Appendix C
Traffic Report
(Available for review at City Hall)

URBAN | CROSSROADS

PALM SPRINGS HOTEL & RESIDENCES (1008-TTM)

TRAFFIC ANALYSIS

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Reference Number	Agency	Date
15147-11 TA Report	City of Palm Springs	September 12, 2024

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CAMUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
EAC	Existing Plus Ambient Plus Cumulative
EAPC	Existing Plus Ambient Plus Project Plus Cumulative
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
PHF	Peak Hour Factor
Project	Palm Springs Hotel & Residences
sf	Square Feet
TA	Traffic Analysis

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1 INTRODUCTION

This report presents the results of the traffic analysis (TA) for Palm Springs Hotel & Residences ("Project"), located on the southeast corner of N. Calle El Segundo and E. Andreas Road in the City of Palm Springs, as shown on Exhibit 1-1.

The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project and recommend improvements to achieve acceptable circulation system operational conditions. This TA has been prepared based in accordance with the City of Palm Springs Traffic Impact Analysis Guidelines (City Guidelines, July 2020). (1) A traffic study scoping package was prepared for review by City staff prior to the preparation of this report. The scope (included in Appendix 1.1) provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology.

1.1 PROJECT OVERVIEW

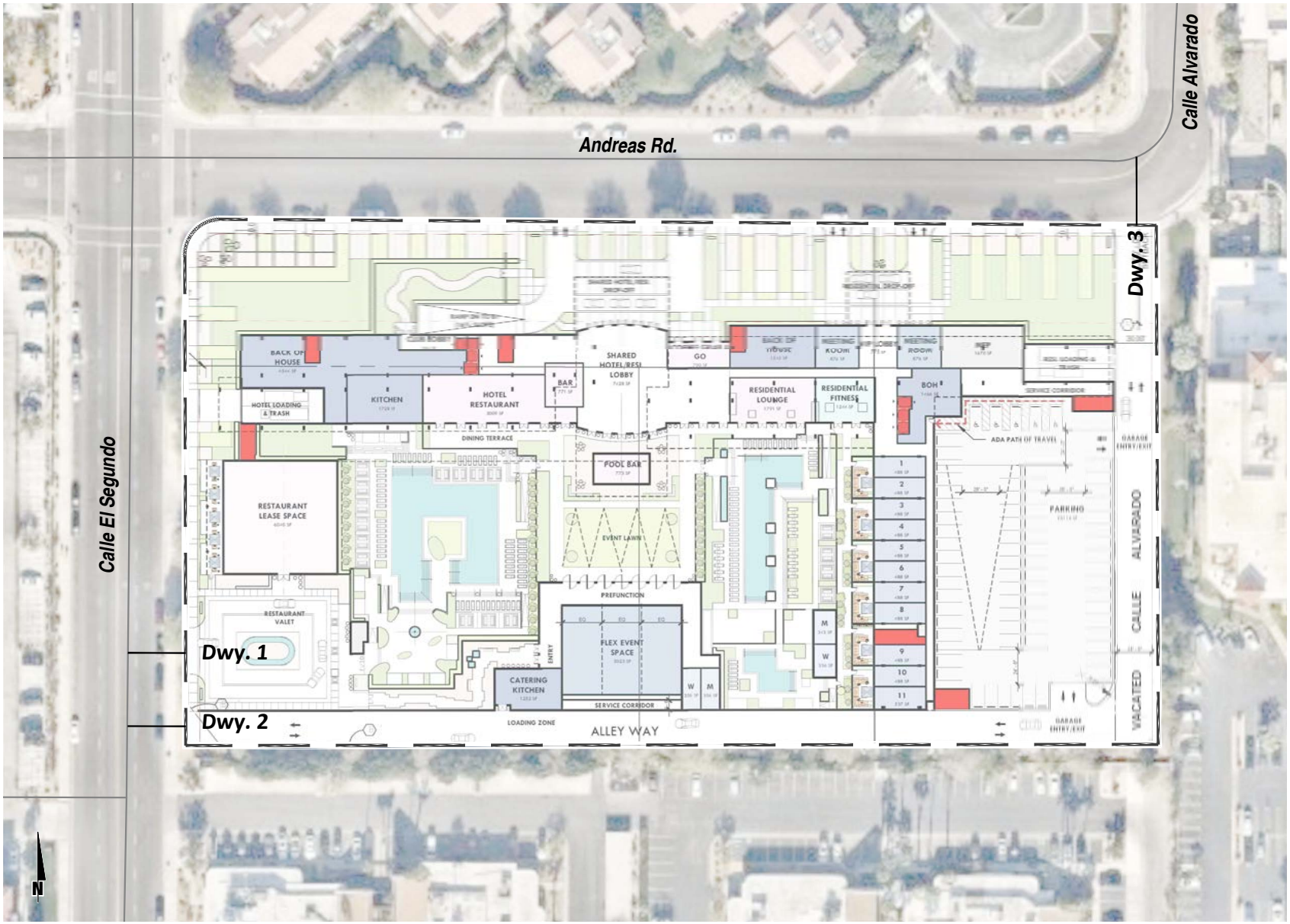
The site is currently an improved (paved and striped) parking lot which is utilized by the City for public parking (that operates under a license agreement). The proposed Project consists of redeveloping the site to develop a nine-story resort hotel with residences and a 6,040-square-foot restaurant. The resort hotel consists of 125 rooms and 132 branded residential condo units. The Project has an anticipated opening year of 2027. A preliminary site plan for the proposed Project is shown in Exhibit 1-1. Access for the proposed site is as follows:

- Northern Driveway on N. Calle El Segundo: Hotel loading/trash
- Southern Driveway on N. Calle El Segundo: Restaurant Valet
- Alley on N. Calle El Segundo: provides access to loading zones for the Flex Event Space and access to the parking garage from the south side
- Western Driveways on E. Andreas Road: Shared Hotel/Residential Drop-Off
- Eastern Driveways on E. Andreas Road: Residential Drop-Off
- Alley on E. Andreas Road: provides access to the parking garage from the east side

In order to develop the traffic characteristics of the proposed Project, trip-generation rates provided in the *Institute of Transportation Engineers (ITE) Trip Generation* (11th Edition, 2021) are utilized.

The Project is anticipated to generate a total of 1,378 vehicle trip-ends per day with 93 AM peak vehicle hour trips and 128 PM peak hour vehicle trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

EXHIBIT 1-1 : PRELIMINARY SITE PLAN



1.2 ANALYSIS SCENARIOS

For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2024) Conditions
- Existing Plus Project (E+P) Conditions
- Background (2027) Without Project Conditions, referred to as "Existing plus Ambient Growth plus Cumulative" (EAC)
- Background (2027) With Project Conditions, referred to as "Existing plus Ambient Growth plus Project plus Cumulative" (EAPC)

The E+P conditions analysis determines traffic deficiencies that would occur on the existing roadway system with the addition of Project traffic.

The Background conditions analysis determines the potential near-term cumulative circulation system deficiencies without and with the Project. To account for background traffic growth, an ambient growth factor from Existing conditions of 6.12% (2% per year, compounded annually over 3 years) is included for 2027 traffic conditions. The ambient growth is consistent with the growth used by other projects in the area within the City of Palm Springs. The cumulative project list was compiled from information provided by the City of Palm Springs.

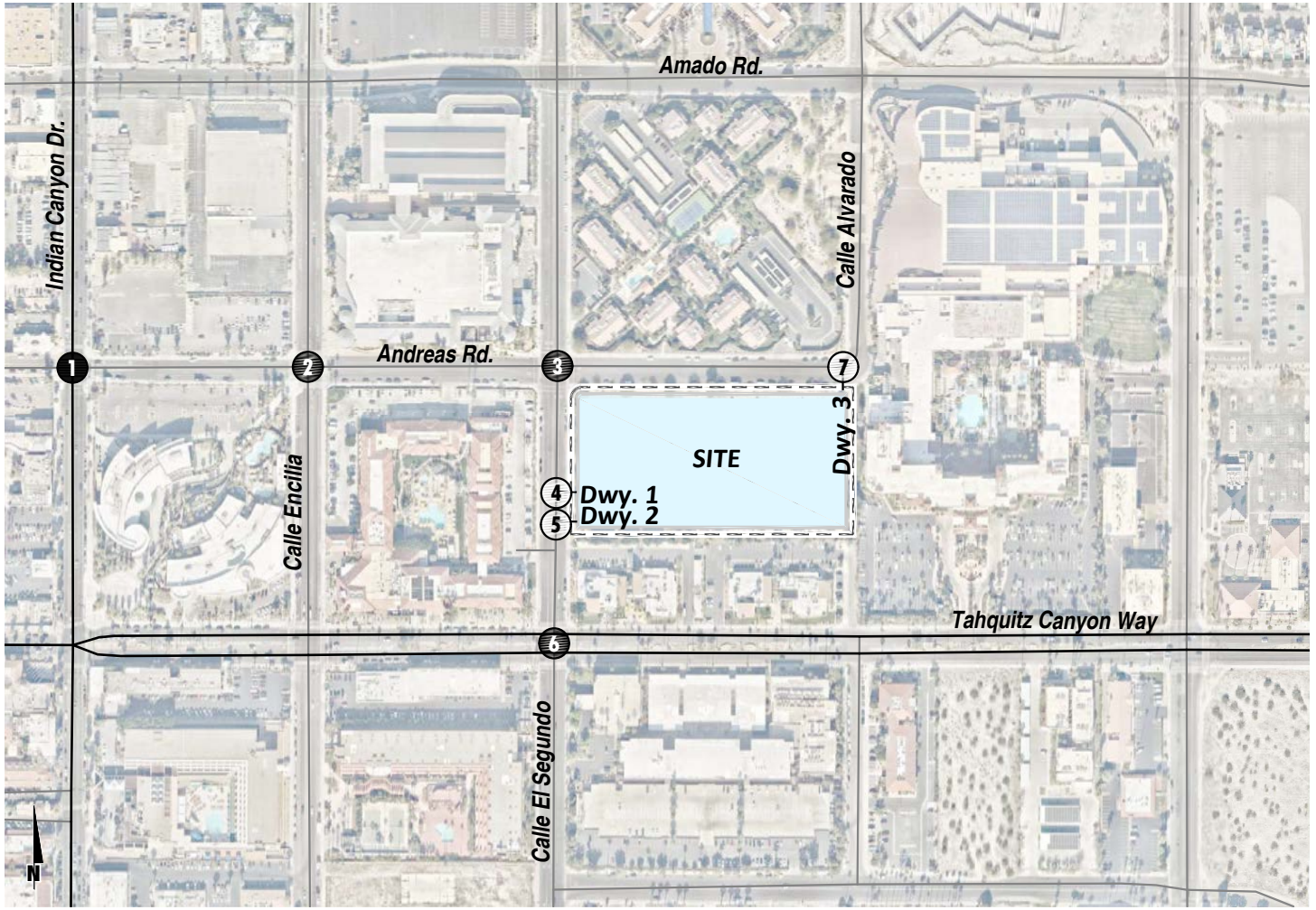
1.3 STUDY AREA

Consistent with City Guidelines, the study area includes any intersection of "Collector" or higher classification street, with "Collector" or higher classification streets, at which the proposed Project will add 50 or more peak hour trips. Exhibit 1-2 presents the study area and intersection analysis locations. The intersections listed in Table 1-1 were selected for this TA based upon the Project trip generation and traffic distribution pattern.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

#	Intersection	Jurisdiction
1	Indian Canyon Dr. & Andreas Rd.	City of Palm Springs
2	Calle Encilla & Andreas Rd.	City of Palm Springs
3	Calle El Segundo & Andreas Rd.	City of Palm Springs
4	Calle El Segundo & Driveway 1	City of Palm Springs
5	Calle El Segundo & Driveway 2	City of Palm Springs
6	Calle El Segundo & Tahquitz Canyon Rd.	City of Palm Springs
7	Driveway 3 & Andreas Rd.	City of Palm Springs

EXHIBIT 1-2 : STUDY AREA



LEGEND:

0 = *Existing Intersection Analysis Location*

(0) = *Future Intersection Analysis Location*

1.4 ANALYSIS FINDINGS

This section provides a summary of the analysis results for Existing (2024), E+P, and Background (2027) conditions.

1.4.1 EXISTING (2024) CONDITIONS

For Existing (2024) traffic conditions, the study area intersections are currently operating at an acceptable LOS (LOS "D" or better) during AM and PM peak hours.

No unsignalized study area intersections currently meet the volume warrants for installation of a traffic signal based upon existing traffic counts.

1.4.2 EXISTING PLUS PROJECT (E+P) CONDITIONS

For E+P traffic conditions, the study area intersections continue operating at an acceptable LOS (LOS "D" or better) during AM and PM peak hours, with access improvements described in Chapter 8 of this report.

1.4.3 BACKGROUND (2027) CONDITIONS

For EAC (2027) and EAPC (2027) traffic conditions, the study area intersections continue operating at an acceptable LOS (LOS "D" or better) during AM and PM peak hours.

For EAC and EAPC conditions, no other study area intersections meet the volume warrants for installation of a traffic signal.

Roadway improvements necessary to provide site access are detailed in Chapter 8.

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2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are consistent with the City Guidelines. (1)

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing a breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 7th Edition Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (2)

The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Palm Springs requires signalized intersection operations analysis based on the methodology described in the HCM. (2) Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections, LOS is related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 2-1.

The traffic modeling and signal timing optimization software package Synchro (Version 11) is utilized to analyze signalized intersections. Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study area intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

A saturation flow rate of 1900 is utilized for signalized intersections. The peak hour traffic volumes are adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow.

However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (2)

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0[1]
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F

Source: HCM, 7th Edition

[1] If V/C is greater than 1.0 then LOS is F per HCM.

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Palm Springs requires the operations of unsignalized intersections to be evaluated using the methodology described in the HCM. (2) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection.

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0[1]
Little or no delays.	0 to 10.00	A
Short traffic delays.	10.01 to 15.00	B
Average traffic delays.	15.01 to 25.00	C
Long traffic delays.	25.01 to 35.00	D
Very long traffic delays.	35.01 to 50.00	E
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F

Source: HCM, 7th Edition

[1] If V/C is greater than 1.0 then LOS is F per HCM.

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or determine the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (3)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (3) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions and for all future analysis scenarios for existing unsignalized intersections.

For the purposes of this study, the speed limit was the basis for determining whether "Urban" or "Rural" warrants were used for a given intersection. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with urban characteristics (e.g., adjacent major streets operating at or below 40 miles per hour) or rural characteristics (e.g., adjacent major streets operating above 40 miles per hour).

Future intersections have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets. Similarly, the speed limit has been used as the basis for determining the use of Urban and Rural warrants.

Traffic signal warrant analyses were performed for the following unsignalized study area intersections shown in Table 2-3.

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

#	Intersection	Jurisdiction
2	Calle Encilla & Andreas Rd.	City of Palm Springs
3	Calle El Segundo & Andreas Rd.	City of Palm Springs
4	Calle El Segundo & Driveway 1	City of Palm Springs
5	Calle El Segundo & Driveway 2	City of Palm Springs
7	Driveway 3 & Andreas Rd.	City of Palm Springs

The Existing conditions traffic signal warrant analysis results are presented in the subsequent section, Section 3 *Area Conditions* of this report. The traffic signal warrant analyses for future conditions are presented in Section 6 EAC *(2027) Traffic Conditions* and Section 7 *EAPC (2027) Traffic Conditions* of this report.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

The City of Palm Springs General Plan recommends a minimum LOS standard of LOS D or better. If during the LOS evaluations an intersection or roadway segment is found to not meet the requisite LOS standard as established by the General Plan, improvement modifications will be evaluated to bring the forecasted deficiency to within acceptable LOS thresholds.

The following deficiency criteria has been utilized for the City of Palm Springs to determine whether the addition of project-related traffic at a study intersection would result in a deficiency:

- For signalized intersections:
  - Intersection operating at an acceptable LOS D or better without project traffic in which the addition of project traffic causes the intersection to degrade to a LOS E or F shall identify improvements to improve operations to LOS D or better.
  - Intersection that is operating at LOS E or F without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.
- For unsignalized intersections:
  - Addition of project related traffic causes the intersection to degrade from an acceptable LOS D or better to LOS E or F. (case a)
  - The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at a LOS E or F. (case b)
  - The intersection meets the peak hour traffic signal warrant after the addition of project traffic. (case c)
  - If the conditions above are satisfied, improvements should be identified that achieve LOS D or better for case a) above or to pre-project LOS and delay for case b) above.

3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Palm Springs General Plan Circulation Network, and a review of existing peak hour intersection operations and traffic signal warrant analyses.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the Project scope (Appendix 1.1), the study area includes 4 existing and 3 future intersections as shown previously on Exhibit 1-2, where the Project is anticipated to contribute 50 or more peak hour trips or has been added at the direction of City staff. Exhibit 3-1 illustrates the number of through traffic lanes for existing roadways and traffic controls for study area intersections.

3.2 CITY OF PALM SPRINGS GENERAL PLAN CIRCULATION ELEMENT

As noted previously, the Project site is located on the southeast corner of N. Calle El Segundo and E. Andreas Road in the City of Palm Springs. Exhibit 3-2 shows the City of Palm Springs General Plan Circulation Element, with planned roadway classifications. Exhibit 3-3 illustrates the City of Palm Springs General Plan roadway cross-sections.

The following study area roadways are classified as Major Thoroughfares which can accommodate four travel lanes:

- Indian Canyon Drive
- Tahquitz Canyon Way

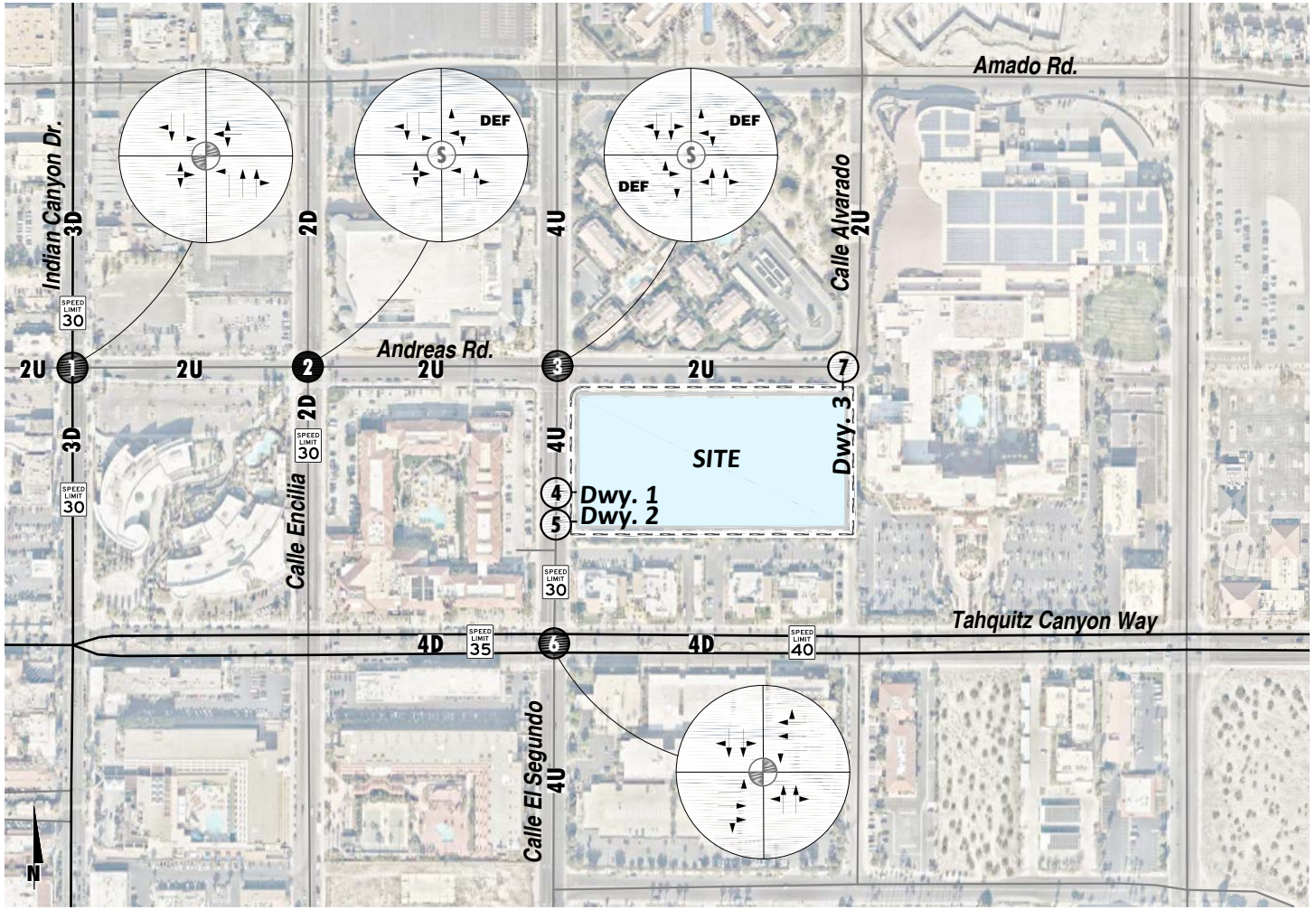
The following study area roadways are classified as a Collector which typically accommodate two travel lanes:

- Calle Encilia, south of Tahquitz Canyon Way
- Calle El Segundo
- Calle Alvarado
- Andreas Road, west of Indian Canyon Drive

The following study area roadways are classified as a local roadway:

- Calle Encilia, between Tahquitz Canyon Way and Amado Road
- Andreas Road

EXHIBIT 3-1 : EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



LEGEND:

- = Existing Intersection Analysis Location
- = Future Intersection Analysis Location
- = Existing Traffic Signal
- = Existing All-Way Stop
- = Existing Lane
- 4 = Number of Lanes
- D = Divided / Undivided
- DEF = Defacto Right Turn

EXHIBIT 3-2 : CITY OF PALM SPRINGS GENERAL PLAN CIRCULATION ELEMENT

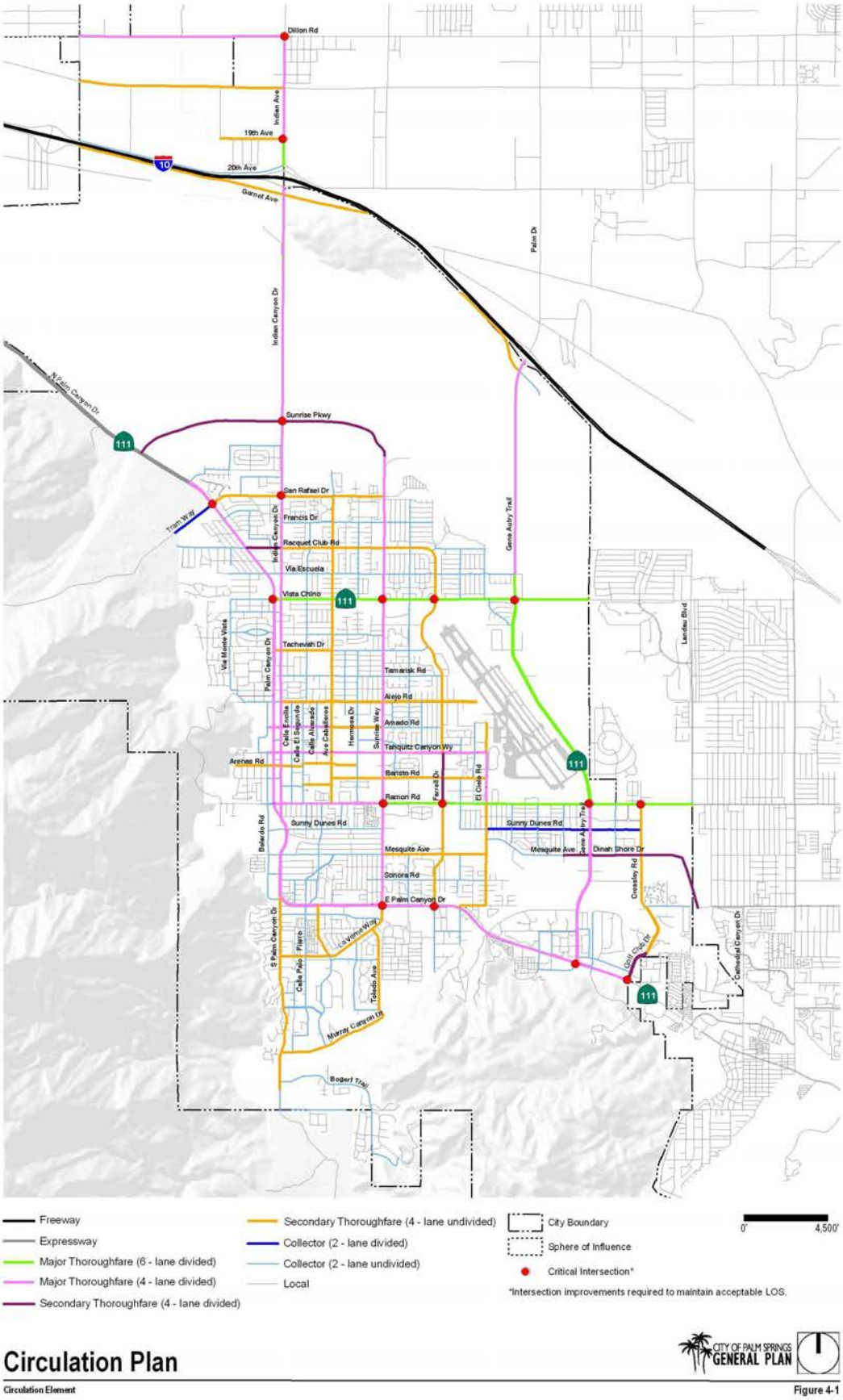
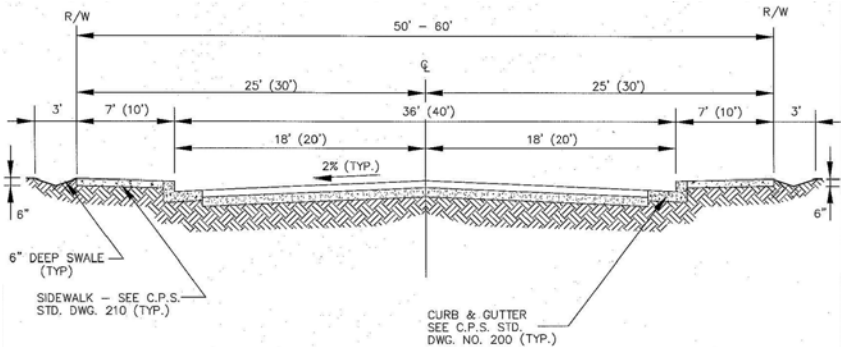
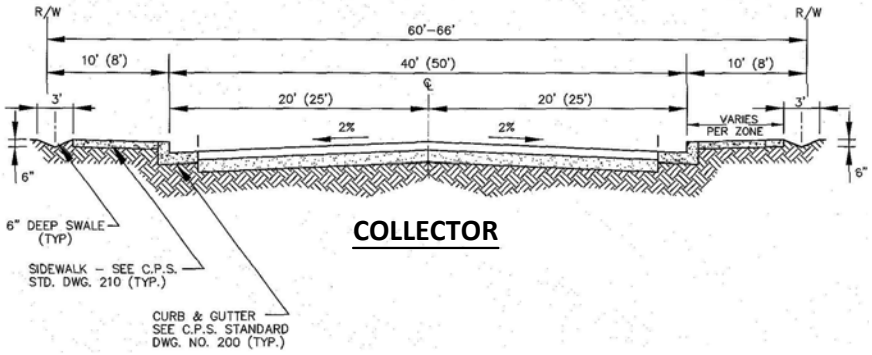


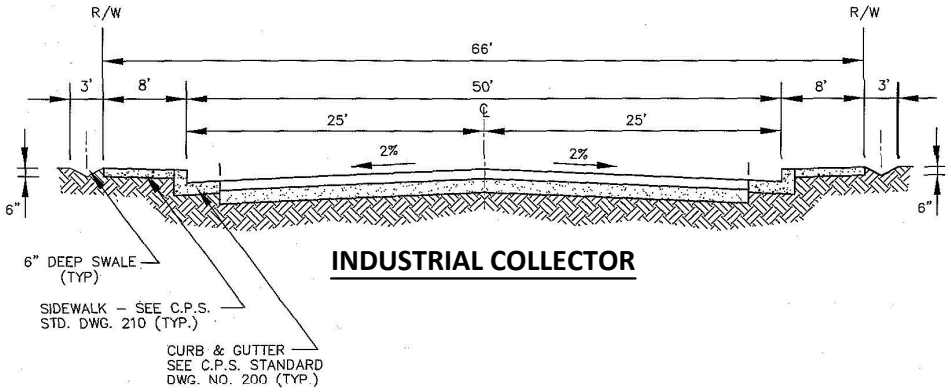
EXHIBIT 3-3 : CITY OF PALM SPRINGS GENERAL PLAN ROADWAY CROSS-SECTIONS (SHEET 1 OF 2)



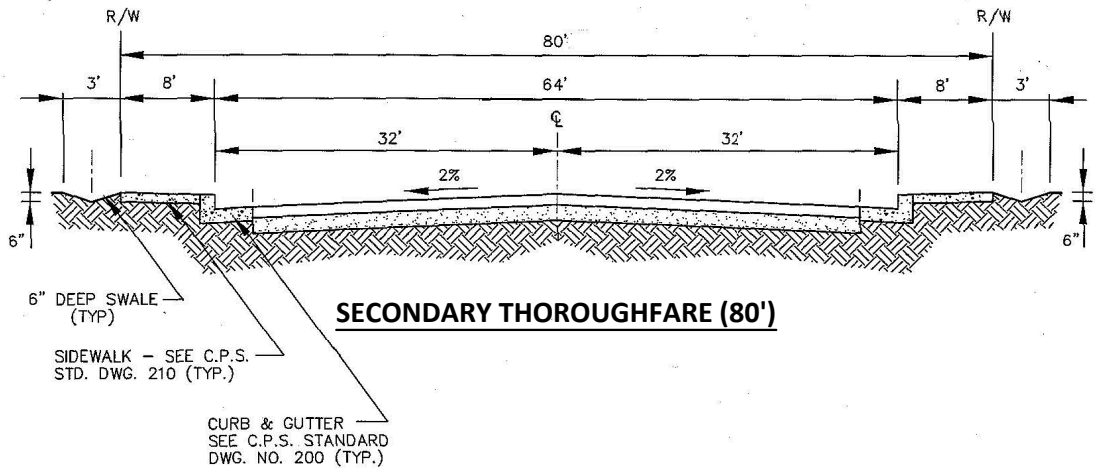
LOCAL



COLLECTOR

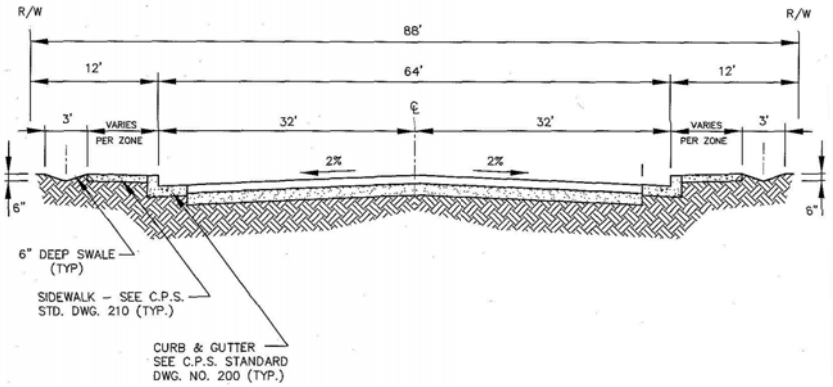


INDUSTRIAL COLLECTOR

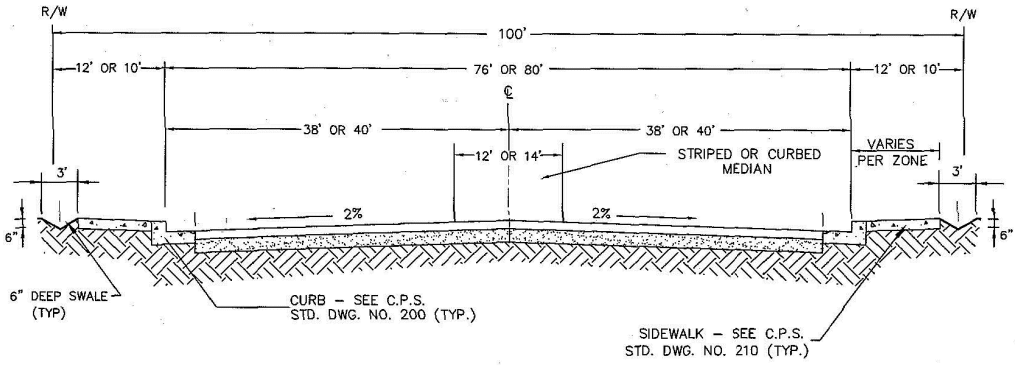


SECONDARY THOROUGHFARE (80')

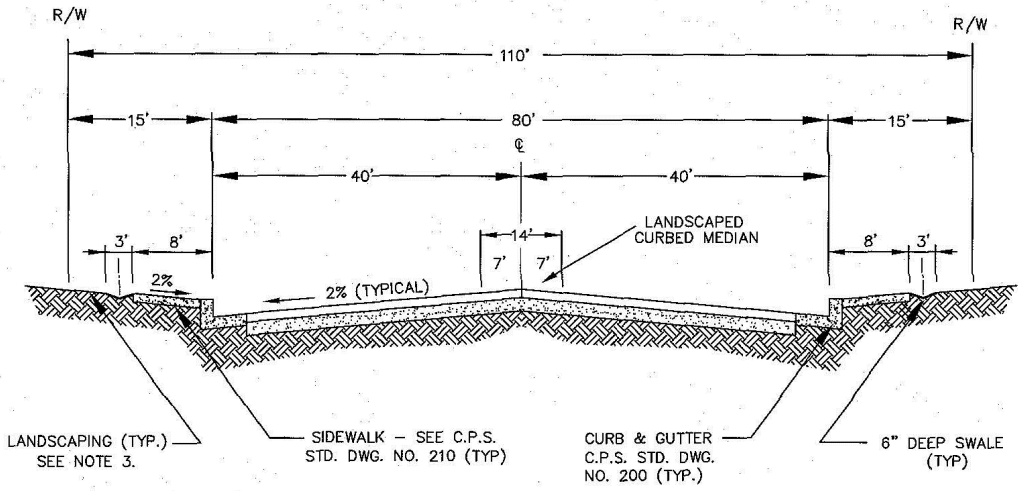
EXHIBIT 3-3 : CITY OF PALM SPRINGS GENERAL PLAN ROADWAY CROSS-SECTIONS (SHEET 2 OF 2)



SECONDARY THOROUGHFARE (88')



MAJOR THOROUGHFARE (100')



MAJOR THOROUGHFARE (110')

3.3 TRANSIT SERVICE

Sunline Transit Agency currently maintains three routes in the vicinity of the Project. These fixed transit routes provide access for employees and visitors at the Project to access nearby residential areas, shops, and visitor services without using a single occupant automobile.

Route 1WV runs along Indian Canyon Drive and extends through the western part of the Coachella Valley, starting at the Palm Canyon at Stevent timepoint and ending at the Town Center at Hahn timepoint by the mall in Palm Desert. Route 1WV serves the cities of Palm Springs, Cathedral City, and Rancho Mirage with key destinations including downtown Palm Springs, the desert regional medical center, the city halls in the western end of the valley, various shopping centers, and the Palm Desert mall. Route 2 runs along Tahquitz Canyon Way and Indian Canyon Drive and serves the cities of Desert Hot Springs, Palm Springs, and Cathedral City. Route 4 runs along Tahquitz Canyon Way and Indian Canyon Drive and serves the cities of Palm Springs, Cathedral City, Thousand Palms, Rancho Mirage, and Palm Desert.

Transit service is reviewed and updated by Sunline periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.4 PEDESTRIAN AND BICYCLE FACILITIES

Exhibits 3-4 and 3-5 illustrates the City of Palm Springs recreational trails map and bikeway system, respectively.

The existing pedestrian and bike facilities within the study area are shown on Exhibit 3-6. As shown on Exhibit 3-6, sidewalks exist on Indian Canyon Drive, Calle Encilia, Calle El Segundo, Calle Alvardo, Amado Road, Andreas Road, and Tahquitz Canyon Way. A class II bike lanes exists on Tahquitz Canyon Way, east of Calle El Segundo, and class III bike routes exist on Indian Canyon Drive, Calle Encilia, Calle El Segundo, and Tahquitz Canyon Way, west of Calle El Segundo.

