0.3%	3.7%	2.0%	0.6%	0.2%	0.3%	0.1%	0.2%	0.3%	0.4%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
-------	---	---	---	---	---	---	---	---	---	----	----	----	----	--

TOTAL: ALL	596	21,543	2,476	107	849	542	178	79	97	50	55	80	150	26,802
% OF TOTAL	4.3%	155.5%	17.9%	0.8%	6.1%	3.9%	1.3%	0.6%	0.7%	0.4%	0.4%	0.6%	1.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS2 Heacock between Hemlock and SR-60 WB Ramps

AM TIME	SOUTHBOUND													TOTAL	PM Time	SOUTHBOUND													TOTAL	
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13		
0:00	0	33	1	0	0	0	0	0	0	0	0	0	0	34	12:00	6	134	15	0	6	4	1	1	0	0	1	0	0	168	
0:15	0	34	2	0	0	0	0	0	0	0	0	0	0	36	12:15	6	120	13	0	10	6	3	0	1	0	0	1	2	162	
0:30	2	25	4	0	0	0	0	0	0	0	0	0	0	31	12:30	9	140	10	2	6	5	3	1	2	1	3	1	1	184	
0:45	0	20	3	0	1	0	0	0	0	0	0	0	0	24	12:45	2	138	16	0	6	4	2	0	1	0	0	1	2	172	
1:00	0	19	0	0	1	0	0	0	0	0	0	0	0	20	13:00	10	137	12	4	5	3	2	4	2	1	0	1	2	183	
1:15	0	14	1	0	1	0	0	0	0	0	0	0	0	16	13:15	7	133	15	4	7	7	2	2	0	2	2	0	1	182	
1:30	0	14	0	0	1	0	0	0	0	0	0	0	0	15	13:30	6	123	13	4	7	3	5	2	3	2	1	1	3	173	
1:45	0	21	0	0	0	0	0	0	0	0	0	0	0	21	13:45	1	90	6	5	8	3	4	2	1	0	0	0	1	121	
2:00	1	13	1	0	0	0	0	0	0	0	0	0	0	15	14:00	5	112	21	6	4	8	0	0	6	1	1	0	3	167	
2:15	0	16	2	0	0	0	0	0	0	1	0	0	0	19	14:15	5	142	11	2	10	3	2	2	2	0	0	1	4	184	
2:30	0	21	2	0	1	0	0	0	0	0	0	0	0	24	14:30	6	90	8	0	2	5	2	0	0	0	0	0	1	114	
2:45	0	15	1	0	1	0	0	0	0	0	0	0	0	17	14:45	5	135	20	1	9	2	0	1	0	0	0	0	1	174	
3:00	0	32	5	0	0	2	0	0	0	0	0	0	0	39	15:00	5	125	16	0	2	4	4	1	0	2	2	0	4	165	
3:15	2	35	4	0	1	0	0	0	0	0	0	0	0	42	15:15	2	135	16	0	7	7	0	2	1	0	1	1	2	174	
3:30	0	49	7	0	1	0	0	0	0	0	0	0	0	57	15:30	2	144	14	0	6	7	1	2	1	0	0	0	3	180	
3:45	0	53	11	0	1	1	0	0	0	0	0	0	0	66	15:45	0	129	14	3	4	5	1	0	2	0	1	0	0	159	
4:00	1	59	12	0	6	1	0	0	0	0	0	0	0	79	16:00	11	168	10	2	3	4	3	0	2	0	0	1	1	205	
4:15	0	95	19	0	6	0	0	0	0	0	0	1	0	121	16:15	2	193	9	1	8	1	2	0	0	1	0	1	3	221	
4:30	0	103	17	0	4	2	1	0	0	0	0	0	0	127	16:30	4	230	12	1	2	4	2	0	0	1	0	0	0	256	
4:45	0	92	21	0	3	0	0	0	0	0	0	1	0	117	16:45	3	167	18	2	3	3	2	3	1	0	1	0	2	205	
5:00	0	92	11	0	5	1	1	0	1	1	0	0	0	112	17:00	5	198	14	1	8	9	3	0	0	1	1	0	0	240	
5:15	5	102	20	0	2	2	1	0	0	0	0	0	0	132	17:15	3	199	21	1	3	3	1	2	0	1	0	3	1	238	
5:30	2	110	29	1	7	2	1	0	0	0	0	0	2	154	17:30	3	208	25	0	2	2	0	0	0	1	0	2	0	243	
5:45	3	95	12	0	8	1	1	0	0	0	0	0	0	120	17:45	7	200	7	1	8	2	5	0	0	0	0	1	2	233	
6:00	1	85	14	0	2	3	2	0	0	0	0	0	0	107	18:00	6	114	11	3	4	4	3	1	0	2	1	1	4	154	
6:15	1	98	14	0	4	1	0	0	0	0	0	0	1	119	18:15	3	143	12	0	3	2	2	2	2	0	0	0	3	172	
6:30	0	102	14	1	3	2	1	1	0	0	0	0	0	124	18:30	3	128	21	3	5	3	2	1	1	0	2	0	4	173	
6:45	1	118	17	0	7	1	0	0	0	1	1	0	1	147	18:45	7	148	9	1	0	8	0	0	0	0	0	0	2	175	
7:00	6	177	21	2	4	1	1	0	1	0	0	0	0	213	19:00	11	128	16	0	3	5	3	0	0	0	0	0	2	168	
7:15	10	183	11	0	6	6	0	0	2	0	0	1	2	221	19:15	4	122	17	0	3	1	1	1	2	0	0	1	0	152	
7:30	7	194	15	1	7	4	1	0	0	1	0	0	1	232	19:30	5	133	11	0	3	6	0	1	1	0	1	0	0	161	
7:45	7	196	17	0	7	6	3	0	0	1	1	0	2	240	19:45	3	118	14	1	1	5	0	0	0	0	0	0	1	143	
8:00	7	191	13	1	6	6	1	3	0	1	0	2	0	231	20:00	4	111	9	0	5	7	2	0	0	0	0	0	1	139	
8:15	2	164	7	0	7	9	2	0	2	0	0	1	2	196	20:15	2	125	14	0	0	2	0	0	1	0	0	1	0	145	
8:30	5	182	22	1	6	5	3	1	1	0	1	0	3	230	20:30	0	107	14	0	2	2	0	0	1	0	0	0	1	127	
8:45	6	169	19	0	3	6	0	0	0	0	1	0	0	204	20:45	3	105	7	0	2	1	0	0	0	0	0	0	0	118	
9:00	1	96	12	1	6	7	2	0	0	0	1	0	3	129	21:00	4	106	7	1	0	1	0	1	0	0	0	0	0	120	
9:15	6	130	12	1	9	4	0	2	0	0	0	0	1	165	21:15	0	97	8	0	3	1	0	0	1	0	1	0	1	112	
9:30	12	114	9	0	6	3	2	3	0	3	1	0	2	155	21:30	2	101	9	0	2	5	0	0	2	0	0	1	0	122	
9:45	2	133	12	2	5	4	0	1	2	0	1	0	2	164	21:45	0	92	10	0	0	0	0	0	0	0	0	1	0	103	
10:00	6	138	13	0	1	1	2	0	1	3	0	0	2	167	22:00	1	84	4	0	1	1	0	0	0	0	0	0	0	1	92
10:15	5	122	20	0	4	2	0	1	1	0	0	0	2	157	22:15	0	82	5	1	0	1	0	0	0	0	0	0	0	89	
10:30	6	135	19	0	4	1	3	1	0	2	0	3	1	175	22:30	0	62	5	0	2	0	0	0	1	0	0	0	0	70	
10:45	6	85	10	0	1	4	2	0	2	0	0	2	0	112	22:45	0	79	10	0	0	1	1	0	0	0	0	0	0	91	
11:00	8	118	18	0	4	2	0	0	0	1	1	0	0	152	23:00	0	61	3	0	0	1	0	0	0	0	0	0	0	65	
11:15	2	158	14	0	7	3	1	0	0	0	1	1	0	187	23:15	0	39	5	0	0	1	0	0	2	0	0	0	0	47	
11:30	6	136	17	0	2	3	1	0	0	0	1	1	1	168	23:30	0	49	2	0	1	0	0	0	0	0	0	0	0	52	
11:45	9	124	13	2	4	8	2	2	1	0	0	1	1	167	23:45	0	52	2	0	0	0	0	0	1	0	0	0	0	55	
TOTAL	138	4,510	538	13	165	104	34	15	15	14	10	15	29	5,600	TOTAL	173	5,976	561	50	176	162	64	32	40	16	19	20	59	7,348	
AM PEAK HOUR														7:15 AM	PM PEAK HOUR														5:00 PM	
AM PEAK VOLUME														924	PM PEAK VOLUME														954	

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	311	####	1,099	63	341	266	98	47	55	30	29	35	88	12,948
% OF TOTAL	2.4%	81.0%	8.5%	0.5%	2.6%	2.1%	0.8%	0.4%	0.4%	0.2%	0.2%	0.3%	0.7%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
-------	---	---	---	---	---	---	---	---	---	----	----	----	----

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS3 Indian between Ironwood and Hemlock

AM TIME	SOUTHBOUND													TOTAL	PM Time	SOUTHBOUND													TOTAL			
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13				
0:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	12:00	0	38	7	1	2	0	0	0	0	0	0	0	0	0	0	0	48
0:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4	12:15	0	32	4	1	3	0	0	0	0	0	0	0	0	0	0	40	
0:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5	12:30	0	21	6	0	1	0	0	0	0	0	0	0	0	0	0	28	
0:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12:45	0	38	6	0	5	0	0	0	0	0	0	0	0	0	0	49	
1:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4	13:00	0	47	6	0	1	0	0	0	0	0	0	0	0	0	0	54	
1:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	13:15	0	39	5	1	1	0	0	0	0	0	0	0	0	0	0	46	
1:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:30	0	25	5	0	4	0	0	0	0	0	0	0	0	0	0	34	
1:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	13:45	0	42	5	1	2	1	0	0	0	0	0	0	0	0	0	51	
2:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	14:00	1	43	5	0	2	0	0	0	0	0	0	0	0	0	0	51	
2:15	0	2	0	0	1	0	0	0	0	0	0	0	0	3	14:15	0	76	11	0	6	1	0	0	0	0	0	0	0	0	0	94	
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:30	0	49	10	0	3	0	0	0	0	0	0	0	0	0	0	62	
2:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:45	0	49	9	0	5	0	0	0	0	0	0	0	0	0	0	63	
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	15:00	0	45	2	0	4	0	0	0	0	0	0	0	0	0	0	51	
3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:15	0	42	12	0	2	0	0	0	0	0	0	0	0	0	0	56	
3:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	15:30	0	47	5	0	2	0	0	0	0	0	0	0	0	0	0	54	
3:45	0	3	0	0	2	0	0	0	0	0	0	0	0	5	15:45	0	37	2	0	4	0	0	0	0	0	0	0	0	0	0	43	
4:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7	16:00	0	34	9	0	4	0	1	0	0	0	0	0	0	0	0	48	
4:15	0	10	0	0	1	0	0	0	0	0	0	0	0	11	16:15	0	43	6	0	0	1	0	0	0	0	0	0	0	0	0	50	
4:30	0	10	1	0	0	0	0	0	0	0	0	0	0	11	16:30	0	40	3	0	4	0	0	0	0	0	0	0	0	0	0	47	
4:45	1	7	1	0	0	0	0	0	0	0	0	0	0	9	16:45	0	46	3	0	2	0	0	0	0	0	0	0	0	0	0	51	
5:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5	17:00	0	50	5	0	4	0	0	0	0	0	0	0	0	0	0	59	
5:15	0	10	2	0	0	0	0	0	0	0	0	0	0	12	17:15	0	35	1	0	2	0	0	0	0	0	0	0	0	0	0	38	
5:30	0	16	4	0	0	0	0	0	0	0	0	0	0	20	17:30	0	49	8	0	1	0	0	0	0	0	0	0	0	0	0	58	
5:45	0	13	1	0	0	0	0	0	0	0	0	0	0	14	17:45	0	45	7	0	5	0	0	0	0	0	0	0	0	0	0	57	
6:00	1	15	2	0	2	0	0	0	0	0	0	0	0	20	18:00	0	56	5	0	4	0	0	0	0	0	0	0	0	0	0	65	
6:15	0	14	3	0	0	0	0	0	0	0	0	0	0	17	18:15	0	41	3	0	0	0	0	0	0	0	0	0	0	0	0	44	
6:30	0	10	3	0	3	0	0	0	0	0	0	0	0	16	18:30	0	31	10	0	3	0	0	0	0	0	0	0	0	0	0	44	
6:45	0	33	3	0	6	0	0	0	0	0	0	0	0	42	18:45	0	50	4	0	1	0	0	0	0	0	0	0	0	0	0	55	
7:00	0	27	4	0	5	0	0	0	0	0	0	0	0	36	19:00	0	43	3	0	1	0	0	0	0	0	0	0	0	0	0	47	
7:15	0	54	8	0	5	0	0	0	0	0	0	0	0	67	19:15	0	30	4	0	3	0	0	0	0	0	0	0	0	0	0	37	
7:30	1	80	15	0	2	0	0	0	0	0	0	0	0	98	19:30	0	21	5	0	2	0	0	0	0	0	0	0	0	0	0	28	
7:45	0	99	7	0	6	0	0	0	0	0	0	0	0	112	19:45	0	34	5	0	2	0	0	0	0	0	0	0	0	0	0	41	
8:00	0	70	12	0	4	0	0	0	0	0	0	0	0	86	20:00	0	32	7	0	3	0	0	0	0	0	0	0	0	0	0	42	
8:15	0	46	4	0	6	0	0	0	0	0	0	0	0	56	20:15	0	42	3	0	3	0	0	0	0	0	0	0	0	0	0	48	
8:30	0	29	5	0	6	0	0	0	0	0	0	0	0	40	20:30	0	33	2	0	2	0	0	0	0	0	0	0	0	0	0	37	
8:45	1	42	10	0	0	0	0	0	0	0	0	0	0	53	20:45	0	25	2	0	2	0	0	0	0	0	0	0	0	0	0	29	
9:00	0	37	4	0	1	0	0	0	0	0	0	0	0	42	21:00	0	19	2	0	0	0	0	0	0	0	0	0	0	0	0	21	
9:15	1	31	5	1	1	0	0	0	0	0	1	0	0	40	21:15	0	31	5	0	1	0	0	0	0	0	0	0	0	0	0	37	
9:30	0	43	10	0	1	0	1	0	0	0	0	0	0	55	21:30	0	17	2	0	1	0	0	0	0	0	0	0	0	0	0	20	
9:45	0	28	4	0	2	0	0	0	0	0	0	0	0	34	21:45	0	20	2	0	0	0	0	0	0	0	0	0	0	0	0	22	
10:00	0	37	4	0	1	0	0	0	0	0	0	0	0	42	22:00	0	15	1	0	0	0	0	0	0	0	0	0	0	0	0	16	
10:15	0	27	2	0	3	0	0	0	0	0	0	0	0	32	22:15	0	12	2	0	0	0	0	0	0	0	0	0	0	0	0	14	
10:30	0	38	5	0	4	0	0	0	0	0	0	0	0	47	22:30	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
10:45	0	30	8	0	1	0	0	0	0	0	0	0	0	39	22:45	0	10	1	0	1	0	0	0	0	0	0	0	0	0	0	12	
11:00	0	28	4	0	3	1	0	0	0	0	0	0	0	36	23:00	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
11:15	0	30	4	0	1	0	0	0	0	0	0	0	0	35	23:15	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
11:30	0	36	7	0	4	0	0	0	0	0	0	0	0	47	23:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7	
11:45	0	38	5	0	1	0	0	0	0	0	0	0	0	44	23:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
TOTAL	5	1,033	149	1	72	1	1	0	0	0	1	0	0	1,263	TOTAL	2	1,607	211	4	98	3	1	0	0	0	0	0	0	0	1,926		
AM PEAK HOUR														7:15 AM	PM PEAK HOUR														2:15 PM			
AM PEAK VOLUME														363	PM PEAK VOLUME														270			

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	7	2,640	360	5	170	4	2	0	0	0	1	0	0	3,189
% OF TOTAL	0.2%	82.8%	11.3%	0.2%	5.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
-------	---	---	---	---	---	---	---	---	---	----	----	----	----

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS4 Indian south of Hemlock

AM TIME	NORTHBOUND													TOTAL	PM Time	NORTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4	12:00	1	44	6	0	2	0	0	0	0	0	0	53		
0:15	0	7	1	0	0	0	0	0	0	0	0	0	0	8	12:15	0	27	7	0	3	0	0	0	0	0	0	37		
0:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7	12:30	0	41	5	0	1	0	0	0	0	0	0	47		
0:45	0	12	0	0	0	0	0	0	0	0	0	0	0	12	12:45	0	37	6	0	2	0	0	0	0	0	0	45		
1:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10	13:00	0	50	6	0	1	0	0	0	0	0	0	57		
1:15	0	1	0	0	1	0	0	0	0	0	0	0	0	2	13:15	0	49	7	0	5	0	0	0	0	0	0	61		
1:30	0	5	1	0	0	0	0	0	0	0	0	0	0	6	13:30	0	44	10	0	4	0	1	0	0	0	0	59		
1:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	13:45	0	52	7	0	3	1	0	0	0	0	0	63		
2:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6	14:00	0	57	13	0	2	0	0	0	0	0	0	72		
2:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5	14:15	2	64	4	0	5	0	0	0	0	0	0	75		
2:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	14:30	0	70	13	0	2	0	0	0	0	0	0	85		
2:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:45	1	61	2	0	7	0	0	0	0	0	0	71		
3:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	15:00	1	76	8	0	7	0	0	0	0	0	0	92		
3:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2	15:15	0	70	11	0	7	0	0	0	0	0	0	88		
3:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:30	1	70	15	0	7	1	0	0	0	0	0	94		
3:45	0	5	1	0	1	0	0	0	0	0	0	0	0	7	15:45	1	70	13	0	5	0	0	0	0	0	0	89		
4:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	16:00	0	67	9	0	1	0	0	0	0	0	0	77		
4:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5	16:15	0	74	4	0	3	0	0	0	0	0	0	81		
4:30	0	6	1	0	0	0	0	0	0	0	0	0	0	7	16:30	0	68	7	0	6	0	0	0	0	0	0	81		
4:45	0	4	0	0	1	0	0	0	0	0	0	0	0	5	16:45	0	74	14	0	6	0	0	0	0	0	0	94		
5:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10	17:00	1	85	14	0	3	0	0	0	0	0	0	103		
5:15	0	5	1	0	0	0	0	0	0	0	0	0	0	6	17:15	0	87	14	0	5	0	0	0	0	0	0	106		
5:30	0	5	0	0	1	0	0	0	0	0	0	0	0	6	17:30	0	81	4	0	7	0	0	0	0	0	0	92		
5:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	17:45	0	75	5	0	8	0	0	0	0	0	0	88		
6:00	1	12	5	0	1	0	0	0	0	0	0	0	0	19	18:00	0	98	13	0	4	1	0	0	0	0	0	116		
6:15	0	8	3	0	0	0	0	0	0	0	0	0	0	11	18:15	0	68	2	0	3	0	0	0	0	0	0	73		
6:30	0	16	3	0	2	0	0	0	0	0	0	0	0	21	18:30	0	79	6	0	1	0	0	0	0	0	0	86		
6:45	0	26	3	0	4	0	0	0	0	0	0	0	0	33	18:45	0	63	9	0	7	0	0	0	0	0	0	79		
7:00	0	37	8	0	2	0	0	0	0	0	0	0	0	47	19:00	0	73	16	0	4	0	0	0	0	0	0	93		
7:15	0	44	10	0	2	0	0	0	0	0	0	0	0	56	19:15	0	60	7	0	4	0	0	0	0	0	0	71		
7:30	0	62	7	1	6	0	0	0	0	0	0	0	0	76	19:30	0	56	7	0	1	0	0	0	0	0	0	64		
7:45	5	55	11	0	6	0	0	0	0	0	0	0	0	77	19:45	1	58	5	0	4	0	0	0	0	0	0	68		
8:00	0	61	6	0	4	0	0	0	0	0	0	0	0	71	20:00	0	63	9	0	3	0	0	0	0	0	0	75		
8:15	0	35	3	0	5	1	0	0	0	0	0	0	0	44	20:15	0	45	8	0	4	0	0	0	0	0	0	57		
8:30	0	25	6	0	1	0	0	0	0	0	0	0	0	32	20:30	0	46	4	0	2	0	0	0	0	0	0	52		
8:45	0	27	13	0	1	0	0	0	0	0	0	0	0	41	20:45	0	56	4	0	1	0	0	0	0	0	0	61		
9:00	0	27	7	0	1	0	0	0	0	0	0	0	0	35	21:00	0	42	3	0	0	0	0	0	0	0	0	45		
9:15	0	19	5	0	2	0	0	0	0	0	0	0	0	26	21:15	0	36	6	0	4	0	0	0	0	0	0	46		
9:30	0	24	3	0	1	0	0	0	0	0	0	0	0	28	21:30	0	33	4	0	1	0	0	0	0	0	0	38		
9:45	0	20	5	0	0	0	0	0	0	0	0	0	0	25	21:45	0	27	5	0	1	0	0	0	0	0	0	33		
10:00	0	26	4	0	4	0	0	0	0	0	0	0	0	34	22:00	0	23	1	0	2	0	0	0	0	0	0	26		
10:15	0	20	4	0	1	0	0	0	0	0	0	0	0	25	22:15	0	25	2	0	0	0	0	0	0	0	0	27		
10:30	1	30	2	0	0	0	0	0	0	0	0	0	0	33	22:30	0	19	3	0	2	0	0	0	0	0	0	24		
10:45	0	29	1	0	2	0	0	0	0	0	0	0	0	32	22:45	0	16	0	0	1	0	0	0	0	0	0	17		
11:00	3	30	7	0	1	0	0	0	0	0	0	0	0	41	23:00	0	12	1	0	2	0	0	0	0	0	0	15		
11:15	0	38	6	0	1	1	0	0	0	0	0	0	0	46	23:15	0	18	1	0	1	0	0	0	0	0	0	20		
11:30	0	29	7	0	2	0	0	0	0	0	0	0	0	38	23:30	0	17	0	0	1	0	0	0	0	0	0	18		
11:45	0	36	4	0	3	0	0	0	0	0	0	0	0	43	23:45	0	9	1	0	0	0	0	0	0	0	0	10		
TOTAL	10	848	142	1	56	2	0	0	0	0	0	0	0	1,059	TOTAL	9	2,535	321	0	155	3	1	0	0	0	0	3,024		

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 280

PM PEAK HOUR 5:15 PM
PM PEAK VOLUME 402

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	19	3,383	463	1	211	5	1	0	0	0	0	0	0	4,083
% OF TOTAL	0.5%	82.9%	11.3%	0.0%	5.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	31	6,094	997	8	474	29	26	4	1	0	0	3	0	7,667
% OF TOTAL	0.8%	149.3%	24.4%	0.2%	11.6%	0.7%	0.6%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS4 Indian south of Hemlock

AM TIME	SOUTHBOUND													TOTAL	PM Time	SOUTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5	12:00	1	37	3	1	7	1	3	0	0	0	0	53		
0:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5	12:15	0	32	7	1	6	2	1	1	0	0	0	50		
0:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7	12:30	0	23	4	0	8	2	0	0	0	0	0	37		
0:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6	12:45	0	23	10	0	3	2	0	0	0	0	0	38		
1:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3	13:00	0	32	6	0	3	1	0	0	0	0	0	42		
1:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5	13:15	0	29	8	0	2	2	2	0	0	0	0	43		
1:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:30	0	24	7	0	7	2	1	0	0	0	1	42		
1:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	13:45	1	34	3	0	2	1	0	0	0	0	0	41		
2:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	14:00	0	46	14	0	4	0	1	0	0	0	0	65		
2:15	0	6	0	0	1	0	0	0	0	0	0	0	0	7	14:15	0	53	14	0	6	0	0	0	0	0	0	73		
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:30	0	64	15	0	6	0	0	0	0	0	0	85		
2:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:45	0	47	16	0	6	0	0	0	0	0	0	69		
3:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3	15:00	0	48	7	0	3	0	0	0	0	0	0	58		
3:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	15:15	0	39	11	1	3	0	0	0	0	0	0	54		
3:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	15:30	0	58	11	0	4	0	0	0	0	0	0	73		
3:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:45	0	41	6	0	6	0	0	0	0	0	0	53		
4:00	0	5	1	0	1	0	0	0	0	0	0	0	0	7	16:00	0	43	11	0	8	0	1	0	0	0	0	63		
4:15	0	7	1	0	1	0	0	0	0	0	0	0	0	9	16:15	0	47	6	0	2	0	0	0	0	0	0	55		
4:30	0	10	0	0	3	0	0	0	0	0	0	0	0	13	16:30	0	50	4	0	8	0	0	0	0	0	0	62		
4:45	1	10	2	0	2	0	0	0	0	0	0	0	0	15	16:45	0	46	6	1	5	0	0	0	0	0	0	58		
5:00	0	6	2	0	1	0	0	0	0	0	0	0	0	9	17:00	0	61	8	0	6	0	0	0	0	0	0	75		
5:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7	17:15	0	43	9	0	0	0	0	0	0	0	0	52		
5:30	0	14	5	0	1	0	0	0	0	0	0	0	0	20	17:30	0	60	5	0	5	0	0	0	0	0	0	70		
5:45	0	14	3	0	2	0	0	0	0	0	0	0	0	19	17:45	0	59	11	0	7	0	0	0	0	0	0	77		
6:00	1	11	1	0	2	0	0	0	0	0	0	0	0	15	18:00	0	64	11	0	4	0	0	0	0	0	0	79		
6:15	0	15	5	0	0	0	0	0	0	0	0	0	0	20	18:15	0	57	9	0	4	0	0	0	0	0	0	70		
6:30	0	14	4	0	3	0	0	0	0	0	0	0	0	21	18:30	0	37	8	0	2	0	0	0	0	0	0	47		
6:45	0	34	8	0	3	0	0	0	0	0	0	0	0	45	18:45	0	64	2	0	1	0	0	0	0	0	0	67		
7:00	0	31	4	0	10	0	0	0	0	0	0	0	0	45	19:00	0	47	6	0	3	0	0	0	0	0	0	56		
7:15	0	49	10	0	6	0	0	0	0	0	0	0	0	65	19:15	0	35	11	0	4	0	0	0	0	0	0	50		
7:30	0	85	18	0	5	0	0	0	0	0	0	0	0	108	19:30	0	31	7	0	3	0	0	0	0	0	0	41		
7:45	0	88	21	0	9	0	0	0	0	0	0	0	0	118	19:45	0	46	11	0	2	0	0	0	0	0	0	59		
8:00	0	54	10	0	5	0	0	0	0	0	0	0	0	69	20:00	0	43	5	0	2	0	0	0	0	0	0	50		
8:15	1	42	9	1	6	2	0	0	0	0	0	0	0	61	20:15	0	31	7	0	5	0	0	0	0	0	0	43		
8:30	0	26	5	0	4	0	1	0	0	0	0	0	0	36	20:30	0	32	5	0	1	0	0	0	0	0	0	38		
8:45	1	35	13	1	4	2	3	1	0	0	0	0	0	60	20:45	0	29	3	0	2	0	0	0	0	0	0	34		
9:00	0	36	4	0	2	1	0	0	0	0	0	1	0	44	21:00	0	23	4	0	1	0	0	0	0	0	0	28		
9:15	0	28	6	1	2	0	0	0	0	0	0	0	0	37	21:15	0	24	10	0	3	0	0	0	0	0	0	37		
9:30	1	33	8	0	2	0	2	0	0	0	0	0	0	46	21:30	0	18	5	0	4	0	0	0	0	0	0	27		
9:45	0	35	11	0	2	0	0	0	0	0	0	0	0	48	21:45	1	20	5	0	0	0	0	0	0	0	0	26		
10:00	0	31	1	0	5	1	1	2	0	0	0	0	0	41	22:00	0	22	4	0	0	0	0	0	0	0	0	26		
10:15	0	39	6	0	1	1	1	0	0	0	0	0	0	48	22:15	0	18	2	0	1	0	0	0	0	0	0	21		
10:30	0	42	5	0	4	0	0	0	0	0	0	0	0	51	22:30	0	13	2	0	0	0	0	0	0	0	0	15		
10:45	1	25	11	0	3	1	2	0	0	0	0	0	0	43	22:45	0	9	2	0	1	0	0	0	0	0	0	12		
11:00	0	21	7	0	2	0	2	0	0	0	0	1	0	33	23:00	0	8	1	0	0	0	0	0	0	0	0	9		
11:15	2	29	7	0	3	2	1	0	0	0	0	0	0	44	23:15	0	7	2	0	0	0	0	0	0	0	0	9		
11:30	1	23	12	0	5	1	2	0	0	0	0	0	0	44	23:30	0	7	1	0	0	0	0	0	0	0	0	8		
11:45	0	33	2	0	3	0	1	0	1	0	0	0	0	40	23:45	0	6	0	0	0	0	0	0	0	0	0	6		
TOTAL	9	981	209	3	103	11	16	3	1	0	0	2	0	1,338	TOTAL	3	1,730	325	4	160	13	9	1	0	0	0	1	0	2,246
AM PEAK HOUR														7:15 AM	PM PEAK HOUR														5:30 PM
AM PEAK VOLUME														360	PM PEAK VOLUME														296

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	12	2,711	534	7	263	24	25	4	1	0	0	3	0	3,584
% OF TOTAL	0.3%	75.6%	14.9%	0.2%	7.3%	0.7%	0.7%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
-------	---	---	---	---	---	---	---	---	---	----	----	----	----

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS5 Ironwood west of Heacock

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	15	1	0	1	0	0	0	0	0	0	0	0	17	12:00	3	82	8	0	7	3	0	0	0	0	1	0	0	104
0:15	0	10	3	0	0	0	0	0	0	0	0	0	0	13	12:15	1	71	8	1	9	2	1	0	0	1	0	0	94	
0:30	0	10	2	0	2	0	0	0	0	0	0	0	0	14	12:30	2	75	7	0	5	2	1	0	0	0	0	0	92	
0:45	0	9	2	0	1	0	0	0	0	0	0	0	0	12	12:45	3	65	9	1	5	1	2	0	0	0	0	1	87	
1:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6	13:00	4	102	16	0	3	6	0	0	0	1	0	2	134	
1:15	1	4	1	0	0	0	0	0	0	0	0	0	0	6	13:15	1	106	19	1	11	1	1	0	0	0	0	0	140	
1:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7	13:30	2	88	24	0	9	0	1	0	0	0	0	0	124	
1:45	0	9	0	0	0	0	0	0	0	0	0	0	0	9	13:45	5	96	19	2	17	2	0	0	0	0	0	0	141	
2:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4	14:00	6	77	18	1	4	0	0	0	0	0	0	0	106	
2:15	1	8	1	0	1	0	0	0	0	1	0	0	0	12	14:15	0	72	21	0	5	3	1	0	0	0	0	0	102	
2:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:30	0	89	17	0	6	2	0	0	0	0	0	0	114	
2:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6	14:45	2	68	11	0	13	2	1	0	0	0	0	0	97	
3:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	15:00	4	89	12	1	6	2	0	1	0	0	1	0	116	
3:15	0	3	2	0	0	0	0	0	0	0	0	0	0	5	15:15	7	82	14	0	12	0	1	0	0	0	1	0	117	
3:30	0	4	3	0	0	0	0	0	0	0	0	0	0	7	15:30	4	87	12	0	7	2	0	2	0	0	1	0	115	
3:45	0	10	0	0	1	0	0	0	0	0	0	0	0	11	15:45	1	90	12	1	4	0	1	1	0	0	0	0	110	
4:00	0	9	0	0	1	0	0	0	0	0	0	0	0	10	16:00	1	123	17	0	13	1	4	0	0	0	0	1	160	
4:15	0	6	4	0	2	0	0	0	0	0	0	0	0	12	16:15	5	133	18	0	4	1	0	0	0	0	2	0	163	
4:30	0	15	0	0	0	0	0	0	0	0	0	0	0	15	16:30	3	126	16	0	12	3	1	2	0	0	1	0	164	
4:45	0	15	1	0	2	1	0	0	0	0	0	0	0	19	16:45	1	134	18	0	13	2	0	0	0	0	0	0	168	
5:00	0	11	4	0	0	0	0	0	0	0	0	0	0	15	17:00	2	123	14	0	17	2	1	0	1	0	0	0	160	
5:15	0	24	6	1	0	0	0	0	0	0	0	0	0	31	17:15	1	132	26	1	14	0	1	1	1	0	0	0	177	
5:30	0	22	1	0	3	0	0	0	0	0	0	0	0	26	17:30	9	141	20	0	10	2	0	0	0	0	1	1	184	
5:45	0	18	4	0	1	0	0	0	0	0	0	0	0	23	17:45	6	134	12	0	10	2	1	0	1	0	0	2	168	
6:00	1	25	2	0	2	0	0	0	0	0	0	0	0	30	18:00	6	113	22	0	8	3	0	0	0	0	1	1	154	
6:15	1	30	1	1	1	0	0	0	0	0	0	0	0	34	18:15	3	107	10	0	13	7	1	0	1	0	0	0	142	
6:30	1	51	5	0	3	0	0	0	0	0	0	0	0	60	18:30	3	77	15	0	9	1	1	1	0	0	0	0	107	
6:45	2	40	6	0	3	0	0	0	0	0	0	0	0	51	18:45	5	121	14	0	2	1	1	1	0	0	1	1	147	
7:00	1	69	7	0	3	1	0	0	0	0	0	0	0	81	19:00	7	104	7	0	2	2	0	1	0	0	0	0	123	
7:15	1	90	12	1	6	0	0	0	0	0	0	0	0	110	19:15	2	75	14	0	4	1	0	0	0	0	0	0	96	
7:30	0	113	16	0	4	0	0	0	0	0	0	0	0	133	19:30	2	81	12	0	5	1	0	0	0	0	0	0	101	
7:45	3	96	16	0	3	0	0	1	0	0	0	0	0	119	19:45	2	85	9	0	4	1	1	0	0	0	0	0	102	
8:00	0	94	12	0	4	1	1	0	0	1	0	0	0	113	20:00	1	69	11	0	5	0	0	0	0	0	0	0	86	
8:15	1	78	9	0	3	1	0	0	0	0	0	1	0	93	20:15	1	58	8	0	6	0	1	1	1	0	0	0	76	
8:30	1	76	15	1	6	0	1	0	0	0	1	0	0	101	20:30	0	51	13	0	5	1	0	0	0	0	0	0	70	
8:45	8	51	8	1	6	2	0	0	0	0	0	0	0	76	20:45	0	64	5	0	4	0	0	0	0	0	0	0	73	
9:00	4	61	13	0	2	0	0	0	0	0	0	0	0	80	21:00	3	51	2	0	4	1	0	0	0	0	0	0	61	
9:15	0	44	6	1	6	0	0	0	0	0	0	0	0	57	21:15	2	71	6	0	4	0	1	0	0	0	1	0	85	
9:30	1	58	8	1	10	0	0	0	0	0	0	0	0	78	21:30	8	38	6	0	3	0	0	0	0	0	0	0	55	
9:45	0	57	11	0	2	1	0	0	1	0	0	0	0	72	21:45	1	36	5	0	2	0	0	0	0	0	0	0	44	
10:00	1	54	6	0	5	0	0	0	0	0	0	0	0	66	22:00	1	40	7	0	1	0	0	0	0	0	0	0	49	
10:15	0	56	14	0	5	1	0	0	0	0	0	0	0	76	22:15	0	43	3	1	4	0	1	0	0	0	0	0	52	
10:30	2	80	13	1	3	2	0	2	0	0	0	0	0	103	22:30	3	31	1	0	2	0	0	0	0	0	0	0	37	
10:45	2	59	12	0	5	3	0	0	0	0	0	0	0	81	22:45	0	26	6	0	0	0	0	0	0	0	0	0	32	
11:00	2	57	6	0	5	1	1	0	0	0	0	1	1	74	23:00	0	38	2	0	1	0	0	0	0	0	0	0	41	
11:15	3	77	9	0	5	0	0	0	0	0	0	0	0	94	23:15	0	15	1	0	0	0	0	0	0	0	0	0	16	
11:30	4	62	13	0	3	2	1	2	1	1	0	0	0	89	23:30	0	16	3	0	3	0	0	0	0	0	0	0	22	
11:45	2	63	14	2	8	2	1	0	0	0	0	1	1	93	23:45	0	9	3	0	0	0	0	0	0	0	0	0	12	
TOTAL	43	1,767	272	10	118	18	5	5	3	2	1	2	2	2,248	TOTAL	123	3,804	553	10	307	60	25	11	5	2	2	12	6	4,920