EXHIBIT 3-4 : CITY OF PALM SPRINGS GENERAL PLAN TRAILS PLAN

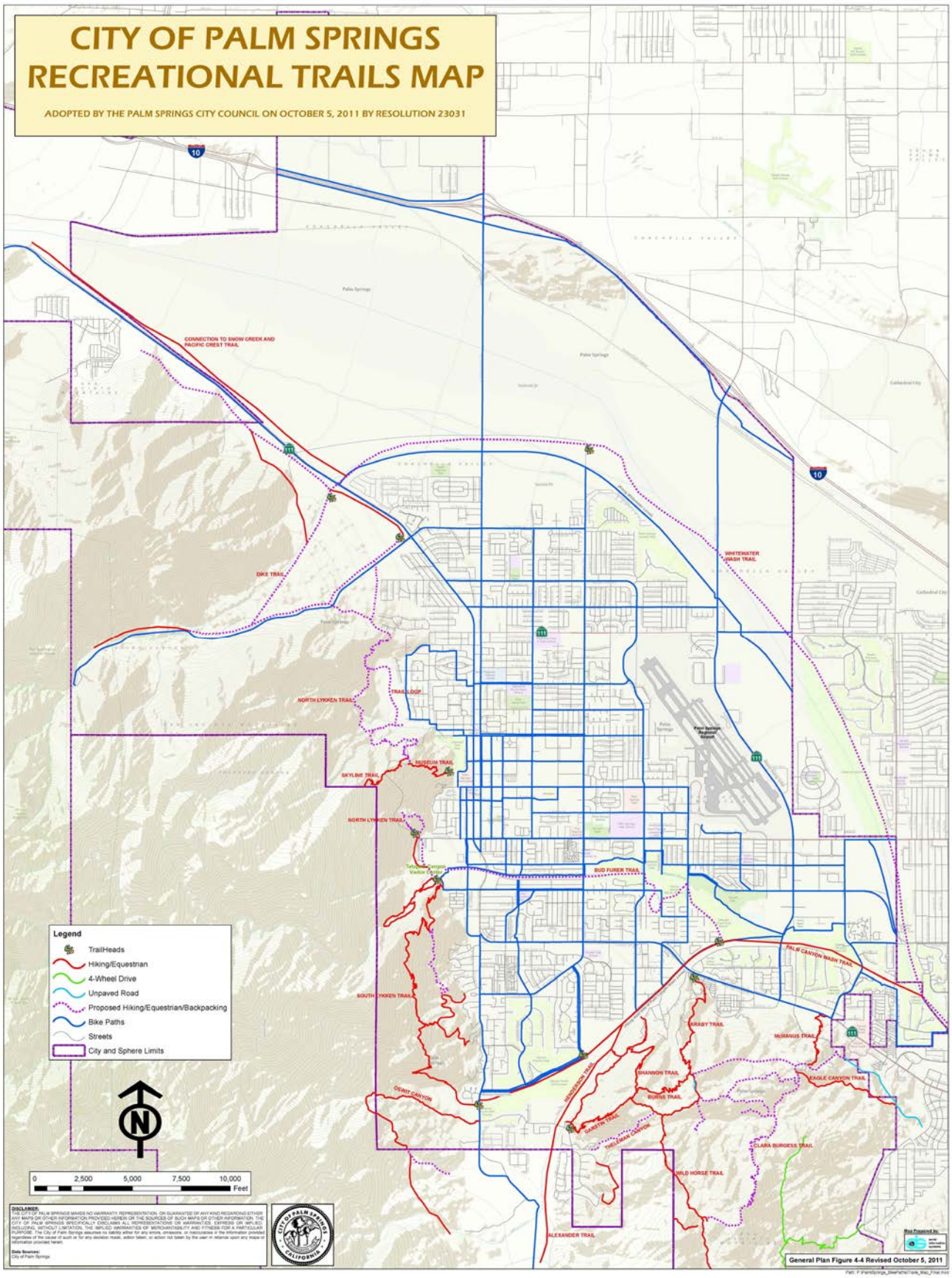


EXHIBIT 3-5 : CITY OF PALM SPRINGS GENERAL PLAN BICYCLE PLAN

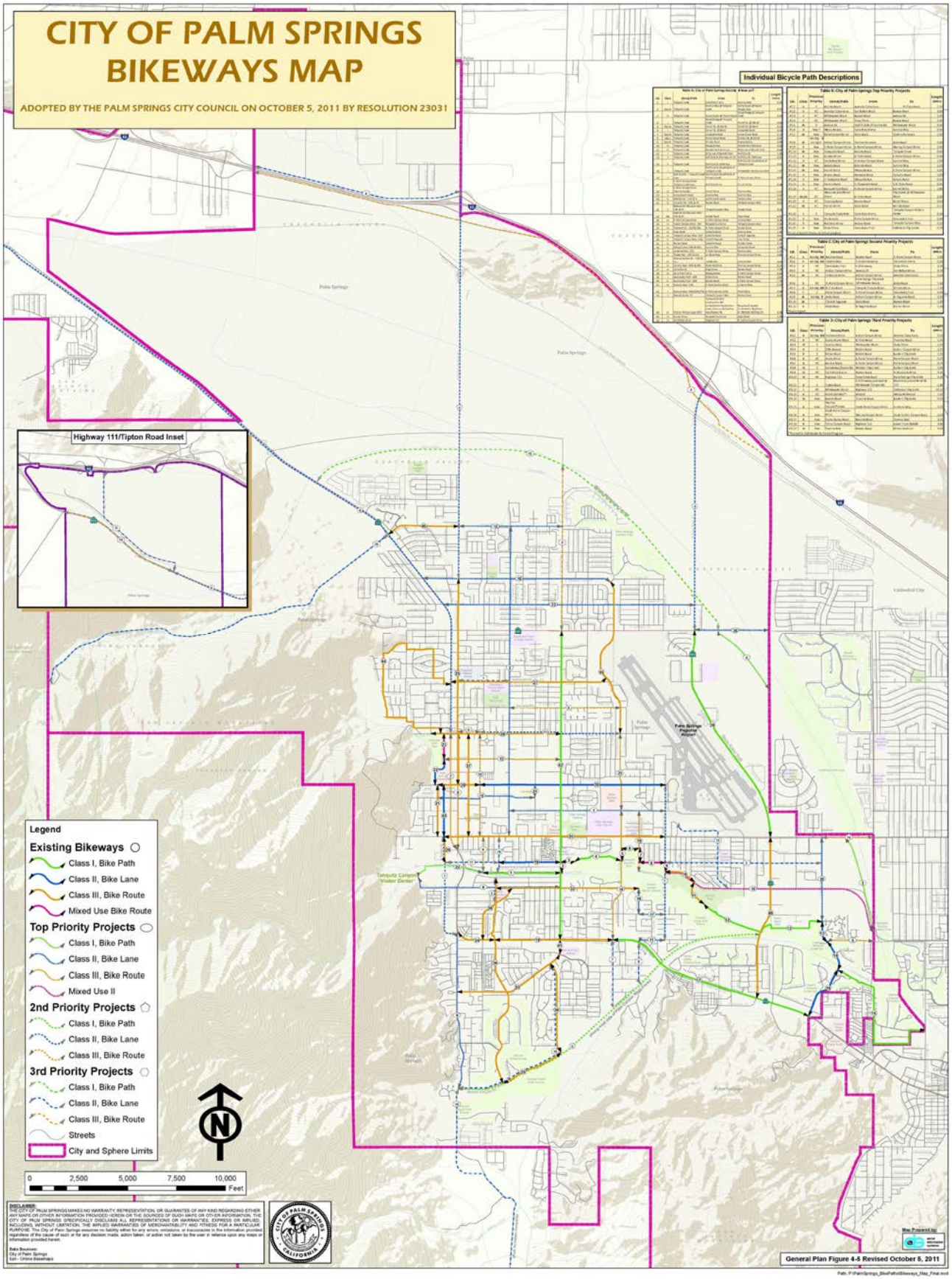
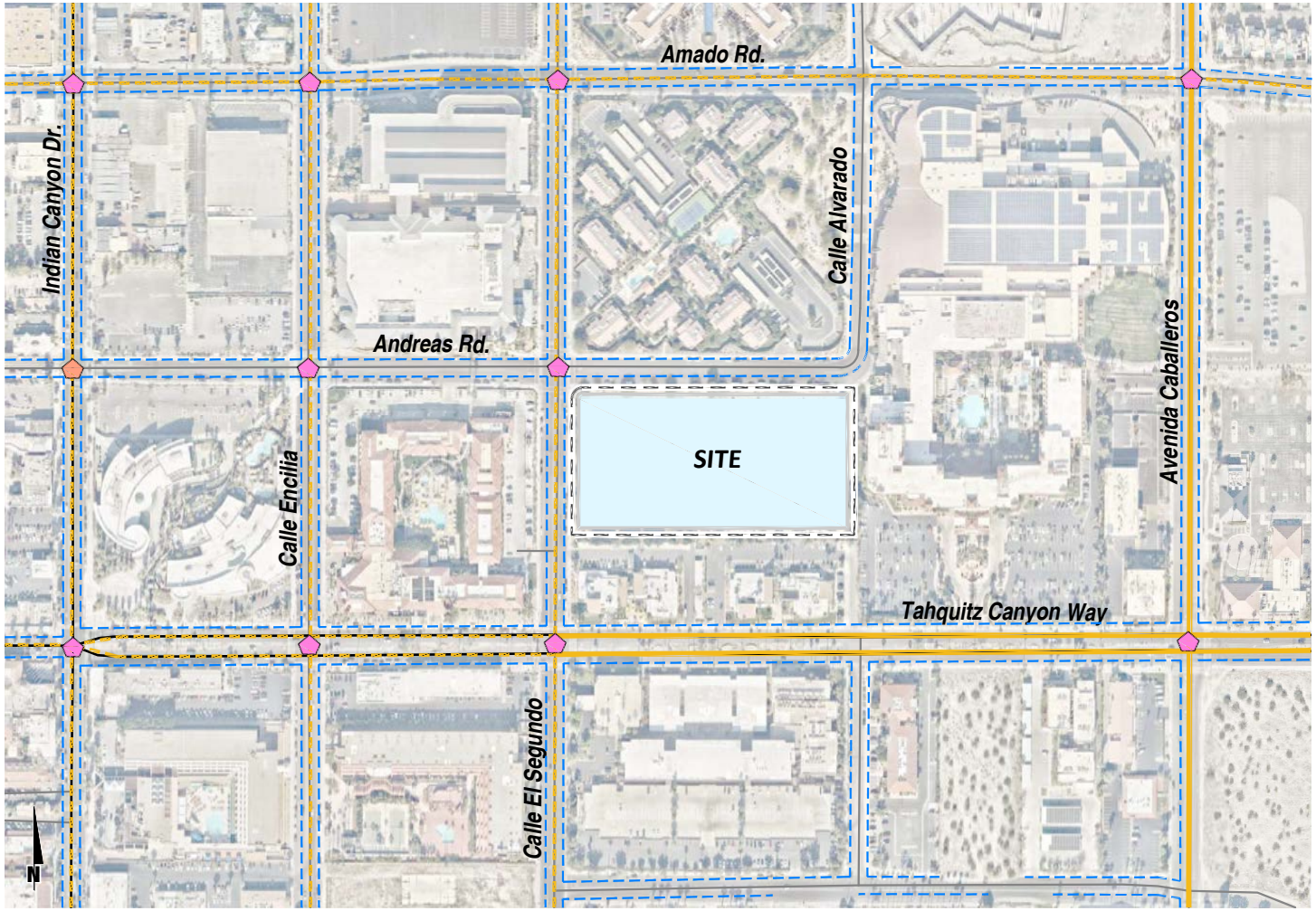


EXHIBIT 3-6 : EXISTING PEDESTRIAN AND BIKE FACILITIES



3.5 EXISTING (2024) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected on April 25, 2024.

The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

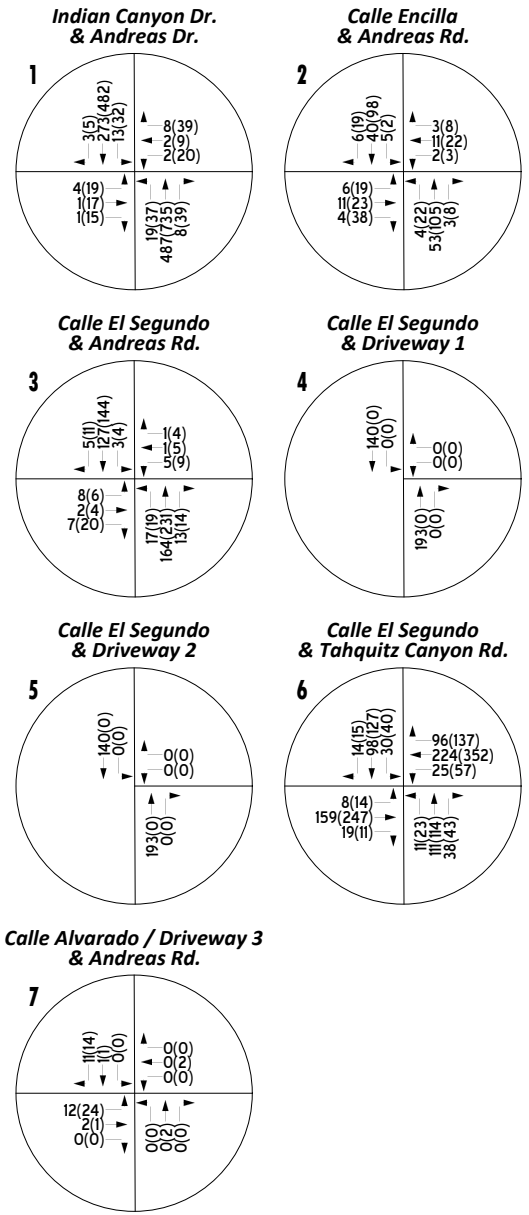
The weekday AM and PM peak hour count data are representative of typical peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity that would prevent or limit roadway access and detour routes. These raw turning volumes have been flow conserved between intersections with limited access, no access and where there are currently no uses generating traffic. Existing weekday peak hour intersection volumes are shown on Exhibit 3-7.

Existing weekday ADT volumes are also shown on Exhibit 3-7. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 11.55 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 8.66 percent. As such, the above equation utilizing a factor of 11.55 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 8.66 percent (i.e., 1/0.0866 = 11.55) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses.

EXHIBIT 3-7 : EXISTING (2024) TRAFFIC VOLUMES



3.6 INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1, which indicates that the study area intersections are currently operating at an acceptable LOS (LOS "D" or better) during AM and PM peak hours. The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2024) CONDITIONS

#	Intersection	Traffic Control[2]	Delay[1] (secs.) AM	Delay[1] (secs.) PM	Level of Service AM	Level of Service PM
1	Indian Canyon Dr. & Andreas Rd.	TS	3.6	7.4	A	A
2	Calle Encilla & Andreas Rd.	AWS	7.7	8.7	A	A
3	Calle El Segundo & Andreas Rd.	AWS	8.1	8.5	A	A
4	Calle El Segundo & Driveway 1		Future Intersection			
5	Calle El Segundo & Driveway 2		Future Intersection			
6	Calle El Segundo & Tahquitz Canyon Rd.	TS	7.4	7.8	A	A
7	Driveway 3 & Andreas Rd.	CSS	7.3	7.3	A	A

[1] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[2] TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop

3.7 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on 2024 peak hour intersection turning volumes (see Appendix 3.3). For Existing (2024) traffic conditions, unsignalized study area intersections are not anticipated to meet volume warrants for installation of a traffic signal.

4 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. The proposed Project consists of redeveloping the site to develop a nine-story resort hotel with residences and a 6,040-square-foot restaurant. The resort hotel consists of 125 rooms and 132 branded residential condo units. The Project has an anticipated opening year of 2027. A preliminary site plan for the proposed Project is shown in Exhibit 1. Access for the proposed site is as follows:

- Northern Driveway on N. Calle El Segundo: Hotel loading/trash
- Southern Driveway on N. Calle El Segundo: Restaurant Valet
- Alley on N. Calle El Segundo: provides access to loading zones for the Flex Event Space and access to the parking garage from the south side
- Western Driveways on E. Andreas Road: Shared Hotel/Residential Drop-Off
- Eastern Driveways on E. Andreas Road: Residential Drop-Off
- Alley on E. Andreas Road: provides access to the parking garage from the east side

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

In order to develop the traffic characteristics of the proposed Project, the trip generation rates provided in the *Institute of Transportation Engineers (ITE) Trip Generation* (11th Edition, 2021) have been utilized (4). Table 4-1 shows the vehicle trip generation rates for the Project, as well as the vehicle trip generation summary with daily and peak hour trip generation estimates. As shown in Table 4-1, the Project is anticipated to generate a total of 1,378 vehicle trip-ends per day with 93 AM peak vehicle hour trips and 128 PM peak hour vehicle trips.

4.2 PROJECT TRIP DISTRIBUTION

The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and proximity to the surrounding highway network. Trip distribution patterns proposed for the Project for inbound and outbound conditions are illustrated on Exhibit 4-1.

TABLE 4-1: PROJECT TRIP GENERATION SUMMARY

Land Use[1]	ITE Code	Units[2]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Multifamily (Mid-Rise) Residential (4-10 Floors)	221	DU	0.09	0.28	0.37	0.24	0.15	0.39	4.54
Resort Hotel[3]	330	Rooms	0.23	0.09	0.32	0.18	0.23	0.41	4.10
Fine Dining Restaurant[4]	931	TSF	0.37	0.36	0.73	5.23	2.57	7.80	83.84

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] TSF = thousand square feet; DU = dwelling units

[3] Daily rate not available. Estimated at 10 times the PM peak hour rate.

[4] AM inbound and outbound split not available in ITE. Assumed 50/50 split.

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Multifamily (Mid-Rise) Residential	132	DU	11	38	49	31	20	51	600
Internal Capture Reduction			0	0	0	-3	-5	-8	-96
Resort Hotel	125	Rooms	29	11	40	22	29	51	514
Internal Capture Reduction			0	0	0	-2	-2	-4	-40
Fine Dining Restaurant	6.040	TSF	2	2	4	32	16	48	506
Internal Capture Reduction			0	0	0	-6	-4	-10	-106
Project Total Trips			**42**	**51**	**93**	**74**	**54**	**128**	**1,378**

[2] TSF = thousand square feet; DU = dwelling units

4.3 MODAL SPLIT

The potential for Project trips to be reduced by the use of public transit, walking, or bicycling have not been included as part of the Project's estimated trip generation. Essentially, the Project's traffic projections are "conservative" in that these alternative travel modes would reduce the forecasted traffic volumes.

4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project ADT and peak hour intersection turning movement volumes are shown on Exhibit 4-2.

On-site restaurant and commercial spaces support the Project hotel rooms and provide a new local service for adjacent residents to accommodate their food and beverage needs. The provision of on-site restaurant and commercial facilities shortens non-discretionary trips by putting those goods and services closer to complementary land uses, resulting in conditions which do not increase overall vehicle miles traveled.

EXHIBIT 4-1 : PROJECT TRIP DISTRIBUTION (SHEET 1 OF 2)

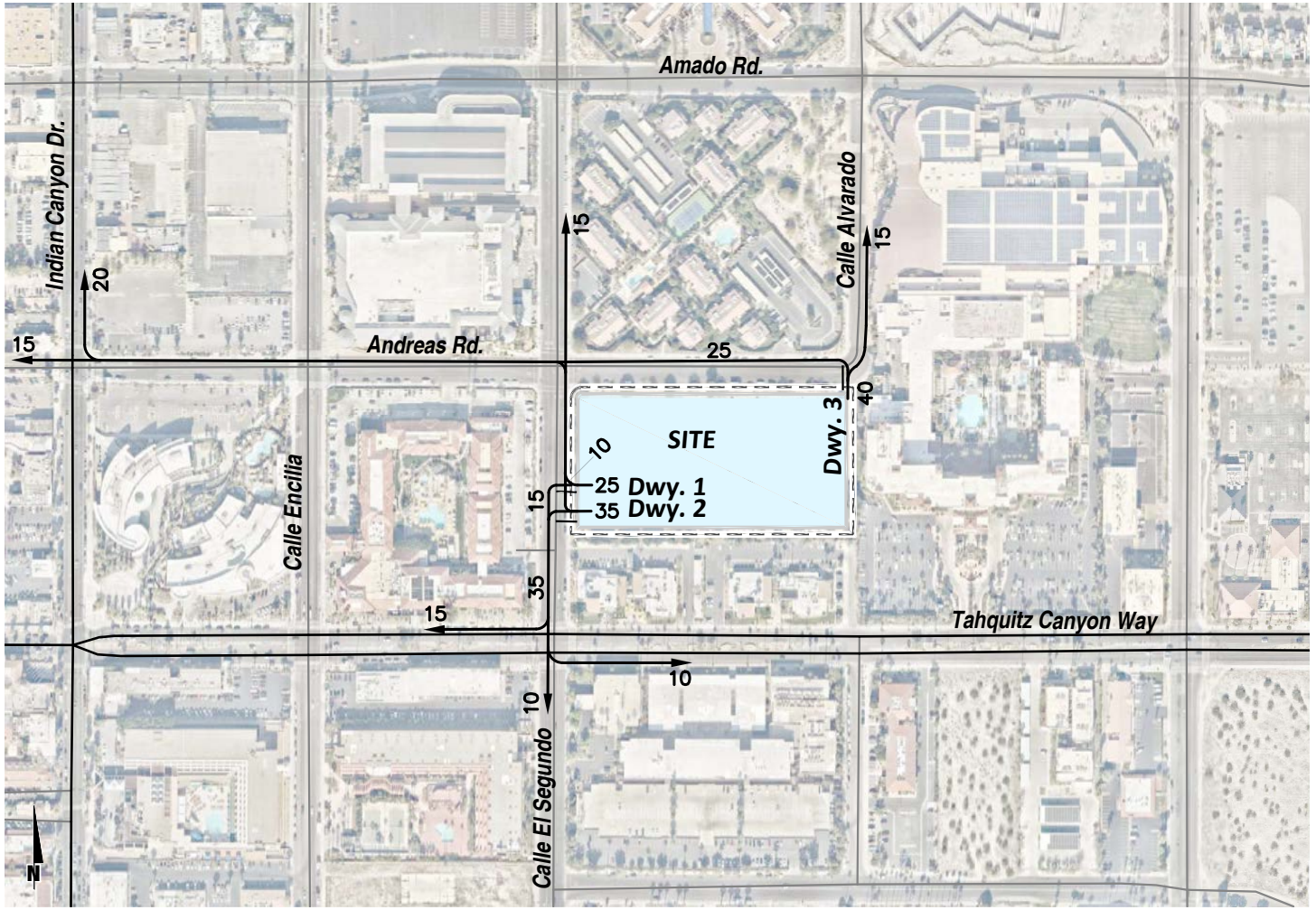


EXHIBIT 4-1 : PROJECT TRIP DISTRIBUTION (SHEET 2 OF 2)

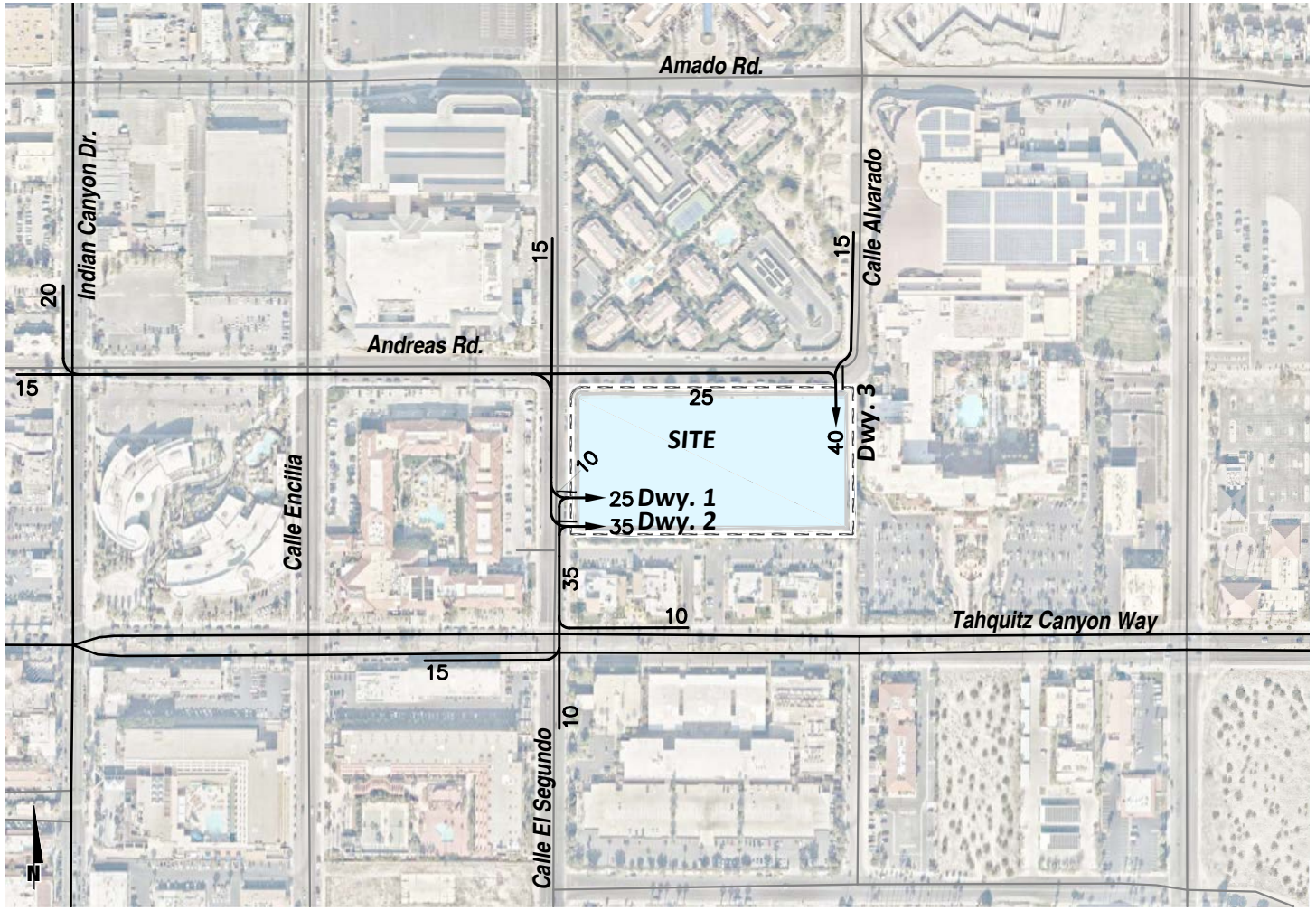
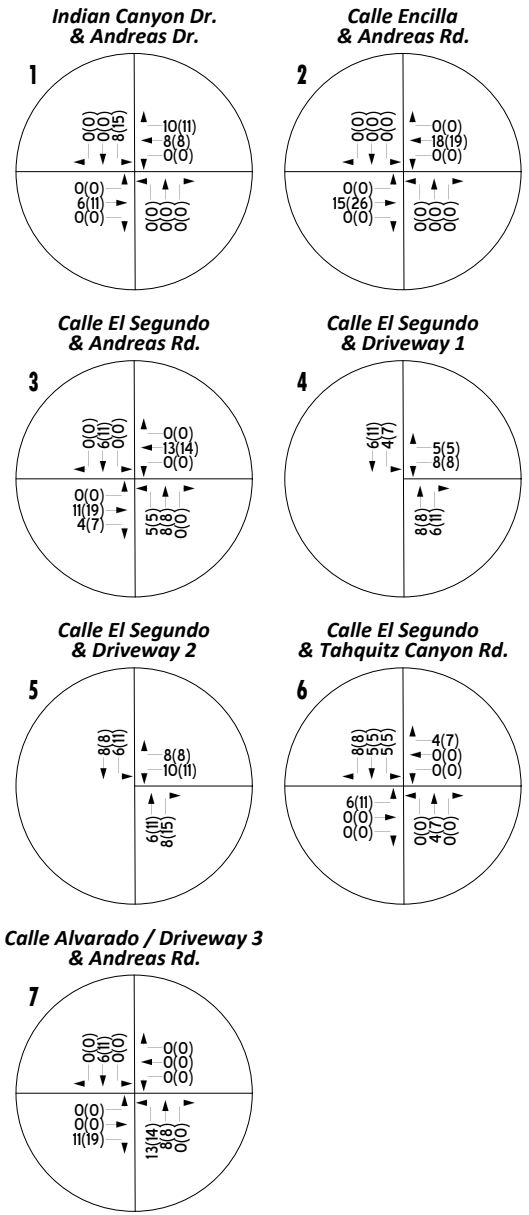
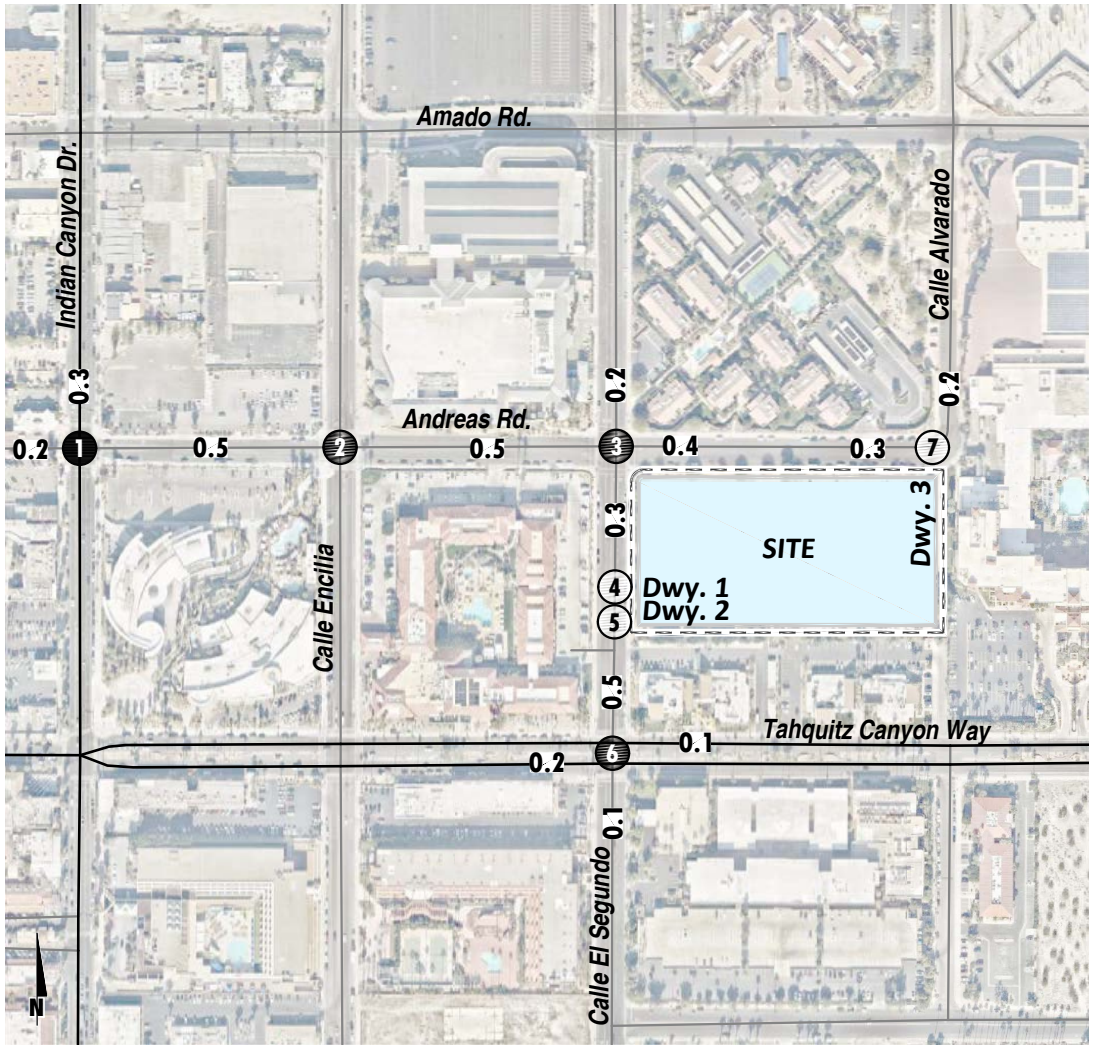


EXHIBIT 4-2 : PROJECT ONLY TRAFFIC VOLUMES





LEGEND:

6 = *Existing Intersection Analysis Location*

0 = *Future Intersection Analysis Location*

00 = *Average Daily Traffic (ADT) in Thousands*

4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon background (ambient) growth at 2% per year for 2027 traffic conditions. The total ambient growth is 6.12% for 2027 traffic conditions. This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in conjunction with traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies.

Exhibit 4-3 illustrates the cumulative development location map. The cumulative projects listed are those that would generate traffic and would contribute traffic to study area intersections. A summary of cumulative development projects and their proposed land uses are shown in Table 4-2. If applicable, the traffic generated by individual cumulative projects was manually added to the Opening Year Cumulative forecasts to ensure that traffic generated by the listed cumulative development projects in Table 4-2 are reflected as part of the background traffic.

The near-term traffic analysis includes the following traffic conditions, with the various traffic components:

- EAC (2027)
  - Existing (2024) volumes
  - Ambient growth traffic (6.12% over 3 years)
  - Cumulative development traffic
- EAPC (2027)
  - Existing (2024) volumes
  - Ambient growth traffic (6.12% over 3 years)
  - Project traffic
  - Cumulative development traffic

The traffic generated by the proposed Project was then manually added to the base volume to determine EAC/EAPC forecasts.