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 475

PM PEAK HOUR 5:00 PM
PM PEAK VOLUME 689

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	166	5,571	825	20	425	78	30	16	8	4	3	14	8	7,168
% OF TOTAL	2.3%	77.7%	11.5%	0.3%	5.9%	1.1%	0.4%	0.2%	0.1%	0.1%	0.0%	0.2%	0.1%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
-------	---	---	---	---	---	---	---	---	---	----	----	----	----	--

TOTAL: ALL	222	11,640	2,111	46	1,152	157	42	26	15	4	4	19	9	15,447
% OF TOTAL	3.1%	162.4%	29.5%	0.6%	16.1%	2.2%	0.6%	0.4%	0.2%	0.1%	0.1%	0.3%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS5 Ironwood west of Heacock

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	11	2	0	1	0	0	0	0	0	0	0	0	14	12:00	2	62	18	1	14	0	1	0	0	0	0	0	98	
0:15	0	13	1	0	1	0	0	0	0	0	0	0	0	15	12:15	0	81	24	0	10	0	0	0	0	0	0	115		
0:30	0	5	2	0	1	0	0	0	0	0	0	0	0	8	12:30	0	88	22	0	13	2	0	0	0	0	0	125		
0:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7	12:45	0	85	23	0	11	1	0	0	0	0	1	121		
1:00	0	7	3	0	0	0	0	0	0	0	0	0	0	10	13:00	0	94	20	1	14	4	1	0	0	0	0	134		
1:15	0	4	3	0	2	0	0	0	0	0	0	0	0	9	13:15	4	94	20	1	8	1	0	0	0	0	0	128		
1:30	0	5	1	0	1	0	0	0	0	0	0	0	0	7	13:30	0	91	22	2	15	1	0	1	0	0	0	132		
1:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	13:45	2	89	17	0	12	0	0	0	0	0	0	120		
2:00	0	3	2	0	1	0	0	0	0	0	0	0	0	6	14:00	0	92	24	0	11	3	0	0	0	0	0	130		
2:15	0	7	1	0	1	0	0	0	0	0	0	0	0	9	14:15	0	102	31	1	15	0	0	0	0	0	0	149		
2:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:30	0	90	24	0	16	1	0	0	0	0	0	131		
2:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	14:45	0	81	19	0	18	1	0	0	0	0	0	119		
3:00	0	2	0	0	2	0	0	0	0	0	0	0	0	4	15:00	1	98	17	0	13	1	0	0	0	0	0	130		
3:15	0	4	5	0	3	0	0	0	0	0	0	0	0	12	15:15	2	99	16	0	13	1	0	0	0	0	0	131		
3:30	1	3	0	0	3	0	0	0	0	0	0	0	0	7	15:30	4	99	16	1	13	3	0	1	0	0	0	137		
3:45	0	13	2	0	1	0	0	0	0	0	0	0	0	16	15:45	0	86	23	0	8	3	0	0	0	0	0	120		
4:00	0	7	1	0	2	0	0	0	0	0	0	0	0	10	16:00	1	105	21	0	10	0	0	0	0	0	0	137		
4:15	0	10	2	0	0	0	0	0	0	0	0	0	0	12	16:15	2	131	18	0	14	1	0	0	0	0	0	166		
4:30	0	15	3	0	2	0	0	0	0	0	0	0	0	20	16:30	1	111	20	0	10	0	2	0	0	0	0	144		
4:45	0	14	7	0	1	0	0	0	0	0	0	0	0	22	16:45	1	116	26	1	12	2	0	2	0	0	0	160		
5:00	0	18	5	0	0	1	0	0	0	0	0	0	0	24	17:00	0	129	17	0	14	4	0	0	0	0	0	164		
5:15	0	20	7	0	0	0	0	0	0	0	0	0	0	27	17:15	1	105	20	1	16	4	0	0	0	0	0	147		
5:30	0	26	8	0	6	0	0	0	0	0	0	0	0	40	17:30	0	122	21	0	12	2	1	1	0	0	0	159		
5:45	0	22	9	0	7	1	0	0	0	0	0	0	0	39	17:45	0	124	25	1	11	1	0	1	0	0	0	163		
6:00	1	37	7	0	6	0	0	0	0	0	0	0	0	51	18:00	3	92	18	0	9	2	0	0	0	0	0	124		
6:15	1	45	15	0	15	0	0	0	0	0	0	0	0	76	18:15	3	86	13	0	5	1	0	0	0	0	0	108		
6:30	0	59	14	1	16	0	0	0	0	0	0	0	0	90	18:30	2	99	19	1	7	3	0	0	0	0	0	131		
6:45	0	83	14	0	17	3	0	0	0	0	0	0	0	117	18:45	2	94	15	0	10	0	0	0	0	0	0	121		
7:00	0	123	17	0	14	0	0	0	0	0	0	0	0	154	19:00	0	87	20	0	6	1	0	0	0	0	1	115		
7:15	0	141	29	1	15	2	0	0	0	0	0	0	1	189	19:15	0	61	22	0	9	1	0	0	0	0	0	93		
7:30	4	135	27	1	20	5	0	0	1	0	0	0	0	193	19:30	0	57	11	0	6	0	0	0	0	0	0	74		
7:45	2	158	37	1	15	4	1	1	1	0	0	1	0	221	19:45	4	90	19	1	6	0	0	0	0	0	0	120		
8:00	0	147	31	0	14	4	1	0	0	0	0	0	0	197	20:00	2	59	16	0	6	0	0	0	0	0	0	83		
8:15	5	128	25	1	12	2	0	0	0	0	0	0	0	173	20:15	0	62	10	1	6	0	0	0	0	0	0	79		
8:30	0	97	11	0	11	0	0	0	0	0	0	0	0	119	20:30	1	97	16	0	6	2	0	0	0	0	0	122		
8:45	0	84	18	1	6	0	0	0	0	0	0	0	0	109	20:45	0	81	12	1	7	0	0	0	0	0	0	101		
9:00	0	63	18	0	7	0	1	0	0	0	0	0	0	89	21:00	0	79	10	0	2	0	0	0	1	0	0	92		
9:15	1	54	14	0	9	1	0	1	0	0	0	0	0	80	21:15	0	81	11	0	3	1	1	0	0	0	0	97		
9:30	0	49	10	0	9	1	1	0	0	0	0	0	0	70	21:30	0	61	20	0	4	0	0	0	1	0	0	86		
9:45	0	55	14	2	6	0	0	0	0	0	0	0	0	77	21:45	0	66	6	1	11	2	0	0	0	0	0	86		
10:00	0	62	13	0	8	0	0	0	0	0	0	0	0	83	22:00	0	51	11	0	5	0	0	0	1	0	0	68		
10:15	1	61	19	1	7	0	0	1	0	0	0	1	0	91	22:15	0	46	6	0	3	0	1	0	0	0	0	56		
10:30	0	58	13	0	11	2	0	0	0	0	0	0	0	84	22:30	0	33	6	0	3	0	0	0	0	0	0	42		
10:45	1	62	14	1	9	2	0	1	0	0	1	0	0	91	22:45	0	28	2	0	1	0	0	0	0	0	0	31		
11:00	0	55	12	1	8	0	1	0	0	0	0	1	0	78	23:00	0	18	7	0	2	0	0	0	0	0	0	27		
11:15	0	58	17	0	7	2	0	0	1	0	0	0	0	85	23:15	0	23	4	0	5	0	0	0	0	0	0	32		
11:30	0	66	24	0	12	0	0	0	0	0	0	0	0	102	23:30	0	17	4	0	3	0	0	0	1	0	0	25		
11:45	1	99	25	0	8	0	0	0	0	0	0	0	0	133	23:45	0	20	1	0	2	0	0	0	0	0	0	23		
TOTAL	18	2,207	503	11	297	30	5	4	3	0	1	3	1	3,083	TOTAL	38	3,862	783	15	430	49	7	6	4	0	2	0	5,196	

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 800

PM PEAK HOUR 4:15 PM
PM PEAK VOLUME 634

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	56	6,069	1,286	26	727	79	12	10	7	0	1	5	1	8,279
% OF TOTAL	0.7%	73.3%	15.5%	0.3%	8.8%	1.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	100.0%

Class 1 2 3 4 5 6 7 8 9 10 11 12 13

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS6 Ironwood between Heacock and Davis

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	23	4	0	1	0	0	0	0	0	0	0	0	28	12:00	0	62	16	0	4	0	0	0	0	0	0	82		
0:15	0	16	4	0	3	0	0	0	0	0	0	0	0	23	12:15	1	60	11	1	8	2	0	0	0	0	0	83		
0:30	0	10	2	0	1	0	0	0	0	0	0	0	0	13	12:30	2	45	16	0	9	0	0	0	0	0	0	70		
0:45	0	14	4	0	0	0	0	0	0	0	0	0	0	18	12:45	2	52	10	0	6	0	0	1	0	0	0	71		
1:00	0	8	4	0	0	0	0	0	0	0	0	0	0	12	13:00	2	71	27	1	9	0	0	0	0	0	1	111		
1:15	0	9	2	0	1	0	0	0	0	0	0	0	0	12	13:15	0	69	28	0	14	0	1	0	0	0	0	112		
1:30	0	4	0	0	1	0	0	0	0	0	0	0	0	5	13:30	2	81	23	0	8	1	0	0	0	0	0	115		
1:45	0	11	2	0	0	0	0	0	0	0	0	0	0	13	13:45	4	71	27	2	7	1	0	0	0	0	0	112		
2:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6	14:00	5	69	20	1	19	1	0	0	0	0	0	115		
2:15	0	6	1	0	1	0	0	0	0	0	0	0	0	8	14:15	0	85	22	0	13	0	1	0	0	1	0	122		
2:30	0	2	2	0	0	0	0	0	0	0	0	0	0	4	14:30	1	74	23	0	11	2	0	2	0	0	0	113		
2:45	0	13	1	0	0	0	0	0	0	0	0	0	0	14	14:45	3	54	15	0	15	1	1	0	0	0	0	89		
3:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3	15:00	0	78	12	0	10	0	0	0	0	0	0	100		
3:15	0	3	1	0	2	0	0	0	0	0	0	0	0	6	15:15	0	67	20	0	10	1	0	0	0	0	0	98		
3:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7	15:30	0	67	15	0	12	0	0	0	0	0	0	94		
3:45	0	7	1	0	0	0	0	0	0	0	0	0	0	8	15:45	1	76	15	0	12	1	0	0	1	0	0	106		
4:00	0	7	1	0	1	0	0	0	0	0	0	0	0	9	16:00	0	94	18	0	16	0	0	0	0	0	0	128		
4:15	0	5	1	0	1	0	0	0	0	0	0	0	0	7	16:15	2	96	26	0	16	2	0	0	0	0	0	142		
4:30	0	9	1	0	1	0	0	0	0	0	0	0	0	11	16:30	1	96	16	1	10	2	0	0	0	0	0	126		
4:45	0	13	4	0	4	0	0	0	0	0	0	0	0	21	16:45	0	89	23	0	24	3	0	0	0	0	0	139		
5:00	0	7	2	0	2	0	0	0	0	0	0	0	0	11	17:00	4	112	21	0	18	2	1	0	0	0	0	158		
5:15	0	9	1	1	1	0	0	0	0	0	0	0	0	12	17:15	1	110	12	0	17	2	0	0	0	0	0	142		
5:30	0	7	3	0	0	0	0	0	0	0	0	0	0	10	17:30	3	127	29	0	17	4	0	0	0	0	1	181		
5:45	0	19	1	0	3	0	0	0	0	0	0	0	0	23	17:45	2	133	26	1	18	1	1	0	0	0	0	182		
6:00	0	18	5	0	1	0	0	0	0	0	0	0	0	24	18:00	2	106	23	1	13	3	0	0	0	0	1	149		
6:15	0	15	2	1	4	0	0	0	0	0	0	0	0	22	18:15	4	101	37	0	13	2	0	0	0	0	0	157		
6:30	0	20	5	0	6	0	0	0	0	0	0	0	0	31	18:30	0	70	18	0	10	2	0	0	0	0	0	100		
6:45	0	26	8	0	3	0	1	0	0	0	0	0	0	38	18:45	2	109	20	1	13	1	0	0	0	0	0	146		
7:00	0	53	11	0	5	2	0	0	0	0	0	0	0	71	19:00	0	87	17	0	11	1	0	0	0	0	0	116		
7:15	0	61	25	0	6	5	0	0	0	0	0	0	0	97	19:15	1	62	21	0	7	1	0	0	0	0	0	92		
7:30	0	95	21	0	3	2	0	0	0	0	0	0	0	121	19:30	2	72	17	0	5	1	0	0	0	0	0	97		
7:45	2	67	22	0	8	0	0	0	0	0	0	0	0	99	19:45	0	73	15	1	6	1	1	0	0	0	0	97		
8:00	2	62	13	0	5	1	0	1	0	0	0	0	0	84	20:00	1	63	16	0	7	2	0	0	0	0	0	89		
8:15	0	47	12	0	4	1	0	0	0	0	0	0	0	64	20:15	0	63	12	0	17	1	0	0	0	0	0	93		
8:30	1	49	17	1	9	0	0	0	0	0	0	0	0	77	20:30	2	49	24	0	9	0	0	0	0	0	0	84		
8:45	0	65	7	0	8	0	0	0	0	0	1	0	0	81	20:45	0	58	16	1	10	0	0	0	0	0	0	85		
9:00	1	41	7	0	4	2	0	0	0	0	0	0	0	55	21:00	0	48	11	0	4	0	0	0	0	0	0	63		
9:15	0	33	10	1	13	0	1	1	0	0	0	0	0	59	21:15	1	64	18	0	2	0	0	0	0	0	0	85		
9:30	0	41	10	1	15	0	0	0	0	0	0	0	0	67	21:30	0	49	11	0	4	0	0	0	1	0	0	65		
9:45	0	31	12	0	8	2	0	0	0	0	0	0	0	53	21:45	2	42	9	0	3	0	0	0	0	0	0	56		
10:00	0	39	5	0	6	0	1	0	0	0	0	0	0	51	22:00	2	29	8	0	3	0	0	0	0	0	0	42		
10:15	0	35	15	0	5	1	0	0	0	0	0	0	0	56	22:15	0	35	10	0	2	0	0	0	0	0	0	47		
10:30	0	50	19	1	8	0	1	1	0	0	0	0	0	80	22:30	0	32	6	0	2	0	0	0	0	0	0	40		
10:45	4	40	21	1	7	0	0	1	0	0	0	0	0	74	22:45	0	20	5	0	1	0	0	0	0	0	0	26		
11:00	0	49	11	0	12	0	0	1	0	0	0	0	0	73	23:00	0	33	8	0	2	1	0	0	0	0	0	44		
11:15	0	62	16	0	9	0	0	0	0	0	0	0	0	87	23:15	0	22	2	0	1	0	0	0	0	0	0	25		
11:30	1	64	24	0	8	0	0	0	0	0	0	0	0	97	23:30	0	20	8	0	1	0	0	0	0	0	0	29		
11:45	3	51	22	1	12	0	0	0	0	0	0	0	0	89	23:45	0	15	1	0	0	0	0	0	0	0	0	16		
TOTAL	14	1,330	363	8	193	16	4	5	0	0	1	0	0	1,934	TOTAL	53	3,260	804	11	449	42	6	3	2	1	1	2	0	4,634

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 401

PM PEAK HOUR 5:30 PM
PM PEAK VOLUME 669

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	67	4,590	1,167	19	642	58	10	8	2	1	2	2	0	6,568
% OF TOTAL	1.0%	69.9%	17.8%	0.3%	9.8%	0.9%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
-------	---	---	---	---	---	---	---	---	---	----	----	----	----

TOTAL: ALL	157	9,626	2,429	40	1,309	131	20	21	9	1	4	3	2	13,752
% OF TOTAL	2.4%	146.6%	37.0%	0.6%	19.9%	2.0%	0.3%	0.3%	0.1%	0.0%	0.1%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS6 Ironwood between Heacock and Davis