EXHIBIT 4-4 : CUMULATIVE DEVELOPMENT ONLY TRAFFIC VOLUMES

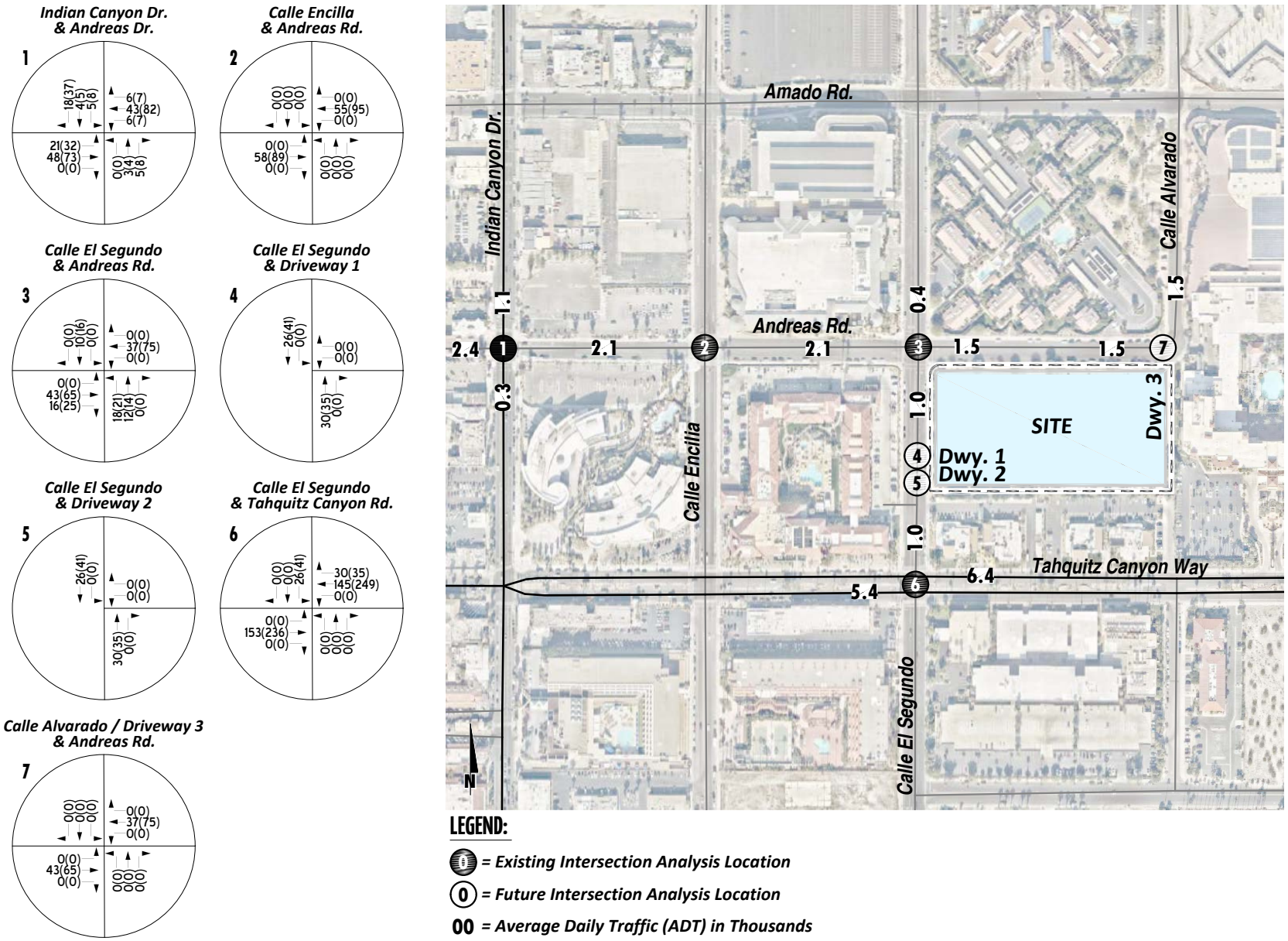
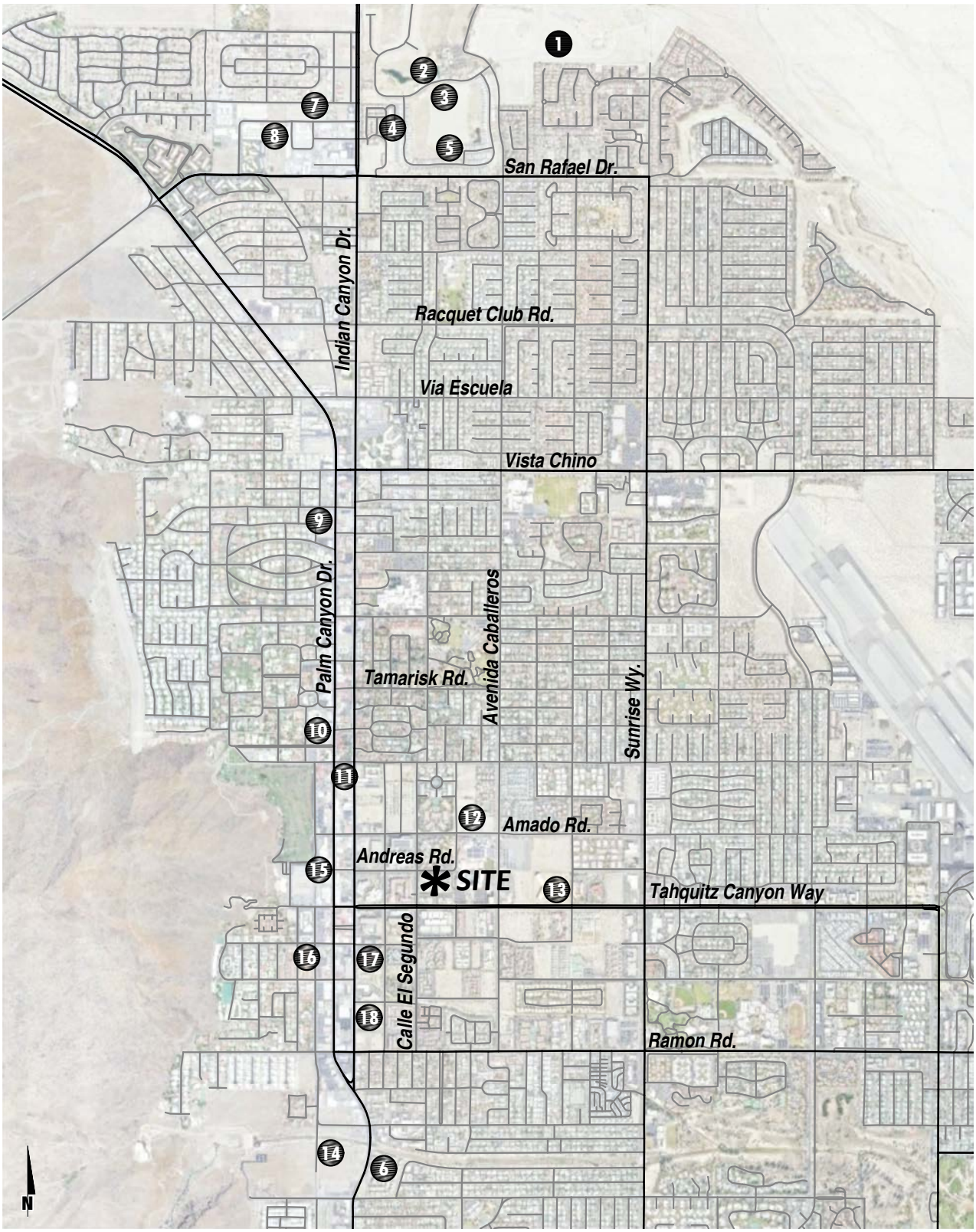


EXHIBIT 4-3 : CUMULATIVE DEVELOPMENT LOCATION MAP



LEGEND:

0 = *Cumulative Development ID*

TABLE 4-2: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use[1]	Quantity	Units[2]
1	Avalon 1150	Single Family Residential	191	DU
		Single Family Residential	130	DU
2	Gallery Homes at Miralon	Single Family Residential	50	DU
3	Condominiums at Miralon	Multi-Family Residential	153	DU
4	Flair at Miralon	Single Family Residential	44	DU
5	Aura at Miralon	Single Family Residential	70	DU
6	Cody Place	Commercial	15	TSF
7	Alure Palm Springs	Single Family Residential	26	DU
8	Secure Space Self Storage	Self Storage Facility	127.2	TSF
9	Aloe at Palm Canyon	Senior Affordable Housing	71	DU
10	Mixed-Use Project by Las Palmas (575 N. Palm Canyon Dr.)	Condominium	24	DU
		Commercial	2.214	TSF
11	Thompson Hotel (400 N. Palm Canyon Dr.)	Hotel	150	RM
		Retail	32.705	TSF
12	Dream Hotel	Hotel	156	RM
		Condominium	40	DU
13	Living Out (north of Tahquitz Cyn. Wy. & west of Hermosa Dr.)	Apartment	122	DU
		Retail	4.99	TSF
14	Elan	Single Family Residential	56	DU
		Multi-Family	25	DU
15	Block B-1 Mixed-Use Building (northeast corner of Belardo Rd. and Museum Wy.)	Condominium	45	DU
16	Orchid Tree Hotel (222 S. Cahuilla Road)	Hotel	74	RM
17	Drift Hotel (Bode Hotel - 284 S. Indian Canyon Dr.)	Boutique Hotel	30	RM
18	Blackhaus Hotel (421 S. Calle Encilia)	Hotel	20	RM

[1] DU = Dwelling Unit; RM = Room; TSF = Thousand Square Feet

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5 EXISTING PLUS PROJECT (E+P) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for E+P conditions and the resulting intersection operations and traffic signal warrant analyses.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for E+P conditions are consistent with those shown previously on Exhibit 3-1, except for Project driveways and those facilities assumed to be constructed by the Project to provide site access (e.g., intersection and roadway improvements at the Project's frontage and driveways).

5.2 E+P TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus the addition of Project traffic. The ADT and peak hour intersection turning movement volumes which can be expected for E+P traffic conditions are shown on Exhibit 5-1.

5.3 INTERSECTION OPERATIONS ANALYSIS

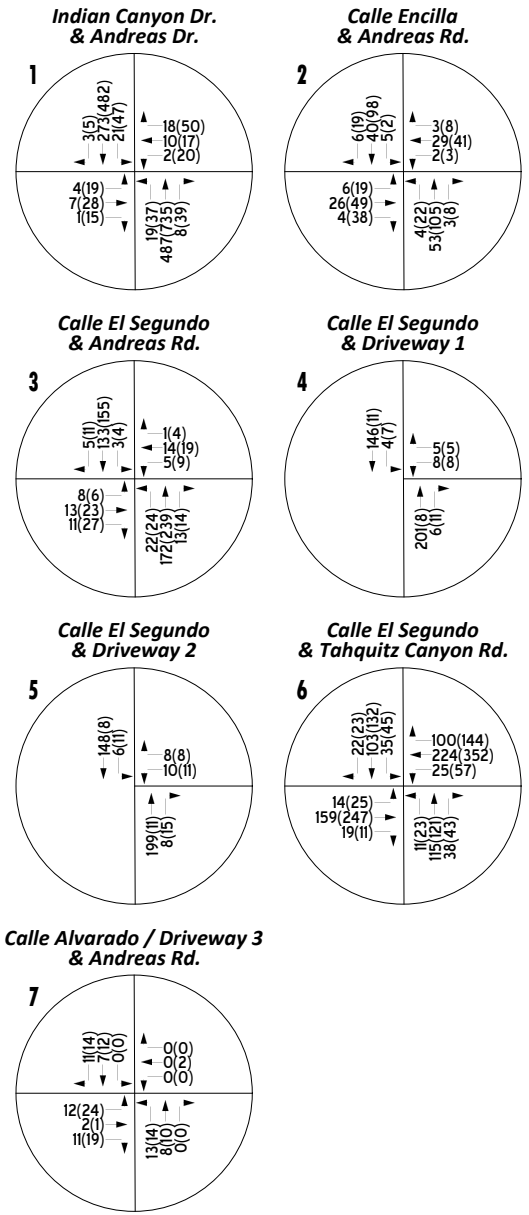
E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 5-1.

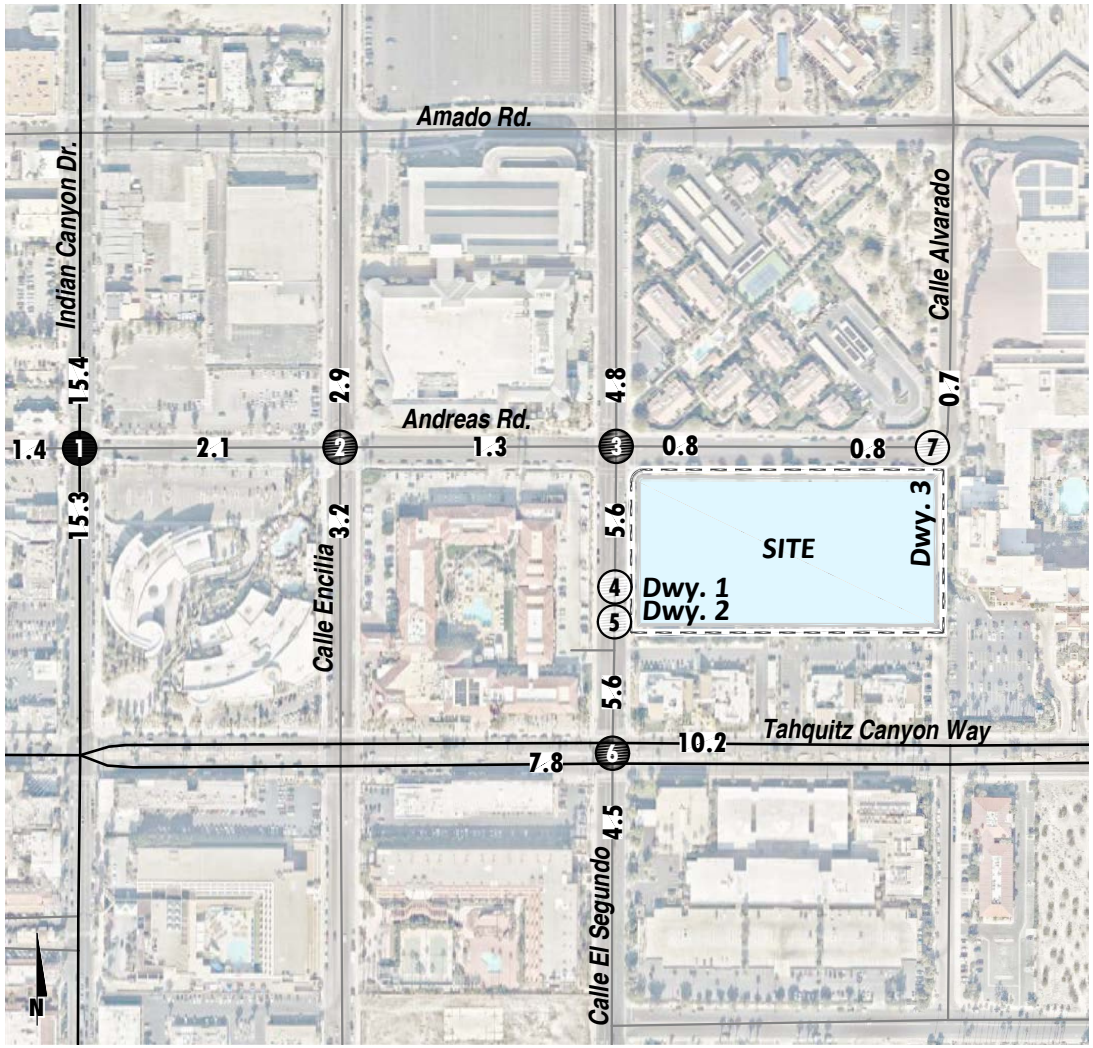
For E+P traffic conditions, the study area intersections continue operating at an acceptable LOS (LOS "D" or better) during AM and PM peak hours, with access improvements described in Chapter 8 of this report. The intersection operations analysis worksheets for E+P traffic conditions is included in Appendix 5.1 of this TA.

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis worksheets for E+P traffic conditions are provided in Appendix 5.2. As noted previously, unsignalized study area intersections are not anticipated to meet volume-based warrants for a traffic signal. The remaining unsignalized intersections are not anticipated to meet peak hour volume-based warrants and daily volume-based warrants with the addition of Project traffic.

EXHIBIT 5-1 : E+P TRAFFIC VOLUMES





LEGEND:

6 = *Existing Intersection Analysis Location*

0 = *Future Intersection Analysis Location*

00 = *Average Daily Traffic (ADT) in Thousands*

TABLE 5-1: INTERSECTION ANALYSIS FOR E+P CONDITIONS

#	Intersection	Traffic Control[2]	Existing (2024) Delay[1] (secs.) AM	Existing (2024) Delay[1] (secs.) PM	Existing (2024) Level of Service AM	Existing (2024) Level of Service PM	E+P Delay[1] (secs.) AM	E+P Delay[1] (secs.) PM	E+P Level of Service AM	E+P Level of Service PM
1	Indian Canyon Dr. & Andreas Rd.	TS	3.6	7.4	A	A	4.5	7.8	A	A
2	Calle Encilla & Andreas Rd.	AWS	7.7	8.7	A	A	7.8	9.0	A	A
3	Calle El Segundo & Andreas Rd.	AWS	8.1	8.5	A	A	8.3	8.7	A	A
4	Calle El Segundo & Driveway 1	**CSS**	Future Intersection				10.0	8.6	A	A
5	Calle El Segundo & Driveway 2	**CSS**	Future Intersection				9.9	8.7	A	A
6	Calle El Segundo & Tahquitz Canyon Rd.	TS	7.4	7.8	A	A	7.5	7.8	A	A
7	Driveway 3 & Andreas Rd.	CSS	7.3	7.3	A	A	9.2	9.3	A	A

[1] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[2] TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop; **CSS** = Improvement

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6 EAC (2027) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for EAC conditions and the resulting intersection operations and traffic signal warrant analyses.

The lane configurations and traffic controls assumed to be in place for EAC (2027) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of driveways and those facilities assumed to be constructed by cumulative projects to provide site access also assumed to be in place for EAC (2027) conditions only (e.g., intersection and roadway improvements at the cumulative projects' frontage and driveways).

6.1 EAC (2027) TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 6.12% and the addition of cumulative project traffic. The ADT and peak hour intersection turning movement volumes which can be expected for EAC (2027) traffic conditions are shown on Exhibit 6-1.

6.2 INTERSECTION OPERATIONS ANALYSIS

EAC peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 6-1.

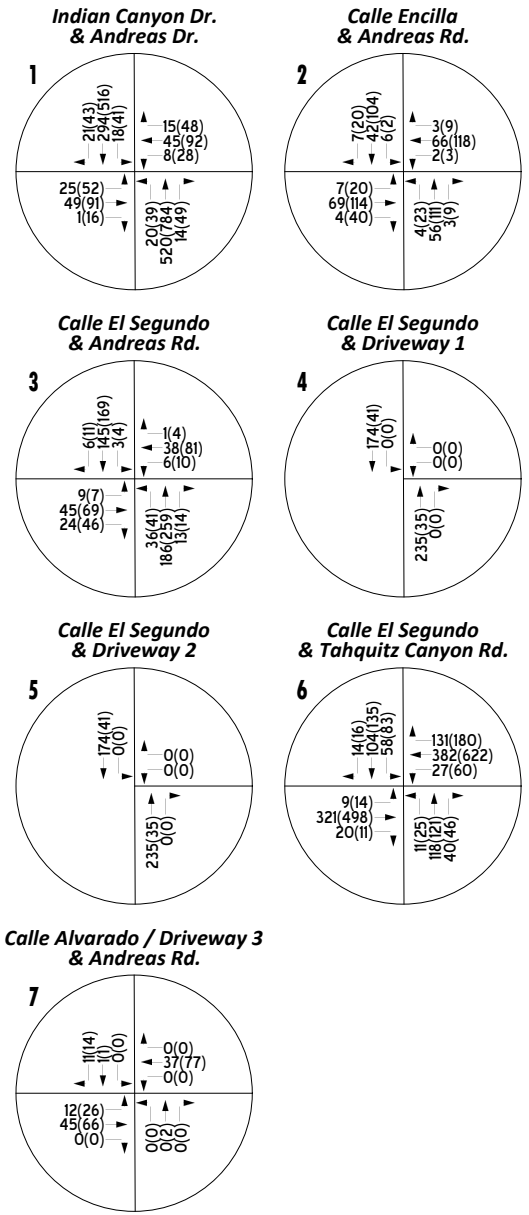
For EAC traffic conditions, the study area intersections continue operating at an acceptable LOS (LOS "D" or better) during AM and PM peak hours.

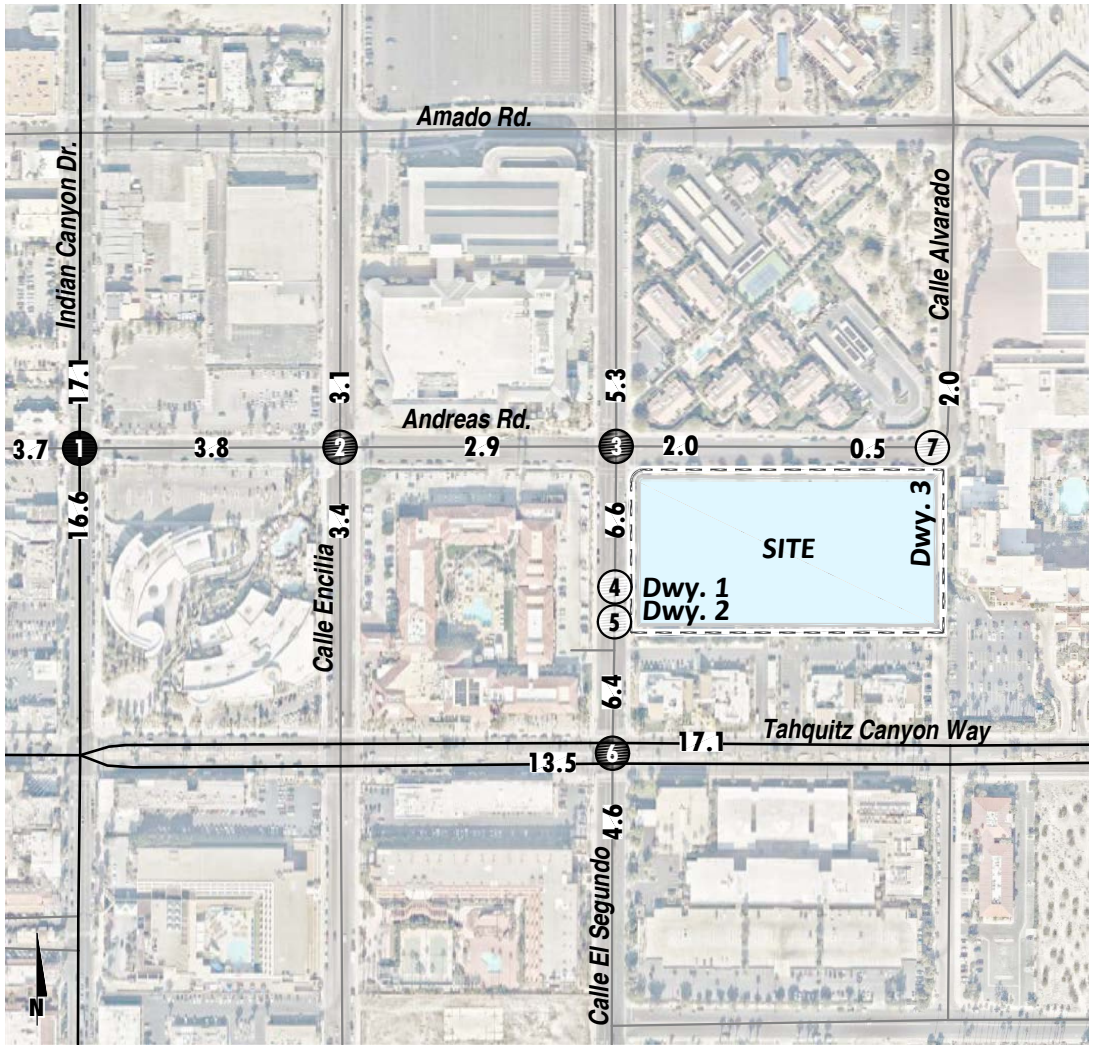
The intersection operations analysis worksheets for EAC traffic conditions are included in Appendix 6.1 of this TA.

6.3 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis worksheets for EAC (2027) traffic conditions are provided in Appendix 6.2. Unsignalized study area intersections are not anticipated to meet peak hour volume-based warrants and daily volume-based warrants for a traffic signal for background conditions.

EXHIBIT 6-1 : EAC (2027) TRAFFIC VOLUMES





LEGEND:

6 = *Existing Intersection Analysis Location*

0 = *Future Intersection Analysis Location*

00 = *Average Daily Traffic (ADT) in Thousands*

TABLE 6-1: INTERSECTION ANALYSIS FOR EAC (2027) CONDITIONS

#	Intersection	Traffic Control[2]	EAC (2027) Delay[1] (secs.) AM	PM	Level of Service AM	PM
1	Indian Canyon Dr. & Andreas Rd.	TS	6.9	9.0	A	A
2	Calle Encilla & Andreas Rd.	AWS	8.3	10.2	A	B
3	Calle El Segundo & Andreas Rd.	AWS	8.7	9.7	A	A
4	Calle El Segundo & Driveway 1	**CSS**	Future Intersection			
5	Calle El Segundo & Driveway 2	**CSS**	Future Intersection			
6	Calle El Segundo & Tahquitz Canyon Rd.	TS	7.9	8.4	A	A
7	Driveway 3 & Andreas Rd.	CSS	7.3	7.3	A	A

1 Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

2 TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop; **CSS** = Improvement

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7 EAPC (2027) TRAFFIC CONDITIONS

This section discusses the EAPC (2027) traffic forecasts and the resulting intersection operations and traffic signal warrant analyses.

The lane configurations and traffic controls assumed to be in place for EAPC (2027) conditions are consistent with those shown previously on Exhibit 3-1, apart from the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for EAPC conditions only (e.g., intersection and roadway improvements along the Project's frontage and driveways).
- If applicable, driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for EAPC conditions (e.g., intersection and roadway improvements along the cumulative development's frontages and driveways).

7.1 EAPC (2027) TRAFFIC VOLUME FORECASTS

This scenario adds Project traffic to cumulative background conditions (existing traffic volumes plus an ambient growth factor of 6.12% plus traffic from pending and approved but not yet constructed known development projects in the area). The weekday ADT and weekday peak hour volumes which can be expected for EAPC (2027) traffic conditions are shown on Exhibit 7-1.

7.2 INTERSECTION OPERATIONS ANALYSIS

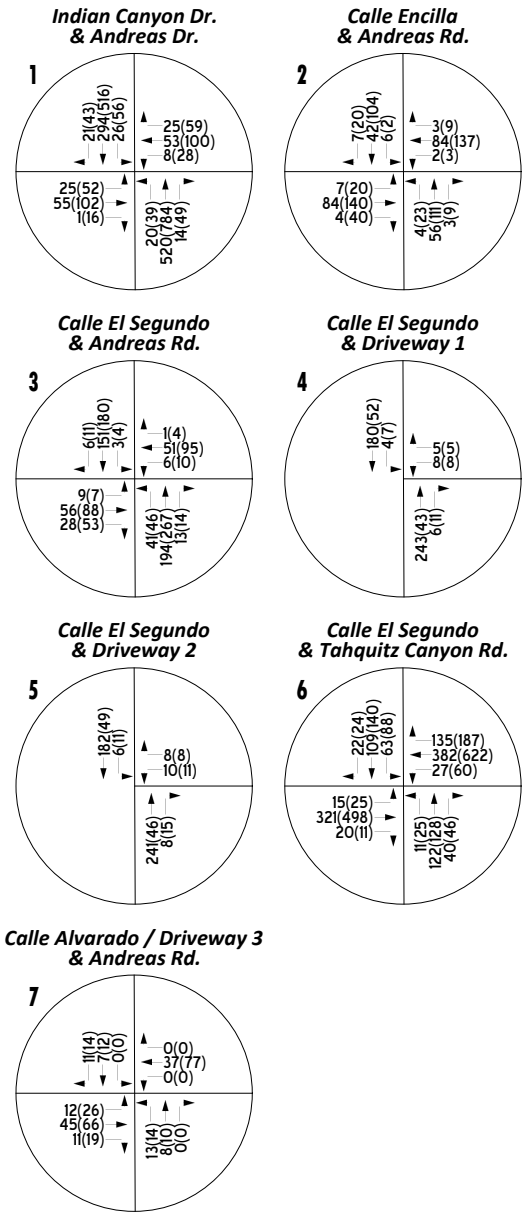
EAPC peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 7-1.

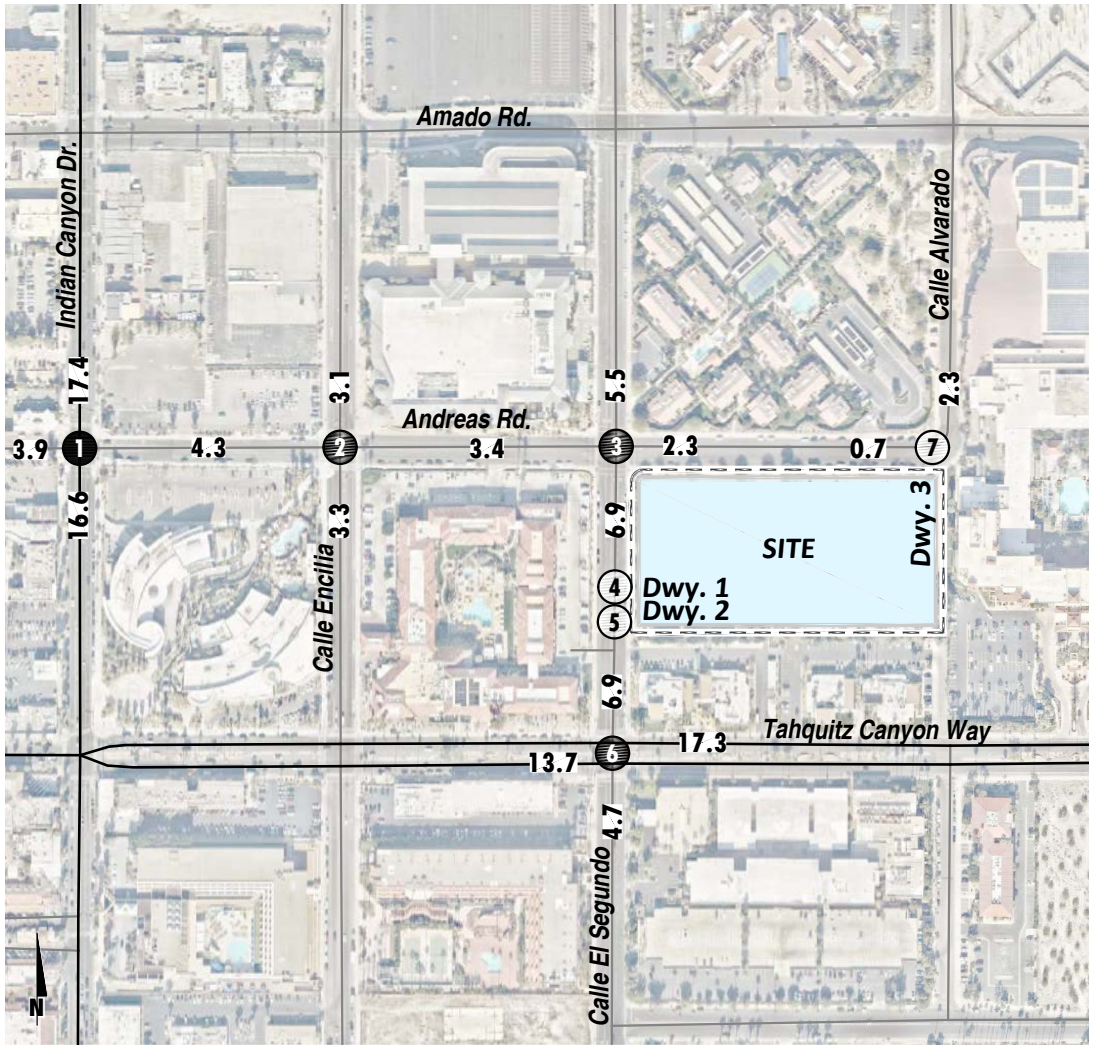
For EAPC traffic conditions, the study area intersections continue operating at an acceptable LOS (LOS "D" or better) during AM and PM peak hours. The intersection operations analysis worksheets for EAPC traffic conditions are included in Appendix 7.1 of this TA.

7.3 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis worksheets for EAPC (2027) traffic conditions provided in Appendix 7.2. As noted previously, unsignalized study area intersections are not anticipated to meet peak hour volume-based warrants and daily volume-based warrants for a traffic signal with the addition of Project traffic.

EXHIBIT 7-1 : EAPC (2027) TRAFFIC VOLUMES





LEGEND:

6 = *Existing Intersection Analysis Location*

0 = *Future Intersection Analysis Location*

00 = *Average Daily Traffic (ADT) in Thousands*

TABLE 7-1: INTERSECTION ANALYSIS FOR EAPC (2027) CONDITIONS

#	Intersection	Traffic Control[2]	EAC (2027) (See Table 6-1) Delay[1] (secs.) AM	PM	Level of Service AM	PM	EAPC (2027) Delay[1] (secs.) AM	PM	Level of Service AM	PM
1	Indian Canyon Dr. & Andreas Rd.	TS	6.9	9.0	A	A	7.1	9.1	A	A
2	Calle Encilla & Andreas Rd.	AWS	8.3	10.2	A	B	8.5	10.8	A	B
3	Calle El Segundo & Andreas Rd.	AWS	8.7	9.7	A	A	9.0	10.2	A	B
4	Calle El Segundo & Driveway 1	**CSS**	Future Intersection				10.4	8.9	B	A
5	Calle El Segundo & Driveway 2	**CSS**	Future Intersection				10.3	9.0	B	A
6	Calle El Segundo & Tahquitz Canyon Rd.	TS	7.9	8.4	A	A	8.0	8.4	A	A
7	Driveway 3 & Andreas Rd.	CSS	7.3	7.3	A	A	9.6	9.8	A	A

1 Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

2 TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop; **CSS** = Improvement

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8 SITE ACCESS IMPROVEMENTS

Exhibit 8-1 depicts the roadway improvements needed to provide Project access. Access for the proposed site is as follows:

- Northern Driveway on N. Calle El Segundo: Hotel loading/trash
- Southern Driveway on N. Calle El Segundo: Restaurant Valet
- Alley on N. Calle El Segundo: provides access to loading zones for the Flex Event Space and access to the parking garage from the south side
- Western Driveways on E. Andreas Road: Shared Hotel/Residential Drop-Off
- Eastern Driveways on E. Andreas Road: Residential Drop-Off
- Alley on E. Andreas Road: provides access to the parking garage from the east side

Roadway improvements necessary to provide site access and on-site circulation are assumed to be constructed in conjunction with site development and are described below.

Andreas Road is an east-west oriented local roadway located on the Project's northerly boundary. According to the City of Palm Springs General Plan, Andreas Road is currently built to its ultimate width. However, the Project is to implement sidewalk, curb-and-gutter, and landscaping improvements as needed to accommodate site access.

Calle El Segundo is a north-south oriented local roadway, located on the Project's westerly boundary. According to the City of Palm Springs General Plan, Calle El Segundo is currently built to its ultimate width. However, the Project is to implement sidewalk, curb-and-gutter, and landscaping improvements as needed to accommodate site access.

The following entry improvements and traffic controls are recommended:

Calle El Segundo & Driveway 1 (#4)

- Project to install a stop control on the westbound approach and construct a shared left-right turn lane.

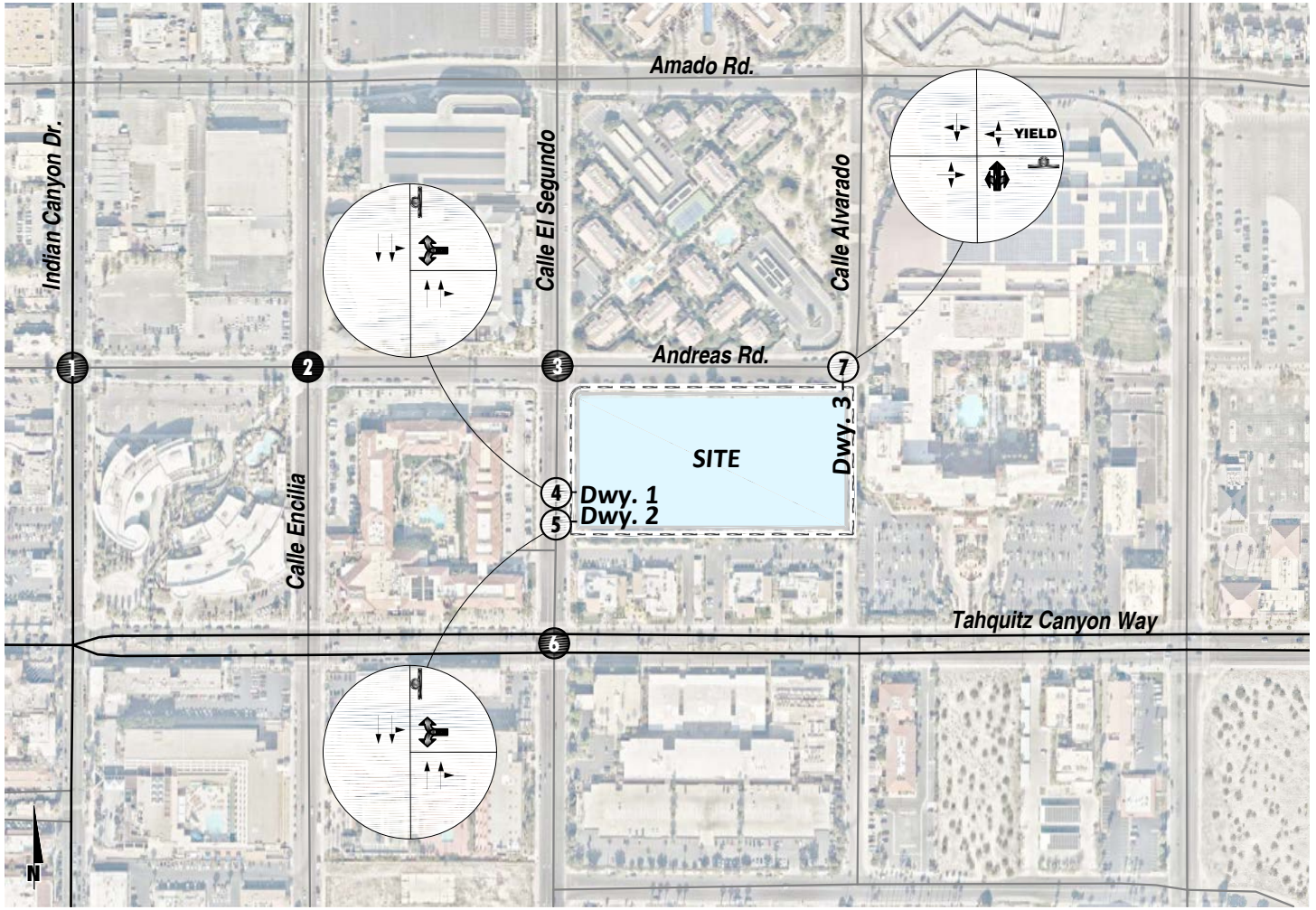
Calle El Segundo & Driveway 2 (#5)

- Project to install a stop control on the westbound approach and construct a shared left-right turn lane.

Driveway 3 & Andreas Road (#7)

- Project to install a stop control on the northbound approach and construct a shared left-through-right turn lane.

EXHIBIT 8-1 : SITE ACCESS IMPROVEMENTS



9 REFERENCES

1. **Fehr & Peers.** *City of Palm Springs Traffic Impact Analysis Guideines.* City of Palm Springs : s.n., July 2020.
2. **Transportation Research Board.** *Highway Capacity Manual (HCM), 7th Edition.* s.l. : National Academy of Sciences, 2022.
3. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (CA MUTCD). 2014, Updated January 11, 2024 (Revision 8).
4. **Institute of Transportation Engineers.** Trip Generation Manual. 11th Edition, 2021.

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APPENDIX 1.1: TRAFFIC STUDY SCOPE

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MEMORANDUM

URBAN | CROSSROADS

DATE: April 11, 2024
TO: Rick Minjares, City of Palm Springs
FROM: Charlene So, Urban Crossroads, Inc.
JOB NO: 15147-05 TA Scope

PALM SPRINGS HOTEL & RESIDENCES (1008-TTM) TRAFFIC STUDY SCOPING AGREEMENT (REVISED)

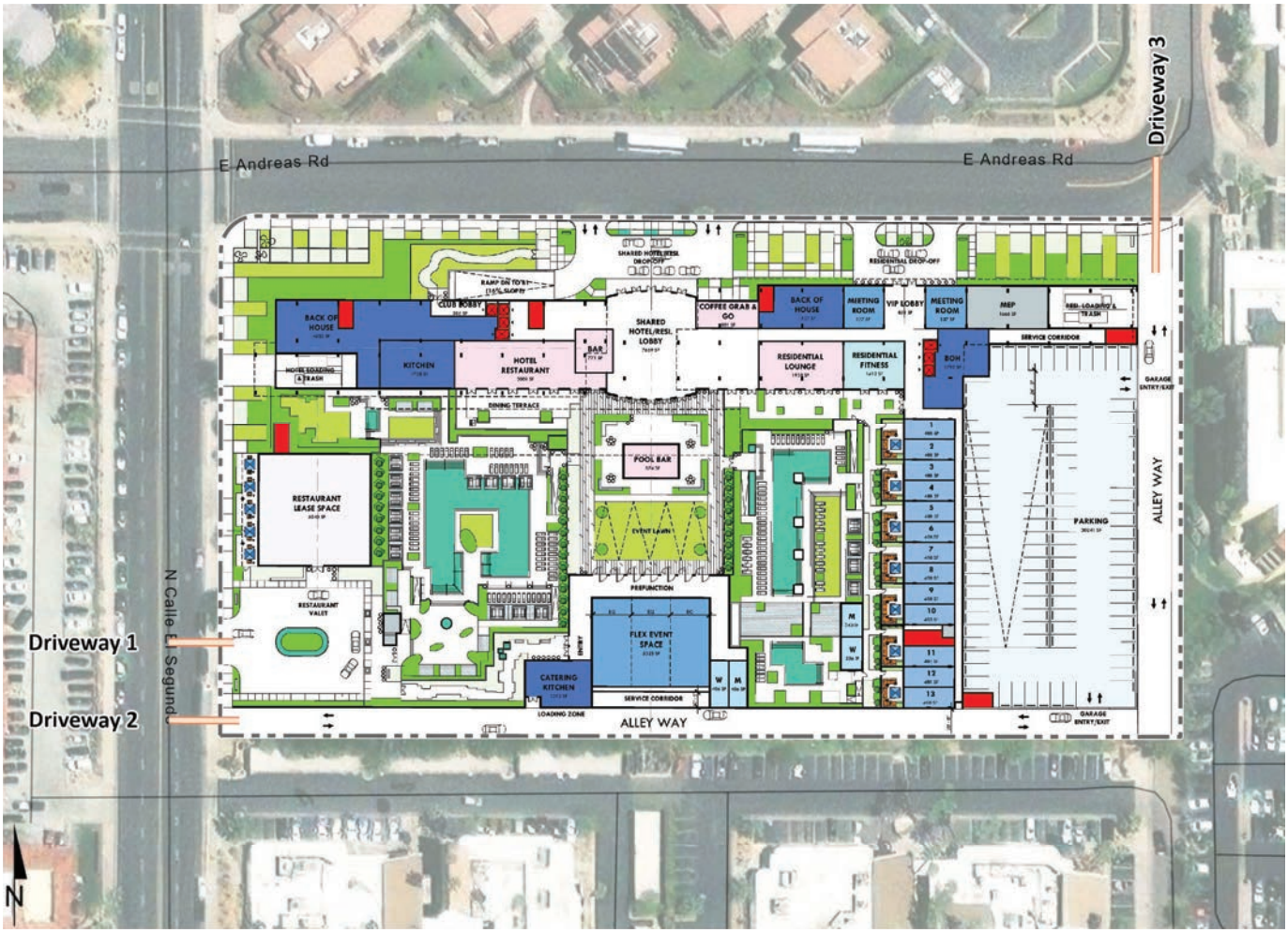
Urban Crossroads, Inc. is pleased to provide the following Traffic Study Scoping Agreement for the Palm Springs Hotel & Residences development (**Project**), which is located on the southeast corner of N. Calle El Segundo and E. Andreas Road in the City of Palm Springs. This letter describes the proposed Project trip generation, trip distribution, and analysis methodology, which have been used to establish the draft proposed Project study area and analysis locations. The following memorandum has been prepared in accordance with the City of Palm Springs Traffic Impact Analysis Guidelines (July 2020, referred to as **City's Guidelines**). The City's Scoping Form is included in Attachment A. The following scoping agreement also responds to the City's December 12, 2023, comments on the Trip Generation Assessment (see Attachment B for the City's comments and responses).

PROPOSED PROJECT

The site is currently an improved (paved and striped) parking lot which is utilized by the City for public parking (that operates under a license agreement). The proposed Project consists of redeveloping the site to develop a nine-story resort hotel with residences and a 6,040 square foot restaurant. The resort hotel consists of 125 rooms with 132 branded residential condo units. The Project has an anticipated opening year of 2027. A preliminary site plan for the proposed Project is shown in Exhibit 1. Access for the proposed site are as follows:

- Northern Driveway on N. Calle El Segundo: Hotel loading/trash
- Southern Driveway on N. Calle El Segundo: Restaurant Valet
- Alley on N. Calle El Segundo: provides access to loading zones for the Flex Event Space and access to the parking garage from the south side
- Western Driveways on E. Andreas Road: Shared Hotel/Residential Drop-Off
- Eastern Driveways on E. Andreas Road: Residential Drop-Off
- Alley on E. Andreas Road: access to the parking garage from the east side

EXHIBIT 1: PRELIMINARY SITE PLAN



TRIP GENERATION

The proposed Project is a nine-story resort hotel with 125 rooms and 132 condo residences. The property also proposes a standalone 6,040 square foot restaurant. Trip generation estimates for the proposed Project have been developed using data from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021). The trip generation rates used to estimate Project traffic are summarized in Table 2 for the proposed land uses (multifamily residential, resort hotel, and fine dining restaurant). As shown on Table 2, the proposed Project is anticipated to generate a net total of 1,378 two-way trips per day with 93 AM peak hour trips and 128 PM peak hour trips.

TABLE 1: PROJECT TRIP GENERATION SUMMARY

Land Use[1]	ITE Code	Units[2]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Multifamily (Mid-Rise) Residential (4-10 Floors)	221	DU	0.09	0.28	0.37	0.24	0.15	0.39	4.54
Resort Hotel[3]	330	Rooms	0.23	0.09	0.32	0.18	0.23	0.41	4.10
Fine Dining Restaurant[4]	931	TSF	0.37	0.36	0.73	5.23	2.57	7.80	83.84

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] TSF = thousand square feet; DU = dwelling units

[3] Daily rate not available. Estimated at 10 times the PM peak hour rate.

[4] AM inbound and outbound split not available in ITE. Assumed 50/50 split.

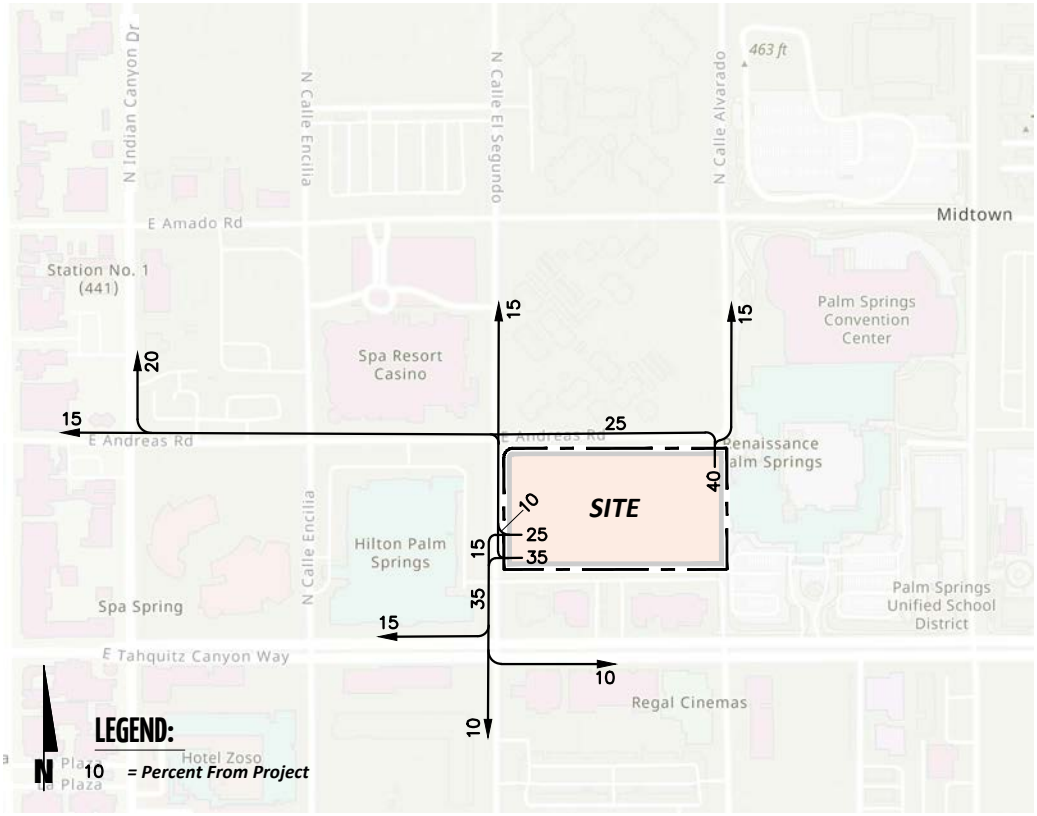
Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Multifamily (Mid-Rise) Residential	132	DU	11	38	49	31	20	51	600
Internal Capture Reduction			0	0	0	-3	-5	-8	-96
Resort Hotel	125	Rooms	29	11	40	22	29	51	514
Internal Capture Reduction			0	0	0	-2	-2	-4	-40
Fine Dining Restaurant	6.040	TSF	2	2	4	32	16	48	506
Internal Capture Reduction			0	0	0	-6	-4	-10	-106
Project Total Trips			**42**	**51**	**93**	**74**	**54**	**128**	**1,378**

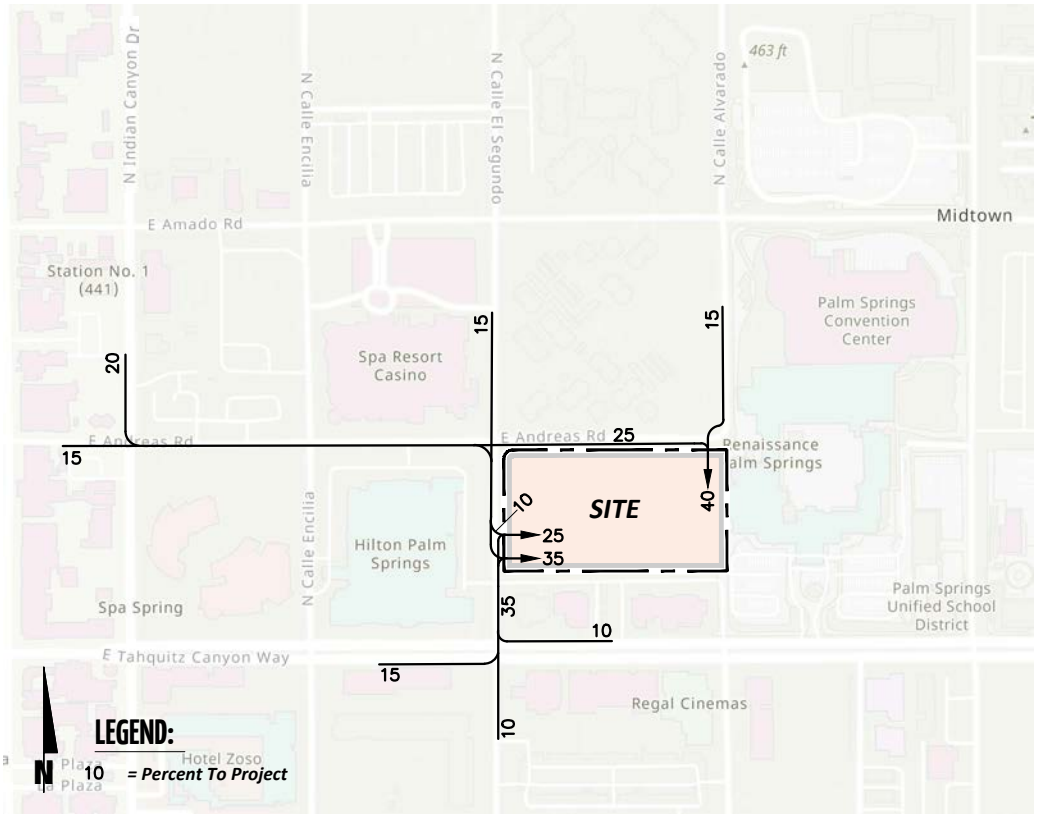
[2] TSF = thousand square feet; DU = dwelling units

TRIP DISTRIBUTION

The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. Project trip distribution patterns are shown on Exhibit 2.

EXHIBIT 2: PROJECT TRIP DISTRIBUTION





ANALYSIS SCENARIOS

Based on the language in the City's Guidelines, a traffic study is required for any project that is expected to generate more than 100 peak hour trips and would contribute more than 50 peak hour trips to any intersection of Collector-to-Collector classification or higher. The study area that is proposed to be evaluated for the purposes of the traffic study based on the City's Guidelines is shown on Exhibit 3 and listed below.

#	Intersection
1	Indian Canyon Dr. & Andreas Rd.
2	Calle Encilla & Andreas Rd.
3	Calle El Segundo & Andreas Rd.
4	Calle El Segundo & Driveway 1
5	Calle El Segundo & Alley Way
6	Calle El Segundo & Tahquitz
7	Alley Way & Andreas Rd.

Consistent with the City's Guidelines, intersection analysis will be provided for the following analysis scenarios during the AM and PM peak hours (7-9 AM and 4-6 PM):

- Existing (2023) Conditions
- Existing plus Project (E+P) Conditions
- Background (2027) Conditions – includes traffic from approved projects in the area (not if there are no or limited approved projects in the area of the project, an ambient growth rate could be considered in lieu of assigning traffic from approved projects in the area)
- Background (2027) Plus Project Conditions

The analysis of Cumulative Without and With Project traffic conditions (long-range, 2045) has not been recommended since the Project is consistent with the General Plan land use and proposes no General Plan Amendments, Zone Change, or Specific Plan. Although the City Guidelines do not specify conditions under which Cumulative traffic conditions should be evaluated, the County of Riverside's Guidelines (December 2020) specifies that projects proposing a General Plan Amendment (to land use or circulation), Specific Plan, Zone Change, or other change that increases the traffic as approved in the General Plan would be required to conduct a buildout/horizon (Cumulative) year analysis.

Per the City's Guidelines, all study area intersections will be evaluated using the Highway Capacity Manual (HCM) 7th Edition analysis methodology (Synchro plus SimTraffic 12 software, Version 12.2, Build 1, Revision 18).

EXHIBIT 3: STUDY AREA

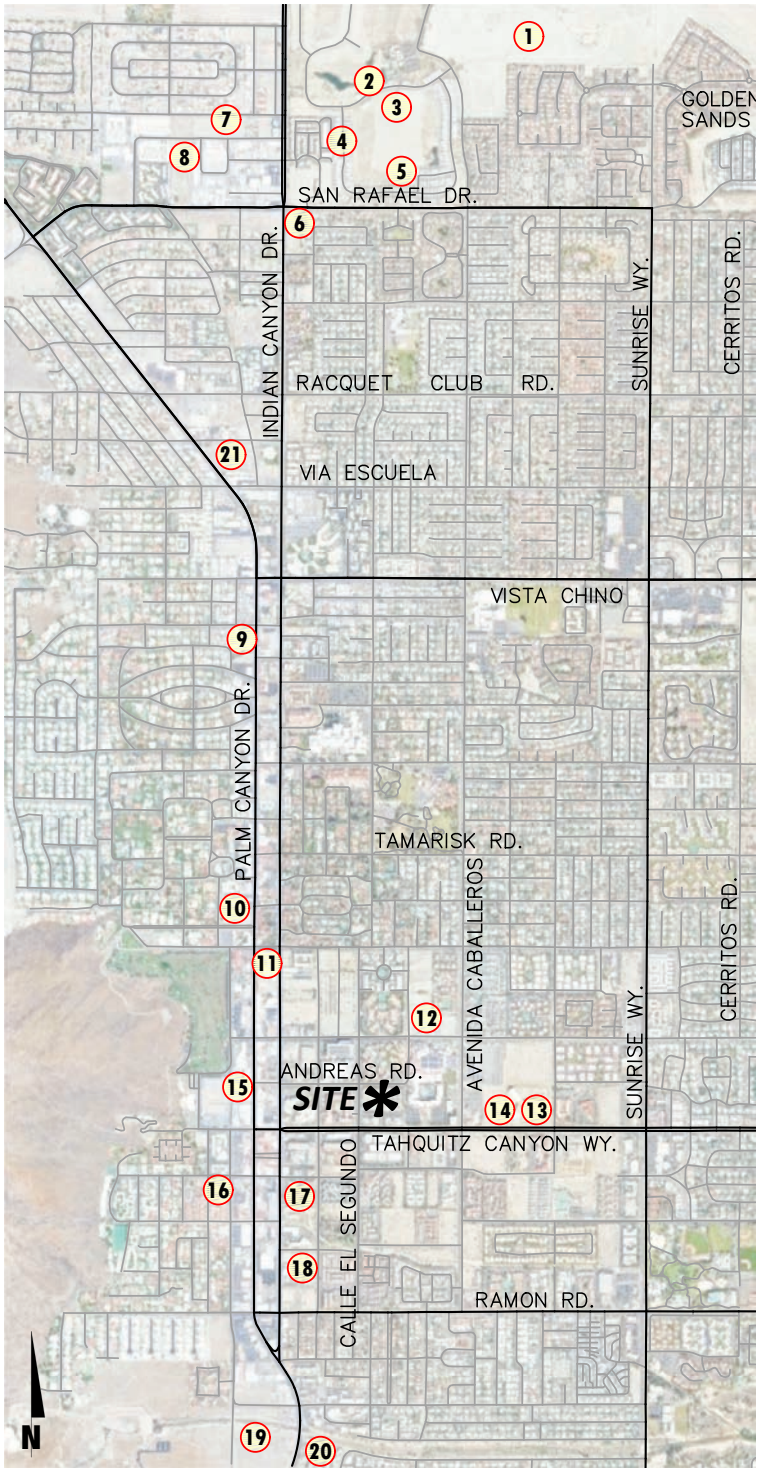
TRAFFIC COUNTS

Traffic counts (classified by vehicle type) will be collected at the proposed study area intersections once the scoping agreement has been approved when local schools were in session and operating on normal bell schedules (counts will include pedestrian and bicycle counts). Since traffic counts will be collected during the off-peak season (April), an adjustment factor of 5% will be applied to the traffic counts for baseline conditions. Although the City of Palm Springs does not specify a peak seasonal adjustment factor, the City of La Quinta does identify a 5% adjustment factor to account for seasonality and defines the same peak and off-peak seasons as the City of Palm Springs.

CUMULATIVE PROJECTS

It is requested that City staff review the list of cumulative development projects (shown on Exhibit 4 and listed on Table 2) for inclusion in the traffic study. Consistent with other studies performed in the area, an ambient growth rate of 2% per year will be utilized as a minimum if necessary. The rate will be compounded over a 3-year period (i.e., $1.02^{3 \text{ years}} = 1.0612$ or 6.12%) for Background (2027) conditions.

EXHIBIT 4: CUMULATIVE DEVELOPMENT LOCATION MAP



LEGEND:

0 = *Cumulative Development ID*

TABLE 2: SUMMARY OF CUMULATIVE DEVELOPMENT PROJECTS

ID	Project Name	Land Use[1]	Quantity	Units[2]
1	Avalon 1150	Single Family Residential	191	DU
		Single Family Residential	130	DU
2	Gallery Homes at Miralon	Single Family Residential	50	DU
3	Condominiums at Miralon	Multi-Family Residential	153	DU
4	Flair at Miralon	Single Family Residential	44	DU
5	Aura at Miralon	Single Family Residential	70	DU
6	Monarch Apartments	Multi-Family (Affordable Housing)	60	DU
7	Alure Palm Springs	Single Family Residential	26	DU
8	Secure Space Self Storage	Self Storage Facility	127.2	TSF
9	Aloe at Palm Canyon	Senior Affordable Housing	71	DU
10	Mixed-Use Project by Las Palmas (575 North Palm Canyon Drive)	Condominium	24	DU
		Commercial	2.214	TSF
11	Thompson Hotel (400 N Palm Canyon Dr.)	Hotel	150	RM
		Retail	32.705	TSF
12	Dream Hotel	Hotel	156	RM
		Condominium	40	DU
13	Living Out (north of Tahquitz Cyn. Wy. & west of Hermosa Dr.)	Apartment	122	DU
		Retail	4.99	TSF
14	Tahquitz Hotel	Hotel	161	RM
15	Block B-1 Mixed-use Building (northeast corner of Belardo Rd. and Museum Wy.)	Condominium	45	DU
16	Orchid Tree Hotel (222 S. Cahuilla Road)	Hotel	74	RM
17	Drift Hotel (Bode Hotel - 284 S Indian Canyon Dr)	Boutique Hotel	30	RM
18	Blackhaus Hotel (421 S Calle Encilia Palm Springs, CA)	Hotel	20	RM
19	Elan	Single Family Residential	56	DU
		Multi-Family	25	DU
20	Cody Place	Multi-Family	80	DU
		Commercial	15	TSF
21	North Palm Canyon Hotel	Hotel	136	RM
		Coffee Shop	1.037	TSF
		Commercial	3.280	TSF

[1] DU = Dwelling Unit; RM = Room; TSF = Thousand Square Feet

Z:\Shared\UcJobs_15100-15500_15100\15147\02_LOS\Excel\[15147-03 TA Scope.xlsx]2

LEVEL OF SERVICE (LOS) CRITERIA

Per the City of Palm Springs's General Plan, LOS D as the threshold for acceptable traffic conditions on the circulation network.

INTERSECTION GENERAL PLAN CONSISTENCY REQUIREMENTS

Consistent with the acceptable LOS in the City's General Plan, the City considers the following criteria for application in a traffic study to identify infrastructure improvements required to accommodate acceptable peak hour operations.

Signalized Intersections:

- Any signalized intersection operating at an acceptable LOS D or better without project traffic in which the addition of project traffic causes the intersection to degrade to a LOS E or F shall identify improvements to improve operations to LOS D or better.
- Any signalized study intersection that is operating at LOS E or F without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

Unsignalized Intersections:

- An operational improvement would be required if the study determines that either section a) or both sections b) and c) occur:
    a) The addition of project related traffic causes the intersection to degrade from an acceptable LOS D or better to LOS E or F.

OR

    b) The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at a LOS E or F.

AND

    c) The Intersection meets the peak hour traffic signal warrant after the addition of project traffic.

If the conditions above are satisfied, improvements should be identified that achieve the following:

- LOS D or better for case a) above or pre-project LOS and delay for case b) above.

SPECIAL ISSUES

The following issues will also be address as part of the traffic study:

- *Traffic Signal Warrant Analysis:* Signal warrant analysis will be prepared for all unsignalized study intersections that allow for full access (no traffic signal warrants to be performed for restricted access locations due to infeasibility of installing a signal at these types of locations).
- *Improvements:* Based on the traffic analysis results, the traffic study will indicate new improvement requirements and fair share contributions (if applicable) for the proposed project. Fair share is to be determined based on the project's trips at each intersection as a percentage of the total future traffic (project plus cumulative traffic).
- *Site Access and Circulation:* Recommendations related to driveway lanes and controls will be provided. Site access review will also include determining whether right turn lanes are needed at any driveways. Pedestrian and bicycle accessibility will also be reviewed including access to near-by transit.
- *Vehicle Miles Traveled (VMT):* VMT will be addressed under separate cover.

If you have any questions or comments, I can be reached at cso@urbanxroads.com.

ATTACHMENT A: SCOPING FORM

Project Scoping Form

This scoping form shall be submitted to the City of Palm Springs to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Case Number:	
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Palm Springs Hotel & Residences
Project Address:	SEC of N. Calle El Segundo and E.Andreas Road
Project Opening Year:	2027
Project Description:	9-story hotel with 125 rooms and 132 branded residential condo units plus 6,040 square foot restaurant

	Consultant:	Developer:
Name:	Urban Crossroads - Charlene So	Nexus Development - Rob Eres
Address:	1133 Camelback St, #8329	1 MacArthur Place
	Newport Beach, CA 92658	Santa Ana, CA 92707
Telephone:	949-861-0177	
Fax/Email:	cso@urbanxroads.com	

Trip Generation Information:

Trip Generation Data Source: ITE Trip Generation Manual (11th Edition, 2021)

Current General Plan Land Use: Tourist Resort Commercial

Proposed General Plan Land Use: Tourist Resort Commercial

Current Zoning: Civic Uses District Zone (CU)

Proposed Zoning: Civic Uses District Zone (CU)

34

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips				42	51	93
PM Trips				74	54	128

Trip Internalization: [X] Yes [ ] No (15 % Trip Discount)

Pass-By Allowance: [ ] Yes [X] No (_____% Trip Discount)

Potential Screening Checks

Is your project screened from specific analyses (see Page 11 of the guidelines related to LOS assessment and Pages 24-26).

Is the project screened from LOS assessment? [ ] Yes [X] No

LOS screening justification (see Page 11 of the guidelines): _____

Is the project screened from VMT assessment? [ ] Yes [X] No

VMT screening justification (see Pages 24-26 of the guidelines): _____

Level of Service Scoping

- Proposed Trip Distribution (Attach Graphic for Detailed Distribution):

North	South	East	West
50 %	10 %	10 %	30 %

- Attach list of Approved and Pending Projects that need to be considered (provided by the City of Palm Springs and adjacent agencies)
- Attach list of study intersections/roadway segments ** See attached memo
- Attach site plan
- Not other specific items to be addressed:
  - Site access
  - On-site circulation
  - Parking
  - Consistency with Plans supporting Bikes/Peds/Transit
  - Other _____
- Date of Traffic Counts Likely to be conducted in April with scoping agreement approval + 5% Factor
- Attach proposed analysis scenarios (years plus proposed forecasting approach)
- Attach proposed phasing approach (if the project is phased)

VMT Scoping

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model Used RIVCOM
- Attach Screening VMT Assessment output or describe why it is not appropriate for use
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)

WRCOG screening tool does not include the Palm Springs area.

TABLE 3: SED INPUTS

Land Use	Conversion Factor	SED Input
Residential[1]	1.93 Person per Household	255 people
Restaurant[2]	500 employees per SF[4]	12 employees
Resort Hotel[3]	2.46 employee per Room	308 employees

[1]City of Palm Springs General Plan Housing Element
[2]Riverside County General Plan Appendix E-2
[3]ITE Trip Generation Trips per employee
[4]SF refers to square feet

APPENDIX 1.2: SITE ADJACENT QUEUING WORKSHEETS

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Intersection: 3: Calle El Segundo & Andreas Rd.

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	LT	TR	LT	TR
Maximum Queue (ft)	61	56	66	12	67	44	68	30
Average Queue (ft)	33	19	35	1	35	17	31	11
95th Queue (ft)	52	46	56	9	57	35	51	29
Link Distance (ft)	534		627		157	157	575	575
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		200		200				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 4: Calle El Segundo & Driveway 1

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	36	12
Average Queue (ft)	10	1
95th Queue (ft)	33	10
Link Distance (ft)	358	157
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Calle El Segundo & Driveway 2

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	40	25
Average Queue (ft)	15	3
95th Queue (ft)	40	19
Link Distance (ft)	438	87
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Driveway 3/Calle Alvardo & Andreas Rd.

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	42	36	4
Average Queue (ft)	6	20	0
95th Queue (ft)	27	45	3
Link Distance (ft)	172	316	601
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Intersection: 3: Calle El Segundo & Andreas Rd.

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	LT	TR	LT	TR
Maximum Queue (ft)	59	52	60	30	89	51	64	44
Average Queue (ft)	33	23	36	3	45	22	33	15
95th Queue (ft)	52	47	55	18	73	43	53	34
Link Distance (ft)	532		627		157	157	575	575
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		200		200				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 4: Calle El Segundo & Driveway 1

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	36	19
Average Queue (ft)	12	1
95th Queue (ft)	37	9
Link Distance (ft)	358	157
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Calle El Segundo & Driveway 2

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	31	6
Average Queue (ft)	15	0
95th Queue (ft)	40	6
Link Distance (ft)	438	87
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Driveway 3/Calle Alvardo & Andreas Rd.

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	4	43	36	4
Average Queue (ft)	0	5	17	0
95th Queue (ft)	3	26	43	3
Link Distance (ft)	627	172	316	601
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

APPENDIX 3.1: TRAFFIC COUNTS – DECEMBER 2023

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Thursday, April 25, 2024 | CITY: Palm Springs | PROJECT: SC4606

ADT1 N Calle El Segundo south of E Andreas Rd.

Prepared by AimTD LLC tel. 714 253 7888

AM Period	NB		SB			PM Period	NB		SB		
0:00	6		6			12:00	41		38		
0:15	1		3			12:15	47		33		
0:30	5		1			12:30	38		36		
0:45	2	14	6	16	30	12:45	50	176	33	140	316
1:00	2		1			13:00	50		32		
1:15	3		5			13:15	44		45		
1:30	1		5			13:30	56		41		
1:45	5	11	4	15	26	13:45	69	219	41	159	378
2:00	1		7			14:00	51		44		
2:15	0		2			14:15	60		33		
2:30	1		1			14:30	44		32		
2:45	0	2	2	12	14	14:45	57	212	44	153	365
3:00	1		4			15:00	49		32		
3:15	1		3			15:15	61		44		
3:30	3		4			15:30	72		40		
3:45	3	8	1	12	20	15:45	55	237	54	170	407
4:00	2		1			16:00	70		39		
4:15	0		3			16:15	53		47		
4:30	5		3			16:30	65		36		
4:45	6	13	3	10	23	16:45	63	251	43	165	416
5:00	2		5			17:00	62		39		
5:15	4		2			17:15	55		40		
5:30	10		5			17:30	54		36		
5:45	12	28	9	21	49	17:45	45	216	47	162	378
6:00	13		5			18:00	44		43		
6:15	10		6			18:15	43		35		
6:30	21		13			18:30	49		30		
6:45	34	78	16	40	118	18:45	50	186	42	150	336
7:00	25		19			19:00	35		26		
7:15	39		17			19:15	41		41		
7:30	43		32			19:30	23		26		
7:45	47	154	30	98	252	19:45	26	125	33	126	251
8:00	44		35			20:00	47		41		
8:15	47		30			20:15	33		27		
8:30	46		38			20:30	31		31		
8:45	39	176	27	130	306	20:45	26	137	27	126	263
9:00	46		22			21:00	13		28		
9:15	45		33			21:15	20		22		
9:30	34		25			21:30	25		28		
9:45	40	165	38	118	283	21:45	19	77	24	102	179
10:00	43		39			22:00	20		28		
10:15	40		29			22:15	18		23		
10:30	51		37			22:30	16		29		
10:45	33	167	38	143	310	22:45	18	72	15	95	167
11:00	37		30			23:00	15		20		
11:15	38		23			23:15	12		20		
11:30	41		31			23:30	8		18		
11:45	55	171	29	113	284	23:45	7	42	6	64	106
Total Vol.		987		728	**1715**			1950		1612	**3562**

Daily Totals

NB	SB	**Combined**
2937	2340	**5277**

	AM			**PM**		
Split %	57.6%	42.4%	**32.5%**	54.7%	45.3%	**67.5%**
Peak Hour	7:45	9:45	**7:45**	15:15	15:30	**15:15**
Volume	184	143	**317**	258	180	**435**
P.H.F.	0.98	0.92	**0.94**	0.90	0.83	**0.97**

cs@aimtd.com Tell. 714 253 7888

Thursday, April 25, 2024 CITY: Palm Springs PROJECT: SC4606

ADT2 E Andreas Rd east of N Calle El Segundo. **Prepared by AimTD LLC tel. 714 253 7888**

AM Period	EB		WB			PM Period	EB		WB		
0:00	1		0			12:00	3		2		
0:15	0		0			12:15	3		2		
0:30	0		0			12:30	5		7		
0:45	0	1	2	2	3	12:45	4	15	3	14	29
1:00	1		1			13:00	6		1		
1:15	1		0			13:15	2		10		
1:30	0		0			13:30	5		1		
1:45	3	5	3	4	9	13:45	1	14	8	20	34
2:00	0		0			14:00	2		5		
2:15	1		0			14:15	2		5		
2:30	0		0			14:30	2		3		
2:45	0	1	0	0	1	14:45	6	12	6	19	31
3:00	0		0			15:00	2		6		
3:15	0		0			15:15	2		2		
3:30	1		0			15:30	3		8		
3:45	0	1	0	0	1	15:45	4	11	7	23	34
4:00	0		0			16:00	4		3		
4:15	0		0			16:15	3		6		
4:30	1		0			16:30	6		2		
4:45	0	1	0	0	1	16:45	8	21	7	18	39
5:00	1		0			17:00	4		5		
5:15	0		0			17:15	4		4		
5:30	0		0			17:30	2		9		
5:45	0	1	0	0	1	17:45	2	12	8	26	38
6:00	1		0			18:00	4		2		
6:15	0		0			18:15	5		3		
6:30	1		1			18:30	2		0		
6:45	2	4	3	4	8	18:45	8	19	3	8	27
7:00	2		2			19:00	2		1		
7:15	3		1			19:15	2		0		
7:30	3		4			19:30	1		1		
7:45	0	8	2	9	17	19:45	1	6	1	3	9
8:00	4		3			20:00	0		4		
8:15	9		1			20:15	2		1		
8:30	4		1			20:30	2		1		
8:45	6	23	4	9	32	20:45	1	5	1	7	12
9:00	5		3			21:00	0		2		
9:15	1		2			21:15	4		1		
9:30	3		2			21:30	3		5		
9:45	9	18	3	10	28	21:45	3	10	2	10	20
10:00	7		5			22:00	4		3		
10:15	2		7			22:15	2		1		
10:30	3		2			22:30	1		2		
10:45	3	15	5	19	34	22:45	2	9	1	7	16
11:00	2		5			23:00	1		0		
11:15	2		2			23:15	1		1		
11:30	4		4			23:30	0		0		
11:45	3	11	4	15	26	23:45	0	2	0	1	3
Total Vol.		89		72	**161**			136		156	**292**

	Daily Totals		
	EB	WB	**Combined**
	225	228	**453**

	AM			**PM**		
Split %	55.3%	44.7%	**35.5%**	46.6%	53.4%	**64.5%**
Peak Hour	8:15	10:00	**9:30**	16:30	17:00	**16:45**
Volume	24	19	**38**	22	26	**43**
P.H.F.	0.67	0.68	**0.79**	0.69	0.72	**0.72**

cs@aimtd.com Tell. 714 253 7888

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Apr 25, 24

LOCATION: Palm Springs
NORTH & SOUTH: Indian Canyon Dr
EAST & WEST: E Andreas Rd

PROJECT #: SC4606
LOCATION #: 1
CONTROL: SIGNAL

NOTES:
Queue SB PM

AM
PM
MD
OTHER
OTHER

N ▲
◄ W
E ►
S ▼

	NORTHBOUND Indian Canyon Dr			SOUTHBOUND Indian Canyon Dr			EASTBOUND E Andreas Rd			WESTBOUND E Andreas Rd			
LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 0.5	SR 0.5	EL 0.3	ET 0.3	ER 0.3	WL 0.3	WT 0.3	WR 0.3	TOTAL

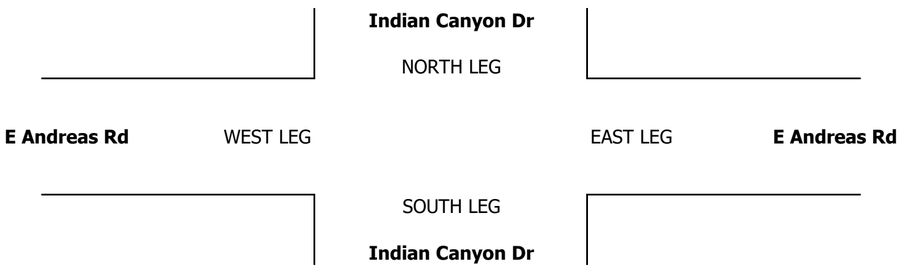
U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	