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	7	1	0	1	0	0	0	0	0	0	0	0	9	12:00	3	46	23	1	11	1	0	0	0	0	0	0	85	
0:15	0	13	2	0	1	0	0	0	0	0	0	0	0	16	12:15	0	79	27	0	9	1	0	0	0	0	0	0	116	
0:30	0	6	0	0	1	0	0	0	0	0	0	0	0	7	12:30	1	74	13	0	17	1	0	0	0	0	0	106		
0:45	0	3	2	0	0	0	0	0	0	0	0	0	0	5	12:45	0	73	16	0	15	2	0	0	0	0	0	106		
1:00	0	9	3	0	0	0	0	0	0	0	0	0	0	12	13:00	0	73	18	0	14	2	0	0	0	0	0	107		
1:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:15	1	58	16	1	5	2	0	0	0	0	0	83		
1:30	0	9	3	0	0	0	0	0	0	0	0	0	0	12	13:30	2	66	19	0	6	0	0	1	0	0	0	94		
1:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6	13:45	0	69	14	0	10	1	0	0	0	0	0	94		
2:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3	14:00	0	63	19	0	6	1	0	1	0	0	0	90		
2:15	0	4	0	0	1	0	0	0	0	0	0	0	0	5	14:15	4	72	24	1	9	0	0	0	0	0	0	110		
2:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:30	2	85	19	0	7	1	1	1	0	0	0	117		
2:45	0	5	1	0	1	0	0	0	0	0	0	0	0	7	14:45	0	65	18	0	11	2	0	0	0	0	0	96		
3:00	0	12	1	0	3	0	0	0	0	0	0	0	0	16	15:00	0	70	17	0	8	1	0	0	0	0	0	96		
3:15	0	9	6	0	2	0	0	0	0	0	0	0	0	17	15:15	1	62	17	0	7	1	0	0	0	0	0	88		
3:30	1	10	2	0	2	0	0	0	0	0	0	0	0	15	15:30	5	63	19	1	4	4	1	1	0	0	0	98		
3:45	0	16	4	0	3	0	0	0	0	0	0	0	0	23	15:45	1	73	18	0	10	1	0	0	0	0	0	103		
4:00	1	13	4	0	7	0	0	0	0	0	0	0	0	25	16:00	3	67	19	0	10	0	0	0	0	0	0	99		
4:15	0	28	5	0	5	0	0	0	0	0	0	0	0	38	16:15	0	99	13	0	6	0	0	0	0	0	0	118		
4:30	0	23	9	0	5	1	0	0	0	0	0	0	0	38	16:30	0	73	19	1	7	0	0	0	0	0	0	100		
4:45	0	34	5	0	10	0	0	0	0	0	0	0	0	49	16:45	5	76	15	0	13	0	0	1	0	0	0	110		
5:00	0	29	9	0	6	0	0	0	0	0	0	0	0	44	17:00	0	81	27	0	10	0	1	0	0	0	0	119		
5:15	0	40	9	0	6	0	0	0	0	0	0	0	0	55	17:15	0	65	13	0	8	1	0	0	0	0	0	87		
5:30	2	40	17	0	15	0	0	0	0	0	0	0	0	74	17:30	3	85	15	0	13	1	1	1	0	0	0	119		
5:45	0	27	13	0	5	1	0	0	0	0	0	0	0	46	17:45	5	79	19	0	10	0	0	0	0	0	0	113		
6:00	0	38	10	0	11	1	0	0	0	0	0	0	0	60	18:00	1	88	15	0	5	1	0	0	0	0	0	110		
6:15	4	39	15	0	10	0	0	0	0	0	0	0	0	68	18:15	0	70	11	0	5	2	1	0	0	0	0	89		
6:30	0	59	20	1	9	0	0	0	0	0	0	0	0	89	18:30	4	77	10	0	10	1	0	0	0	0	0	102		
6:45	1	73	14	0	16	2	0	0	0	0	0	0	0	106	18:45	1	75	18	0	6	0	0	1	0	0	0	101		
7:00	0	84	23	1	11	0	0	0	0	0	0	0	0	119	19:00	1	67	14	0	7	1	0	0	0	0	0	90		
7:15	0	111	23	0	15	4	0	0	0	0	0	0	0	153	19:15	0	54	21	0	10	1	0	0	0	0	0	86		
7:30	7	105	25	2	14	3	3	1	0	0	0	0	1	161	19:30	1	54	14	0	3	1	0	0	0	0	1	74		
7:45	3	147	41	2	12	2	1	1	0	0	0	0	0	209	19:45	0	66	15	1	4	0	0	0	0	0	0	86		
8:00	2	116	29	0	17	1	0	0	0	0	0	0	0	165	20:00	1	53	11	0	5	1	0	0	0	0	0	71		
8:15	0	82	25	1	11	1	0	0	0	0	0	0	0	120	20:15	0	59	22	0	12	2	0	1	0	0	0	96		
8:30	1	64	9	0	14	2	0	0	0	0	0	0	0	90	20:30	0	94	16	0	8	2	0	0	0	0	0	120		
8:45	3	69	18	2	6	1	0	0	0	0	0	0	0	99	20:45	1	73	12	1	9	1	1	0	0	0	0	98		
9:00	0	58	19	0	9	1	0	1	0	0	1	0	0	89	21:00	1	76	13	0	3	1	0	0	2	0	0	96		
9:15	0	65	15	0	9	1	0	1	0	0	0	0	0	91	21:15	2	62	18	0	4	0	0	0	1	0	1	88		
9:30	0	61	11	0	9	0	0	0	0	0	0	0	0	81	21:30	0	72	20	0	5	3	0	0	1	0	0	101		
9:45	0	38	19	1	5	1	0	0	0	0	0	0	0	64	21:45	0	57	12	1	9	1	0	0	0	0	0	80		
10:00	0	56	14	0	9	0	0	0	0	0	0	0	0	79	22:00	5	46	7	0	3	1	0	0	0	0	0	62		
10:15	2	45	16	0	7	0	0	1	0	0	0	0	0	71	22:15	0	39	5	0	5	0	0	0	0	0	0	49		
10:30	0	52	19	0	8	1	0	0	1	0	0	0	0	81	22:30	2	27	7	0	1	1	0	0	0	0	0	38		
10:45	0	48	14	1	12	1	0	0	0	0	0	0	0	76	22:45	2	31	1	0	2	0	0	0	0	0	0	36		
11:00	2	40	7	1	7	1	0	0	0	0	0	0	0	58	23:00	0	19	3	0	3	0	0	0	0	0	0	25		
11:15	0	44	12	0	5	0	0	0	0	0	0	0	0	61	23:15	0	22	5	0	1	1	0	0	0	0	0	29		
11:30	1	70	28	0	9	3	0	0	0	0	0	0	0	111	23:30	0	15	4	0	3	0	0	0	1	0	0	23		
11:45	2	86	26	1	8	1	0	0	0	0	0	0	0	124	23:45	0	24	1	0	1	0	0	0	1	0	0	27		
TOTAL	32	2,000	550	13	317	29	4	5	1	0	1	0	1	2,953	TOTAL	58	3,036	712	8	350	44	6	8	6	0	1	1	4,231	
AM PEAK HOUR														7:15 AM	PM PEAK HOUR														4:15 PM
AM PEAK VOLUME														688	PM PEAK VOLUME														447

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	90	5,036	1,262	21	667	73	10	13	7	0	2	1	2	7,184
% OF TOTAL	1.3%	70.1%	17.6%	0.3%	9.3%	1.0%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
-------	---	---	---	---	---	---	---	---	---	----	----	----	----

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS7 Ironwood east of Indian

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	17	0	0	0	0	0	0	0	0	0	0	0	17	12:00	2	71	11	1	2	2	0	0	0	0	0	0	0	89
0:15	0	16	1	0	0	0	0	0	0	0	0	0	0	17	12:15	0	64	6	0	3	1	0	0	1	0	0	0	0	75
0:30	0	10	1	0	0	0	0	0	0	0	0	0	0	11	12:30	0	55	6	0	3	0	1	0	0	0	0	0	0	65
0:45	0	10	0	0	0	0	0	0	0	0	0	0	0	10	12:45	0	67	4	0	3	2	0	0	0	0	0	0	0	76
1:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8	13:00	1	81	9	1	1	1	1	0	0	0	0	0	0	95
1:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9	13:15	0	83	12	0	7	0	0	0	0	0	0	0	0	102
1:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3	13:30	4	88	5	0	5	3	0	0	0	0	0	0	0	105
1:45	1	10	0	0	0	0	0	0	0	0	0	0	0	11	13:45	2	89	8	0	2	0	0	0	1	0	0	0	0	102
2:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	14:00	1	81	15	1	3	2	0	0	0	0	0	0	0	103
2:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5	14:15	2	99	10	0	2	3	0	0	0	0	0	0	0	116
2:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:30	0	107	9	0	5	1	0	0	0	0	0	0	0	122
2:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6	14:45	0	67	12	0	2	3	0	0	0	0	0	0	0	84
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	15:00	0	75	13	0	4	1	0	0	0	0	0	0	0	93
3:15	0	3	2	0	0	0	0	0	0	0	0	0	0	5	15:15	0	84	5	1	4	1	0	0	0	0	0	0	0	95
3:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:30	0	83	12	1	1	0	0	1	0	0	0	0	0	98
3:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	15:45	2	84	6	0	2	3	1	0	0	0	0	0	1	99
4:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	16:00	0	84	16	0	2	0	0	0	0	0	0	1	0	103
4:15	0	5	1	0	0	0	0	0	0	0	0	0	0	6	16:15	1	113	14	0	1	0	0	0	0	0	0	0	0	129
4:30	0	9	1	0	0	0	0	0	0	0	0	0	0	10	16:30	2	103	8	1	1	0	0	0	0	0	0	0	0	115
4:45	0	14	4	0	1	0	0	0	0	0	0	0	0	19	16:45	0	108	19	0	3	2	0	0	0	0	0	0	0	132
5:00	0	12	3	0	0	0	0	0	0	0	0	0	0	15	17:00	2	118	10	0	7	2	0	0	1	1	0	0	0	141
5:15	1	13	2	1	0	0	0	0	0	0	0	0	0	17	17:15	0	124	18	0	5	3	0	0	0	0	0	0	0	150
5:30	0	12	2	0	0	0	0	0	0	0	0	0	0	14	17:30	5	132	11	0	10	4	0	0	0	0	0	0	0	162
5:45	1	19	1	0	0	0	0	0	0	0	0	0	0	21	17:45	2	133	16	0	4	2	0	0	0	0	0	0	0	157
6:00	0	14	2	0	0	0	0	0	0	0	0	0	0	16	18:00	3	127	15	0	0	2	0	0	0	0	0	0	0	147
6:15	0	18	6	0	2	0	0	0	0	0	0	0	0	26	18:15	4	107	14	0	3	4	0	0	0	0	0	0	0	132
6:30	0	26	4	1	2	0	0	0	0	0	0	0	0	33	18:30	1	97	11	0	2	2	1	0	0	0	0	1	0	115
6:45	0	46	6	0	1	0	1	0	0	0	0	0	0	54	18:45	0	89	8	1	3	2	0	0	0	0	0	0	1	104
7:00	0	67	3	0	6	0	0	0	0	1	0	0	0	77	19:00	0	76	9	0	1	2	0	0	0	0	0	1	0	89
7:15	3	120	14	2	3	3	0	0	0	0	0	0	0	145	19:15	1	77	12	0	1	1	0	0	0	0	0	0	1	93
7:30	1	125	5	0	3	1	0	0	1	0	1	0	0	137	19:30	2	80	7	0	1	0	0	0	0	0	0	0	0	90
7:45	1	105	9	0	3	0	1	0	0	0	0	0	0	119	19:45	2	68	10	1	2	2	0	0	0	0	0	0	0	85
8:00	0	74	6	0	1	2	0	0	0	0	0	0	0	83	20:00	2	66	7	0	4	2	0	0	0	0	0	0	0	81
8:15	3	55	5	0	1	0	0	0	1	0	0	1	0	66	20:15	0	71	15	0	1	0	0	0	0	0	0	0	0	87
8:30	0	56	6	1	3	0	0	0	0	0	0	0	0	66	20:30	0	64	8	0	1	0	0	0	0	0	0	0	0	73
8:45	0	51	1	0	2	1	0	0	0	0	0	0	0	55	20:45	0	61	8	1	1	1	0	0	0	0	0	0	0	72
9:00	0	44	6	0	2	2	0	0	0	0	0	0	0	54	21:00	0	46	5	0	0	2	0	0	0	0	0	0	0	53
9:15	0	48	12	0	4	0	1	1	0	0	0	0	0	66	21:15	0	68	5	0	1	0	0	0	0	0	0	0	0	74
9:30	1	40	11	1	2	0	0	0	0	0	0	0	0	55	21:30	0	59	3	0	1	1	0	0	0	0	0	0	0	64
9:45	2	42	6	0	1	0	0	0	0	0	0	1	0	52	21:45	0	39	3	0	1	0	0	0	0	0	0	0	0	43
10:00	0	36	4	0	4	1	0	0	0	0	0	0	0	45	22:00	0	35	2	0	1	0	0	0	0	0	0	0	0	38
10:15	0	39	4	0	0	2	0	0	0	0	0	0	0	45	22:15	0	36	4	0	0	0	0	0	0	0	0	0	0	40
10:30	2	54	5	1	1	0	0	0	0	0	0	0	0	63	22:30	0	23	1	0	0	1	0	0	0	0	0	0	0	25
10:45	0	66	3	1	2	1	0	0	0	1	1	0	0	75	22:45	0	20	0	0	0	0	0	0	0	0	0	0	0	20
11:00	1	71	13	0	2	3	0	0	0	0	0	0	0	90	23:00	0	25	1	0	1	1	0	0	0	0	0	0	0	28
11:15	3	97	15	0	2	1	0	0	0	1	0	0	0	119	23:15	0	22	2	0	1	0	0	0	0	0	0	0	0	25
11:30	0	97	7	0	3	2	0	0	0	0	0	0	0	109	23:30	0	12	1	0	0	0	0	0	0	0	0	0	0	13
11:45	1	78	15	1	3	1	0	0	0	0	0	0	0	99	23:45	0	12	1	0	0	0	0	0	0	0	0	0	0	13
TOTAL	21	1,665	188	9	53	21	3	1	2	3	3	1	0	1,970	TOTAL	41	3,573	407	9	108	59	4	1	3	1	1	2	3	4,212

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 484

PM PEAK HOUR 5:15 PM
PM PEAK VOLUME 616

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	62	5,238	595	18	161	80	7	2	5	4	4	3	3	6,182
% OF TOTAL	1.0%	84.7%	9.6%	0.3%	2.6%	1.3%	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	96	10,700	1,499	36	493	127	23	7	14	6	7	4	4	13,016
% OF TOTAL	1.6%	173.1%	24.2%	0.6%	8.0%	2.1%	0.4%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS7 Ironwood east of Indian

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL						
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13							
0:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10	12:00	0	77	22	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	105
0:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7	12:15	0	98	18	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	121	
0:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8	12:30	0	79	10	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	95	
0:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:45	0	63	17	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	87	
1:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13	13:00	1	76	12	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	97	
1:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7	13:15	0	79	7	0	7	0	1	0	0	0	0	0	0	0	0	0	0	0	94	
1:30	0	9	1	0	0	0	0	0	0	0	0	0	0	10	13:30	0	67	14	0	5	0	0	1	0	0	0	0	0	0	0	0	0	0	87	
1:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	13:45	0	90	13	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	106	
2:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4	14:00	0	62	17	0	6	5	0	0	0	0	0	0	0	0	0	0	0	0	90	
2:15	0	6	0	0	1	0	0	0	0	0	0	0	0	7	14:15	0	87	15	1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	110	
2:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:30	2	86	16	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	106	
2:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:45	0	79	8	0	10	0	0	1	0	0	0	0	0	0	0	0	0	0	98	
3:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8	15:00	0	72	15	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	91	
3:15	0	7	3	0	0	0	0	0	0	0	0	0	0	10	15:15	0	81	13	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	96	
3:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:30	2	80	12	1	7	3	2	0	0	0	0	0	0	0	0	0	0	0	107	
3:45	0	12	6	0	0	1	0	0	0	0	0	0	0	19	15:45	0	76	12	0	5	0	0	0	0	0	0	0	0	1	0	0	0	94		
4:00	0	12	4	0	2	0	0	0	0	0	0	0	0	18	16:00	0	72	13	0	9	0	1	0	0	0	0	0	0	0	0	0	0	0	95	
4:15	0	9	2	0	0	0	0	0	0	0	0	0	0	11	16:15	1	79	16	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	101	
4:30	0	13	2	0	0	1	0	0	0	0	0	0	0	16	16:30	2	65	9	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	81	
4:45	0	15	4	0	1	0	0	0	0	0	0	0	0	20	16:45	0	80	21	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	108	
5:00	0	22	4	0	0	0	0	0	0	0	0	0	0	26	17:00	1	79	10	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	96	
5:15	0	18	7	0	2	0	0	0	0	0	0	0	0	27	17:15	1	74	13	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	90	
5:30	0	31	15	0	3	1	0	0	0	0	0	0	0	50	17:30	0	91	18	0	6	0	1	0	0	0	0	0	0	0	0	0	0	0	116	
5:45	0	18	5	0	2	1	0	0	0	0	0	0	0	26	17:45	1	78	17	1	6	3	0	0	0	0	0	0	0	0	0	0	0	0	106	
6:00	0	30	5	0	3	0	0	0	0	0	0	0	0	38	18:00	0	84	9	0	8	0	1	0	0	0	0	0	0	0	0	0	0	0	102	
6:15	0	34	8	0	3	0	0	0	0	0	0	0	0	45	18:15	0	88	9	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	101	
6:30	0	51	12	1	3	0	0	0	0	0	0	0	0	67	18:30	0	80	11	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	96	
6:45	0	58	10	0	10	0	0	0	0	0	0	0	0	78	18:45	0	61	11	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	78	
7:00	0	106	15	0	9	0	0	0	0	0	0	0	0	130	19:00	0	99	13	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	116	
7:15	2	118	16	0	6	1	0	1	0	0	0	0	0	144	19:15	0	72	17	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	95	
7:30	1	139	23	2	7	2	1	1	0	1	0	0	1	178	19:30	0	71	8	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	82	
7:45	4	192	31	1	13	4	0	1	0	0	0	1	0	247	19:45	0	68	7	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	77	
8:00	0	115	24	0	9	2	3	0	0	0	0	0	0	153	20:00	1	73	8	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	89	
8:15	0	80	10	1	6	0	0	0	0	0	0	0	0	97	20:15	0	82	17	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	103	
8:30	1	65	12	1	6	1	0	0	0	0	0	0	0	86	20:30	0	94	9	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	108	
8:45	0	85	11	0	4	0	0	0	0	0	0	0	0	100	20:45	0	94	9	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	107	
9:00	2	53	11	0	5	0	0	0	0	0	1	0	0	72	21:00	2	91	9	0	3	2	0	0	1	0	0	0	0	0	0	0	0	0	108	
9:15	0	56	7	0	5	0	1	0	0	0	0	0	0	69	21:15	0	79	9	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	92	
9:30	0	54	9	0	2	0	1	0	0	0	0	0	0	66	21:30	2	78	11	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	96	
9:45	2	43	14	0	2	0	0	0	0	0	0	0	0	61	21:45	1	69	5	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	81	
10:00	0	63	9	0	2	0	0	0	0	0	0	0	0	74	22:00	1	47	4	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	54	
10:15	0	51	14	0	2	1	0	0	0	0	0	0	0	68	22:15	0	50	5	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	60	
10:30	0	59	10	0	5	2	0	0	0	0	0	0	0	76	22:30	0	35	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	39	
10:45	0	62	16	2	2	0	1	0	0	0	0	0	0	83	22:45	0	29	5	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	37	
11:00	0	39	10	0	3	1	0	0	0	0	0	0	0	53	23:00	0	19	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
11:15	0	58	5	0	5	0	1	0	0	0	0	0	0	69	23:15	1	26	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	29	
11:30	2	114	24	1	9	1	0	0	0	0	0	0	0	151	23:30	0	20	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	23	
11:45	1	99	17	0	2	1	1	0	0	0	0	0	0	121	23:45	0	18	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	21	
TOTAL	15	2,065	382	9	134	20	9	3	0	1	1	1	1	2,641	TOTAL	19	3,397	522	9	198	27	7	2	9	1	2	0	0	0	0	0	4,193			
AM PEAK HOUR														7:15 AM	PM PEAK HOUR														8:15 PM						
AM PEAK VOLUME														722	PM PEAK VOLUME														426						

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	34	5,462	904	18	332	47	16	5	9	2	3	1	1	6,834
% OF TOTAL	0.5%	79.9%	13.2%	0.3%	4.9%	0.7%	0.2%	0.1%	0.					