RTOR

NRR	SRR	ERR	WRR
0	0	0	0

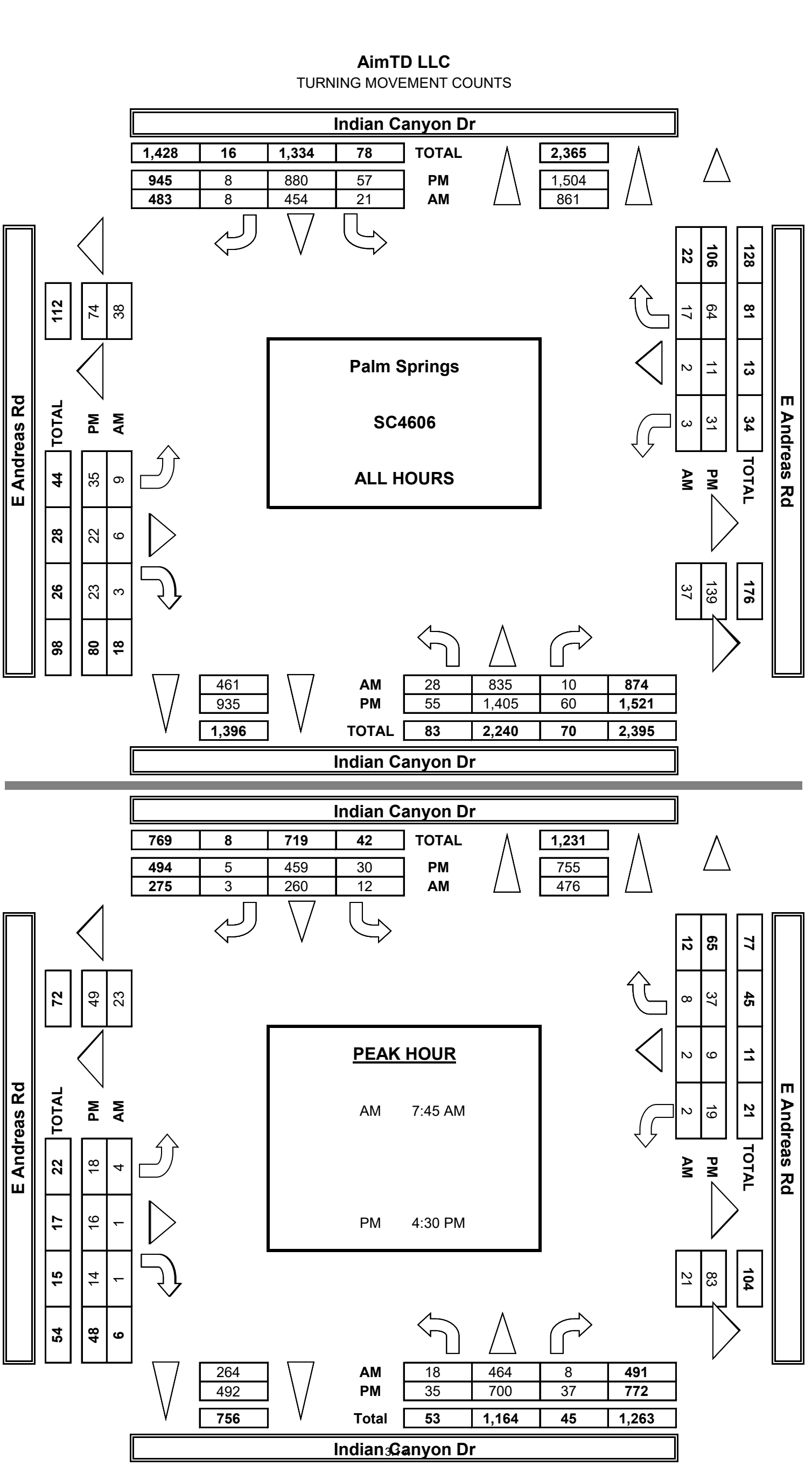
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				U-TURNS					RTOR			
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL	NRR	SRR	ERR	WRR
AM	7:00 AM	1	69	0	3	44	2	1	1	1	0	0	0	122	0	0	0	0	0	0	1	0	0
	7:15 AM	3	86	0	0	47	1	0	3	0	0	0	1	141	0	0	0	0	0	0	0	0	0
	7:30 AM	1	99	0	4	46	0	2	0	1	1	0	3	157	0	0	0	0	0	0	0	0	2
	7:45 AM	3	148	1	1	71	1	1	0	1	0	1	3	231	0	0	0	0	0	0	0	0	0
	8:00 AM	2	102	2	4	70	1	1	0	0	0	1	2	185	0	0	0	0	0	0	0	0	0
	8:15 AM	6	98	3	3	59	0	1	1	0	0	0	3	174	0	0	0	0	0	0	0	0	0
	8:30 AM	7	116	2	4	60	1	1	0	0	2	0	0	193	1	0	0	0	1	0	0	0	0
	8:45 AM	5	117	2	2	57	2	2	1	0	0	0	5	193	0	0	0	0	0	0	0	0	0
	VOLUMES	28	835	10	21	454	8	9	6	3	3	2	17	1,397	1	0	0	0	1	0	1	0	2
	APPROACH %	3%	96%	1%	4%	94%	2%	50%	33%	17%	14%	9%	77%										
	APP/DEPART	874	/	861	483	/	461	18	/	37	22	/	38	0									
	BEGIN PEAK HR		7:45 AM																				
	VOLUMES	18	464	8	12	260	3	4	1	1	2	2	8	784	1	0	0	0		0	0	0	0
	APPROACH %	4%	95%	2%	4%	95%	1%	67%	17%	17%	17%	17%	67%										
	PEAK HR FACTOR		0.808			0.917			0.750			0.750		0.848									
	APP/DEPART	491	/	476	275	/	264	6	/	21	12	/	23	0									
PM	04:00 PM	4	202	8	5	76	0	7	2	2	4	0	5	315	0	0	0	0	0	0	0	0	2
	4:15 PM	5	183	3	3	113	3	8	3	3	2	2	7	335	0	0	0	0	0	0	0	1	4
	4:30 PM	8	169	8	11	121	2	4	0	3	3	1	6	336	0	0	0	0	0	1	0	1	3
	4:45 PM	13	177	13	9	111	0	7	6	2	10	5	16	369	0	0	0	0	0	0	0	0	4
	5:00 PM	8	165	10	4	111	1	4	6	6	3	1	8	327	0	0	0	0	0	3	0	1	4
	5:15 PM	6	189	6	6	116	2	3	4	3	3	2	7	347	0	0	0	0	0	0	0	0	3
	5:30 PM	8	160	7	7	121	0	0	0	2	5	0	8	318	0	0	0	0	0	0	0	1	2
	5:45 PM	3	160	5	12	111	0	2	1	2	1	0	7	304	1	0	0	0	1	2	0	1	2
	VOLUMES	55	1,405	60	57	880	8	35	22	23	31	11	64	2,652	1	0	0	0	1	6	0	5	24
	APPROACH %	4%	92%	4%	6%	93%	1%	44%	28%	29%	29%	10%	60%										
	APP/DEPART	1,521	/	1,504	945	/	935	80	/	139	106	/	74	0									
	BEGIN PEAK HR		4:30 PM																				
	VOLUMES	35	700	37	30	459	5	18	16	14	19	9	37	1,379	0	0	0	0		4	0	2	14
	APPROACH %	5%	91%	5%	6%	93%	1%	38%	33%	29%	29%	14%	57%										
	PEAK HR FACTOR		0.951			0.922			0.750			0.524		0.934									
	APP/DEPART	772	/	755	494	/	492	48	/	83	65	/	49	0									



		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	1	1	0	1	3	1	1	0	0	2	0	0	0	1	1
	7:15 AM	2	2	1	2	7	2	2	1	1	6	0	0	0	1	1
	7:30 AM	1	0	0	2	3	0	0	0	2	2	1	0	0	0	1
	7:45 AM	4	2	0	0	6	0	1	0	0	1	4	1	0	0	5
	8:00 AM	1	0	1	0	2	1	0	1	0	2	0	0	0	0	0
	8:15 AM	3	0	1	3	7	3	0	0	3	6	0	0	1	0	1
	8:30 AM	2	0	0	0	2	2	0	0	0	2	0	0	0	0	0
	8:45 AM	4	2	1	0	7	2	2	0	0	4	2	0	1	0	3
	TOTAL	18	7	4	8	37	11	6	2	6	25	7	1	2	2	12
PM	4:00 PM	1	6	4	5	16	1	6	4	5	16	0	0	0	0	0
	4:15 PM	3	12	1	2	18	2	10	1	2	15	1	2	0	0	3
	4:30 PM	2	4	2	1	9	2	4	2	1	9	0	0	0	0	0
	4:45 PM	0	6	12	14	32	0	6	11	14	31	0	0	1	0	1
	5:00 PM	5	10	12	5	32	4	7	12	5	28	1	3	0	0	4
	5:15 PM	2	9	6	10	27	2	9	6	10	27	0	0	0	0	0
	5:30 PM	5	13	17	17	52	3	13	16	16	48	2	0	1	1	4
	5:45 PM	14	10	11	18	53	13	10	11	18	52	1	0	0	0	1
	TOTAL	32	70	65	72	239	27	65	63	71	226	5	5	2	1	13

AimTD LLC

TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Apr 25, 24

LOCATION: Palm Springs
NORTH & SOUTH: N Calle Encilia
EAST & WEST: E Andreas Rd

PROJECT #: SC4606
LOCATION #: 2
CONTROL: STOP ALL

NOTES:
Minor Construction WB AM

AM
PM
MD
OTHER
OTHER

▲ N
◄ W
E ►
S ▼

	NORTHBOUND N Calle Encilia			SOUTHBOUND N Calle Encilia			EASTBOUND E Andreas Rd			WESTBOUND E Andreas Rd			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	

RTOR			
NRR	SRR	ERR	WRR
X	X	X	X

		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				U-TURNS					RTOR			
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL	NRR	SRR	ERR	WRR
AM	7:00 AM	1	8	2	0	4	0	0	3	2	2	0	0	22	0	0	0	0	0	0	0	0	0
	7:15 AM	1	7	0	0	4	2	3	1	0	1	0	0	19	0	0	0	0	0	0	0	0	0
	7:30 AM	0	7	1	1	4	2	0	5	1	0	3	1	25	0	0	0	0	0	0	0	0	0
	7:45 AM	0	12	0	1	8	4	1	2	0	0	3	1	32	0	0	0	0	0	0	0	0	0
	8:00 AM	1	14	0	1	12	0	1	0	3	1	3	1	37	1	0	0	0	1	0	0	0	0
	8:15 AM	2	13	2	0	11	2	2	5	0	1	1	1	40	0	0	0	0	0	0	0	0	0
	8:30 AM	1	11	1	3	7	0	2	3	1	0	3	0	32	0	0	0	0	0	0	0	0	0
	8:45 AM	3	11	0	2	7	2	0	1	0	1	2	1	30	0	0	0	0	0	0	0	0	0
	VOLUMES	9	83	6	8	57	12	9	20	7	6	15	5	238	1	0	0	0	1	0	0	0	0
	APPROACH %	9%	84%	6%	10%	74%	16%	25%	56%	19%	23%	58%	19%										
	APP/DEPART	99	/	97	77	/	71	36	/	34	26	/	36	0									
	BEGIN PEAK HR		7:45 AM																				
	VOLUMES	4	50	3	5	38	6	6	10	4	2	10	3	142	1	0	0	0		0	0	0	0
	APPROACH %	7%	86%	5%	10%	78%	12%	30%	50%	20%	13%	67%	20%										
	PEAK HR FACTOR		0.853			0.942			0.714			0.750		0.888									
	APP/DEPART	58	/	59	49	/	45	20	/	18	15	/	20	0									
PM	04:00 PM	4	25	2	0	20	2	7	3	10	0	3	1	77	0	0	0	0	0	0	0	0	0
	4:15 PM	4	22	1	0	20	2	2	5	3	0	6	2	67	0	0	0	0	0	0	0	0	0
	4:30 PM	5	24	0	0	20	5	4	6	13	0	5	1	83	0	0	0	0	0	0	0	0	0
	4:45 PM	9	27	1	0	20	4	4	5	9	1	11	4	95	0	0	0	0	0	0	0	0	0
	5:00 PM	2	23	1	0	28	5	8	4	10	1	3	0	85	0	0	1	0	1	0	0	0	0
	5:15 PM	8	22	2	1	17	4	4	4	9	0	4	4	79	0	0	0	0	0	0	0	0	0
	5:30 PM	5	27	1	1	16	5	2	4	10	2	8	3	84	0	0	0	0	0	0	0	0	0
	5:45 PM	6	28	4	0	32	4	4	10	7	0	6	1	102	0	0	0	0	0	0	0	0	0
	VOLUMES	43	198	12	2	173	31	35	41	71	4	46	16	673	0	0	1	0	1	0	0	0	0
	APPROACH %	17%	78%	5%	1%	84%	15%	24%	28%	48%	6%	70%	24%										
	APP/DEPART	253	/	249	206	/	248	148	/	55	66	/	121	0									
	BEGIN PEAK HR		5:00 PM																				
	VOLUMES	21	100	8	2	93	18	18	22	36	3	21	8	351	0	0	1	0		0	0	0	0
	APPROACH %	16%	78%	6%	2%	82%	16%	23%	29%	47%	9%	66%	25%										
	PEAK HR FACTOR		0.849			0.785			0.837			0.615		0.860									
	APP/DEPART	129	/	126	113	/	132	77	/	32	32	/	61	0									

N Calle Encilia

NORTH LEG

E Andreas Rd WEST LEG EAST LEG **E Andreas Rd**

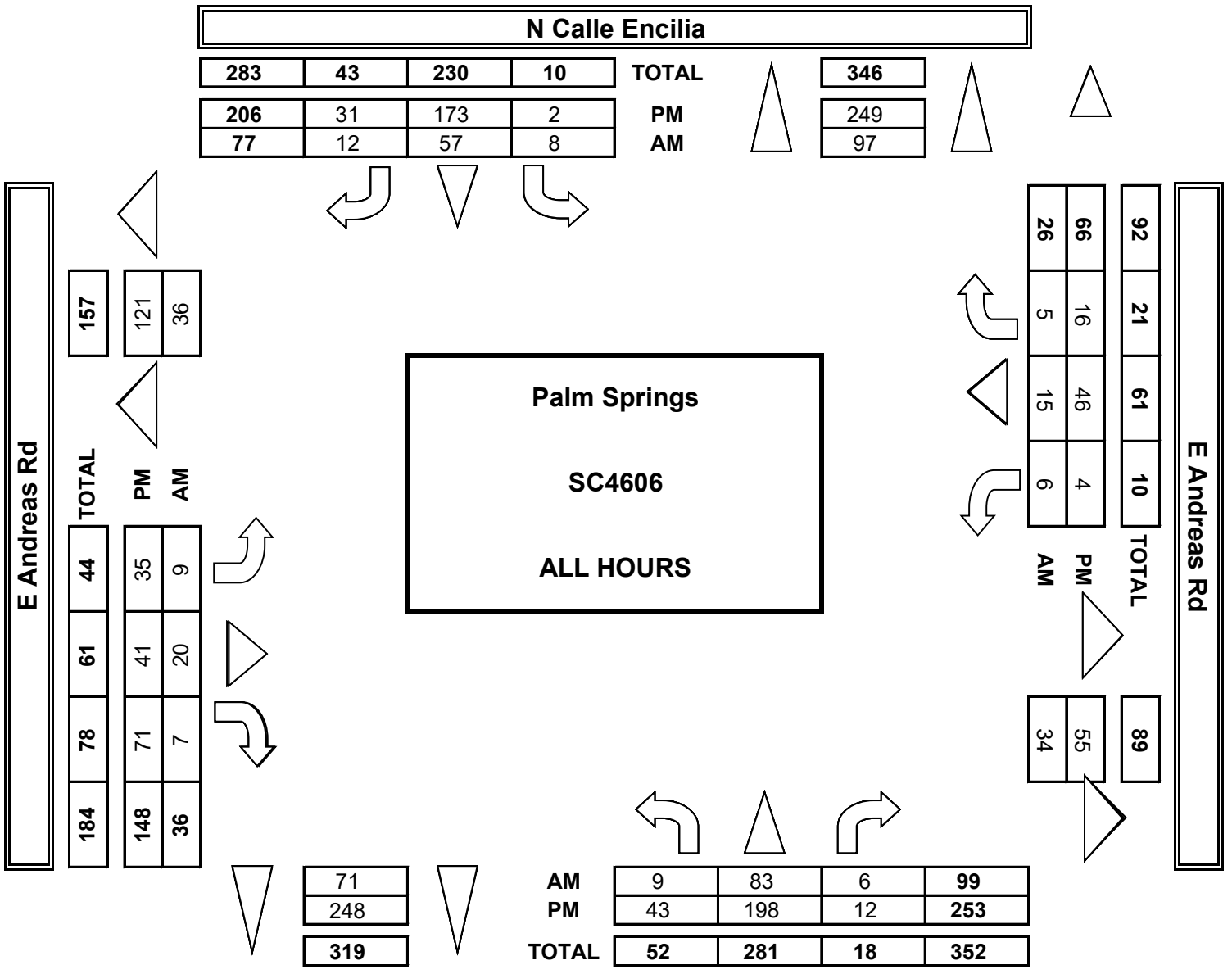
SOUTH LEG

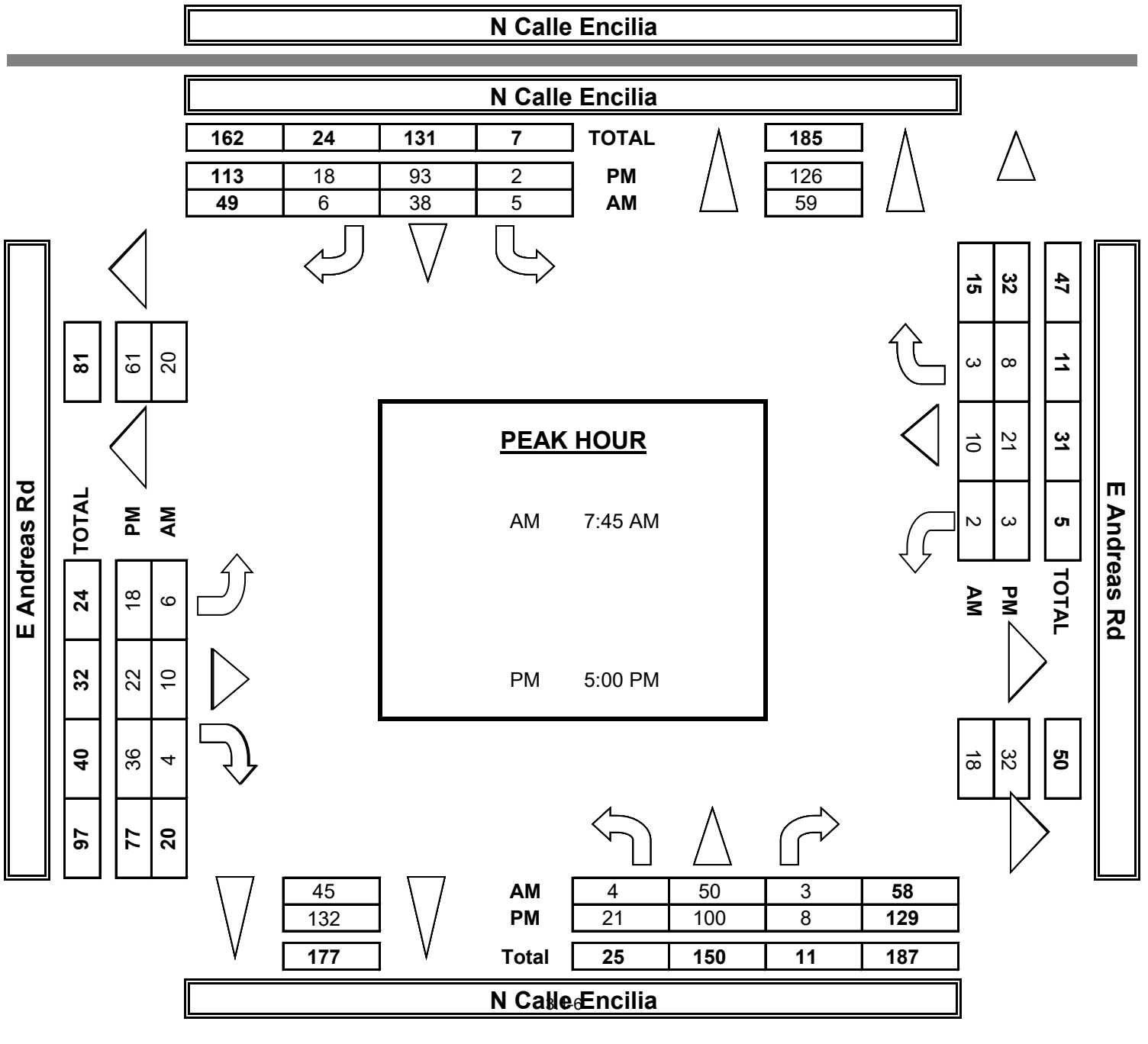
N Calle Encilia

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	0	1	1	5	7	0	1	1	4	6	0	0	0	1	1
	7:15 AM	4	1	2	5	12	4	1	2	4	11	0	0	0	1	1
	7:30 AM	3	1	1	3	8	3	1	1	3	8	0	0	0	0	0
	7:45 AM	2	0	3	0	5	2	0	3	0	5	0	0	0	0	0
	8:00 AM	3	1	3	0	7	3	1	3	0	7	0	0	0	0	0
	8:15 AM	13	7	13	5	38	13	5	12	5	35	0	2	1	0	3
	8:30 AM	11	0	6	0	17	11	0	6	0	17	0	0	0	0	0
	8:45 AM	2	2	1	2	7	2	2	1	2	7	0	0	0	0	0
	TOTAL	38	13	30	20	101	38	11	29	18	96	0	2	1	2	5
PM	4:00 PM	6	3	6	15	30	5	1	5	13	24	1	2	1	2	6
	4:15 PM	11	8	6	12	37	10	6	6	12	34	1	2	0	0	3
	4:30 PM	5	0	2	12	19	4	0	2	12	18	1	0	0	0	1
	4:45 PM	15	6	14	13	48	15	5	14	12	46	0	1	0	1	2
	5:00 PM	12	7	9	13	41	9	7	9	13	38	3	0	0	0	3
	5:15 PM	2	4	2	16	24	2	2	2	14	20	0	2	0	2	4
	5:30 PM	7	5	5	11	28	6	4	5	10	25	1	1	0	1	3
	5:45 PM	6	4	10	17	37	4	4	10	17	35	2	0	0	0	2
	TOTAL	64	37	54	109	264	55	29	53	103	240	9	8	1	6	24

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE:				
Thu, Apr 25, 24	LOCATION:	Palm Springs	PROJECT #:	SC4606
	NORTH & SOUTH:	N Calle El Segundo	LOCATION #:	3
	EAST & WEST:	E Andreas Rd	CONTROL:	STOP ALL

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND N Calle El Segundo			SOUTHBOUND N Calle El Segundo			EASTBOUND E Andreas Rd			WESTBOUND E Andreas Rd			
LANES:	NL 0	NT 2	NR 0	SL 0	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL

U-TURNS					RTOR			
NB	SB	EB	WB	TTL	NRR	SRR	ERR	WRR
0	0	0	0		X	X	X	X

		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				U-TURNS					RTOR			
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL	NRR	SRR	ERR	WRR
AM	7:00 AM	0	24	1	0	17	0	0	1	1	1	0	1	46	0	0	0	0	0	0	0	0	0
	7:15 AM	0	36	3	0	17	3	1	0	0	0	0	1	61	0	0	0	0	0	0	0	0	0
	7:30 AM	2	40	1	1	25	1	2	1	4	3	1	0	81	0	0	0	0	0	0	0	0	0
	7:45 AM	5	42	0	0	29	1	2	0	1	0	1	1	82	0	0	0	0	0	0	0	0	0
	8:00 AM	3	38	3	1	31	2	1	0	1	3	0	0	83	0	0	0	0	0	0	0	0	0
	8:15 AM	3	37	7	1	27	1	2	1	2	1	0	0	82	0	0	0	0	0	0	0	0	0
	8:30 AM	5	39	2	1	34	1	3	1	3	1	0	0	90	0	0	0	0	0	0	0	0	0
	8:45 AM	3	33	3	2	23	2	0	1	3	1	0	3	74	0	0	0	0	0	0	0	0	0
	VOLUMES	21	289	20	6	203	11	11	5	15	10	2	6	599	0	0	0	0	0	0	0	0	0
	APPROACH %	6%	88%	6%	3%	92%	5%	35%	16%	48%	56%	11%	33%										
	APP/DEPART	330	/	306	220	/	228	31	/	31	18	/	34	0									
	BEGIN PEAK HR		7:45 AM																				
	VOLUMES	16	156	12	3	121	5	8	2	7	5	1	1	337	0	0	0	0		0	0	0	0
	APPROACH %	9%	85%	7%	2%	94%	4%	47%	12%	41%	71%	14%	14%										
	PEAK HR FACTOR		0.979			0.896			0.607			0.583		0.936									
	APP/DEPART	184	/	165	129	/	133	17	/	17	7	/	22	0									
PM	04:00 PM	3	67	0	3	36	3	2	1	2	1	1	1	120	0	0	0	0	0	0	0	0	0
	4:15 PM	6	45	2	1	34	2	2	0	7	6	0	0	105	0	0	0	0	0	0	0	0	0
	4:30 PM	3	57	5	0	28	3	2	1	8	0	0	2	109	0	0	0	0	0	0	0	0	0
	4:45 PM	6	51	6	0	39	2	0	2	2	2	4	1	115	0	0	0	0	0	0	0	0	0
	5:00 PM	4	55	3	0	32	0	2	1	5	2	1	2	107	0	0	0	0	0	0	0	0	0
	5:15 PM	6	47	2	2	36	0	4	0	1	3	0	1	102	0	0	0	0	0	0	0	0	0
	5:30 PM	5	49	0	1	28	2	1	1	3	5	2	2	99	0	0	0	0	0	0	0	0	0
	5:45 PM	4	40	1	0	33	0	4	1	8	6	1	1	99	0	0	0	0	0	0	0	0	0
	VOLUMES	37	411	19	7	266	12	17	7	36	25	9	10	856	0	0	0	0	0	0	0	0	0
	APPROACH %	8%	88%	4%	2%	93%	4%	28%	12%	60%	57%	20%	23%										
	APP/DEPART	467	/	438	285	/	327	60	/	33	44	/	58	0									
	BEGIN PEAK HR		4:00 PM																				
	VOLUMES	18	220	13	4	137	10	6	4	19	9	5	4	449	0	0	0	0		0	0	0	0
	APPROACH %	7%	88%	5%	3%	91%	7%	21%	14%	66%	50%	28%	22%										
	PEAK HR FACTOR		0.896			0.899			0.659			0.643		0.935									
	APP/DEPART	251	/	230	151	/	165	29	/	21	18	/	33	0									

N Calle El Segundo

NORTH LEG

E Andreas Rd WEST LEG EAST LEG **E Andreas Rd**

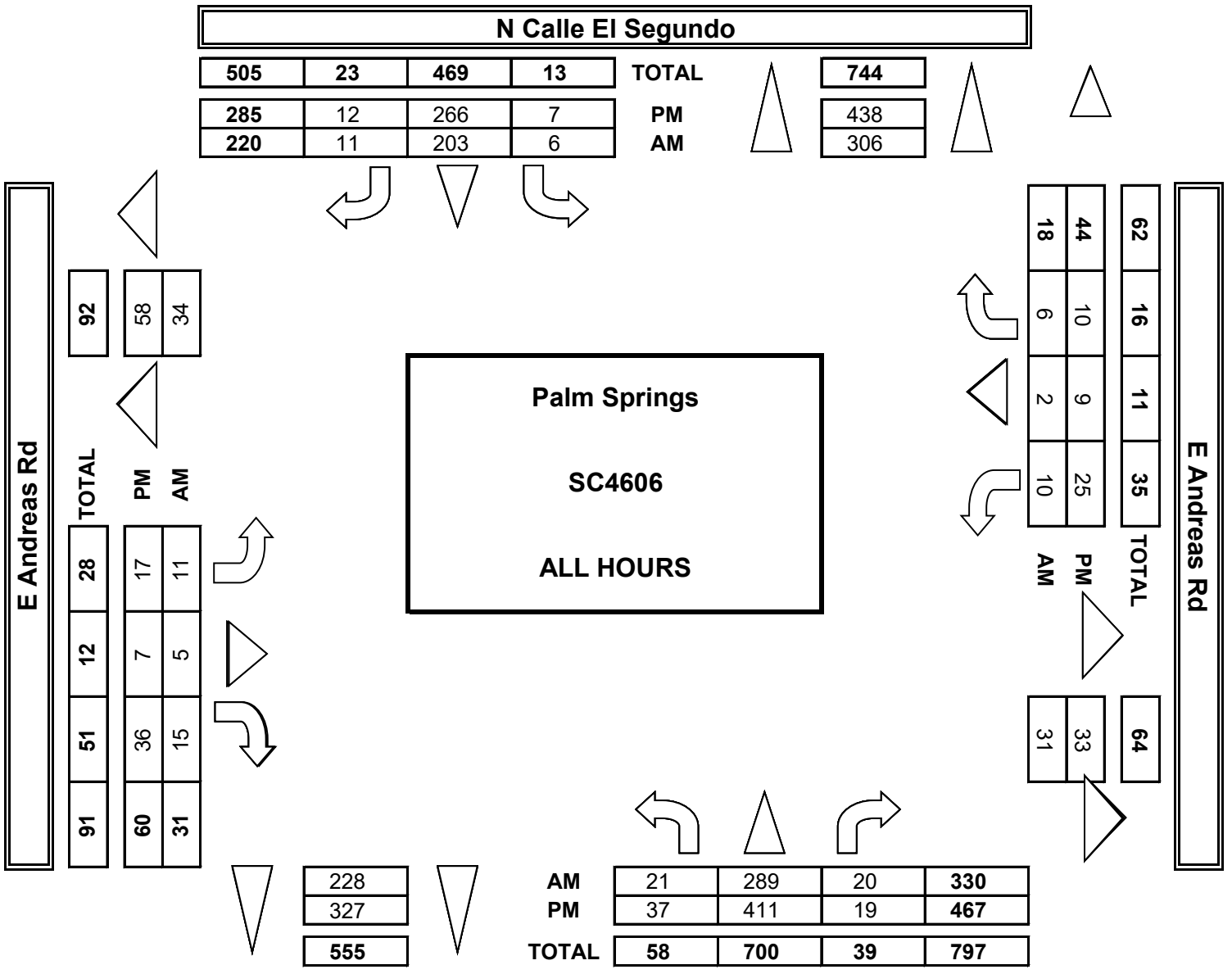
SOUTH LEG

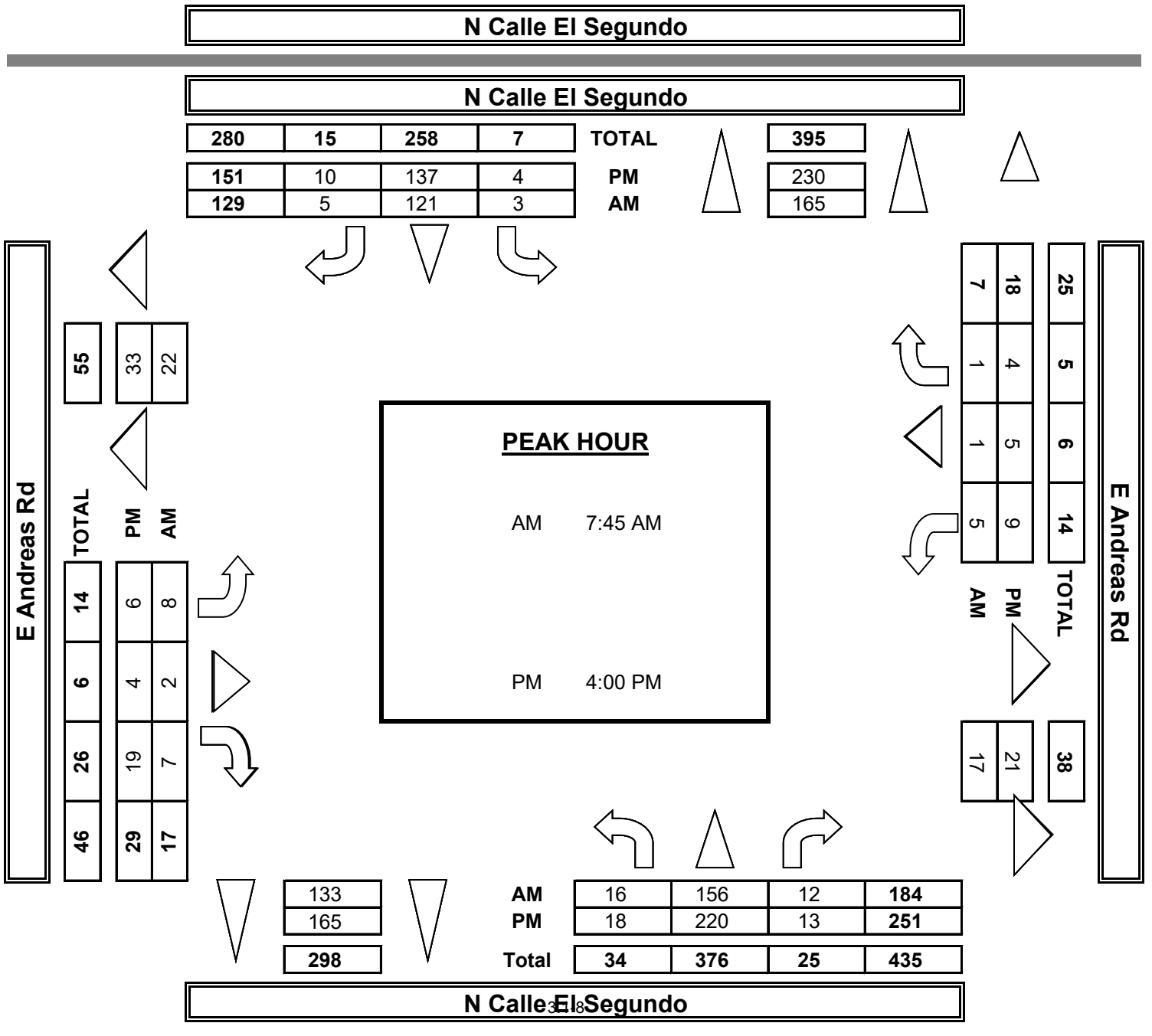
N Calle El Segundo

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	4	0	1	1	6	3	0	1	0	4	1	0	0	1	2
	7:15 AM	1	1	1	2	5	1	1	1	1	4	0	0	0	1	1
	7:30 AM	2	0	1	0	3	1	0	1	0	2	1	0	0	0	1
	7:45 AM	7	0	0	0	7	6	0	0	0	6	1	0	0	0	1
	8:00 AM	2	1	0	0	3	2	1	0	0	3	0	0	0	0	0
	8:15 AM	2	3	1	3	9	2	3	0	3	8	0	0	1	0	1
	8:30 AM	3	0	0	1	4	3	0	0	1	4	0	0	0	0	0
	8:45 AM	3	1	4	0	8	3	1	4	0	8	0	0	0	0	0
	TOTAL	24	6	8	7	45	21	6	7	5	39	3	0	1	2	6
PM	4:00 PM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	4:15 PM	0	1	1	2	4	0	1	1	2	4	0	0	0	0	0
	4:30 PM	3	3	0	0	6	3	2	0	0	5	0	1	0	0	1
	4:45 PM	2	1	6	3	12	2	1	6	3	12	0	0	0	0	0
	5:00 PM	1	1	0	1	3	0	1	0	1	2	1	0	0	0	1
	5:15 PM	1	1	1	4	7	1	1	1	4	7	0	0	0	0	0
	5:30 PM	6	1	1	1	9	5	1	1	0	7	1	0	0	1	2
	5:45 PM	0	5	0	1	6	0	4	0	1	5	0	1	0	0	1
	TOTAL	14	13	9	12	48	12	11	9	11	43	2	2	0	1	5

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Apr 25, 24

LOCATION: Palm Springs
NORTH & SOUTH: N Calle El Segundo
EAST & WEST: E Tahquitz Canyon Way

PROJECT #: SC4606
LOCATION #: 4
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND N Calle El Segundo			SOUTHBOUND N Calle El Segundo			EASTBOUND E Tahquitz Canyon Way			WESTBOUND E Tahquitz Canyon Way			
LANES:	NL 0	NT 2	NR 0	SL 0	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				U-TURNS					RTOR			
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL	NRR	SRR	ERR	WRR
AM	7:00 AM	4	20	4	6	12	3	0	20	0	3	23	8	103	0	0	0	0	0	0	1	0	4
	7:15 AM	2	21	5	5	12	2	3	9	0	2	27	23	111	0	1	0	0	1	1	0	0	7
	7:30 AM	1	24	7	5	24	2	2	28	2	4	27	21	147	0	0	0	0	0	2	0	0	3
	7:45 AM	1	33	6	11	25	0	1	27	2	10	38	18	172	0	0	0	0	0	2	0	2	4
	8:00 AM	3	24	6	7	24	5	3	30	3	8	45	20	178	0	0	1	0	1	4	2	0	7
	8:15 AM	3	29	10	7	27	3	2	38	8	7	45	27	206	0	0	1	2	3	4	1	1	10
	8:30 AM	2	21	9	11	23	3	1	42	3	3	55	20	193	0	0	0	1	1	5	0	0	6
	8:45 AM	2	32	11	4	19	2	2	41	4	6	68	24	215	0	0	0	0	0	2	0	2	3
	VOLUMES	18	204	58	56	166	20	14	235	22	43	328	161	1,331	0	1	2	3	6	20	4	5	44
	APPROACH %	6%	73%	21%	23%	68%	8%	5%	86%	8%	8%	61%	30%										
	APP/DEPART	280	/	380	243	/	231	273	/	352	535	/	368	0									
	BEGIN PEAK HR		8:00 AM																				
	VOLUMES	10	106	36	29	93	13	8	151	18	24	213	91	797	0	0	2	3		15	3	3	26
	APPROACH %	7%	70%	24%	21%	69%	10%	4%	84%	10%	7%	64%	27%										
	PEAK HR FACTOR		0.844			0.912			0.913			0.844		0.927									
	APP/DEPART	152	/	205	135	/	135	179	/	219	331	/	238	0									
PM	04:00 PM	3	32	8	10	24	3	2	52	2	18	100	32	286	0	0	0	1	1	3	1	0	11
	4:15 PM	5	21	14	9	34	6	4	70	3	13	77	32	288	0	0	2	2	4	7	1	1	5
	4:30 PM	6	27	11	9	27	3	5	65	2	12	70	33	270	0	0	1	4	5	6	2	0	11
	4:45 PM	8	29	8	10	36	2	2	48	3	11	88	33	278	0	0	2	3	5	5	1	1	9
	5:00 PM	7	32	12	15	29	4	1	54	2	14	83	32	285	0	0	1	0	1	5	1	2	8
	5:15 PM	7	28	5	16	22	2	1	38	6	8	63	23	219	0	0	1	0	1	1	1	0	10
	5:30 PM	11	27	8	11	23	4	1	51	4	9	72	28	249	0	0	0	1	1	3	1	2	10
	5:45 PM	7	20	5	14	24	6	1	34	0	7	69	30	217	0	0	0	0	0	4	2	0	10
	VOLUMES	54	216	71	94	219	30	17	412	22	92	622	243	2,110	0	0	7	11	18	34	10	6	74
	APPROACH %	16%	63%	21%	27%	64%	9%	4%	90%	5%	10%	64%	25%										
	APP/DEPART	341	/	476	343	/	333	458	/	588	968	/	713	0									
	BEGIN PEAK HR		4:00 PM																				
	VOLUMES	22	109	41	38	121	14	13	235	10	54	335	130	1,137	0	0	5	10		21	5	2	36
	APPROACH %	13%	63%	24%	22%	70%	8%	5%	89%	4%	10%	63%	25%										
	PEAK HR FACTOR		0.956			0.883			0.832			0.876		0.973									
	APP/DEPART	172	/	252	173	/	185	263	/	324	529	/	376	0									

N Calle El Segundo

NORTH LEG

E Tahquitz Canyon Way WEST LEG EAST LEG **E Tahquitz Canyon Way**

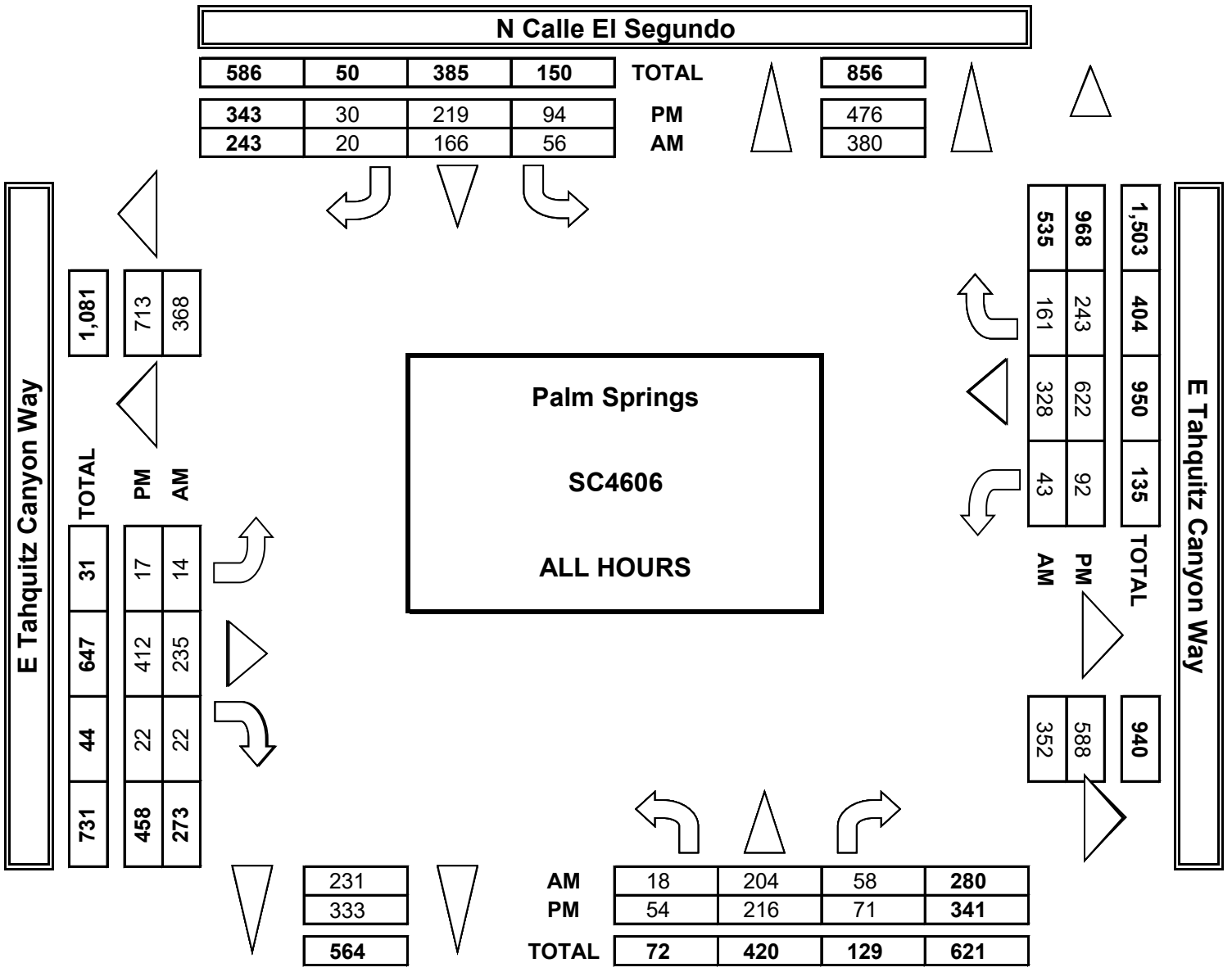
SOUTH LEG

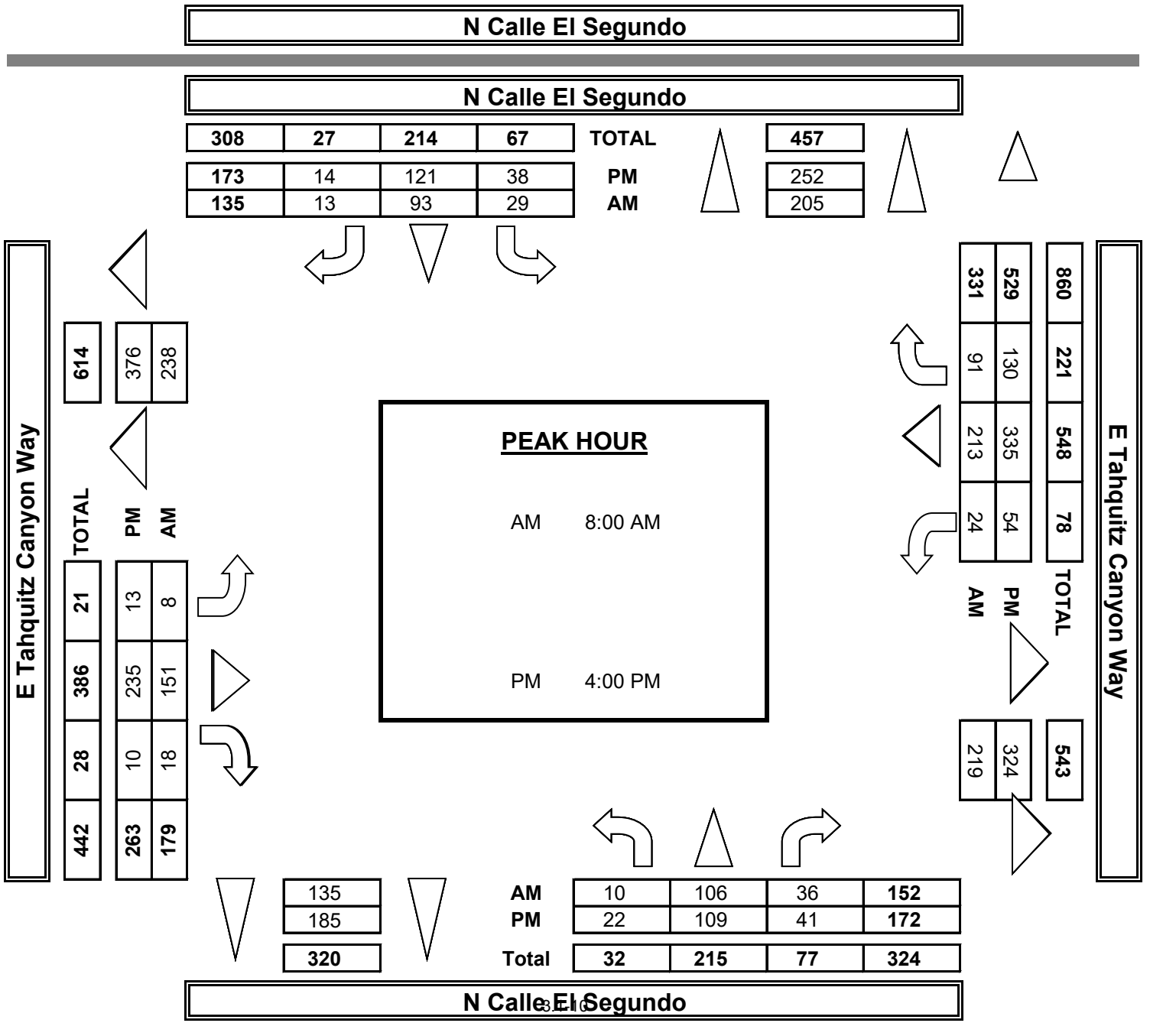
N Calle El Segundo

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	2	1	1	1	5	2	1	1	1	5	0	0	0	0	0
	7:15 AM	4	0	3	7	14	3	0	1	7	11	1	0	2	0	3
	7:30 AM	6	0	9	3	18	5	0	9	3	17	1	0	0	0	1
	7:45 AM	7	2	2	7	18	7	1	2	7	17	0	1	0	0	1
	8:00 AM	1	1	2	3	7	1	1	2	3	7	0	0	0	0	0
	8:15 AM	2	1	5	4	12	2	1	5	4	12	0	0	0	0	0
	8:30 AM	2	4	5	6	17	2	3	3	5	13	0	1	2	1	4
	8:45 AM	2	2	2	5	11	2	2	2	4	10	0	0	0	1	1
	TOTAL	26	11	29	36	102	24	9	25	34	92	2	2	4	2	10
PM	4:00 PM	3	4	4	11	22	3	4	2	11	20	0	0	2	0	2
	4:15 PM	0	2	0	3	5	0	2	0	3	5	0	0	0	0	0
	4:30 PM	3	3	7	4	17	2	2	7	3	14	1	1	0	1	3
	4:45 PM	3	1	3	5	12	2	1	2	5	10	1	0	1	0	2
	5:00 PM	2	2	8	10	22	1	2	8	10	21	1	0	0	0	1
	5:15 PM	3	0	4	1	8	3	0	3	1	7	0	0	1	0	1
	5:30 PM	0	5	4	14	23	0	5	3	14	22	0	0	1	0	1
	5:45 PM	1	4	4	19	28	1	3	2	19	25	0	1	2	0	3
	TOTAL	15	21	34	67	137	12	19	27	66	124	3	2	7	1	13

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Apr 25, 24

LOCATION: Palm Springs
NORTH & SOUTH: N Calle Alvarado
EAST & WEST: E Anreas Rd

PROJECT #: SC4606
LOCATION #: 5
CONTROL: NO CONTROL

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W
E ►
S ▼

	NORTHBOUND Driveway			SOUTHBOUND N Calle Alvarado			EASTBOUND E Anreas Rd			WESTBOUND Driveway			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	

RTOR			
NRR	SRR	ERR	WRR
X	X	X	X

		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				U-TURNS					RTOR			
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL	NRR	SRR	ERR	WRR
AM	7:00 AM	0	0	0	0	0	5	0	0	1	0	0	0	6	0	0	0	0	0	0	0	0	0
	7:15 AM	1	0	0	0	0	2	1	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	1	3	1	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	4	2	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	1	4	6	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	1	1	2	0	0	0	0	4	0	0	1	0	1	0	0	0	0
	8:45 AM	0	0	0	0	0	1	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	VOLUMES	1	0	0	0	2	20	13	3	2	0	1	0	43	0	0	1	0	1	0	0	0	0
	APPROACH %	100%	0%	0%	0%	9%	91%	68%	16%	11%	0%	100%	0%										
	APP/DEPART	1	/	13	22	/	4	19	/	3	1	/	23	0									
	BEGIN PEAK HR		8:00 AM																				
	VOLUMES	0	0	0	0	1	10	11	2	0	0	0	0	25	0	0	1	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	9%	91%	79%	14%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.000			0.550			0.583			0.000		0.568									
	APP/DEPART	0	/	11	11	/	1	14	/	2	0	/	11	0									
PM	04:00 PM	0	0	0	0	0	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	4:15 PM	0	1	0	0	0	4	2	0	0	0	1	0	8	0	0	0	0	0	0	0	0	0
	4:30 PM	1	1	0	1	0	2	4	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	1	1	4	1	0	0	0	1	8	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	1	2	9	0	0	0	0	0	12	0	0	1	0	1	0	0	0	0
	5:15 PM	0	1	0	0	0	1	5	1	0	0	0	0	8	0	1	0	0	1	0	0	0	0
	5:30 PM	0	0	0	0	0	5	5	0	0	0	1	0	11	0	0	0	0	0	0	0	0	0
	5:45 PM	0	1	0	0	0	5	4	0	0	0	1	0	11	0	0	0	0	0	0	0	0	0
	VOLUMES	1	4	0	1	2	22	34	2	0	0	3	1	72	0	1	1	0	2	0	0	0	0
	APPROACH %	20%	80%	0%	4%	8%	85%	92%	5%	0%	0%	75%	25%										
	APP/DEPART	5	/	40	26	/	2	37	/	3	4	/	27	0									
	BEGIN PEAK HR		5:00 PM																				
	VOLUMES	0	2	0	0	1	13	23	1	0	0	2	0	44	0	1	1	0		0	0	0	0
	APPROACH %	0%	100%	0%	0%	7%	87%	92%	4%	0%	0%	100%	0%										
	PEAK HR FACTOR		0.500			0.750			0.625			0.500		0.846									
	APP/DEPART	2	/	26	15	/	1	25	/	1	2	/	16	0									

N Calle Alvarado

NORTH LEG

E Anreas Rd WEST LEG EAST LEG **E Anreas Rd**

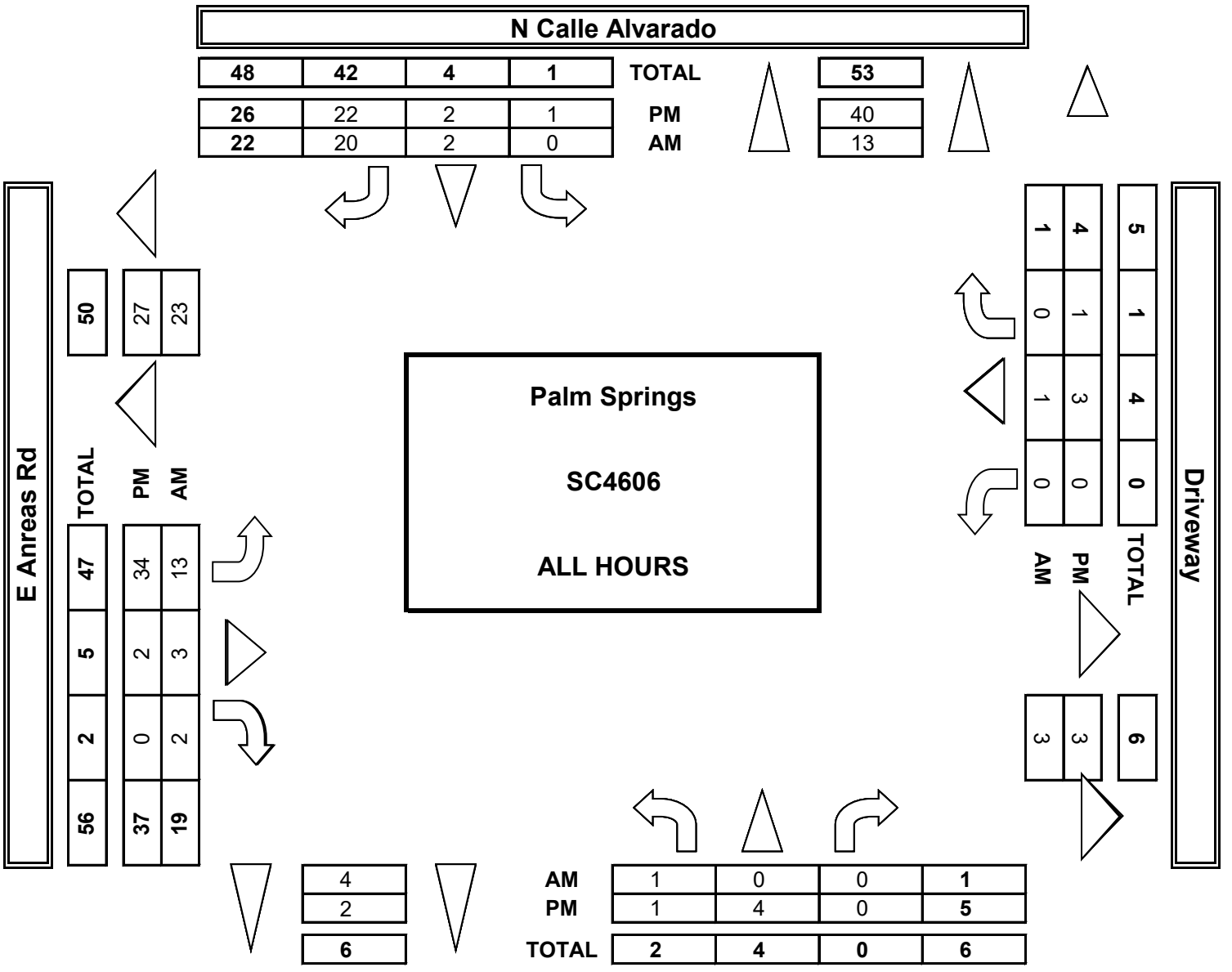
SOUTH LEG

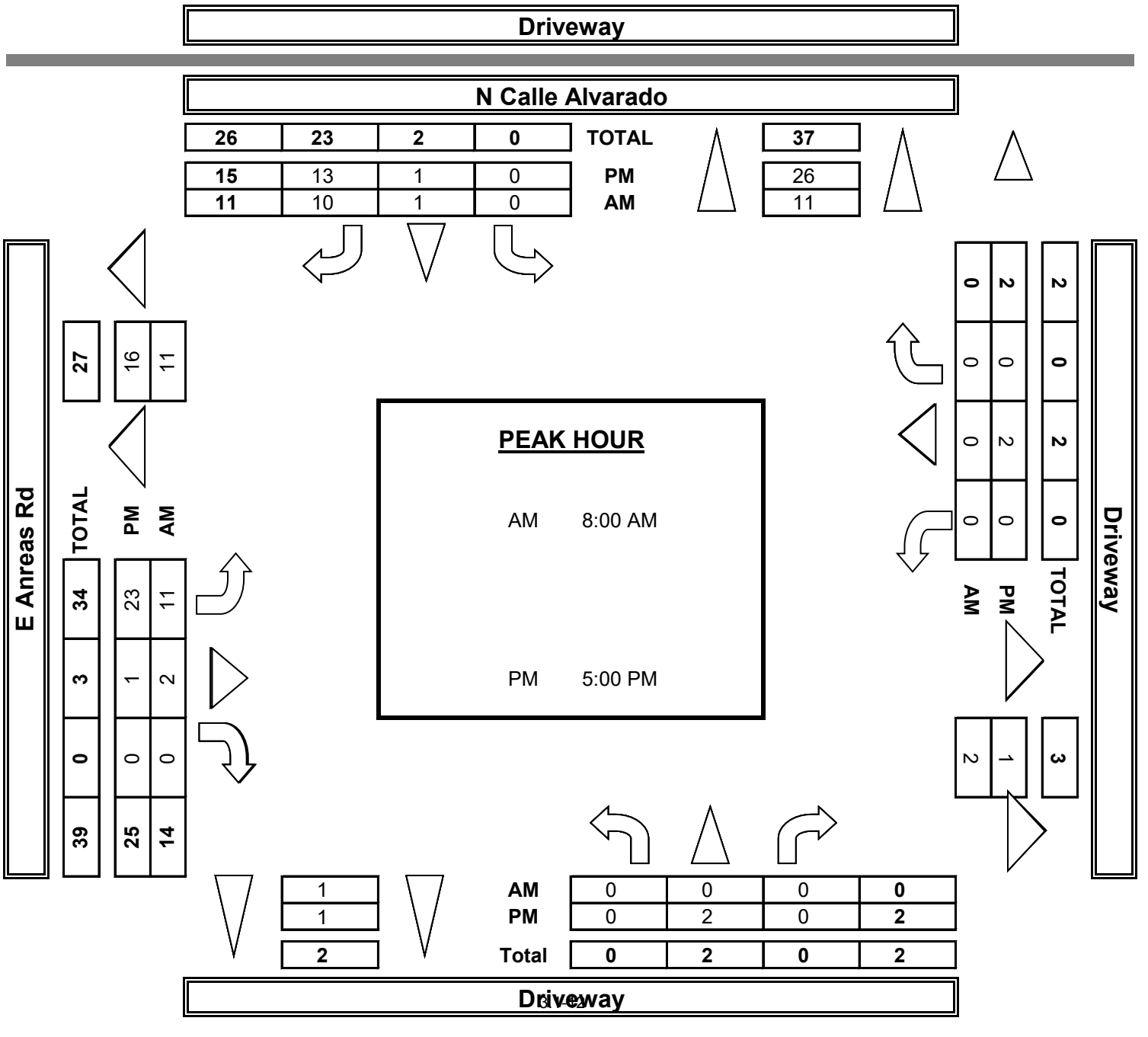
N Calle Alvarado

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	3	0	3	1	7	3	0	3	1	7	0	0	0	0	0
	7:15 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
	7:30 AM	2	0	2	0	4	2	0	2	0	4	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	8:15 AM	1	0	6	0	7	0	0	5	0	5	1	0	1	0	2
	8:30 AM	0	1	2	0	3	0	1	2	0	3	0	0	0	0	0
	8:45 AM	3	2	7	0	12	3	2	7	0	12	0	0	0	0	0
	TOTAL	10	3	21	1	35	9	3	20	1	33	1	0	1	0	2
PM	4:00 PM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	4:15 PM	0	0	2	0	2	0	0	2	0	2	0	0	0	0	0
	4:30 PM	1	1	2	0	4	1	1	2	0	4	0	0	0	0	0
	4:45 PM	4	0	4	0	8	4	0	4	0	8	0	0	0	0	0
	5:00 PM	11	1	9	0	21	10	1	8	0	19	1	0	1	0	2
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	8	0	8	0	0	8	0	8	0	0	0	0	0
	5:45 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0
	TOTAL	17	3	25	0	45	16	3	24	0	43	1	0	1	0	2

AimTD LLC

TURNING MOVEMENT COUNTS





APPENDIX 3.2: EXISTING (2024) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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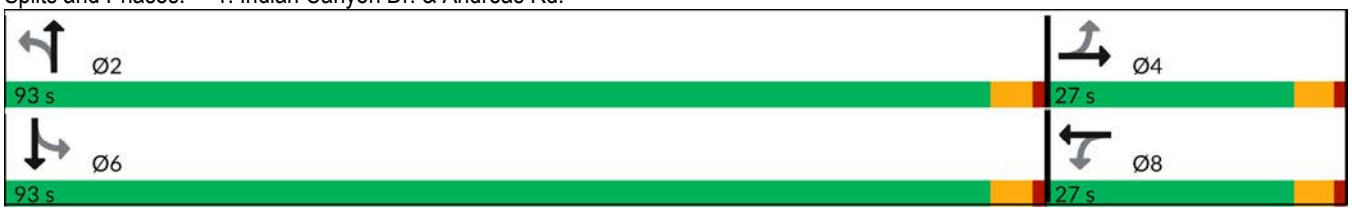
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	4	1	2	2	19	487	13	273
Future Volume (vph)	4	1	2	2	19	487	13	273
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
Total Split (s)	27.0	27.0	27.0	27.0	93.0	93.0	93.0	93.0
Total Split (%)	22.5%	22.5%	22.5%	22.5%	77.5%	77.5%	77.5%	77.5%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.7		4.7	4.7	4.7	4.7	4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)		11.6		11.6	32.7	32.7	32.7	32.7
Actuated g/C Ratio		0.32		0.32	0.91	0.91	0.91	0.91
v/c Ratio		0.01		0.02	0.02	0.18	0.02	0.19
Control Delay (s/veh)		11.1		8.6	3.2	2.3	3.3	2.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		11.1		8.6	3.2	2.3	3.3	2.8
LOS		B		A	A	A	A	A
Approach Delay (s/veh)		11.2		8.6		2.4		2.9
Approach LOS		B		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 35.9	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.19	
Intersection Signal Delay (s/veh): 2.7	Intersection LOS: A
Intersection Capacity Utilization 32.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Indian Canyon Dr. & Andreas Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1	1	2	2	8	19	487	8	13	273	3
Future Volume (veh/h)	4	1	1	2	2	8	19	487	8	13	273	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	1	1	2	2	9	22	573	9	15	321	4
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	361	13	13	214	15	68	745	1748	27	669	900	11
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.06	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1071	214	214	247	247	1111	1052	3579	56	830	1843	23
Grp Volume(v), veh/h	7	0	0	13	0	0	22	284	298	15	0	325
Grp Sat Flow(s),veh/h/ln	1499	0	0	1605	0	0	1052	1777	1858	830	0	1866
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.3	2.0	2.0	0.2	0.0	2.3
Cycle Q Clear(g_c), s	0.1	0.0	0.0	0.1	0.0	0.0	2.5	2.0	2.0	2.3	0.0	2.3
Prop In Lane	0.71		0.14	0.15		0.69	1.00		0.03	1.00		0.01
Lane Grp Cap(c), veh/h	388	0	0	297	0	0	745	868	908	669	0	911
V/C Ratio(X)	0.02	0.00	0.00	0.04	0.00	0.00	0.03	0.33	0.33	0.02	0.00	0.36
Avail Cap(c_a), veh/h	1858	0	0	1896	0	0	4680	7512	7856	3775	0	7887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.2	0.0	0.0	9.3	0.0	0.0	4.1	3.3	3.3	3.9	0.0	3.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.3	0.0	0.0	9.3	0.0	0.0	4.1	3.5	3.5	4.0	0.0	3.5
LnGrp LOS	A			A			A	A	A	A		A
Approach Vol, veh/h		7			13			604			340	
Approach Delay, s/veh		9.3			9.3			3.5			3.6	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	14.9	6.0	14.9	6.0
Change Period (Y+Rc), s	4.7	4.7	4.7	4.7
Max Green Setting (Gmax), s	88.3	22.3	88.3	22.3
Max Q Clear Time (g_c+I1), s	4.5	2.1	4.3	2.1
Green Ext Time (p_c), s	4.1	0.0	2.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	3.6
HCM 7th LOS	A

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	11	4	2	11	3	4	53	3	5	40	6
Future Vol, veh/h	6	11	4	2	11	3	4	53	3	5	40	6
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	12	4	2	12	3	4	60	3	6	45	7
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	8	7.6	7.7	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	29%	15%	0%	100%	0%
Vol Thru, %	0%	95%	52%	85%	0%	0%	87%
Vol Right, %	0%	5%	19%	0%	100%	0%	13%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	56	21	13	3	5	46
LT Vol	4	0	6	2	0	5	0
Through Vol	0	53	11	11	0	0	40
RT Vol	0	3	4	0	3	0	6
Lane Flow Rate	4	63	24	15	3	6	52
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.006	0.08	0.031	0.02	0.004	0.008	0.065
Departure Headway (Hd)	5.135	4.597	4.702	4.834	4.056	5.14	4.548
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	695	776	751	730	867	694	784
Service Time	2.883	2.345	2.799	2.631	1.852	2.891	2.298
HCM Lane V/C Ratio	0.006	0.081	0.032	0.021	0.003	0.009	0.066
HCM Control Delay, s/veh	7.9	7.7	8	7.7	6.9	7.9	7.6
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0.3	0.1	0.1	0	0	0.2

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	2	7	5	1	1	17	164	13	3	127	5
Future Vol, veh/h	8	2	7	5	1	1	17	164	13	3	127	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	2	7	5	1	1	18	174	14	3	135	5
Number of Lanes	0	1	1	0	1	1	0	2	0	0	2	0

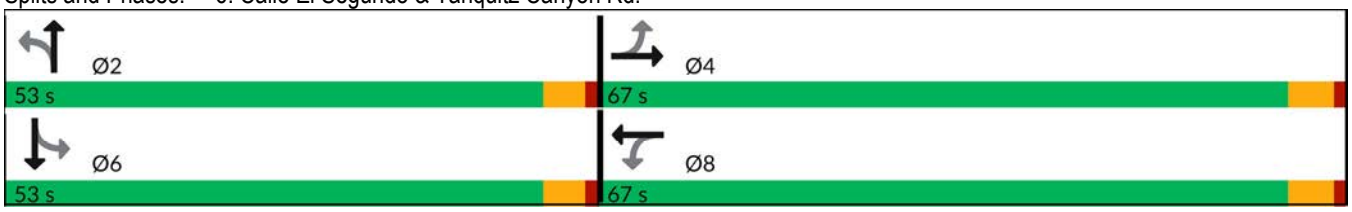
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	8.1	8.3	8.2	7.9
HCM LOS	A	A	A	A

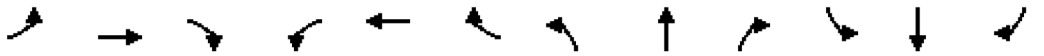
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	0%	80%	0%	83%	0%	5%	0%
Vol Thru, %	83%	86%	20%	0%	17%	0%	95%	93%
Vol Right, %	0%	14%	0%	100%	0%	100%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	99	95	10	7	6	1	67	69
LT Vol	17	0	8	0	5	0	3	0
Through Vol	82	82	2	0	1	0	64	64
RT Vol	0	13	0	7	0	1	0	5
Lane Flow Rate	105	101	11	7	6	1	71	73
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.139	0.128	0.017	0.01	0.01	0.001	0.092	0.094
Departure Headway (Hd)	4.736	4.554	5.758	4.652	5.787	4.664	4.705	4.632
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	751	781	625	774	622	772	753	764
Service Time	2.501	2.319	3.458	2.352	3.488	2.365	2.488	2.414
HCM Lane V/C Ratio	0.14	0.129	0.018	0.009	0.01	0.001	0.094	0.096
HCM Control Delay, s/veh	8.3	8	8.6	7.4	8.5	7.4	8	7.9
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.5	0.4	0.1	0	0	0	0.3	0.3

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	8	159	25	224	11	111	30	98
Future Volume (vph)	8	159	25	224	11	111	30	98
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	28.1	28.1	28.1	28.1	30.7	30.7	30.7	30.7
Total Split (s)	67.0	67.0	67.0	67.0	53.0	53.0	53.0	53.0
Total Split (%)	55.8%	55.8%	55.8%	55.8%	44.2%	44.2%	44.2%	44.2%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1		4.7		4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)	12.3	12.3	12.3	12.3		12.7		12.7
Actuated g/C Ratio	0.35	0.35	0.35	0.35		0.36		0.36
v/c Ratio	0.02	0.15	0.06	0.28		0.14		0.13
Control Delay (s/veh)	9.3	8.3	9.5	7.4		6.6		7.8
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	9.3	8.3	9.5	7.4		6.6		7.8
LOS	A	A	A	A		A		A
Approach Delay (s/veh)		8.4		7.6		6.7		7.8
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 35.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.28	
Intersection Signal Delay (s/veh): 7.7	Intersection LOS: A
Intersection Capacity Utilization 54.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: Calle El Segundo & Tahquitz Canyon Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	159	19	25	224	96	11	111	38	30	98	14
Future Volume (veh/h)	8	159	19	25	224	96	11	111	38	30	98	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.96	0.99		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	171	17	27	241	75	12	119	25	32	105	12
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	527	1161	114	603	946	285	160	946	187	312	863	98
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1050	3261	320	1187	2658	802	96	2779	549	459	2534	288
Grp Volume(v), veh/h	9	92	96	27	159	157	83	0	73	80	0	69
Grp Sat Flow(s),veh/h/ln	1050	1777	1804	1187	1777	1682	1825	0	1599	1636	0	1644
Q Serve(g_s), s	0.2	1.1	1.2	0.5	2.0	2.1	0.0	0.0	1.0	0.0	0.0	0.9
Cycle Q Clear(g_c), s	2.3	1.1	1.2	1.7	2.0	2.1	1.0	0.0	1.0	1.0	0.0	0.9
Prop In Lane	1.00		0.18	1.00		0.48	0.14		0.34	0.40		0.18
Lane Grp Cap(c), veh/h	527	633	642	603	633	599	749	0	544	713	0	560
V/C Ratio(X)	0.02	0.15	0.15	0.04	0.25	0.26	0.11	0.00	0.13	0.11	0.00	0.12
Avail Cap(c_a), veh/h	2166	3407	3458	2455	3407	3226	2772	0	2392	2509	0	2459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.2	7.1	7.1	7.6	7.4	7.4	7.3	0.0	7.4	7.3	0.0	7.3
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.2	0.2	0.1	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.1	0.5	0.5	0.3	0.0	0.2	0.3	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.2	7.2	7.2	7.7	7.6	7.6	7.4	0.0	7.5	7.4	0.0	7.4
LnGrp LOS	A	A	A	A	A	A	A		A	A		A
Approach Vol, veh/h		197			343			156			149	
Approach Delay, s/veh		7.2			7.6			7.4			7.4	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.7		16.6		15.7		16.6				
Change Period (Y+Rc), s		4.7		5.1		4.7		5.1				
Max Green Setting (Gmax), s		48.3		61.9		48.3		61.9				
Max Q Clear Time (g_c+I1), s		3.0		4.3		3.0		4.1				
Green Ext Time (p_c), s		1.0		1.1		0.9		2.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			7.4									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	2	0	0	0	0	0	0	0	0	1	11
Future Vol, veh/h	12	2	0	0	0	0	0	0	0	0	1	11
Conflicting Peds, #/hr	0	0	14	0	0	0	0	0	4	0	0	3
Sign Control	Free	Free	Free	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	57	57	57	57	57	57	57	57	57	57
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	4	0	0	0	0	0	0	0	0	2	19

Major/Minor	Major1			Minor1			Major2			
Conflicting Flow All	24	0	0	61	84	22	18	0	0
Stage 1	-	-	-	60	60	-	-	-	-
Stage 2	-	-	-	2	24	-	-	-	-
Critical Hdwy	4.12	-	-	6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	-	-	-	5.42	5.52	-	-	-	-
Critical Hdwy Stg 2	-	-	-	5.42	5.52	-	-	-	-
Follow-up Hdwy	2.218	-	-	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	1591	-	-	945	806	1056	1599	-	-
Stage 1	-	-	-	963	845	-	-	-	-
Stage 2	-	-	-	1021	875	-	-	-	-
Platoon blocked, %		-	-					-	-
Mov Cap-1 Maneuver	1591	-	-	920	0	1038	1578	-	-
Mov Cap-2 Maneuver	-	-	-	920	0	-	-	-	-
Stage 1	-	-	-	938	0	-	-	-	-
Stage 2	-	-	-	1021	0	-	-	-	-