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS8 Hemlock west of Heacock

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	14	0	0	0	0	0	0	0	0	0	0	0	14	12:00	0	9	2	0	0	0	0	0	0	0	0	11		
0:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7	12:15	1	7	1	0	0	2	0	0	0	0	0	11		
0:30	0	11	0	0	0	0	0	0	0	0	0	0	0	11	12:30	7	18	2	0	1	0	0	0	0	0	0	28		
0:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6	12:45	7	11	0	0	1	0	0	0	0	0	0	19		
1:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	13:00	1	14	2	0	1	0	0	0	0	0	0	18		
1:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:15	11	20	0	0	0	0	0	0	0	0	0	31		
1:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	13:30	16	21	2	0	2	0	0	0	0	0	0	41		
1:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6	13:45	3	12	3	0	1	0	0	0	0	0	0	19		
2:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:00	4	17	2	0	0	0	0	0	0	0	0	23		
2:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	14:15	4	5	3	0	0	0	0	0	0	0	0	12		
2:30	0	6	0	0	1	0	0	0	0	0	0	0	0	7	14:30	5	15	2	0	0	0	0	0	0	0	0	22		
2:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	14:45	1	11	3	0	0	0	0	0	0	0	0	15		
3:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8	15:00	3	13	1	0	0	0	0	0	0	0	0	17		
3:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:15	2	8	1	0	0	0	0	0	0	0	0	11		
3:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7	15:30	8	17	2	0	1	0	0	0	0	0	0	28		
3:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	15:45	4	12	3	0	0	0	0	0	0	0	0	19		
4:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	16:00	0	68	1	0	1	0	0	0	0	0	0	70		
4:15	0	9	2	0	0	0	0	0	0	0	0	0	0	11	16:15	4	68	2	0	1	0	0	0	0	1	0	76		
4:30	0	9	0	0	0	0	0	0	0	0	0	0	0	9	16:30	6	74	4	0	2	0	0	0	0	0	0	86		
4:45	0	10	2	0	1	0	0	0	0	0	0	0	0	13	16:45	5	63	3	0	0	0	0	0	0	0	0	71		
5:00	0	12	4	0	1	0	0	0	0	0	0	0	0	17	17:00	3	64	1	0	1	0	0	0	0	0	0	69		
5:15	0	12	0	0	0	0	0	0	0	0	0	0	0	12	17:15	2	65	2	0	0	1	0	0	0	0	0	70		
5:30	0	19	4	0	0	0	0	0	0	0	0	0	0	23	17:30	3	62	4	0	0	0	0	0	0	0	0	69		
5:45	0	14	1	0	0	0	0	0	0	0	0	0	0	15	17:45	2	52	2	0	0	0	0	0	0	1	0	57		
6:00	0	7	6	0	1	0	0	0	0	0	0	0	0	14	18:00	2	16	4	0	0	0	0	0	0	0	0	22		
6:15	0	15	2	0	1	0	0	0	0	0	0	0	0	18	18:15	2	10	4	0	0	0	0	1	0	0	0	17		
6:30	0	15	3	0	1	0	0	0	0	0	0	0	0	19	18:30	3	15	1	0	0	0	0	0	0	0	0	19		
6:45	0	24	2	0	1	0	0	0	0	0	0	0	0	27	18:45	4	12	4	0	1	0	0	0	0	0	0	21		
7:00	0	35	2	0	1	0	0	0	0	0	0	0	0	38	19:00	1	7	1	0	1	0	0	0	0	0	0	10		
7:15	0	40	4	0	5	0	0	0	0	0	0	0	0	49	19:15	1	10	4	0	0	0	0	0	0	0	0	15		
7:30	0	64	3	0	0	1	0	0	0	0	0	0	0	68	19:30	4	12	2	0	1	0	0	0	0	0	0	19		
7:45	0	50	5	0	0	0	0	0	0	0	0	0	0	55	19:45	1	10	1	0	0	1	0	0	0	0	0	13		
8:00	0	37	3	0	1	0	0	0	0	0	0	0	0	41	20:00	2	7	1	0	0	0	0	0	0	0	0	10		
8:15	0	41	6	0	1	0	0	0	0	0	0	0	0	48	20:15	2	14	0	0	0	0	0	0	0	0	0	16		
8:30	0	43	7	0	0	1	0	0	0	0	0	0	0	51	20:30	2	15	2	0	0	0	0	0	0	0	0	19		
8:45	0	44	3	0	2	0	0	0	0	0	0	0	0	49	20:45	1	8	2	0	0	0	0	0	0	0	0	11		
9:00	0	29	5	0	2	1	0	0	0	0	0	0	0	37	21:00	5	13	0	0	0	0	0	0	0	0	0	18		
9:15	0	30	3	0	2	0	0	0	0	0	0	0	0	35	21:15	3	8	1	0	1	0	0	0	0	0	0	13		
9:30	0	31	6	0	1	0	0	0	0	0	0	0	0	38	21:30	4	16	0	0	0	0	0	0	0	0	0	20		
9:45	0	41	1	0	2	0	0	0	0	0	0	0	0	44	21:45	2	7	1	0	0	0	0	0	0	0	0	10		
10:00	0	31	6	0	0	0	0	0	0	0	0	0	0	37	22:00	2	4	0	1	0	0	0	0	0	0	0	7		
10:15	0	26	7	0	1	0	0	0	0	0	0	0	0	34	22:15	1	9	1	0	0	0	0	0	0	0	0	11		
10:30	0	37	3	1	0	0	0	0	0	0	0	0	0	41	22:30	1	2	2	0	0	0	0	0	0	0	0	5		
10:45	0	30	7	0	2	0	0	0	0	0	0	0	0	39	22:45	3	12	0	0	0	0	0	0	0	0	0	15		
11:00	3	19	2	0	0	0	0	0	0	0	0	0	0	24	23:00	1	3	0	0	0	0	0	0	0	0	0	4		
11:15	6	24	2	0	2	0	0	0	0	0	0	0	0	34	23:15	1	11	2	0	0	0	0	0	0	0	0	14		
11:30	3	12	3	0	0	0	0	0	0	0	0	0	0	18	23:30	0	7	1	0	0	0	0	0	0	0	0	8		
11:45	2	5	0	0	1	0	0	0	0	0	0	0	0	8	23:45	1	5	1	0	0	0	0	0	0	0	0	7		
TOTAL	14	910	107	1	30	3	0	0	0	0	0	0	0	1,065	TOTAL	151	959	83	1	18	2	0	1	0	0	2	0	1,217	

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 213

PM PEAK HOUR 4:00 PM
PM PEAK VOLUME 303

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	165	1,869	190	2	48	5	0	1	0	0	0	2	0	2,282
% OF TOTAL	7.2%	81.9%	8.3%	0.1%	2.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
-------	---	---	---	---	---	---	---	---	---	----	----	----	----	--

TOTAL: ALL	193	4,645	449	4	103	29	12	1	2	0	0	2	1	5,441
% OF TOTAL	8.5%	203.5%	19.7%	0.2%	4.5%	1.3%	0.5%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017

JOB #: SC1422

LOCATION#

CLASS8 Hemlock west of Heacock

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL					
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13						
0:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7	12:00	0	28	4	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	34
0:15	0	6	0	0	0	0	0	0	0	0	0	0	0	6	12:15	0	46	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	51	
0:30	0	10	0	0	1	0	0	0	0	0	0	0	0	11	12:30	1	53	3	0	3	1	2	0	0	0	0	0	0	0	0	0	0	63	
0:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	12:45	1	40	7	0	2	0	1	0	0	0	0	0	0	0	0	0	0	51	
1:00	0	3	0	0	0	1	0	0	0	0	0	0	0	4	13:00	1	43	6	1	0	1	0	0	0	0	0	0	0	0	0	0	0	52	
1:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:15	0	39	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	45	
1:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6	13:30	1	39	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	
1:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	13:45	0	36	5	0	2	0	0	0	0	0	0	0	0	0	0	0	0	43	
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:00	0	35	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	38	
2:15	0	8	0	0	0	0	0	0	0	0	0	0	0	8	14:15	1	42	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	
2:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:30	1	37	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	41	
2:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:45	0	49	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	57	
3:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	15:00	0	53	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	
3:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:15	1	50	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	
3:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	15:30	0	52	7	0	2	1	1	0	0	0	0	0	0	0	0	0	0	63	
3:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	15:45	1	48	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	
4:00	0	6	1	0	2	0	0	0	0	0	0	0	0	9	16:00	1	44	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	
4:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	16:15	1	50	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	55	
4:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6	16:30	1	61	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	67	
4:45	0	8	0	0	2	0	0	0	0	0	0	0	0	10	16:45	0	51	4	0	1	1	0	0	0	0	0	0	0	0	0	0	0	57	
5:00	0	18	1	0	1	0	0	0	0	0	0	0	0	20	17:00	0	52	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	57	
5:15	0	6	2	0	0	0	0	0	0	0	0	0	0	8	17:15	2	42	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	51	
5:30	0	8	2	0	0	0	0	0	0	0	0	0	0	10	17:30	0	49	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	
5:45	0	8	1	0	0	0	0	0	0	0	0	0	0	9	17:45	1	47	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	52	
6:00	0	10	2	0	0	0	0	0	0	0	0	0	0	12	18:00	0	45	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	48	
6:15	0	14	3	0	2	0	0	0	0	0	0	0	0	19	18:15	3	52	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	59	
6:30	0	6	3	0	2	0	0	0	1	0	0	0	0	12	18:30	0	40	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	
6:45	0	24	1	0	2	0	0	0	0	0	0	0	0	27	18:45	1	40	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	47	
7:00	0	29	3	0	1	0	1	0	0	0	0	0	0	34	19:00	1	47	7	0	0	2	1	0	0	0	0	0	0	0	0	0	0	58	
7:15	0	33	3	0	1	0	0	0	0	0	0	0	1	38	19:15	0	44	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	50	
7:30	1	38	6	0	1	1	0	0	0	0	0	0	0	47	19:30	1	38	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	
7:45	0	53	7	0	0	0	0	0	0	0	0	0	0	60	19:45	0	41	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	44	
8:00	1	45	6	0	1	0	0	0	0	0	0	0	0	53	20:00	0	42	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	
8:15	0	41	4	0	0	0	1	0	0	0	0	0	0	46	20:15	1	50	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	57	
8:30	1	32	1	0	0	2	0	0	0	0	0	0	0	36	20:30	0	41	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	
8:45	0	30	6	0	1	0	0	0	0	0	0	0	0	37	20:45	0	42	5	0	2	1	0	0	0	0	0	0	0	0	0	0	0	50	
9:00	0	33	1	0	1	1	0	0	0	0	0	0	0	36	21:00	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
9:15	0	29	6	0	2	0	0	0	0	0	0	0	0	37	21:15	1	42	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	
9:30	0	26	10	0	0	0	0	0	0	0	0	0	0	36	21:30	0	41	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	
9:45	0	34	4	0	0	2	0	0	0	0	0	0	0	40	21:45	0	28	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	
10:00	0	30	0	0	2	0	0	0	0	0	0	0	0	32	22:00	0	20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	
10:15	1	29	4	0	0	1	0	0	0	0	0	0	0	35	22:15	0	35	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	
10:30	0	31	6	0	0	0	0	0	0	0	0	0	0	37	22:30	0	19	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	20	
10:45	0	34	4	0	2	0	0	0	0	0	0	0	0	40	22:45	0	25	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	27	
11:00	0	34	5	0	2	1	0	0	0	0	0	0	0	42	23:00	0	14	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	17	
11:15	0	40	0	0	0	0	0	0	0	0	0	0	0	40	23:15	0	10	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	12	
11:30	0	34	1	0	0	0	2	0	0	0	0	0	0	37	23:30	1	14	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	18	
11:45	1	40	3	0	0	0	1	0	1	0	0	0	0	46	23:45	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
TOTAL	5	885	96	0	26	9	5	0	2	0	0	0	1	1,029	TOTAL	23	1,891	163	2	29	15	7	0	0	0	0	0	0	0	0	0	2,130		
													AM PEAK HOUR	7:30 AM														PM PEAK HOUR	4:15 PM					
													AM PEAK VOLUME	206														PM PEAK VOLUME	236					

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	28	2,776	259	2	55	24	12	0	2	0	0	0	1	3,159
% OF TOTAL	0.9%	87.9%	8.2%	0.1%	1.7%	0.8%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
-------	---	---	---	---	---	---	---	---	---	----	----	----	----

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS9 Hemlock between Heacock and Davis

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	6	0	0	1	0	0	0	0	0	0	0	0	7	12:00	1	49	4	0	2	0	0	1	0	0	0	0	57	
0:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7	12:15	0	40	2	0	3	0	0	0	0	0	0	45		
0:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12:30	0	32	7	0	2	0	0	0	0	0	0	41		
0:45	0	8	2	0	0	0	0	0	0	0	0	0	0	10	12:45	0	47	5	0	0	0	0	0	0	0	0	52		
1:00	0	4	0	0	1	0	0	0	0	0	0	0	0	5	13:00	0	43	7	1	4	0	0	0	0	0	0	55		
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:15	0	40	6	1	2	0	0	0	0	0	0	49		
1:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	13:30	0	52	7	0	4	0	0	0	0	0	0	63		
1:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	13:45	0	37	5	0	1	0	0	0	1	0	0	44		
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	14:00	0	38	8	1	2	0	0	0	0	0	0	49		
2:15	0	5	1	0	0	0	0	0	0	0	0	0	0	6	14:15	1	32	5	0	2	0	0	0	0	0	0	40		
2:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:30	0	39	5	0	2	0	0	1	0	0	0	47		
2:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	14:45	0	43	3	0	0	0	0	0	0	0	0	46		
3:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:00	0	36	4	0	1	0	0	0	0	0	0	41		
3:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:15	1	28	5	1	0	0	0	0	0	0	0	35		
3:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5	15:30	0	46	5	0	3	0	0	0	0	0	0	54		
3:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6	15:45	0	36	3	0	1	0	0	0	0	0	0	40		
4:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8	16:00	0	49	8	0	2	0	0	0	0	0	0	59		
4:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	16:15	1	47	6	0	4	0	0	0	0	0	0	58		
4:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	16:30	1	48	5	1	3	0	0	0	1	0	0	59		
4:45	0	3	0	0	6	0	0	0	0	0	0	0	0	9	16:45	0	52	6	0	3	0	0	0	0	0	0	61		
5:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	17:00	0	58	6	1	1	0	0	0	0	0	0	66		
5:15	0	6	0	0	0	1	0	0	0	0	0	0	0	7	17:15	0	30	5	0	1	0	0	0	1	0	0	37		
5:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3	17:30	0	51	5	1	2	0	0	0	0	0	0	59		
5:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	17:45	0	53	9	0	1	0	0	0	0	0	0	63		
6:00	0	3	2	0	1	0	0	0	0	0	0	0	0	6	18:00	2	55	4	0	0	0	0	1	1	0	0	63		
6:15	0	5	1	1	0	0	0	0	0	0	0	0	0	7	18:15	0	51	7	0	1	0	0	0	0	0	0	59		
6:30	0	8	3	0	0	0	0	0	0	0	0	0	0	11	18:30	0	59	6	1	1	0	0	0	0	0	0	67		
6:45	0	12	0	0	1	0	0	0	0	0	0	0	0	13	18:45	0	55	5	0	0	0	0	2	0	0	0	62		
7:00	0	14	0	0	4	1	0	0	0	0	0	0	0	19	19:00	0	54	3	0	1	0	0	0	0	0	0	58		
7:15	1	11	0	1	2	0	0	0	0	0	0	0	0	15	19:15	0	28	6	0	1	0	0	0	0	0	0	35		
7:30	0	38	1	0	0	0	0	0	0	0	0	0	0	39	19:30	0	42	4	1	1	0	0	0	0	0	0	48		
7:45	0	39	3	0	1	0	0	0	0	0	0	0	0	43	19:45	0	31	2	0	1	0	0	0	0	0	0	34		
8:00	0	21	3	0	0	0	0	0	1	0	0	0	0	25	20:00	0	31	3	0	1	0	0	0	0	0	0	35		
8:15	0	21	6	0	2	0	0	0	0	0	0	0	0	29	20:15	0	28	1	0	0	0	0	0	0	0	0	29		
8:30	0	23	3	1	1	0	0	0	0	0	0	0	0	28	20:30	0	29	3	1	2	0	0	0	0	0	0	35		
8:45	0	32	3	0	1	0	0	0	0	0	0	0	0	36	20:45	0	38	6	0	1	0	0	0	0	0	0	45		
9:00	0	31	3	1	0	1	0	0	0	0	0	0	0	36	21:00	0	25	2	0	2	0	0	0	0	0	0	29		
9:15	0	22	4	0	2	0	0	0	1	0	0	0	0	29	21:15	0	28	3	0	1	0	0	0	0	0	0	32		
9:30	0	35	7	1	0	0	0	0	0	0	0	0	0	43	21:30	0	22	5	1	0	0	0	0	0	0	0	28		
9:45	0	41	1	0	1	0	0	0	0	0	0	0	0	43	21:45	0	25	2	0	0	0	0	0	0	0	0	27		
10:00	0	34	6	0	2	0	0	0	1	0	0	0	0	43	22:00	0	21	0	0	0	0	0	0	1	0	0	22		
10:15	0	38	6	0	0	0	0	0	0	0	0	0	0	44	22:15	0	23	3	0	1	0	0	0	0	0	0	27		
10:30	0	28	5	0	1	1	0	0	0	0	0	0	0	35	22:30	0	29	2	0	0	0	0	0	0	0	0	31		
10:45	0	34	7	1	3	0	0	0	0	0	0	0	0	45	22:45	0	25	1	0	0	0	0	0	0	0	0	26		
11:00	0	41	4	0	3	1	0	0	0	0	0	0	0	49	23:00	0	18	0	0	0	0	0	0	0	0	0	18		
11:15	0	52	8	0	3	0	0	1	0	0	0	0	0	64	23:15	0	14	3	0	2	0	0	0	0	0	0	19		
11:30	0	29	11	0	1	0	0	0	0	0	0	0	0	41	23:30	1	23	2	0	0	0	0	0	0	0	0	26		
11:45	0	49	7	1	2	0	0	0	0	0	0	0	0	59	23:45	0	15	5	0	1	0	0	0	0	0	0	21		
TOTAL	1	757	98	7	40	5	0	1	3	0	0	0	0	912	TOTAL	8	1,795	209	11	63	0	0	3	7	0	0	0	2,096	