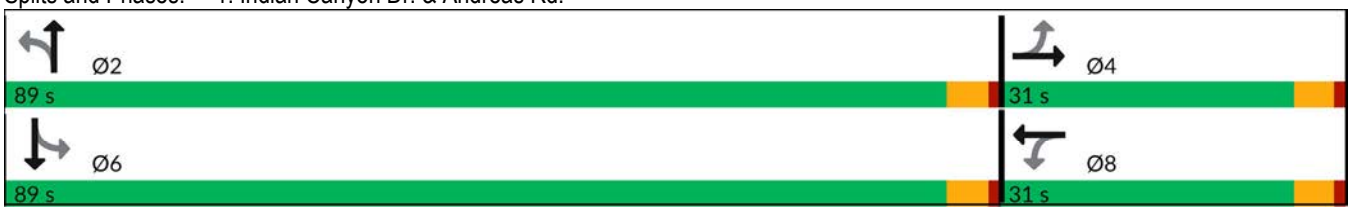
Approach	EB	NB	SB
HCM Control Delay, s/v	6.25	0	0
HCM LOS		A	

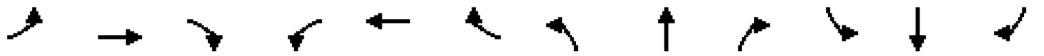
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	SBL	SBT	SBR
Capacity (veh/h)	-	1543	-	-	1578	-	-
HCM Lane V/C Ratio	-	0.013	-	-	-	-	-
HCM Control Delay (s/veh)	0	7.3	0	-	0	-	-
HCM Lane LOS	A	A	A	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	17	20	9	37	735	32	482
Future Volume (vph)	19	17	20	9	37	735	32	482
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
Total Split (s)	31.0	31.0	31.0	31.0	89.0	89.0	89.0	89.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	74.2%	74.2%	74.2%	74.2%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.7		4.7	4.7	4.7	4.7	4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)		11.4		11.4	25.7	25.7	25.7	25.7
Actuated g/C Ratio		0.30		0.30	0.69	0.69	0.69	0.69
v/c Ratio		0.11		0.15	0.07	0.34	0.08	0.41
Control Delay (s/veh)		9.3		7.4	6.6	6.1	7.0	7.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		9.3		7.4	6.6	6.1	7.0	7.7
LOS		A		A	A	A	A	A
Approach Delay (s/veh)		9.3		7.5		6.2		7.7
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 37.5	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.41	
Intersection Signal Delay (s/veh): 6.9	Intersection LOS: A
Intersection Capacity Utilization 50.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Indian Canyon Dr. & Andreas Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	17	15	20	9	39	37	735	39	32	482	5
Future Volume (veh/h)	19	17	15	20	9	39	37	735	39	32	482	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.97		0.92	0.95		0.97	0.99		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	18	14	22	10	27	40	790	38	34	518	5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	244	197	112	235	121	186	439	1650	79	413	885	9
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	407	752	427	378	463	709	870	3446	166	661	1848	18
Grp Volume(v), veh/h	52	0	0	59	0	0	40	407	421	34	0	523
Grp Sat Flow(s),veh/h/ln	1586	0	0	1550	0	0	870	1777	1835	661	0	1866
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.3	5.6	5.6	1.3	0.0	7.4
Cycle Q Clear(g_c), s	0.8	0.0	0.0	1.0	0.0	0.0	8.6	5.6	5.6	7.0	0.0	7.4
Prop In Lane	0.38		0.27	0.37		0.46	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	553	0	0	542	0	0	439	851	879	413	0	894
V/C Ratio(X)	0.09	0.00	0.00	0.11	0.00	0.00	0.09	0.48	0.48	0.08	0.00	0.59
Avail Cap(c_a), veh/h	1257	0	0	1229	0	0	2046	4132	4266	1632	0	4339
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.2	0.0	0.0	10.2	0.0	0.0	10.0	6.4	6.4	8.7	0.0	6.8
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.4	0.4	0.1	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.3	0.0	0.0	0.2	1.3	1.4	0.2	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.3	0.0	0.0	10.3	0.0	0.0	10.0	6.8	6.8	8.8	0.0	7.5
LnGrp LOS	B			B			B	A	A	A		A
Approach Vol, veh/h		52			59			868			557	
Approach Delay, s/veh		10.3			10.3			6.9			7.5	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	22.1	14.2	22.1	14.2
Change Period (Y+Rc), s	4.7	4.7	4.7	4.7
Max Green Setting (Gmax), s	84.3	26.3	84.3	26.3
Max Q Clear Time (g_c+I1), s	10.6	2.8	9.4	3.0
Green Ext Time (p_c), s	6.7	0.2	4.3	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	7.4
HCM 7th LOS	A

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	23	38	3	22	8	22	105	8	2	98	19
Future Vol, veh/h	19	23	38	3	22	8	22	105	8	2	98	19
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	27	44	3	26	9	26	122	9	2	114	22
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	8.9	8.2	8.7	8.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	24%	12%	0%	100%	0%
Vol Thru, %	0%	93%	29%	88%	0%	0%	84%
Vol Right, %	0%	7%	48%	0%	100%	0%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	113	80	25	8	2	117
LT Vol	22	0	19	3	0	2	0
Through Vol	0	105	23	22	0	0	98
RT Vol	0	8	38	0	8	0	19
Lane Flow Rate	26	131	93	29	9	2	136
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.039	0.181	0.131	0.044	0.012	0.004	0.185
Departure Headway (Hd)	5.5	4.948	5.075	5.424	4.66	5.523	4.906
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	652	727	707	660	768	649	732
Service Time	3.223	2.671	3.103	3.155	2.39	3.246	2.63
HCM Lane V/C Ratio	0.04	0.18	0.132	0.044	0.012	0.003	0.186
HCM Control Delay, s/veh	8.4	8.8	8.9	8.4	7.4	8.3	8.7
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.7	0.4	0.1	0	0	0.7

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	4	20	9	5	4	19	231	14	4	144	11
Future Vol, veh/h	6	4	20	9	5	4	19	231	14	4	144	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	4	21	10	5	4	20	246	15	4	153	12
Number of Lanes	0	1	1	0	1	1	0	2	0	0	2	0

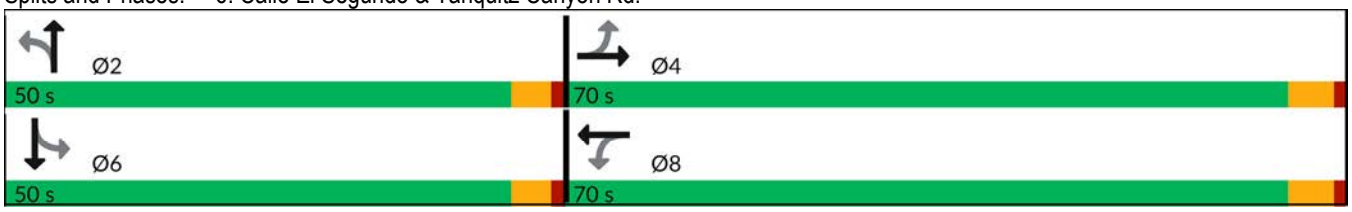
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	8.1	8.6	8.7	8.2
HCM LOS	A	A	A	A

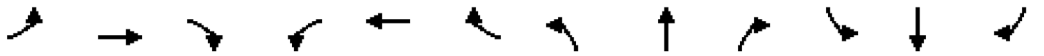
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	14%	0%	60%	0%	64%	0%	5%	0%
Vol Thru, %	86%	89%	40%	0%	36%	0%	95%	87%
Vol Right, %	0%	11%	0%	100%	0%	100%	0%	13%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	135	130	10	20	14	4	76	83
LT Vol	19	0	6	0	9	0	4	0
Through Vol	116	116	4	0	5	0	72	72
RT Vol	0	14	0	20	0	4	0	11
Lane Flow Rate	143	138	11	21	15	4	81	88
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.194	0.182	0.017	0.029	0.025	0.006	0.111	0.118
Departure Headway (Hd)	4.892	4.745	5.897	4.89	5.933	4.904	4.926	4.807
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	738	760	608	733	604	730	729	747
Service Time	2.592	2.445	3.624	2.616	3.66	2.63	2.645	2.525
HCM Lane V/C Ratio	0.194	0.182	0.018	0.029	0.025	0.005	0.111	0.118
HCM Control Delay, s/veh	8.8	8.5	8.7	7.8	8.8	7.7	8.3	8.2
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.7	0.7	0.1	0.1	0.1	0	0.4	0.4

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	14	247	57	352	23	114	40	127
Future Volume (vph)	14	247	57	352	23	114	40	127
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	28.1	28.1	28.1	28.1	30.7	30.7	30.7	30.7
Total Split (s)	70.0	70.0	70.0	70.0	50.0	50.0	50.0	50.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%	41.7%	41.7%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1		4.7		4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)	12.5	12.5	12.5	12.5		12.7		12.7
Actuated g/C Ratio	0.35	0.35	0.35	0.35		0.36		0.36
v/c Ratio	0.04	0.21	0.15	0.41		0.16		0.17
Control Delay (s/veh)	9.5	9.0	10.1	9.0		6.9		8.2
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	9.5	9.0	10.1	9.0		6.9		8.2
LOS	A	A	B	A		A		A
Approach Delay (s/veh)		9.0		9.1		7.0		8.2
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 35.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.41	
Intersection Signal Delay (s/veh): 8.6	Intersection LOS: A
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Calle El Segundo & Tahquitz Canyon Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	247	11	57	352	137	23	114	43	40	127	15
Future Volume (veh/h)	14	247	11	57	352	137	23	114	43	40	127	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.97	0.99		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	255	9	59	363	104	24	118	22	41	131	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	459	1264	44	564	981	277	231	886	158	323	881	67
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	918	3499	123	1109	2715	766	270	2605	465	493	2592	198
Grp Volume(v), veh/h	14	129	135	59	236	231	88	0	76	98	0	84
Grp Sat Flow(s),veh/h/ln	918	1777	1845	1109	1777	1704	1733	0	1607	1621	0	1662
Q Serve(g_s), s	0.4	1.6	1.7	1.3	3.2	3.3	0.0	0.0	1.1	0.0	0.0	1.2
Cycle Q Clear(g_c), s	3.7	1.6	1.7	2.9	3.2	3.3	1.1	0.0	1.1	1.2	0.0	1.2
Prop In Lane	1.00		0.07	1.00		0.45	0.27		0.29	0.42		0.12
Lane Grp Cap(c), veh/h	459	642	666	564	642	615	729	0	546	707	0	565
V/C Ratio(X)	0.03	0.20	0.20	0.10	0.37	0.38	0.12	0.00	0.14	0.14	0.00	0.15
Avail Cap(c_a), veh/h	1945	3517	3652	2358	3517	3373	2440	0	2221	2315	0	2296
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.1	7.2	7.2	8.2	7.7	7.7	7.5	0.0	7.5	7.5	0.0	7.5
Incr Delay (d2), s/veh	0.0	0.2	0.1	0.1	0.4	0.4	0.1	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.4	0.4	0.2	0.8	0.8	0.3	0.0	0.3	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.1	7.4	7.4	8.3	8.1	8.1	7.6	0.0	7.6	7.6	0.0	7.6
LnGrp LOS	A	A	A	A	A	A	A		A	A		A
Approach Vol, veh/h		278			526			164			182	
Approach Delay, s/veh		7.5			8.1			7.6			7.6	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.8		16.9		15.8		16.9				
Change Period (Y+Rc), s		4.7		5.1		4.7		5.1				
Max Green Setting (Gmax), s		45.3		64.9		45.3		64.9				
Max Q Clear Time (g_c+I1), s		3.1		5.7		3.2		5.3				
Green Ext Time (p_c), s		1.0		1.7		1.1		3.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			7.8									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	1	0	0	2	0	0	2	0	0	1	14
Future Vol, veh/h	24	1	0	0	2	0	0	2	0	0	1	14
Conflicting Peds, #/hr	0	0	16	0	0	0	0	0	10	0	0	2
Sign Control	Free	Free	Free	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	1	0	0	2	0	0	2	0	0	1	16

Major/Minor	Major1			Minor1			Major2			
Conflicting Flow All	20	0	0	75	93	27	17	0	0	
Stage 1	-	-	-	74	74	-	-	-	-	
Stage 2	-	-	-	1	20	-	-	-	-	
Critical Hdwy	4.12	-	-	6.42	6.52	6.22	4.12	-	-	
Critical Hdwy Stg 1	-	-	-	5.42	5.52	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	5.42	5.52	-	-	-	-	
Follow-up Hdwy	2.218	-	-	3.518	4.018	3.318	2.218	-	-	
Pot Cap-1 Maneuver	1597	-	-	929	797	1048	1600	-	-	
Stage 1	-	-	-	949	834	-	-	-	-	
Stage 2	-	-	-	1022	879	-	-	-	-	
Platoon blocked, %		-	-					-	-	
Mov Cap-1 Maneuver	1597	-	-	898	0	1022	1576	-	-	
Mov Cap-2 Maneuver	-	-	-	898	0	-	-	-	-	
Stage 1	-	-	-	918	0	-	-	-	-	
Stage 2	-	-	-	1022	0	-	-	-	-	

Approach	EB	NB	SB
HCM Control Delay, s/v	7		0
HCM LOS		-	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	SBL	SBT	SBR
Capacity (veh/h)	-	1596	-	-	1576	-	-
HCM Lane V/C Ratio	-	0.018	-	-	-	-	-
HCM Control Delay (s/veh)	-	7.3	0	-	0	-	-
HCM Lane LOS	-	A	A	-	A	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-

APPENDIX 3.3: EXISTING (2024) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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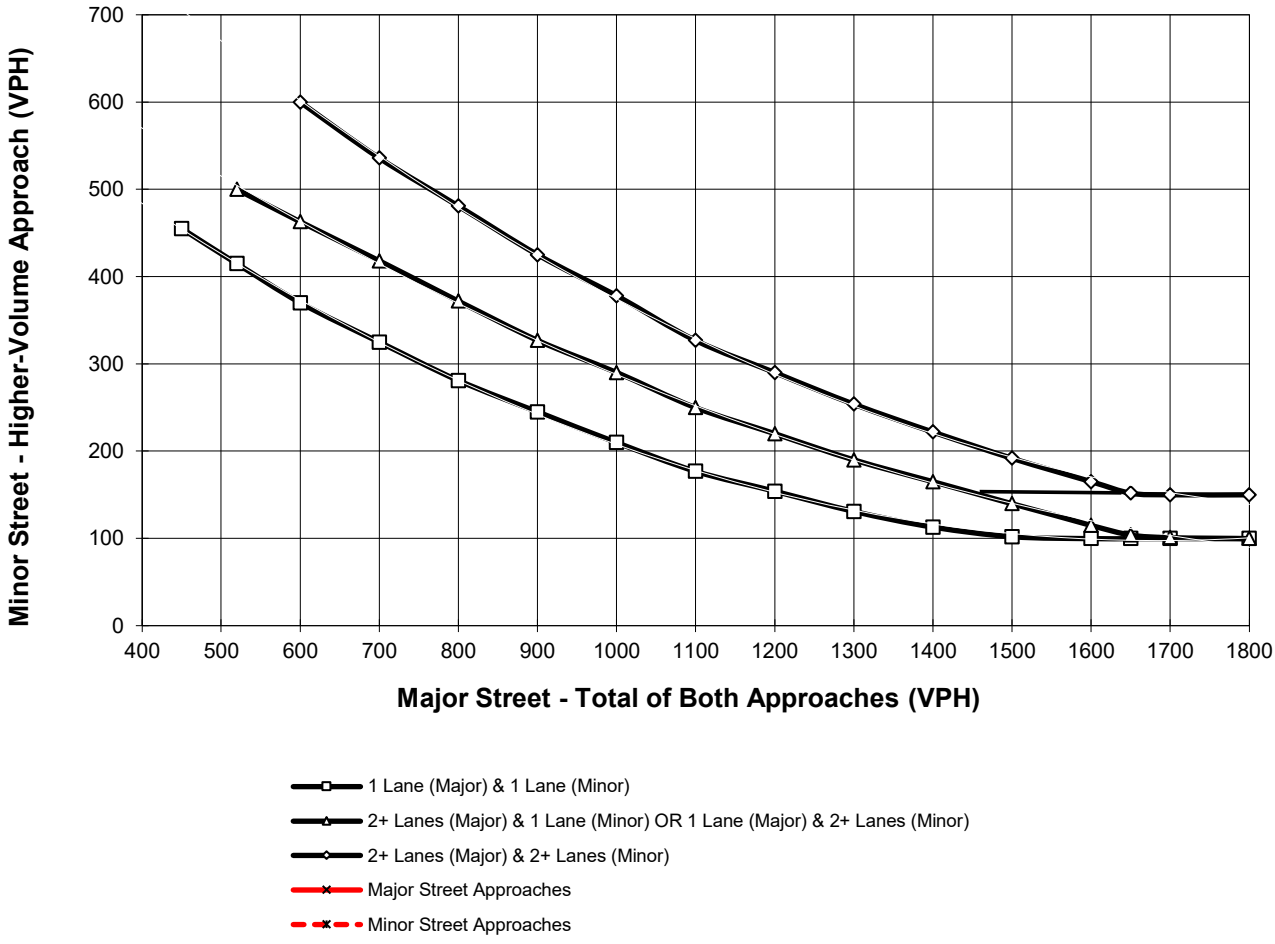
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **Calle Encilla**
Total of Both Approaches (VPH) = **254**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Andreas Rd.**
High Volume Approach (VPH) = **80**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

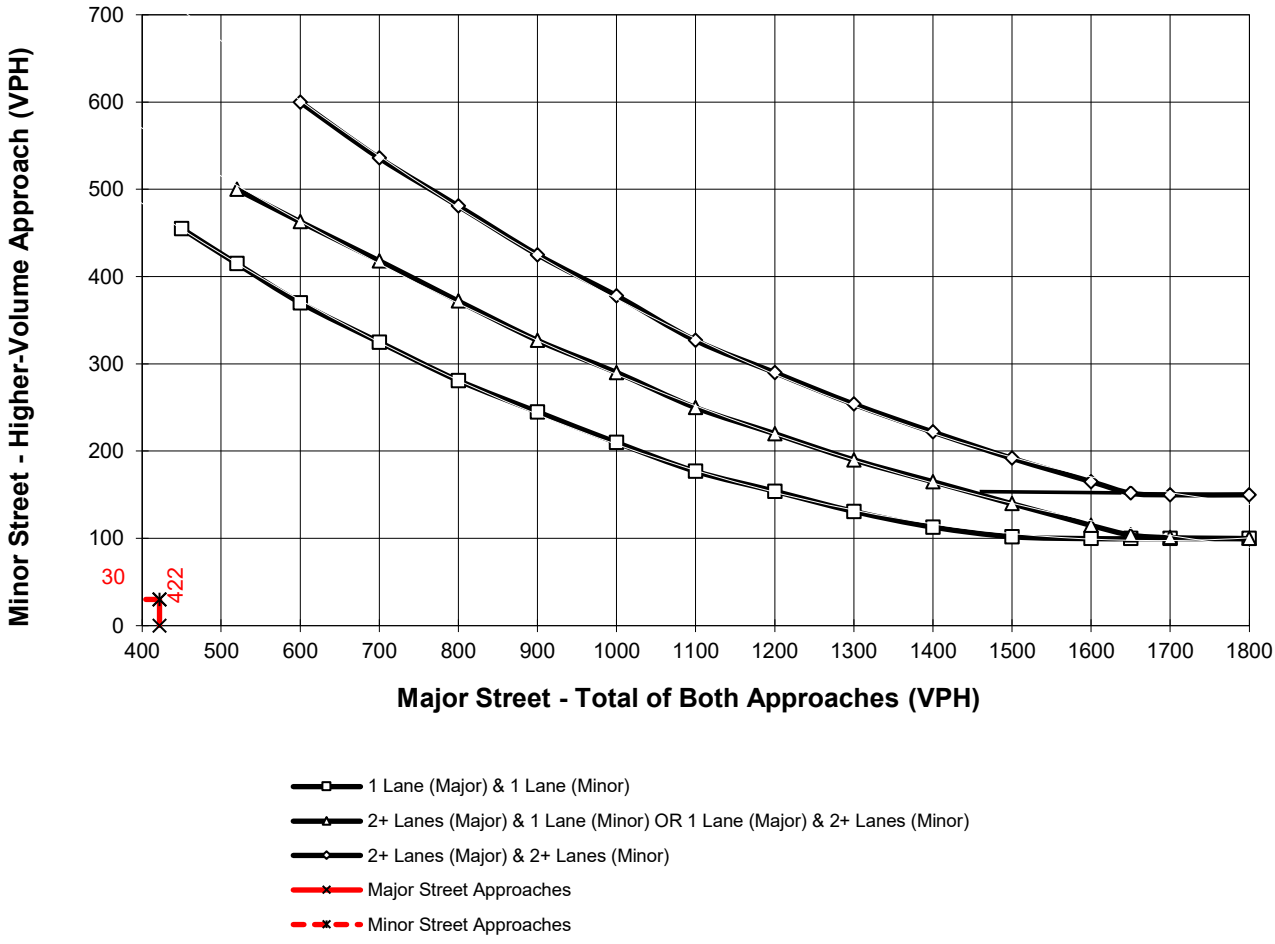
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **Calle El Segundo**
Total of Both Approaches (VPH) = **422**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Andreas Rd.**
High Volume Approach (VPH) = **30**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

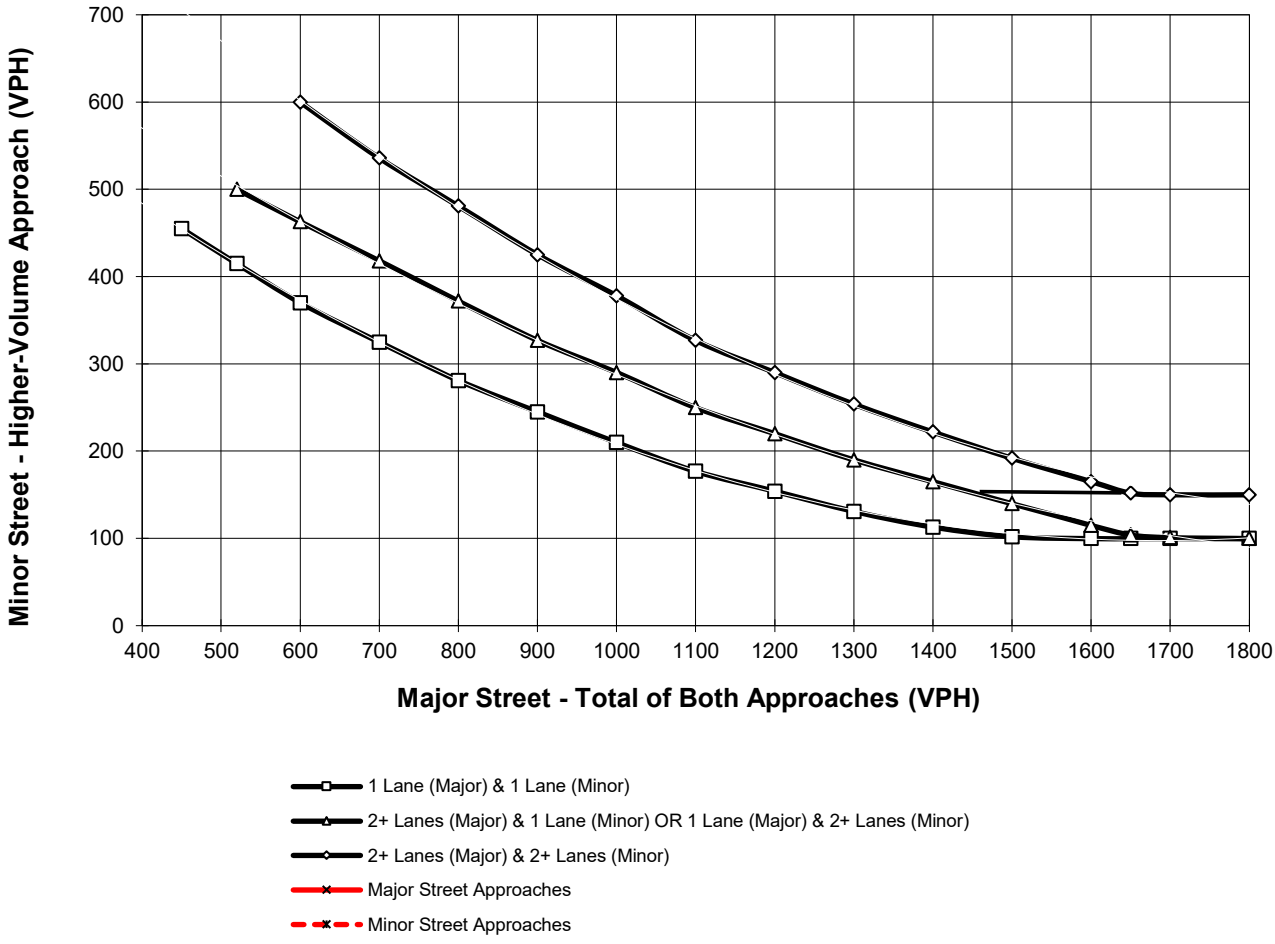
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **Andreas Rd.**
Total of Both Approaches (VPH) = **27**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Calle Alvarado/Driveway 3**
High Volume Approach (VPH) = **15**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 5.1: E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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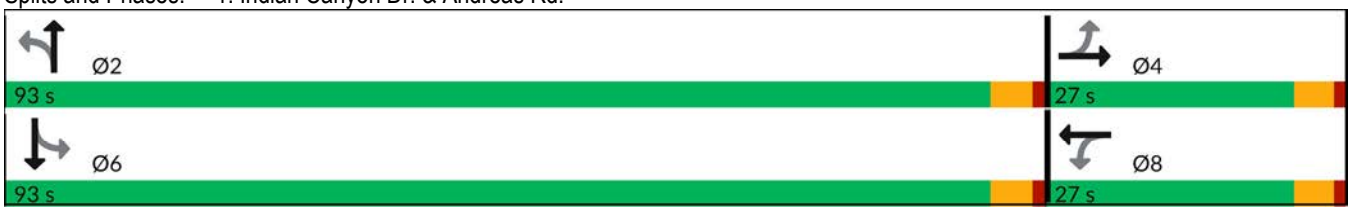
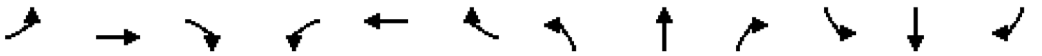
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	4	7	2	10	19	487	21	273
Future Volume (vph)	4	7	2	10	19	487	21	273
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
Total Split (s)	27.0	27.0	27.0	27.0	93.0	93.0	93.0	93.0
Total Split (%)	22.5%	22.5%	22.5%	22.5%	77.5%	77.5%	77.5%	77.5%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.7		4.7	4.7	4.7	4.7	4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)		11.6		11.6	29.7	29.7	29.7	29.7
Actuated g/C Ratio		0.31		0.31	0.80	0.80	0.80	0.80
v/c Ratio		0.02		0.06	0.02	0.20	0.03	0.21
Control Delay (s/veh)		10.9		7.7	5.5	4.1	5.7	4.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		10.9		7.7	5.5	4.1	5.7	4.9
LOS		B		A	A	A	A	A
Approach Delay (s/veh)		10.9		7.7		4.2		5.0
Approach LOS		B		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 36.9	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.22	
Intersection Signal Delay (s/veh): 4.7	Intersection LOS: A
Intersection Capacity Utilization 34.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Indian Canyon Dr. & Andreas Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	7	1	2	10	18	19	487	8	21	273	3
Future Volume (veh/h)	4	7	1	2	10	18	19	487	8	21	273	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	8	1	2	12	21	22	573	9	25	321	4
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	136	15	179	74	125	679	1630	26	613	839	10
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	468	1085	120	72	593	998	1052	3579	56	830	1843	23
Grp Volume(v), veh/h	14	0	0	35	0	0	22	284	298	25	0	325
Grp Sat Flow(s),veh/h/ln	1673	0	0	1664	0	0	1052	1777	1858	830	0	1866
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.3	2.3	0.5	0.0	2.6
Cycle Q Clear(g_c), s	0.2	0.0	0.0	0.4	0.0	0.0	2.9	2.3	2.3	2.8	0.0	2.6
Prop In Lane	0.36		0.07	0.06		0.60	1.00		0.03	1.00		0.01
Lane Grp Cap(c), veh/h	428	0	0	378	0	0	679	809	847	613	0	850
V/C Ratio(X)	0.03	0.00	0.00	0.09	0.00	0.00	0.03	0.35	0.35	0.04	0.00	0.38
Avail Cap(c_a), veh/h	1845	0	0	1818	0	0	4342	6994	7315	3503	0	7344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.6	0.0	0.0	8.8	0.0	0.0	5.0	4.0	4.0	4.9	0.0	4.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.7	0.0	0.0	8.9	0.0	0.0	5.0	4.2	4.2	4.9	0.0	4.3
LnGrp LOS	A			A			A	A	A	A		A
Approach Vol, veh/h		14			35			604			350	
Approach Delay, s/veh		8.7			8.9			4.2			4.4	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.9		7.5		14.9		7.5				
Change Period (Y+Rc), s		4.7		4.7		4.7		4.7				
Max Green Setting (Gmax), s		88.3		22.3		88.3		22.3				
Max Q Clear Time (g_c+I1), s		4.9		2.2		4.8		2.4				
Green Ext Time (p_c), s		4.1		0.0		2.4		0.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			4.5									
HCM 7th LOS			A									

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	26	4	2	29	3	4	53	3	5	40	6
Future Vol, veh/h	6	26	4	2	29	3	4	53	3	5	40	6
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	29	4	2	33	3	4	60	3	6	45	7
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	8.1	7.7	7.9	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	17%	6%	0%	100%	0%
Vol Thru, %	0%	95%	72%	94%	0%	0%	87%
Vol Right, %	0%	5%	11%	0%	100%	0%	13%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	56	36	31	3	5	46
LT Vol	4	0	6	2	0	5	0
Through Vol	0	53	26	29	0	0	40
RT Vol	0	3	4	0	3	0	6
Lane Flow Rate	4	63	40	35	3	6	52
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.006	0.081	0.054	0.047	0.004	0.008	0.066
Departure Headway (Hd)	5.2	4.662	4.85	4.904	4.171	5.206	4.613
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	681	759	743	735	863	681	767
Service Time	2.983	2.445	2.851	2.605	1.871	2.991	2.399
HCM Lane V/C Ratio	0.006	0.083	0.054	0.048	0.003	0.009	0.068
HCM Control Delay, s/veh	8	7.9	8.1	7.8	6.9	8	7.7
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0.3	0.2	0.1	0	0	0.2

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	13	11	5	14	1	22	172	13	3	133	5
Future Vol, veh/h	8	13	11	5	14	1	22	172	13	3	133	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	14	12	5	15	1	23	183	14	3	141	5
Number of Lanes	0	1	1	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	8.2	8.5	8.4	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	20%	0%	38%	0%	26%	0%	4%	0%
Vol Thru, %	80%	87%	62%	0%	74%	0%	96%	93%
Vol Right, %	0%	13%	0%	100%	0%	100%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	108	99	21	11	19	1	70	72
LT Vol	22	0	8	0	5	0	3	0
Through Vol	86	86	13	0	14	0	67	67
RT Vol	0	13	0	11	0	1	0	5
Lane Flow Rate	115	105	22	12	20	1	74	76
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.157	0.138	0.035	0.015	0.031	0.001	0.1	0.102
Departure Headway (Hd)	4.916	4.722	5.618	4.722	5.573	4.736	4.883	4.813
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	734	764	639	759	644	757	736	747
Service Time	2.616	2.422	3.339	2.443	3.295	2.458	2.596	2.526
HCM Lane V/C Ratio	0.157	0.137	0.034	0.016	0.031	0.001	0.101	0.102
HCM Control Delay, s/veh	8.5	8.2	8.5	7.5	8.5	7.5	8.1	8.1
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.6	0.5	0.1	0	0.1	0	0.3	0.3

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	5	201	6	4	146
Future Vol, veh/h	8	5	201	6	4	146
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	5	218	7	4	159

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	310	113	0	0	225	0
Stage 1	222	-	-	-	-	-
Stage 2	88	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	658	919	-	-	1341	-
Stage 1	794	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	656	919	-	-	1341	-
Mov Cap-2 Maneuver	656	-	-	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	922	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.98	0	0.23
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	737	96	-
HCM Lane V/C Ratio	-	-	0.019	0.003	-
HCM Control Delay (s/veh)	-	-	10	7.7	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	8	199	8	6	148
Future Vol, veh/h	10	8	199	8	6	148
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	9	216	9	7	161

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	314	112	0	0	225	0
Stage 1	221	-	-	-	-	-
Stage 2	93	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	654	919	-	-	1341	-
Stage 1	795	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	651	919	-	-	1341	-
Mov Cap-2 Maneuver	651	-	-	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	915	-	-	-	-	-

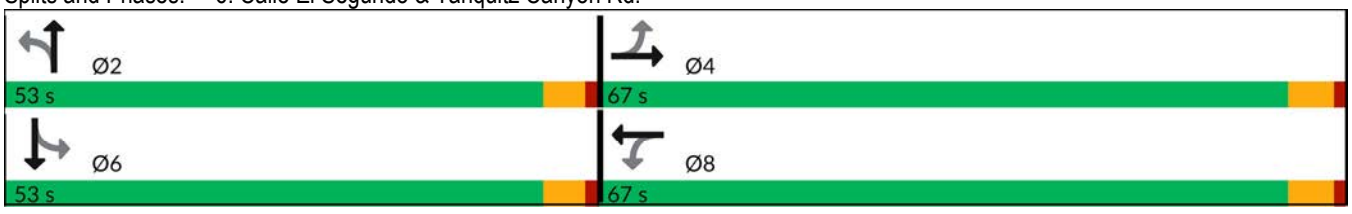
Approach	WB	NB	SB
HCM Control Delay, s/v	9.94	0	0.33
HCM LOS	A		

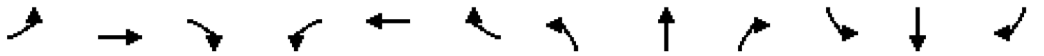
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	748	140	-
HCM Lane V/C Ratio	-	-	0.026	0.005	-
HCM Control Delay (s/veh)	-	-	9.9	7.7	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	14	159	25	224	11	115	35	103
Future Volume (vph)	14	159	25	224	11	115	35	103
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	28.1	28.1	28.1	28.1	30.7	30.7	30.7	30.7
Total Split (s)	67.0	67.0	67.0	67.0	53.0	53.0	53.0	53.0
Total Split (%)	55.8%	55.8%	55.8%	55.8%	44.2%	44.2%	44.2%	44.2%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1		4.7		4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)	12.3	12.3	12.3	12.3		12.7		12.7
Actuated g/C Ratio	0.35	0.35	0.35	0.35		0.36		0.36
v/c Ratio	0.04	0.15	0.06	0.28		0.15		0.15
Control Delay (s/veh)	9.4	8.3	9.5	7.3		6.7		7.6
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	9.4	8.3	9.5	7.3		6.7		7.6
LOS	A	A	A	A		A		A
Approach Delay (s/veh)		8.4		7.5		6.8		7.6
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 35.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.29	
Intersection Signal Delay (s/veh): 7.6	Intersection LOS: A
Intersection Capacity Utilization 55.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: Calle El Segundo & Tahquitz Canyon Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	159	19	25	224	100	11	115	38	35	103	22
Future Volume (veh/h)	14	159	19	25	224	100	11	115	38	35	103	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	171	17	27	241	80	12	124	25	38	111	21
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	526	1161	114	603	934	301	158	955	181	321	790	148
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1050	3261	320	1187	2623	845	90	2804	533	481	2320	434
Grp Volume(v), veh/h	15	92	96	27	161	160	86	0	75	92	0	78
Grp Sat Flow(s),veh/h/ln	1050	1777	1804	1187	1777	1691	1826	0	1602	1622	0	1614
Q Serve(g_s), s	0.3	1.1	1.2	0.5	2.1	2.2	0.0	0.0	1.0	0.0	0.0	1.1
Cycle Q Clear(g_c), s	2.5	1.1	1.2	1.7	2.1	2.2	1.0	0.0	1.0	1.1	0.0	1.1
Prop In Lane	1.00		0.18	1.00		0.50	0.14		0.33	0.41		0.27
Lane Grp Cap(c), veh/h	526	633	642	603	633	602	749	0	545	710	0	549
V/C Ratio(X)	0.03	0.15	0.15	0.04	0.25	0.27	0.11	0.00	0.14	0.13	0.00	0.14
Avail Cap(c_a), veh/h	2166	3406	3458	2455	3406	3242	2770	0	2396	2490	0	2414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.3	7.1	7.1	7.6	7.4	7.4	7.4	0.0	7.4	7.4	0.0	7.4
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.2	0.2	0.1	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.3	0.1	0.5	0.5	0.3	0.0	0.3	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.3	7.2	7.2	7.7	7.6	7.6	7.4	0.0	7.5	7.5	0.0	7.5
LnGrp LOS	A	A	A	A	A	A	A		A	A		A
Approach Vol, veh/h		203			348			161			170	
Approach Delay, s/veh		7.3			7.6			7.5			7.5	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.7		16.6		15.7		16.6				
Change Period (Y+Rc), s		4.7		5.1		4.7		5.1				
Max Green Setting (Gmax), s		48.3		61.9		48.3		61.9				
Max Q Clear Time (g_c+I1), s		3.0		4.5		3.1		4.2				
Green Ext Time (p_c), s		1.0		1.2		1.1		2.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			7.5									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	2	11	0	0	0	13	8	0	0	7	11
Future Vol, veh/h	12	2	11	0	0	0	13	8	0	0	7	11
Conflicting Peds, #/hr	0	0	14	0	0	0	0	0	4	0	0	3
Sign Control	Free	Free	Free	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	57	57	57	57	57	57	57	57	57	57
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	4	19	0	0	0	23	14	0	0	12	19