AM PEAK HOUR 11:00 AM
AM PEAK VOLUME 213

PM PEAK HOUR 5:45 PM
PM PEAK VOLUME 252

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	9	2,552	307	18	103	5	0	4	10	0	0	0	0	3,008
% OF TOTAL	0.3%	84.8%	10.2%	0.6%	3.4%	0.2%	0.0%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	12	4,963	620	23	183	8	1	6	16	0	0	0	0	5,832
% OF TOTAL	0.4%	165.0%	20.6%	0.8%	6.1%	0.3%	0.0%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS9 Hemlock between Heacock and Davis

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL	
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13		
0:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:00	0	41	6	0	2	0	0	0	0	0	0	0	0	0	49
0:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:15	0	35	5	0	4	0	0	0	0	0	0	0	0	0	44
0:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5	12:30	1	53	5	0	3	0	0	1	0	0	0	0	0	0	63
0:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12:45	0	43	8	0	3	0	0	0	0	0	0	0	0	0	54
1:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4	13:00	0	44	3	1	0	0	0	0	0	0	0	0	0	0	48
1:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	13:15	0	42	3	0	5	0	0	0	0	0	0	0	0	0	50
1:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3	13:30	0	39	5	0	0	0	0	0	0	0	0	0	0	0	44
1:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	13:45	0	36	4	0	0	0	0	0	0	0	0	0	0	0	40
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:00	0	33	5	0	0	0	0	0	1	0	0	0	0	0	39
2:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:15	0	45	1	1	3	0	0	0	0	0	0	0	0	0	50
2:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2	14:30	0	24	4	0	0	0	0	0	0	0	0	0	0	0	28
2:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:45	0	28	7	0	1	0	0	0	0	0	0	0	0	0	36
3:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:00	0	46	8	0	1	0	0	0	0	0	0	0	0	0	55
3:15	0	6	1	0	2	0	0	0	0	0	0	0	0	9	15:15	0	40	3	0	0	0	0	0	0	0	0	0	0	0	43
3:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:30	0	41	10	1	4	0	0	0	0	0	0	0	0	0	56
3:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7	15:45	0	23	4	1	1	0	0	0	0	0	0	0	0	0	29
4:00	0	8	2	0	1	0	0	0	0	0	0	0	0	11	16:00	0	32	3	0	2	0	0	0	0	0	0	0	0	0	37
4:15	0	5	1	0	0	0	0	0	0	0	0	0	0	6	16:15	0	36	3	0	1	0	0	0	0	0	0	0	0	0	40
4:30	0	12	4	0	0	0	0	0	0	0	0	0	0	16	16:30	0	37	4	0	2	0	0	0	0	0	0	0	0	0	43
4:45	0	5	0	0	1	0	0	0	0	0	0	0	0	6	16:45	0	39	8	0	1	0	0	0	1	0	0	0	0	0	49
5:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10	17:00	0	38	6	1	2	0	0	0	0	0	0	0	0	0	47
5:15	0	9	1	0	0	0	0	0	0	0	0	0	0	10	17:15	0	33	4	0	1	0	0	0	0	0	0	0	0	0	38
5:30	0	17	4	0	0	0	0	0	0	0	0	0	0	21	17:30	0	28	5	0	0	0	0	0	0	0	0	0	0	0	33
5:45	0	6	0	0	6	1	0	0	0	0	0	0	0	13	17:45	0	46	4	0	1	0	0	0	0	0	0	0	0	0	51
6:00	0	12	3	0	0	0	0	0	0	0	0	0	0	15	18:00	0	42	7	0	1	0	0	0	1	0	0	0	0	0	51
6:15	0	12	2	0	1	0	0	0	0	0	0	0	0	15	18:15	1	35	3	0	1	0	0	0	0	0	0	0	0	0	40
6:30	0	7	2	0	0	0	0	0	0	0	0	0	0	9	18:30	0	27	5	0	1	0	0	0	0	0	0	0	0	0	33
6:45	0	16	1	0	2	0	0	0	0	0	0	0	0	19	18:45	0	33	4	0	1	0	0	0	0	0	0	0	0	0	38
7:00	0	15	1	0	0	0	0	0	0	0	0	0	0	16	19:00	0	42	3	0	2	0	0	0	0	0	0	0	0	0	47
7:15	0	21	1	0	0	0	0	0	0	0	0	0	0	22	19:15	0	28	2	0	1	0	0	0	1	0	0	0	0	0	32
7:30	0	27	6	0	0	0	0	0	0	0	0	0	0	33	19:30	0	34	4	0	0	0	0	0	0	0	0	0	0	0	38
7:45	0	30	6	0	1	1	0	0	0	0	0	0	0	38	19:45	0	40	3	0	0	0	0	0	0	0	0	0	0	0	43
8:00	0	28	2	0	0	0	0	0	0	0	0	0	0	30	20:00	0	32	2	0	0	0	0	0	1	0	0	0	0	0	35
8:15	0	39	6	0	0	0	0	0	0	0	0	0	0	45	20:15	0	52	4	0	0	0	0	0	0	0	0	0	0	0	56
8:30	0	22	5	0	1	0	0	0	0	0	0	0	0	28	20:30	0	34	4	0	2	0	0	0	0	0	0	0	0	0	40
8:45	0	19	10	0	2	0	0	0	0	0	0	0	0	31	20:45	0	30	4	0	1	0	0	0	0	0	0	0	0	0	35
9:00	0	17	0	0	1	0	0	0	0	0	0	0	0	18	21:00	0	32	1	0	0	0	0	0	0	0	0	0	0	0	33
9:15	0	27	3	0	1	0	0	0	0	0	0	0	0	31	21:15	0	42	1	0	0	0	0	0	0	0	0	0	0	0	43
9:30	0	38	7	0	2	0	0	0	0	0	0	0	0	47	21:30	0	44	8	0	1	0	0	0	0	0	0	0	0	0	53
9:45	0	24	4	0	1	0	0	0	0	0	0	0	0	29	21:45	0	35	1	0	0	0	0	0	0	0	0	0	0	0	36
10:00	1	31	4	0	3	0	0	0	0	0	0	0	0	39	22:00	0	27	1	0	0	0	0	0	0	0	0	0	0	0	28
10:15	0	23	6	0	0	0	0	0	1	0	0	0	0	30	22:15	0	28	4	0	0	0	0	0	0	0	0	0	0	0	32
10:30	0	36	8	0	0	1	0	0	0	0	0	0	0	45	22:30	0	31	3	0	0	0	0	0	0	0	0	0	0	0	34
10:45	0	28	6	0	2	0	0	0	0	0	0	0	0	36	22:45	0	25	1	0	0	0	0	0	0	0	0	0	0	0	26
11:00	0	33	9	0	2	0	0	0	0	0	0	0	0	44	23:00	0	24	1	0	0	0	0	0	0	0	0	0	0	0	25
11:15	0	41	3	0	3	0	0	0	0	0	0	0	0	47	23:15	0	15	1	0	0	0	0	1	0	0	0	0	0	0	17
11:30	0	40	8	0	0	0	1	0	0	0	0	0	0	49	23:30	0	11	1	0	0	0	0	0	0	0	0	0	0	0	12
11:45	0	45	5	0	0	0	0	0	0	0	0	0	0	50	23:45	0	15	2	0	0	0	0	0	0	0	0	0	0	0	17
TOTAL	1	751	125	0	32	3	1	0	1	0	0	0	0	914	TOTAL	2	1,660	188	5	48	0	0	2	5	0	0	0	0	0	1,910

AM PEAK HOUR 11:00 AM
AM PEAK VOLUME 190

PM PEAK HOUR 12:30 PM
PM PEAK VOLUME 215

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	3	2,411	313	5	80	3	1	2	6	0	0	0	0	2,824
% OF TOTAL	0.1%	85.4%	11.1%	0.2%	2.8%	0.1%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
-------	---	---	---	---	---	---	---	---	---	----	----	----	----

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS10 Hemlock east of Indian

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	8	2	0	1	0	0	0	0	0	0	0	0	11	12:00	0	38	4	1	1	0	0	0	0	0	0	44		
0:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4	12:15	0	25	3	0	3	0	0	0	0	0	0	31		
0:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	12:30	0	26	2	0	1	0	0	0	0	0	0	29		
0:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	12:45	0	32	3	0	1	0	0	0	0	0	0	36		
1:00	0	6	0	0	1	0	0	0	0	0	0	0	0	7	13:00	0	51	6	1	4	0	0	0	0	0	0	62		
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:15	0	37	5	0	2	0	0	0	0	0	0	44		
1:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	13:30	0	42	10	0	3	2	0	0	1	0	0	58		
1:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:45	0	41	6	0	4	0	0	0	0	0	0	51		
2:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6	14:00	1	33	8	0	3	0	0	0	0	0	0	45		
2:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	14:15	0	53	4	1	0	0	0	0	0	0	0	58		
2:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:30	0	36	4	0	1	0	0	1	0	0	0	42		
2:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:45	0	38	2	0	0	1	0	0	0	0	0	41		
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	15:00	0	43	4	0	0	0	0	0	0	0	0	47		
3:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:15	1	27	3	1	2	0	0	0	0	0	0	34		
3:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:30	1	42	10	0	5	1	0	0	0	0	0	59		
3:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7	15:45	0	36	3	0	3	0	0	0	0	0	0	42		
4:00	0	3	1	0	0	1	0	0	0	0	0	0	0	5	16:00	0	45	8	0	0	0	0	0	0	0	0	53		
4:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	16:15	0	46	4	0	3	0	0	0	0	0	0	53		
4:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	16:30	0	44	8	1	1	0	0	0	0	0	0	54		
4:45	0	3	0	0	1	0	0	0	0	0	0	0	0	4	16:45	1	45	7	0	4	0	0	0	0	0	1	58		
5:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	17:00	0	48	6	0	1	0	0	0	0	0	0	55		
5:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5	17:15	0	42	8	0	1	0	0	0	0	0	0	51		
5:30	0	2	1	0	0	0	0	0	0	0	0	0	0	3	17:30	0	49	5	1	1	0	0	0	0	0	0	56		
5:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8	17:45	1	54	9	0	3	0	0	0	0	0	0	67		
6:00	0	2	3	0	0	0	0	0	0	0	0	0	0	5	18:00	1	45	6	0	4	0	0	1	0	0	0	57		
6:15	0	4	2	1	0	0	0	0	0	0	0	0	0	7	18:15	0	34	4	0	3	0	0	0	0	0	0	41		
6:30	0	11	1	0	0	0	0	0	0	0	0	0	0	12	18:30	0	51	7	0	1	0	0	0	0	0	0	59		
6:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7	18:45	0	46	5	1	1	0	0	0	0	0	0	53		
7:00	0	18	2	0	4	1	0	0	0	0	0	0	0	25	19:00	1	49	5	0	1	0	0	0	0	0	0	56		
7:15	1	25	1	1	2	0	0	0	0	0	0	0	0	30	19:15	0	29	4	0	1	0	0	0	0	0	0	34		
7:30	1	37	1	0	1	0	0	0	0	0	0	0	0	40	19:30	0	38	5	1	0	0	0	0	0	0	0	44		
7:45	1	41	5	0	1	0	0	0	0	0	0	0	0	48	19:45	0	36	1	0	2	0	0	0	0	0	0	39		
8:00	0	34	0	0	1	0	0	0	0	0	0	0	0	35	20:00	0	34	4	0	1	0	0	0	0	0	0	39		
8:15	0	24	2	0	2	0	0	0	0	0	0	0	0	28	20:15	0	33	5	0	0	0	0	0	0	0	0	38		
8:30	0	20	6	1	0	0	0	0	0	0	0	0	0	27	20:30	0	25	1	1	2	0	0	0	0	0	0	29		
8:45	0	24	4	0	0	0	0	0	0	0	0	0	0	28	20:45	0	47	4	0	1	1	0	0	0	0	0	53		
9:00	0	19	5	1	0	0	0	0	0	0	0	0	0	25	21:00	0	28	1	0	2	0	0	0	0	0	0	31		
9:15	0	14	3	0	1	0	0	0	0	0	0	0	0	18	21:15	0	31	4	0	0	0	0	0	0	0	0	35		
9:30	0	26	3	1	4	0	0	0	0	0	0	0	0	34	21:30	0	21	2	1	1	0	0	0	0	0	0	25		
9:45	0	26	4	0	1	0	0	0	0	0	0	0	0	31	21:45	0	23	4	0	2	0	0	0	0	0	0	29		
10:00	0	28	3	0	4	0	0	0	0	0	0	0	0	35	22:00	0	15	1	0	0	0	0	0	0	0	0	16		
10:15	0	19	5	0	1	0	0	0	0	0	0	0	0	25	22:15	0	21	3	0	1	0	0	0	0	0	0	25		
10:30	0	29	0	0	0	0	0	0	0	0	0	0	0	29	22:30	0	16	0	0	0	0	0	0	0	0	0	16		
10:45	0	21	4	1	1	0	0	0	0	0	0	0	0	27	22:45	0	14	1	0	0	0	0	0	0	0	0	15		
11:00	0	43	1	0	2	0	0	0	0	0	0	0	0	46	23:00	0	10	0	0	1	0	0	0	0	0	0	11		
11:15	0	34	3	0	2	0	0	1	0	0	0	0	0	40	23:15	0	7	0	0	0	0	0	0	0	0	0	7		
11:30	0	30	1	0	2	1	1	0	0	0	0	0	0	35	23:30	0	15	0	0	0	0	0	0	0	0	0	15		
11:45	0	39	6	0	3	0	0	0	1	0	0	0	0	49	23:45	0	7	2	0	0	0	0	0	0	0	0	9		
TOTAL	3	658	71	6	35	3	1	1	1	0	0	0	0	779	TOTAL	7	1,648	201	10	71	5	0	2	1	0	0	1,946		

AM PEAK HOUR 11:00 AM
AM PEAK VOLUME 170

PM PEAK HOUR 5:15 PM
PM PEAK VOLUME 231

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	10	2,306	272	16	106	8	1	3	2	0	0	1	0	2,725
% OF TOTAL	0.4%	84.6%	10.0%	0.6%	3.9%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	20	4,404	509	31	184	16	4	5	2	0	0	1	0	5,176
% OF TOTAL	0.7%	161.6%	18.7%	1.1%	6.8%	0.6%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS10 Hemlock east of Indian

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:00	0	19	6	0	1	0	0	0	0	0	0	26		
0:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3	12:15	0	30	3	0	5	0	0	1	0	0	0	39		
0:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	12:30	0	32	5	0	3	1	0	0	0	0	0	41		
0:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1	12:45	0	35	2	0	1	0	0	0	0	0	0	38		
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:00	0	31	4	1	0	0	0	0	0	0	0	36		
1:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4	13:15	0	24	1	0	0	0	0	0	0	0	0	25		
1:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3	13:30	0	37	8	0	4	0	0	0	0	0	0	49		
1:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	13:45	0	34	1	0	1	0	0	0	0	0	0	36		
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:00	0	38	4	0	0	0	0	0	0	0	0	42		
2:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:15	2	38	4	1	1	3	0	0	0	0	0	49		
2:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1	14:30	0	28	5	0	2	0	0	0	0	0	0	35		
2:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:45	0	24	6	0	0	0	0	0	0	0	0	30		
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	15:00	0	29	3	0	2	0	0	0	0	0	0	34		
3:15	0	2	1	0	1	0	0	0	0	0	0	0	0	4	15:15	1	26	6	1	3	0	0	0	0	0	0	37		
3:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	15:30	0	41	6	1	1	0	0	0	0	0	0	49		
3:45	0	0	2	0	1	0	0	0	0	0	0	0	0	3	15:45	0	28	5	0	0	0	0	0	0	0	0	33		
4:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6	16:00	0	27	2	0	0	0	0	0	0	0	0	29		
4:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5	16:15	0	37	5	0	0	0	0	0	0	0	0	42		
4:30	0	6	0	0	2	0	0	0	0	0	0	0	0	8	16:30	0	33	3	1	2	0	0	0	0	0	0	39		
4:45	0	7	1	0	0	0	0	0	0	0	0	0	0	8	16:45	0	28	5	0	2	0	0	0	0	0	0	35		
5:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6	17:00	0	30	2	0	1	0	0	0	0	0	0	33		
5:15	0	5	0	1	0	0	0	0	0	0	0	0	0	6	17:15	0	25	3	0	1	0	0	0	0	0	0	29		
5:30	0	8	2	0	0	0	1	0	0	0	0	0	0	11	17:30	0	23	2	0	0	0	0	0	0	0	0	25		
5:45	0	8	2	0	0	0	0	0	0	0	0	0	0	10	17:45	0	36	3	1	0	0	0	0	0	0	0	40		
6:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6	18:00	0	32	2	0	1	0	0	0	0	0	0	35		
6:15	0	7	3	0	0	1	0	0	0	0	0	0	0	11	18:15	0	33	3	0	1	0	0	0	0	0	0	37		
6:30	0	11	2	1	0	0	0	0	0	0	0	0	0	14	18:30	0	27	2	0	2	0	0	0	0	0	0	31		
6:45	0	16	3	0	1	0	0	0	0	0	0	0	0	20	18:45	0	33	3	1	0	0	0	0	0	0	0	37		
7:00	0	30	1	0	3	0	0	0	0	0	0	0	0	34	19:00	0	30	4	0	0	0	0	0	0	0	0	34		
7:15	0	32	1	0	1	0	0	0	0	0	0	0	0	34	19:15	0	22	3	0	1	1	0	0	0	0	0	27		
7:30	2	42	1	1	0	0	0	0	0	0	0	0	0	46	19:30	0	30	1	0	0	0	0	0	0	0	0	31		
7:45	0	46	7	0	1	1	0	0	0	0	0	0	0	55	19:45	0	34	4	1	1	0	0	0	0	0	0	40		
8:00	0	48	3	0	0	0	0	0	0	0	0	0	0	51	20:00	0	30	2	0	0	0	0	0	0	0	0	32		
8:15	0	33	1	0	1	0	0	0	0	0	0	0	0	35	20:15	0	36	5	0	0	0	0	0	0	0	0	41		
8:30	0	18	5	1	3	0	0	0	0	0	0	0	0	27	20:30	0	27	3	0	1	0	0	0	0	0	0	31		
8:45	0	17	5	0	2	0	1	0	0	0	0	0	0	25	20:45	0	39	2	0	2	0	0	0	0	0	0	43		
9:00	0	19	2	0	1	0	0	0	0	0	0	0	0	22	21:00	0	29	2	0	0	0	0	0	0	0	0	31		
9:15	0	24	2	0	1	0	0	0	0	0	0	0	0	27	21:15	1	35	3	0	2	0	0	0	0	0	0	41		
9:30	0	27	8	1	1	0	0	0	0	0	0	0	0	37	21:30	2	38	5	0	1	0	0	0	0	0	0	46		
9:45	0	30	5	0	2	0	0	0	0	0	0	0	0	37	21:45	0	42	0	0	1	0	0	0	0	0	0	43		
10:00	0	24	2	0	3	0	0	0	0	0	0	0	0	29	22:00	0	40	2	0	0	0	0	0	0	0	0	42		
10:15	0	22	4	0	0	0	0	0	0	0	0	0	0	26	22:15	0	19	3	0	0	0	0	0	0	0	0	22		
10:30	0	30	4	0	2	0	0	0	0	0	0	0	0	36	22:30	0	28	3	0	1	0	0	0	0	0	0	32		
10:45	1	30	3	1	2	0	0	0	0	0	0	0	0	37	22:45	0	23	1	0	1	0	0	0	0	0	0	25		
11:00	0	19	3	0	1	0	0	1	0	0	0	0	0	24	23:00	1	20	0	0	1	0	0	0	0	0	0	22		
11:15	0	20	4	0	0	0	1	0	0	0	0	0	0	25	23:15	0	13	1	0	0	0	0	0	0	0	0	14		
11:30	0	22	5	0	0	0	0	0	0	0	0	0	0	27	23:30	0	10	0	0	0	0	0	0	0	0	0	10		
11:45	0	35	2	1	2	1	0	0	0	0	0	0	0	41	23:45	0	12	1	0	0	0	0	0	0	0	0	13		
TOTAL	3	683	88	7	32	3	3	1	0	0	0	0	0	820	TOTAL	7	1,415	149	8	46	5	0	1	0	0	0	1,631		
AM PEAK HOUR														7:30 AM	PM PEAK HOUR														1:30 PM
AM PEAK VOLUME														187	PM PEAK VOLUME														176

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	10	2,098	237	15	78	8	3	2	0	0	0	0	0	0	2,451
% OF TOTAL	0.4%	85.6%	9.7%	0.6%	3.2%	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
-------	---	---	---	---	---	---	---	---	---	----	----	----	----

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS11 Ironwood between Davis and Nita

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	24	1	0	0	0	0	0	0	0	0	0	0	25	12:00	4	73	11	0	1	2	0	0	0	0	0	1	0	92
0:15	0	17	1	0	2	0	0	0	0	0	0	0	0	20	12:15	0	65	7	1	8	0	0	0	0	1	0	0	0	82
0:30	0	10	2	0	0	0	0	0	0	0	0	0	0	12	12:30	4	58	11	0	6	0	0	0	0	0	0	0	0	79
0:45	0	16	1	0	0	0	0	0	0	0	0	0	0	17	12:45	0	72	3	0	9	0	0	0	0	0	0	0	0	84
1:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11	13:00	0	88	17	1	4	1	0	0	0	0	0	0	0	111
1:15	0	8	2	0	1	0	0	0	0	0	0	0	0	11	13:15	2	97	13	0	8	1	0	0	0	0	0	0	0	121
1:30	0	4	1	0	0	0	0	0	0	0	0	0	0	5	13:30	0	82	10	1	7	0	0	1	0	0	0	0	0	101
1:45	0	12	2	0	0	0	0	0	0	0	0	0	0	14	13:45	0	88	12	2	5	1	0	0	0	0	0	0	0	108
2:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6	14:00	0	83	12	1	12	1	1	0	0	0	0	0	0	110
2:15	0	6	0	0	1	0	0	0	0	0	0	0	0	7	14:15	1	137	17	0	7	2	0	0	0	0	0	1	0	165
2:30	0	2	1	0	0	0	0	0	0	0	0	0	0	3	14:30	0	105	19	0	7	3	0	0	0	0	0	0	0	134
2:45	0	11	0	0	0	0	0	0	0	0	0	0	0	11	14:45	0	78	18	0	7	0	0	0	0	0	0	0	0	103
3:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:00	0	79	12	0	5	1	0	0	0	0	0	0	0	97
3:15	0	4	1	0	1	0	0	0	0	0	0	0	0	6	15:15	0	83	14	1	7	2	0	0	0	0	0	0	0	107
3:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	15:30	2	78	12	1	5	1	0	0	0	0	0	0	0	99
3:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	15:45	0	80	14	0	5	1	1	0	0	0	0	0	0	101
4:00	0	8	0	0	1	0	0	0	0	0	0	0	0	9	16:00	0	89	16	0	9	1	0	0	0	0	0	0	0	115
4:15	0	6	0	0	1	0	0	0	0	0	0	0	0	7	16:15	1	110	14	0	9	0	0	0	0	0	0	0	0	134
4:30	0	11	1	0	0	0	0	0	0	0	0	0	0	12	16:30	0	97	12	1	7	3	0	0	0	0	0	0	0	120
4:45	0	15	3	0	2	0	0	0	0	0	0	0	0	20	16:45	0	98	21	0	16	3	0	0	0	0	0	0	0	138
5:00	0	10	2	0	2	0	0	0	0	0	0	0	0	14	17:00	3	114	17	0	8	3	0	0	0	0	0	0	0	145
5:15	0	10	2	1	0	0	0	0	0	0	0	0	0	13	17:15	0	111	12	0	11	2	0	0	0	0	0	0	0	136
5:30	0	10	4	0	2	0	0	0	0	0	0	0	0	16	17:30	5	130	16	0	13	1	0	0	0	0	0	1	0	166
5:45	1	20	2	0	2	0	0	0	0	0	0	0	0	25	17:45	2	134	18	0	9	0	0	0	0	0	0	0	0	163
6:00	0	22	2	0	2	0	0	0	0	0	0	0	0	26	18:00	1	117	19	0	4	3	0	0	0	0	0	1	1	147
6:15	0	19	4	1	2	0	0	0	0	0	0	0	0	26	18:15	1	121	15	0	6	0	0	0	0	0	0	0	0	143
6:30	0	25	3	0	5	0	0	0	0	0	0	0	0	33	18:30	3	100	10	0	9	2	0	0	0	0	0	0	0	124
6:45	0	33	6	0	2	0	1	0	0	0	0	0	0	42	18:45	2	107	11	1	4	2	0	0	0	0	0	0	0	127
7:00	0	62	4	0	5	0	0	0	0	0	0	0	0	71	19:00	1	85	12	0	2	2	0	0	0	0	0	0	0	102
7:15	0	102	13	1	10	3	0	0	0	0	0	0	0	129	19:15	0	84	13	0	6	0	0	0	0	0	0	0	0	103
7:30	1	120	10	0	6	2	0	0	0	0	0	0	0	139	19:30	0	84	8	0	3	1	0	0	0	0	0	0	0	96
7:45	2	101	17	0	6	1	0	0	0	0	0	0	0	127	19:45	0	77	13	0	3	2	0	0	0	0	0	0	0	95
8:00	0	88	6	0	2	3	0	0	0	0	0	0	0	99	20:00	0	83	8	0	5	0	0	0	0	0	0	0	0	96
8:15	0	58	9	0	4	0	0	0	0	0	0	0	1	72	20:15	0	63	11	0	11	0	0	0	0	0	0	0	0	85
8:30	1	61	10	1	4	0	0	0	0	0	0	0	0	77	20:30	2	55	11	0	4	1	0	0	0	0	0	0	0	73
8:45	1	57	9	0	6	1	0	0	0	0	0	0	0	74	20:45	0	71	9	1	4	1	0	0	0	0	0	0	0	86
9:00	0	52	9	0	4	1	0	0	0	0	0	0	0	66	21:00	0	59	6	0	2	0	0	0	0	0	0	0	0	67
9:15	0	37	13	1	8	0	1	1	0	0	0	0	0	61	21:15	0	71	13	0	0	0	0	0	0	0	0	0	0	84
9:30	0	46	12	2	7	0	0	0	0	0	0	0	0	67	21:30	0	50	5	0	3	1	0	0	0	0	0	0	0	59
9:45	0	42	9	0	2	1	0	0	0	0	0	0	0	54	21:45	1	44	4	0	2	0	0	0	0	0	0	0	0	51
10:00	0	44	7	0	1	0	0	0	0	0	0	0	0	52	22:00	0	33	6	0	2	1	0	0	0	0	0	0	0	42
10:15	0	37	10	0	2	3	0	0	0	0	0	0	0	52	22:15	0	41	6	0	1	0	0	0	0	0	0	0	0	48
10:30	0	57	12	1	3	0	0	0	0	0	0	0	0	73	22:30	0	36	3	0	1	0	0	0	0	0	0	0	0	40
10:45	0	55	10	1	4	0	0	1	0	0	0	1	0	72	22:45	0	19	1	0	0	1	0	0	0	0	0	0	0	21
11:00	0	60	8	0	7	3	0	0	0	0	0	0	0	78	23:00	0	32	6	0	1	1	0	0	0	0	0	0	0	40
11:15	0	84	18	0	5	2	0	0	0	0	0	0	0	109	23:15	0	24	1	0	2	0	0	0	0	0	0	0	0	27
11:30	0	89	15	0	1	1	0	0	0	0	0	0	0	106	23:30	0	21	2	0	1	0	0	0	0	0	0	0	0	24
11:45	1	74	16	1	6	1	0	0	0	0	0	0	0	99	23:45	0	13	1	0	1	0	0	0	0	0	0	0	0	15
TOTAL	7	1,655	260	10	119	22	2	2	0	0	2	0	0	2,079	TOTAL	35	3,719	522	11	262	47	2	1	1	0	2	3	1	4,606

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 494

PM PEAK HOUR 5:30 PM
PM PEAK VOLUME 619

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	42	5,374	782	21	381	69	4	3	1	0	4	3	1	6,685
% OF TOTAL	0.6%	80.4%	11.7%	0.3%	5.7%	1.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
-------	---	---	---	---	---	---	---	---	---	----	----	----	----	--

TOTAL: ALL	108	11,242	1,622	41	654	154	6	6	11	1	7	7	3	13,862
% OF TOTAL	1.6%	168.2%	24.3%	0.6%	9.8%	2.3%	0.1%	0.1%	0.2%	0.0%	0.1%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS11 Ironwood between Davis and Nita

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL	
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13		
0:00	0	10	2	0	0	0	0	0	0	0	0	0	0	12	12:00	0	67	16	1	3	1	0	0	0	0	0	0	0	0	88
0:15	0	11	2	0	0	0	0	0	0	0	0	0	0	13	12:15	0	89	15	0	3	1	0	0	0	0	0	0	0	108	
0:30	0	6	0	0	0	1	0	0	0	0	0	0	0	7	12:30	0	87	14	0	8	1	0	0	0	0	0	0	0	110	
0:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8	12:45	0	78	18	0	4	0	0	0	1	0	0	0	0	101	
1:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13	13:00	0	94	9	1	7	1	0	0	0	0	0	0	0	112	
1:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	13:15	0	73	8	0	4	2	0	0	0	0	0	0	0	87	
1:30	0	10	1	0	0	0	0	0	0	0	0	0	0	11	13:30	0	78	11	0	6	1	0	0	0	0	0	1	0	97	
1:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6	13:45	0	93	10	0	4	2	0	0	0	0	0	0	1	110	
2:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4	14:00	0	90	20	0	3	3	0	0	0	0	1	0	0	117	
2:15	0	5	1	0	0	0	0	0	0	0	0	0	0	6	14:15	0	111	10	1	3	3	0	0	0	0	0	0	0	128	
2:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:30	1	88	8	0	6	2	0	0	0	0	0	1	0	106	
2:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	14:45	0	72	14	0	11	0	0	1	0	0	0	0	0	98	
3:00	0	10	3	0	0	0	0	0	0	0	0	0	0	13	15:00	2	90	14	0	1	0	0	0	0	0	0	0	0	107	
3:15	0	10	3	0	0	0	0	0	0	0	0	0	0	13	15:15	1	78	6	0	1	1	0	0	0	0	0	0	0	87	
3:30	2	7	1	0	1	0	0	0	0	0	0	0	0	11	15:30	4	77	13	1	1	2	1	0	0	0	0	0	0	99	
3:45	0	15	6	0	1	0	0	0	0	0	0	0	0	22	15:45	2	72	16	0	3	2	0	1	0	0	0	0	0	96	
4:00	1	11	5	0	3	0	0	0	0	0	0	0	0	20	16:00	1	79	13	0	2	1	0	0	0	0	0	0	0	96	
4:15	0	22	1	0	1	0	0	0	0	0	0	0	0	24	16:15	0	100	13	0	4	1	0	0	0	0	0	0	0	118	
4:30	0	24	7	0	3	1	0	0	0	0	0	0	0	35	16:30	0	63	13	1	4	2	0	0	0	0	0	0	0	83	
4:45	0	25	7	0	1	0	0	0	0	0	0	0	0	33	16:45	0	93	14	0	8	4	0	0	0	0	0	0	0	119	
5:00	0	38	4	0	2	0	0	0	0	0	0	0	0	44	17:00	2	90	15	0	4	0	0	0	0	0	0	0	0	111	
5:15	0	33	5	0	3	0	0	0	0	0	0	0	0	41	17:15	0	82	13	0	3	0	0	0	0	0	0	0	0	98	
5:30	0	38	19	0	5	1	0	0	0	0	0	0	0	63	17:30	2	96	11	0	8	0	1	0	0	0	0	0	0	118	
5:45	0	32	5	0	2	1	0	0	0	0	0	0	0	40	17:45	2	91	12	1	3	1	0	0	0	0	0	0	0	110	
6:00	0	36	8	0	3	1	0	0	0	0	0	0	0	48	18:00	0	87	7	0	4	2	0	0	0	0	0	0	0	100	
6:15	0	47	9	0	2	0	0	0	0	0	0	0	0	58	18:15	0	77	8	0	1	1	0	0	0	0	0	0	0	87	
6:30	0	63	13	1	3	0	0	0	0	0	0	0	0	80	18:30	2	93	10	0	1	3	0	0	0	0	0	0	0	109	
6:45	0	78	16	0	8	1	0	0	0	0	0	0	0	103	18:45	0	74	13	1	4	2	0	0	0	0	0	0	0	94	
7:00	0	104	16	0	5	3	0	0	0	0	0	0	0	128	19:00	2	85	8	0	2	0	0	0	0	0	0	0	0	97	
7:15	4	148	17	0	8	0	0	0	0	0	0	0	0	177	19:15	0	63	13	0	8	1	0	0	0	0	0	0	0	85	
7:30	3	174	23	3	5	2	0	0	0	0	0	0	1	211	19:30	0	69	12	0	1	1	0	0	0	0	1	0	0	84	
7:45	6	190	21	1	6	6	0	0	0	0	0	1	0	231	19:45	0	72	10	1	1	0	0	0	0	0	0	0	0	84	
8:00	5	133	17	0	10	5	0	0	0	0	0	0	0	170	20:00	2	67	9	0	1	2	0	0	0	0	0	0	0	81	
8:15	4	80	9	0	8	0	0	0	0	0	0	0	0	101	20:15	0	81	13	0	4	0	0	0	1	0	0	0	0	99	
8:30	2	65	13	1	3	1	0	0	0	0	0	0	0	85	20:30	2	109	7	0	2	2	0	0	0	0	0	0	0	122	
8:45	1	69	9	0	3	0	0	0	0	0	0	0	0	82	20:45	3	85	8	1	3	0	0	0	0	0	0	0	0	100	
9:00	0	58	15	0	5	0	0	0	0	0	0	1	0	79	21:00	3	84	8	0	1	1	0	0	1	1	0	0	0	99	
9:15	0	73	5	0	4	1	0	0	0	0	0	0	0	83	21:15	0	86	6	0	2	0	0	0	1	0	0	1	0	96	
9:30	0	52	6	0	4	0	0	0	0	0	0	0	0	62	21:30	0	72	8	0	3	2	0	0	2	0	0	0	0	87	
9:45	0	42	15	1	1	0	0	0	0	0	0	0	0	59	21:45	5	70	5	1	3	3	0	0	0	0	0	0	0	87	
10:00	0	67	7	0	1	0	0	0	0	0	0	0	0	75	22:00	2	49	4	0	1	0	0	0	1	0	0	0	0	57	
10:15	0	55	9	0	1	1	0	1	0	0	0	0	0	67	22:15	0	51	8	0	1	0	0	0	0	0	0	0	0	60	
10:30	0	56	12	0	2	1	0	0	0	0	0	0	0	71	22:30	0	40	4	0	2	1	0	0	0	0	0	0	0	47	
10:45	0	62	9	2	3	0	0	0	0	0	0	0	0	76	22:45	0	25	1	0	0	0	0	0	0	0	0	0	0	26	
11:00	0	48	10	0	3	1	0	0	0	0	0	0	0	62	23:00	0	16	2	0	2	0	0	0	0	0	0	0	0	20	
11:15	0	53	3	0	3	0	0	0	0	0	0	0	0	59	23:15	0	33	0	0	0	0	0	0	1	0	0	0	0	34	
11:30	0	111	17	1	5	2	0	0	0	0	0	0	0	136	23:30	0	23	1	0	3	0	0	0	1	0	0	0	0	28	
11:45	0	90	16	0	1	4	0	0	0	0	0	0	0	111	23:45	0	24	0	0	0	0	0	0	1	0	0	0	0	25	
TOTAL	28	2,302	369	10	119	33	0	1	0	0	1	1	1	2,865	TOTAL	38	3,566	471	10	154	52	2	2	10	1	2	3	1	4,312	

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 789

PM PEAK HOUR 1:45 PM
PM PEAK VOLUME 461

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	66	5,868	840	20	273	85	2	3	10	1	3	4	2	7,177
% OF TOTAL	0.9%	81.8%	11.7%	0.3%	3.8%	1.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
-------	---	---	---	---	---	---	---	---	---	----	----	----	----

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS12 Hemlock between East FMV and Nita

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	10	1	0	1	0	0	0	0	0	0	0	0	12	12:00	1	35	3	0	0	0	0	0	0	0	0	39		
0:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7	12:15	0	36	1	0	3	0	0	0	0	0	0	40		
0:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12:30	1	24	5	0	1	0	0	0	0	0	0	31		
0:45	0	8	2	0	0	0	0	0	0	0	0	0	0	10	12:45	0	34	2	0	1	0	0	0	0	0	0	37		
1:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3	13:00	0	39	6	1	2	0	0	0	0	0	0	48		
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:15	1	33	7	0	1	0	0	0	0	0	0	42		
1:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	13:30	0	40	6	0	4	0	0	0	0	0	0	50		
1:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	13:45	0	31	5	0	2	0	0	0	0	0	0	38		
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	14:00	0	36	7	0	2	0	0	0	0	0	0	45		
2:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9	14:15	0	20	7	1	0	0	0	0	0	0	0	28		
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:30	0	32	7	0	3	0	0	1	0	0	0	43		
2:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:45	0	34	3	0	0	0	0	0	0	0	0	37		
3:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:00	0	32	3	0	1	0	0	0	0	0	0	36		
3:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	15:15	1	24	4	1	0	0	0	0	0	0	0	30		
3:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	15:30	0	35	5	0	1	0	0	1	0	0	0	42		
3:45	0	7	0	0	0	0	0	0	0	0	0	0	0	7	15:45	1	36	3	0	1	0	0	0	0	0	0	41		
4:00	0	5	1	0	1	0	0	0	0	0	0	0	0	7	16:00	0	41	8	0	0	0	0	0	0	0	0	49		
4:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	16:15	0	37	3	0	3	0	0	0	0	0	0	43		
4:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	16:30	1	45	8	1	3	0	0	0	0	0	0	58		
4:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	16:45	0	46	5	0	3	0	0	0	0	0	0	54		
5:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	17:00	0	50	5	0	1	0	0	0	0	0	0	56		
5:15	0	6	0	0	0	0	0	0	0	0	0	0	0	6	17:15	1	35	6	0	2	0	0	0	0	0	0	44		
5:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	17:30	0	46	7	1	1	0	0	0	0	0	0	55		
5:45	0	7	0	0	0	0	0	0	0	0	0	0	0	7	17:45	0	53	8	0	3	0	0	0	0	0	0	64		
6:00	0	2	1	0	1	0	0	0	0	0	0	0	0	4	18:00	1	42	7	0	3	0	0	1	0	0	0	54		
6:15	0	2	1	1	0	0	0	0	0	0	0	0	0	4	18:15	0	50	7	0	1	0	0	0	0	0	0	58		
6:30	0	8	1	0	0	0	0	0	0	0	0	0	0	9	18:30	0	41	6	0	2	0	0	0	0	0	0	49		
6:45	0	8	1	0	1	0	0	0	0	0	0	0	0	10	18:45	0	45	5	1	0	0	0	0	0	0	0	51		
7:00	0	10	1	0	3	1	0	0	0	0	0	0	0	15	19:00	0	47	4	0	0	0	0	0	0	0	0	51		
7:15	1	11	0	1	2	0	0	0	0	0	0	0	0	15	19:15	0	23	6	0	1	0	0	0	0	0	0	30		
7:30	1	34	1	0	0	0	0	0	0	0	0	0	0	36	19:30	0	39	5	1	1	0	0	0	0	0	0	46		
7:45	0	32	2	0	1	0	0	0	0	0	0	0	0	35	19:45	1	34	2	0	2	0	0	0	0	0	0	39		
8:00	0	12	2	0	0	0	0	0	0	1	0	0	0	15	20:00	0	34	3	0	2	0	0	0	0	0	0	39		
8:15	0	13	4	0	2	0	0	0	0	0	0	0	0	19	20:15	0	21	1	0	0	0	0	0	0	0	0	22		
8:30	2	16	1	1	0	0	0	0	0	0	0	0	0	20	20:30	0	29	1	0	2	0	0	0	0	0	0	32		
8:45	0	26	1	0	2	0	0	0	0	0	0	0	0	29	20:45	1	34	4	0	1	0	0	0	0	0	0	40		
9:00	0	22	3	1	0	0	0	0	0	0	0	0	0	26	21:00	0	21	2	0	2	0	0	0	0	0	0	25		
9:15	0	7	5	0	0	0	0	0	0	0	0	0	0	12	21:15	0	18	4	0	1	0	0	0	0	0	0	23		
9:30	0	20	5	1	1	0	0	0	0	0	0	0	0	27	21:30	0	18	4	1	0	0	0	0	0	0	0	23		
9:45	0	30	0	0	0	0	0	0	0	0	0	0	0	30	21:45	0	24	1	0	1	0	0	0	0	0	0	26		
10:00	1	23	3	0	1	0	0	0	0	0	0	0	0	28	22:00	0	16	1	0	0	0	0	0	0	0	0	17		
10:15	0	27	5	0	0	0	0	0	0	0	0	0	0	32	22:15	0	16	2	0	1	0	0	0	0	0	0	19		
10:30	0	21	2	0	1	0	0	0	0	0	0	0	0	24	22:30	0	21	1	0	0	0	0	0	0	0	0	22		
10:45	0	31	6	1	2	0	0	0	0	0	0	0	0	40	22:45	0	13	1	0	0	0	0	0	0	0	0	14		
11:00	0	36	2	0	1	0	1	0	0	0	0	0	0	40	23:00	0	8	0	0	0	0	0	0	0	0	0	8		
11:15	1	35	7	0	1	0	0	0	0	0	0	0	0	44	23:15	0	5	2	0	1	0	0	0	0	0	0	8		
11:30	0	25	6	0	0	0	0	0	0	0	0	0	0	31	23:30	0	11	0	0	0	0	0	0	0	0	0	11		
11:45	0	38	6	1	0	0	0	0	0	0	0	0	0	45	23:45	0	8	4	0	1	0	0	0	0	0	0	13		
TOTAL	6	590	71	7	22	1	1	0	1	0	0	0	0	699	TOTAL	10	1,492	197	8	60	0	0	3	0	0	0	1,770		

AM PEAK HOUR 11:00 AM
AM PEAK VOLUME 160

PM PEAK HOUR 5:30 PM
PM PEAK VOLUME 231

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	16	2,082	268	15	82	1	1	3	1	0	0	0	0	2,469
% OF TOTAL	0.6%	84.3%	10.9%	0.6%	3.3%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	16	3,284	379	30	106	4	1	4	1	0	0	0	0	3,825
% OF TOTAL	0.6%	133.0%	15.4%	1.2%	4.3%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 16, 2017
JOB #: SC1422

LOCATION#
CLASS12 Hemlock between East FMV and Nita

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12:00	0	12	2	0	1	0	0	0	0	0	0	0	15	
0:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12:15	0	12	1	0	0	0	0	0	0	0	0	13		
0:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12:30	0	8	0	0	0	0	0	0	0	0	0	8		
0:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12:45	0	9	1	0	1	0	0	0	0	0	0	11		
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	13:00	0	18	1	1	0	0	0	0	0	0	0	20		
1:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:15	0	14	1	0	0	0	0	0	0	0	0	15		
1:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	13:30	0	18	3	0	0	0	0	0	0	0	0	21		
1:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	13:45	0	15	3	0	0	0	0	0	0	0	0	18		
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:00	0	10	2	0	0	0	0	0	0	0	0	12		
2:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:15	0	14	1	1	1	1	0	0	0	0	0	18		
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:30	0	6	0	0	0	0	0	0	0	0	0	6		
2:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2	14:45	0	8	2	0	0	0	0	0	0	0	0	10		
3:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2	15:00	0	10	3	0	0	0	0	0	0	0	0	13		
3:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2	15:15	0	8	0	1	0	0	0	0	0	0	0	9		
3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:30	0	15	3	1	1	0	0	0	0	0	0	20		
3:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	15:45	0	13	1	0	0	0	0	0	0	0	0	14		
4:00	0	7	0	0	1	0	0	0	0	0	0	0	0	8	16:00	0	28	1	0	0	0	0	0	0	0	0	29		
4:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	16:15	0	35	0	0	0	0	0	0	0	0	0	35		
4:30	0	4	1	0	0	0	0	0	0	0	0	0	0	5	16:30	0	37	0	0	1	0	0	0	0	0	0	38		
4:45	0	2	0	0	1	0	0	0	0	0	0	0	0	3	16:45	0	38	2	0	0	0	0	0	0	0	0	40		
5:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4	17:00	0	48	3	0	0	0	0	0	0	0	0	51		
5:15	0	6	0	0	0	0	0	0	0	0	0	0	0	6	17:15	0	36	3	0	0	0	0	0	0	0	0	39		
5:30	0	7	2	1	0	0	0	0	0	0	0	0	0	10	17:30	0	25	4	0	0	0	0	0	0	0	0	29		
5:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	17:45	0	29	1	1	0	0	0	0	0	0	0	31		
6:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12	18:00	0	13	2	0	0	0	0	0	0	0	0	15		
6:15	0	6	1	0	1	0	0	0	0	0	0	0	0	8	18:15	0	9	0	0	0	0	0	0	0	0	0	9		
6:30	0	4	0	1	0	0	0	0	0	0	0	0	0	5	18:30	0	13	2	0	0	0	0	0	0	0	0	15		
6:45	0	6	2	0	1	0	0	0	0	0	0	0	0	9	18:45	0	9	1	1	0	0	0	0	0	0	0	11		
7:00	0	18	2	0	1	0	0	0	0	0	0	0	0	21	19:00	0	16	1	0	0	0	0	0	0	0	0	17		
7:15	0	16	1	0	0	0	0	0	0	0	0	0	0	17	19:15	0	10	2	0	0	0	0	0	0	0	0	12		
7:30	0	26	3	1	0	0	0	0	0	0	0	0	0	30	19:30	0	10	1	0	0	0	0	0	0	0	0	11		
7:45	0	34	5	0	0	1	0	0	0	0	0	0	0	40	19:45	0	14	0	1	1	0	0	0	0	0	0	16		
8:00	0	38	3	0	1	0	0	0	0	0	0	0	0	42	20:00	0	10	0	0	0	0	0	0	0	0	0	10		
8:15	0	38	2	0	0	0	0	0	0	0	0	0	0	40	20:15	0	21	1	0	0	0	0	1	0	0	0	23		
8:30	0	24	2	1	1	0	0	0	0	0	0	0	0	28	20:30	0	13	0	0	0	0	0	0	0	0	0	13		
8:45	0	18	3	0	2	0	0	0	0	0	0	0	0	23	20:45	0	15	2	1	1	0	0	0	0	0	0	19		
9:00	0	14	0	0	0	0	0	0	0	0	0	0	0	14	21:00	0	9	0	0	0	0	0	0	0	0	0	9		
9:15	0	24	2	0	0	0	0	0	0	0	0	0	0	26	21:15	0	18	1	0	1	0	0	0	0	0	0	20		
9:30	0	14	3	1	1	0	0	0	0	0	0	0	0	19	21:30	0	22	1	0	0	0	0	0	0	0	0	23		
9:45	0	12	2	0	0	0	0	0	0	0	0	0	0	14	21:45	0	14	1	0	0	0	0	0	0	0	0	15		
10:00	0	12	2	0	2	0	0	0	0	0	0	0	0	16	22:00	0	10	0	0	0	0	0	0	0	0	0	10		
10:15	0	6	2	0	0	0	0	0	0	0	0	0	0	8	22:15	0	11	1	0	0	0	0	0	0	0	0	12		
10:30	0	8	3	0	0	0	0	0	0	0	0	0	0	11	22:30	0	9	2	0	0	0	0	0	0	0	0	11		
10:45	0	15	1	1	1	0	0	0	0	0	0	0	0	18	22:45	0	9	1	0	0	0	0	0	0	0	0	10		
11:00	0	16	3	0	1	1	0	0	0	0	0	0	0	21	23:00	0	14	0	0	1	0	0	0	0	0	0	15		
11:15	0	15	1	0	0	0	0	0	0	0	0	0	0	16	23:15	0	3	1	0	0	0	0	0	0	0	0	4		
11:30	0	14	2	0	0	0	0	0	0	0	0	0	0	16	23:30	0	5	0	0	0	0	0	0	0	0	0	5		
11:45	0	15	2	1	0	0	0	0	0	0	0	0	0	18	23:45	0	4	0	0	0	0	0	0	0	0	0	4		
TOTAL	0	455	53	7	15	2	0	0	0	0	0	0	0	532	TOTAL	0	747	58	8	9	1	0	1	0	0	0	824		
AM PEAK HOUR														7:30 AM	PM PEAK HOUR														
AM PEAK VOLUME														152	PM PEAK VOLUME														
PM PEAK VOLUME														168															

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

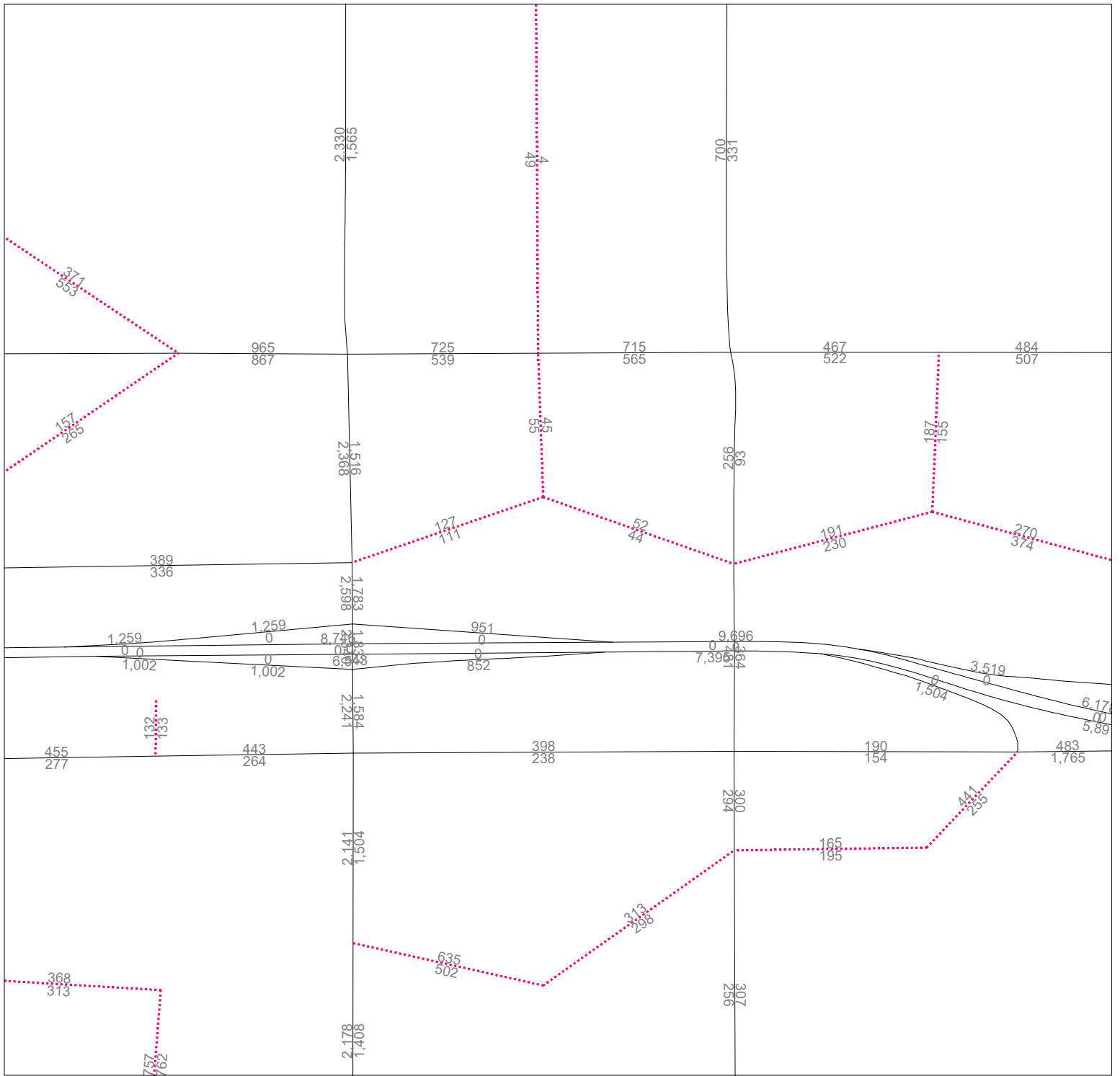
TOTAL: AM+PM	0	1,202	111	15	24	3	0	1	0	0	0	0	0	1,356
% OF TOTAL	0.0%	88.6%	8.2%	1.1%	1.8%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Class	1	2	3	4	5	6	7	8	9	10	11	12	13	

Appendix C: LOS Worksheets

Appendix D: City Approved/Pending Projects List

Project	Address	APN
1. Moreno Valley Plaza (Shopping Center)	23607 Sunnymead Blvd 23935 Sunnymead Blvd	292100016
2. Olivewood Plaza (Office)	23288 Olivewood Plaza Dr.	
3. Riverside County Office Building (Office)	12625 Heacock St., 92553	
4. Sleep Inn & Suites (Hotel)	n/a	292241003
5. Econo Lodge (Hotel)	24412 Sunnymead, 92553	
6. Holiday Inn Express (Hotel)	24630 Sunnymead, 92553	
7. Best Western Hotel and Suites (Hotel)	24840 Elder Ave, 92557	
8. Tract 32710 (Single Family Residential)	n/a	475182043
9. Tract 32126 (Single Family Residential)	n/a	475060001
10. Tract 36761 (Single Family Residential)	n/a	475250067
11. Tract 31621 (Single Family Residential)	n/a	475220060
12. Tract 35956 (Single Family Residential)	TRACT NOT ON FILE	
13. PA14-0027 (Multi-Family Apartments)	23778 Hemlock Ave, 92557	292181001
14. Tract 31814 (Multi-Family Condos)	n/a	479050010
15. Tract 33771 (Multi-Family Condos)	n/a	481120020
16. PEN 16-0066 (Multi-Family Apartments)	24298 Webster Ave, 92553	
17. Tract 35663 (Multi-Family Condos)	n/a	481140024
18. Tract 35769 (Multi-Family Condos)	n/a	481270053
19. PA09-0006 (Multi-Family Apartments)	n/a	482020058

Appendix E: Transportation Analysis Model Outputs



2007 AM