Major/Minor	Major1			Minor1			Major2			
Conflicting Flow All	35	0	0	82	104	31	37	0	0	
Stage 1	-	-	-	69	69	-	-	-	-	
Stage 2	-	-	-	12	35	-	-	-	-	
Critical Hdwy	4.12	-	-	6.42	6.52	6.22	4.12	-	-	
Critical Hdwy Stg 1	-	-	-	5.42	5.52	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	5.42	5.52	-	-	-	-	
Follow-up Hdwy	2.218	-	-	3.518	4.018	3.318	2.218	-	-	
Pot Cap-1 Maneuver	1577	-	-	921	786	1043	1574	-	-	
Stage 1	-	-	-	954	837	-	-	-	-	
Stage 2	-	-	-	1011	866	-	-	-	-	
Platoon blocked, %		-	-					-	-	
Mov Cap-1 Maneuver	1577	-	-	896	0	1025	1553	-	-	
Mov Cap-2 Maneuver	-	-	-	896	0	-	-	-	-	
Stage 1	-	-	-	928	0	-	-	-	-	
Stage 2	-	-	-	1011	0	-	-	-	-	

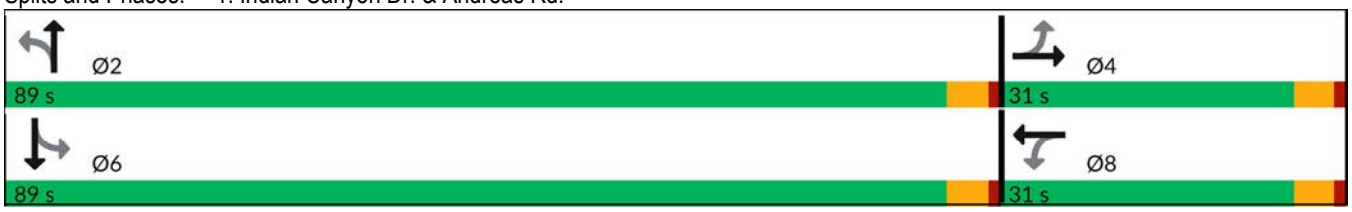
Approach	EB	NB	SB
HCM Control Delay, s/v	3.51	9.19	0
HCM LOS		A	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	SBL	SBT	SBR
Capacity (veh/h)	896	739	-	-	1553	-	-
HCM Lane V/C Ratio	0.041	0.013	-	-	-	-	-
HCM Control Delay (s/veh)	9.2	7.3	0	-	0	-	-
HCM Lane LOS	A	A	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	28	20	17	37	735	47	482
Future Volume (vph)	19	28	20	17	37	735	47	482
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
Total Split (s)	31.0	31.0	31.0	31.0	89.0	89.0	89.0	89.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	74.2%	74.2%	74.2%	74.2%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.7		4.7	4.7	4.7	4.7	4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)		11.4		11.4	24.9	24.9	24.9	24.9
Actuated g/C Ratio		0.31		0.31	0.68	0.68	0.68	0.68
v/c Ratio		0.13		0.18	0.07	0.34	0.12	0.41
Control Delay (s/veh)		10.2		7.5	6.6	6.1	7.3	7.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		10.2		7.5	6.6	6.1	7.3	7.8
LOS		B		A	A	A	A	A
Approach Delay (s/veh)		10.2		7.5		6.2		7.8
Approach LOS		B		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 36.6	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.41	
Intersection Signal Delay (s/veh): 7.0	Intersection LOS: A
Intersection Capacity Utilization 57.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Indian Canyon Dr. & Andreas Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	28	15	20	17	50	37	735	39	47	482	5
Future Volume (veh/h)	19	28	15	20	17	50	37	735	39	47	482	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.97		0.92	0.95		0.97	0.99		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	30	14	22	18	39	40	790	38	51	518	5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	267	99	192	152	216	426	1632	78	402	875	8
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	310	969	358	250	554	783	870	3446	166	661	1848	18
Grp Volume(v), veh/h	64	0	0	79	0	0	40	407	421	51	0	523
Grp Sat Flow(s),veh/h/ln	1637	0	0	1587	0	0	870	1777	1835	661	0	1866
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.3	5.9	5.9	2.1	0.0	7.7
Cycle Q Clear(g_c), s	1.0	0.0	0.0	1.3	0.0	0.0	9.0	5.9	5.9	8.0	0.0	7.7
Prop In Lane	0.31		0.22	0.28		0.49	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	577	0	0	560	0	0	426	842	869	402	0	884
V/C Ratio(X)	0.11	0.00	0.00	0.14	0.00	0.00	0.09	0.48	0.48	0.13	0.00	0.59
Avail Cap(c_a), veh/h	1246	0	0	1208	0	0	1975	4002	4133	1577	0	4203
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.2	0.0	0.0	10.3	0.0	0.0	10.5	6.7	6.7	9.5	0.0	7.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.4	0.4	0.1	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.4	0.0	0.0	0.2	1.5	1.5	0.2	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.3	0.0	0.0	10.4	0.0	0.0	10.6	7.2	7.1	9.6	0.0	7.8
LnGrp LOS	B			B			B	A	A	A		A
Approach Vol, veh/h		64			79			868			574	
Approach Delay, s/veh		10.3			10.4			7.3			8.0	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	22.4	15.0	22.4	15.0
Change Period (Y+Rc), s	4.7	4.7	4.7	4.7
Max Green Setting (Gmax), s	84.3	26.3	84.3	26.3
Max Q Clear Time (g_c+I1), s	11.0	3.0	10.0	3.3
Green Ext Time (p_c), s	6.7	0.3	4.5	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	7.8
HCM 7th LOS	A

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	49	38	3	41	8	22	105	8	2	98	19
Future Vol, veh/h	19	49	38	3	41	8	22	105	8	2	98	19
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	57	44	3	48	9	26	122	9	2	114	22
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	9.3	8.4	8.9	9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	18%	7%	0%	100%	0%
Vol Thru, %	0%	93%	46%	93%	0%	0%	84%
Vol Right, %	0%	7%	36%	0%	100%	0%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	113	106	44	8	2	117
LT Vol	22	0	19	3	0	2	0
Through Vol	0	105	49	41	0	0	98
RT Vol	0	8	38	0	8	0	19
Lane Flow Rate	26	131	123	51	9	2	136
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.04	0.186	0.177	0.077	0.012	0.004	0.191
Departure Headway (Hd)	5.654	5.101	5.179	5.449	4.71	5.677	5.06
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	633	703	691	656	758	630	709
Service Time	3.388	2.836	3.217	3.19	2.451	3.413	2.795
HCM Lane V/C Ratio	0.041	0.186	0.178	0.078	0.012	0.003	0.192
HCM Control Delay, s/veh	8.6	9	9.3	8.6	7.5	8.4	9
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.7	0.6	0.2	0	0	0.7

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	23	27	9	19	4	24	239	14	4	155	11
Future Vol, veh/h	6	23	27	9	19	4	24	239	14	4	155	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	24	29	10	20	4	26	254	15	4	165	12
Number of Lanes	0	1	1	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	8.4	8.8	9	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	0%	21%	0%	32%	0%	5%	0%
Vol Thru, %	83%	90%	79%	0%	68%	0%	95%	88%
Vol Right, %	0%	10%	0%	100%	0%	100%	0%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	144	134	29	27	28	4	82	89
LT Vol	24	0	6	0	9	0	4	0
Through Vol	120	120	23	0	19	0	78	78
RT Vol	0	14	0	27	0	4	0	11
Lane Flow Rate	153	142	31	29	30	4	87	94
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.213	0.192	0.05	0.04	0.049	0.006	0.122	0.13
Departure Headway (Hd)	5.03	4.872	5.794	4.984	5.882	5.014	5.075	4.963
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	714	737	618	718	608	712	707	722
Service Time	2.758	2.6	3.531	2.721	3.623	2.754	2.806	2.694
HCM Lane V/C Ratio	0.214	0.193	0.05	0.04	0.049	0.006	0.123	0.13
HCM Control Delay, s/veh	9.1	8.8	8.8	7.9	8.9	7.8	8.5	8.4
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.8	0.7	0.2	0.1	0.2	0	0.4	0.4

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	5	8	11	7	11
Future Vol, veh/h	8	5	8	11	7	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	5	9	12	8	12

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	36	10	0	0	21	0
Stage 1	15	-	-	-	-	-
Stage 2	21	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	972	1068	-	-	1594	-
Stage 1	1006	-	-	-	-	-
Stage 2	998	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	968	1068	-	-	1594	-
Mov Cap-2 Maneuver	968	-	-	-	-	-
Stage 1	1006	-	-	-	-	-
Stage 2	994	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.64	0	2.84
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1004	1400	-
HCM Lane V/C Ratio	-	-	0.014	0.005	-
HCM Control Delay (s/veh)	-	-	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	8	11	15	11	8
Future Vol, veh/h	11	8	11	15	11	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	9	12	16	12	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	48	14	0	0	28	0
Stage 1	20	-	-	-	-	-
Stage 2	28	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	955	1062	-	-	1583	-
Stage 1	1000	-	-	-	-	-
Stage 2	990	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	948	1062	-	-	1583	-
Mov Cap-2 Maneuver	948	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	983	-	-	-	-	-

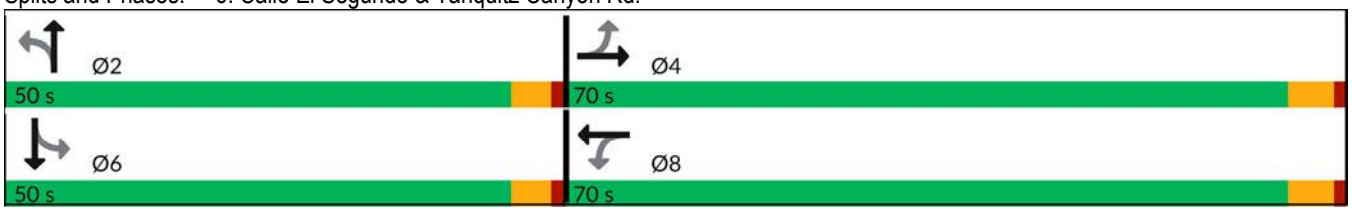
Approach	WB	NB	SB
HCM Control Delay, s/v	8.7	0	4.23
HCM LOS	A		

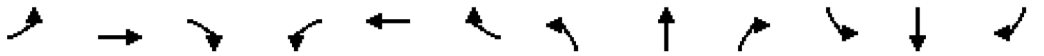
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	993	1580	-
HCM Lane V/C Ratio	-	-	0.021	0.008	-
HCM Control Delay (s/veh)	-	-	8.7	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	247	57	352	23	121	45	132
Future Volume (vph)	25	247	57	352	23	121	45	132
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	28.1	28.1	28.1	28.1	30.7	30.7	30.7	30.7
Total Split (s)	70.0	70.0	70.0	70.0	50.0	50.0	50.0	50.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%	41.7%	41.7%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1		4.7		4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)	12.5	12.5	12.5	12.5		12.7		12.7
Actuated g/C Ratio	0.35	0.35	0.35	0.35		0.35		0.35
v/c Ratio	0.08	0.21	0.15	0.41		0.17		0.19
Control Delay (s/veh)	9.9	9.0	10.1	8.9		7.1		8.1
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	9.9	9.0	10.1	8.9		7.1		8.1
LOS	A	A	B	A		A		A
Approach Delay (s/veh)		9.1		9.1		7.1		8.1
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 35.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay (s/veh): 8.6	Intersection LOS: A
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Calle El Segundo & Tahquitz Canyon Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	247	11	57	352	144	23	121	43	45	132	23
Future Volume (veh/h)	25	247	11	57	352	144	23	121	43	45	132	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.97	0.99		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	255	9	59	363	111	24	125	22	46	136	19
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	456	1264	44	564	964	290	224	900	152	327	819	114
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	912	3499	123	1109	2670	803	253	2649	447	501	2411	335
Grp Volume(v), veh/h	26	129	135	59	240	234	92	0	79	108	0	93
Grp Sat Flow(s),veh/h/ln	912	1777	1845	1109	1777	1696	1737	0	1611	1613	0	1634
Q Serve(g_s), s	0.7	1.6	1.7	1.3	3.3	3.4	0.0	0.0	1.1	0.0	0.0	1.3
Cycle Q Clear(g_c), s	4.1	1.6	1.7	2.9	3.3	3.4	1.1	0.0	1.1	1.3	0.0	1.3
Prop In Lane	1.00		0.07	1.00		0.47	0.26		0.28	0.42		0.20
Lane Grp Cap(c), veh/h	456	642	666	564	642	613	729	0	548	705	0	555
V/C Ratio(X)	0.06	0.20	0.20	0.10	0.37	0.38	0.13	0.00	0.14	0.15	0.00	0.17
Avail Cap(c_a), veh/h	1932	3517	3652	2358	3517	3357	2441	0	2226	2303	0	2257
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.3	7.2	7.2	8.2	7.7	7.8	7.5	0.0	7.5	7.6	0.0	7.6
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.1	0.4	0.4	0.1	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.4	0.4	0.2	0.8	0.8	0.3	0.0	0.3	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.3	7.4	7.4	8.3	8.1	8.2	7.6	0.0	7.6	7.7	0.0	7.7
LnGrp LOS	A	A	A	A	A	A	A		A	A		A
Approach Vol, veh/h		290			533			171			201	
Approach Delay, s/veh		7.5			8.1			7.6			7.7	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.8		16.9		15.8		16.9				
Change Period (Y+Rc), s		4.7		5.1		4.7		5.1				
Max Green Setting (Gmax), s		45.3		64.9		45.3		64.9				
Max Q Clear Time (g_c+I1), s		3.1		6.1		3.3		5.4				
Green Ext Time (p_c), s		1.1		1.7		1.3		3.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			7.8									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	1	19	0	2	0	14	10	0	0	12	14
Future Vol, veh/h	24	1	19	0	2	0	14	10	0	0	12	14
Conflicting Peds, #/hr	0	0	16	0	0	0	0	0	10	0	0	2
Sign Control	Free	Free	Free	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	1	22	0	2	0	16	12	0	0	14	16

Major/Minor	Major1			Minor1			Major2			
Conflicting Flow All	33	0	0	99	117	38	40	0	0	
Stage 1	-	-	-	85	85	-	-	-	-	
Stage 2	-	-	-	14	33	-	-	-	-	
Critical Hdwy	4.12	-	-	6.42	6.52	6.22	4.12	-	-	
Critical Hdwy Stg 1	-	-	-	5.42	5.52	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	5.42	5.52	-	-	-	-	
Follow-up Hdwy	2.218	-	-	3.518	4.018	3.318	2.218	-	-	
Pot Cap-1 Maneuver	1579	-	-	900	773	1033	1570	-	-	
Stage 1	-	-	-	938	825	-	-	-	-	
Stage 2	-	-	-	1009	868	-	-	-	-	
Platoon blocked, %		-	-					-	-	
Mov Cap-1 Maneuver	1579	-	-	870	0	1008	1546	-	-	
Mov Cap-2 Maneuver	-	-	-	870	0	-	-	-	-	
Stage 1	-	-	-	907	0	-	-	-	-	
Stage 2	-	-	-	1009	0	-	-	-	-	

Approach	EB	NB	SB
HCM Control Delay, s/v	3.99	9.28	0
HCM LOS		A	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	SBL	SBT	SBR
Capacity (veh/h)	870	825	-	-	1546	-	-
HCM Lane V/C Ratio	0.032	0.018	-	-	-	-	-
HCM Control Delay (s/veh)	9.3	7.3	0	-	0	-	-
HCM Lane LOS	A	A	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-

APPENDIX 5.2: E+P CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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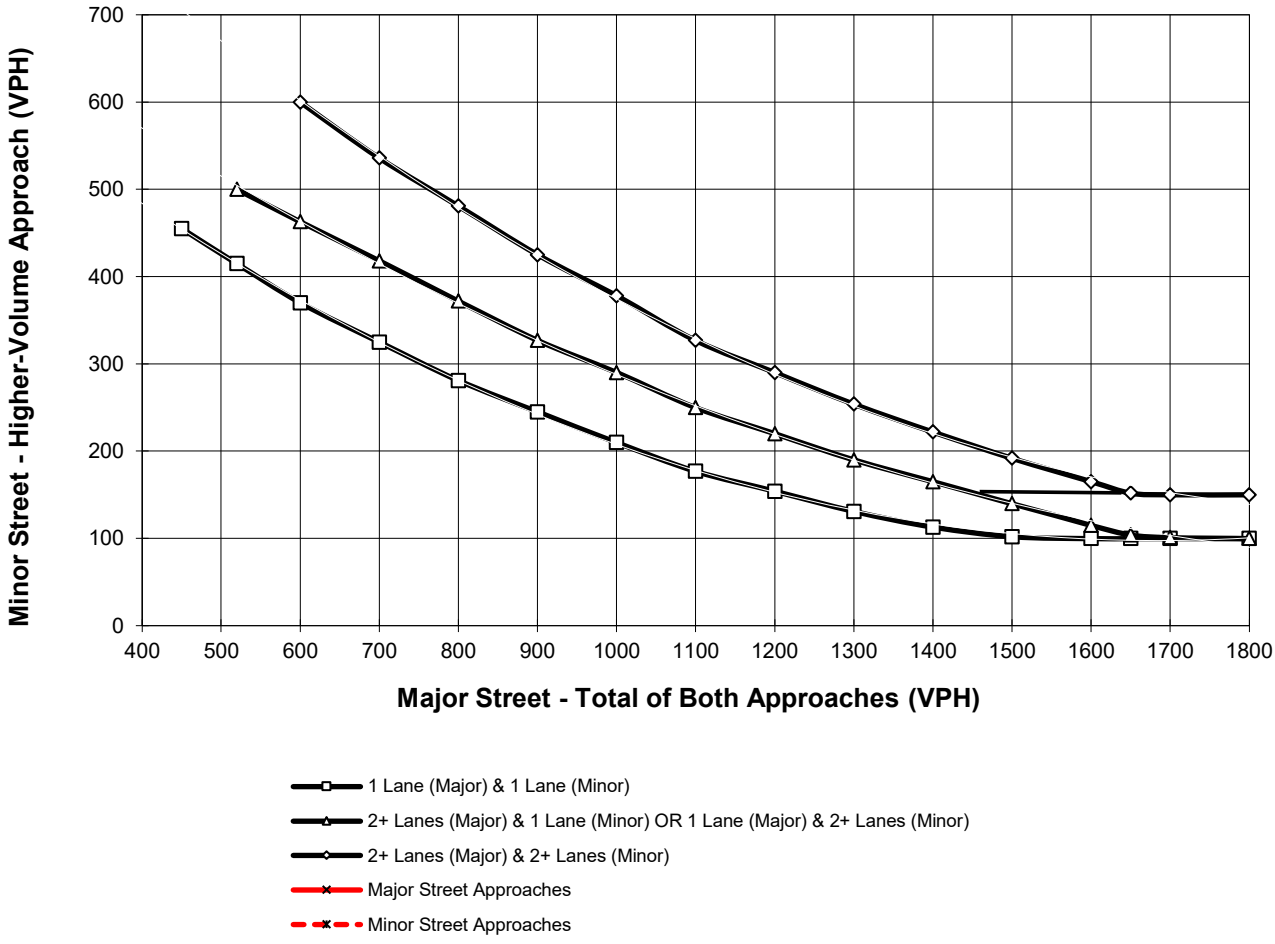
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Calle Encilla**
Total of Both Approaches (VPH) = **254**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Andreas Rd.**
High Volume Approach (VPH) = **106**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

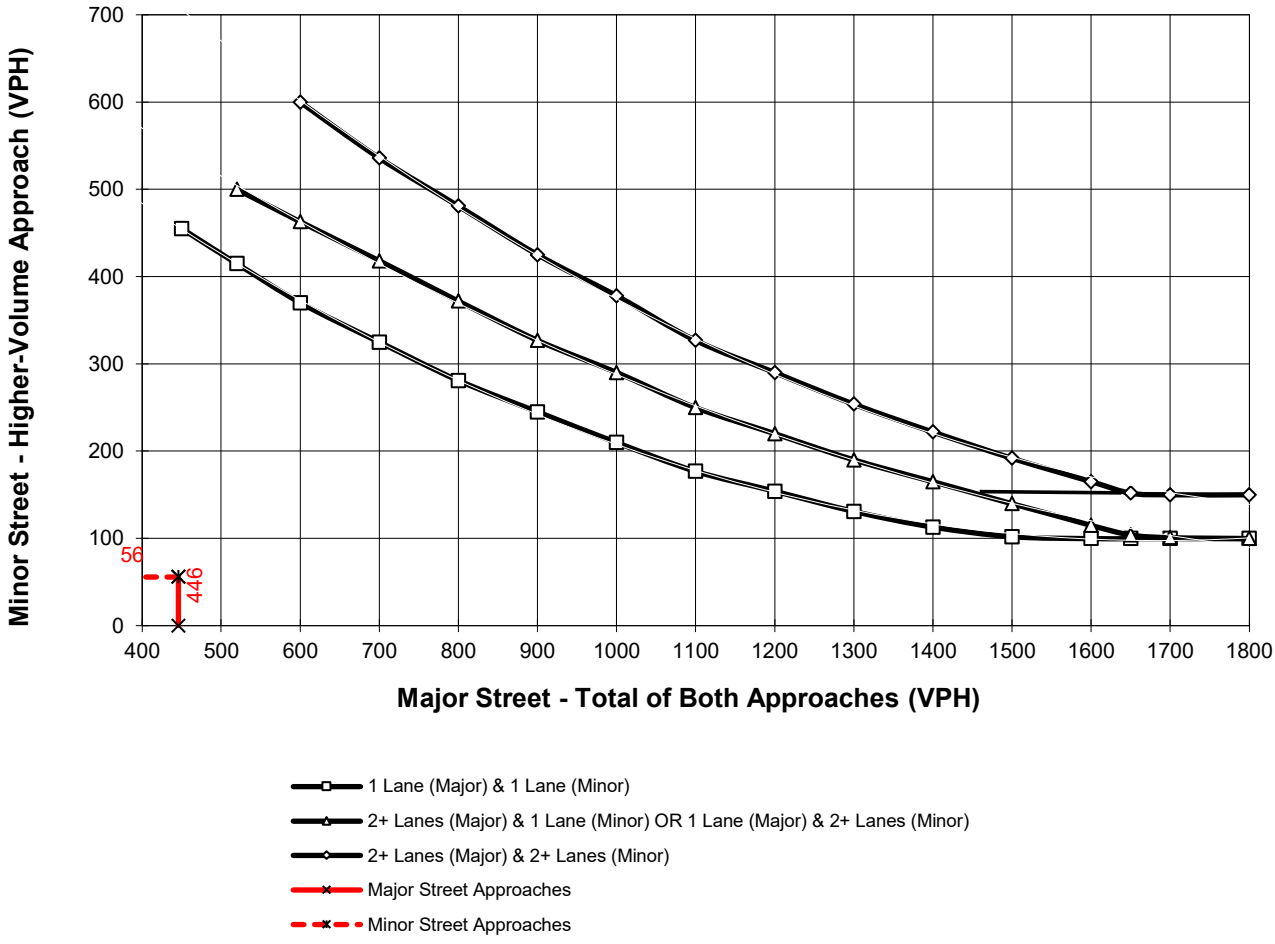
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Calle El Segundo**
Total of Both Approaches (VPH) = **446**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Andreas Rd.**
High Volume Approach (VPH) = **56**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

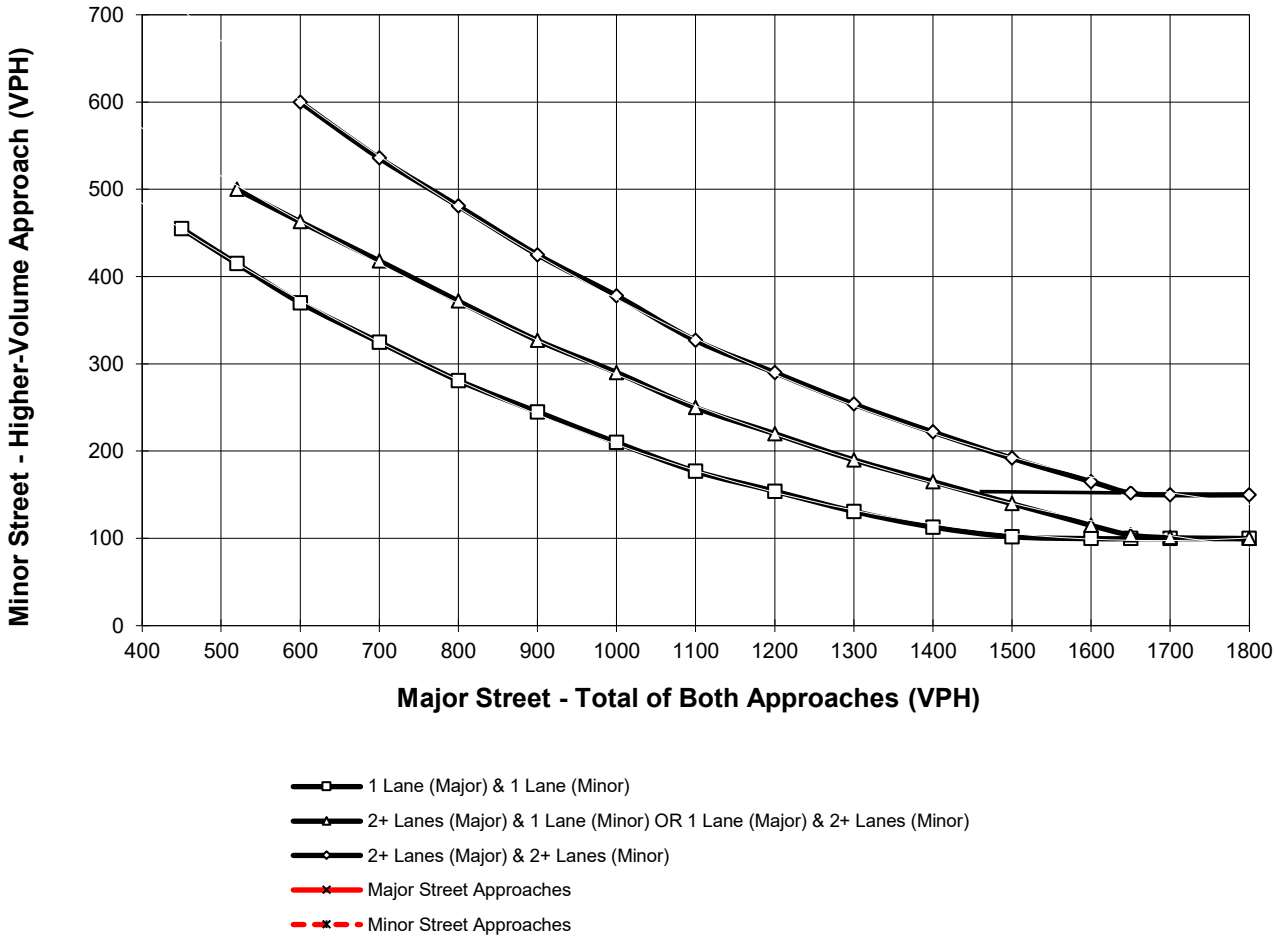
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Andreas Rd.**
Total of Both Approaches (VPH) = **33**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Calle Alvarado/Driveway 3**
High Volume Approach (VPH) = **19**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P
				CALC CP	DATE	05/30/24
Jurisdiction: City of Palm Springs				CHK CP	DATE	05/30/24
Major Street: Calle El Segundo				Critical Approach Speed (Major)		30 mph
Minor Street: Driveway 1				Critical Approach Speed (Minor)		25 mph

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

Major Street Future ADT = **378** vpd Minor Street Future ADT = **172** vpd

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

or **URBAN (U)**

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

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **378**	*1* **172**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **378**	*1* **172**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** **5%** **B** **3%**		2 CONDITIONS 80%		2 CONDITIONS 80%	

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

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

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

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P
				CALC CP	DATE	05/30/24
Jurisdiction: City of Palm Springs				CHK CP	DATE	05/30/24
Major Street: Calle El Segundo				Critical Approach Speed (Major)		30 mph
Minor Street: Driveway 1				Critical Approach Speed (Minor)		25 mph

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

Major Street Future ADT = **447** vpd Minor Street Future ADT = **241** vpd

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

or **URBAN (U)**

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

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **447** / *1* **241**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **447** / *1* **241**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 6% B: 4%				

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

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

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APPENDIX 6.1: EAC (2027) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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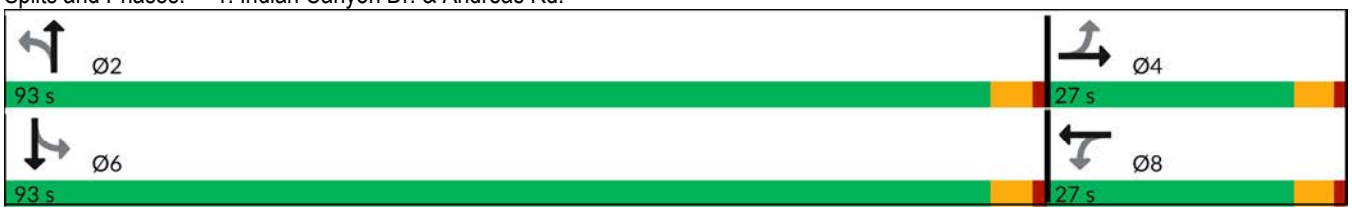
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	49	8	45	20	520	18	294
Future Volume (vph)	25	49	8	45	20	520	18	294
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
Total Split (s)	27.0	27.0	27.0	27.0	93.0	93.0	93.0	93.0
Total Split (%)	22.5%	22.5%	22.5%	22.5%	77.5%	77.5%	77.5%	77.5%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.7		4.7	4.7	4.7	4.7	4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)		11.7		11.7	22.9	22.9	22.9	22.9
Actuated g/C Ratio		0.39		0.39	0.76	0.76	0.76	0.76
v/c Ratio		0.14		0.12	0.03	0.23	0.04	0.26
Control Delay (s/veh)		7.8		7.0	6.6	5.1	6.7	6.1
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		7.8		7.0	6.6	5.1	6.7	6.1
LOS		A		A	A	A	A	A
Approach Delay (s/veh)		7.8		7.0		5.1		6.1
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 30.1	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.26	
Intersection Signal Delay (s/veh): 5.8	Intersection LOS: A
Intersection Capacity Utilization 33.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Indian Canyon Dr. & Andreas Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	49	1	8	45	15	20	520	14	18	294	21
Future Volume (veh/h)	25	49	1	8	45	15	20	520	14	18	294	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	58	1	9	53	18	24	612	16	21	346	25
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	370	5	162	339	105	512	1436	38	477	699	50
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	314	1404	20	81	1288	397	1009	3535	92	796	1720	124
Grp Volume(v), veh/h	88	0	0	80	0	0	24	307	321	21	0	371
Grp Sat Flow(s),veh/h/ln	1737	0	0	1766	0	0	1009	1777	1850	796	0	1844
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.5	3.5	3.5	0.6	0.0	4.3
Cycle Q Clear(g_c), s	1.0	0.0	0.0	1.0	0.0	0.0	4.8	3.5	3.5	4.1	0.0	4.3
Prop In Lane	0.33		0.01	0.11		0.22	1.00		0.05	1.00		0.07
Lane Grp Cap(c), veh/h	626	0	0	606	0	0	512	722	752	477	0	749
V/C Ratio(X)	0.14	0.00	0.00	0.13	0.00	0.00	0.05	0.43	0.43	0.04	0.00	0.50
Avail Cap(c_a), veh/h	1480	0	0	1502	0	0	3231	5511	5738	2622	0	5719
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.1	0.0	0.0	8.1	0.0	0.0	8.1	6.1	6.1	7.5	0.0	6.3
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.3	0.0	0.0	0.1	0.8	0.8	0.1	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.2	0.0	0.0	8.2	0.0	0.0	8.1	6.5	6.5	7.6	0.0	6.8
LnGrp LOS	A			A			A	A	A	A		A
Approach Vol, veh/h		88			80			652			392	
Approach Delay, s/veh		8.2			8.2			6.5			6.8	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.3		12.2		16.3		12.2				
Change Period (Y+Rc), s		4.7		4.7		4.7		4.7				
Max Green Setting (Gmax), s		88.3		22.3		88.3		22.3				
Max Q Clear Time (g_c+I1), s		6.8		3.0		6.3		3.0				
Green Ext Time (p_c), s		4.6		0.4		2.8		0.3				

Intersection Summary												
HCM 7th Control Delay, s/veh		6.9										
HCM 7th LOS		A										

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	69	4	2	66	3	4	56	3	6	42	7
Future Vol, veh/h	7	69	4	2	66	3	4	56	3	6	42	7
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	78	4	2	74	3	4	63	3	7	47	8
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	8.7	8.2	8.2	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	9%	3%	0%	100%	0%
Vol Thru, %	0%	95%	86%	97%	0%	0%	86%
Vol Right, %	0%	5%	5%	0%	100%	0%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	59	80	68	3	6	49
LT Vol	4	0	7	2	0	6	0
Through Vol	0	56	69	66	0	0	42
RT Vol	0	3	4	0	3	0	7
Lane Flow Rate	4	66	90	76	3	7	55
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.007	0.092	0.124	0.105	0.004	0.01	0.075
Departure Headway (Hd)	5.528	4.99	4.956	4.966	4.249	5.537	4.934
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	650	721	726	724	845	648	728
Service Time	3.243	2.705	2.968	2.678	1.962	3.253	2.65
HCM Lane V/C Ratio	0.006	0.092	0.124	0.105	0.004	0.011	0.076
HCM Control Delay, s/veh	8.3	8.2	8.7	8.3	7	8.3	8.1
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0.3	0.4	0.4	0	0	0.2

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	45	24	6	38	1	36	186	13	3	145	6
Future Vol, veh/h	9	45	24	6	38	1	36	186	13	3	145	6
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	48	26	6	40	1	38	198	14	3	154	6
Number of Lanes	0	1	1	0	1	1	0	2	0	0	2	0

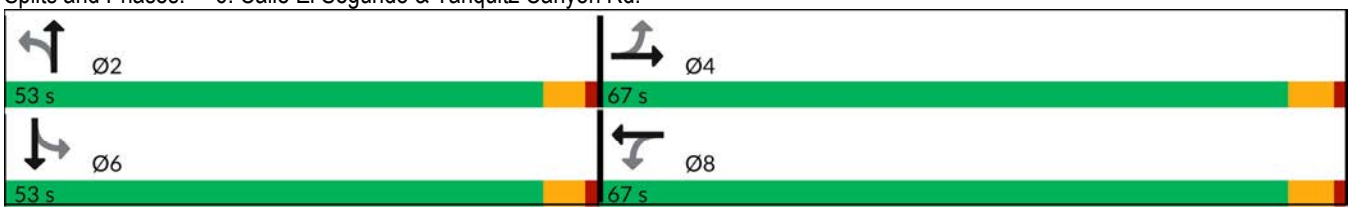
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	8.6	8.9	8.9	8.5
HCM LOS	A	A	A	A

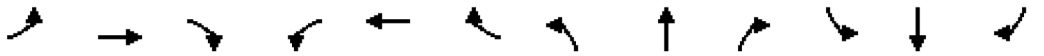
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	28%	0%	17%	0%	14%	0%	4%	0%
Vol Thru, %	72%	88%	83%	0%	86%	0%	96%	92%
Vol Right, %	0%	12%	0%	100%	0%	100%	0%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	129	106	54	24	44	1	76	79
LT Vol	36	0	9	0	6	0	3	0
Through Vol	93	93	45	0	38	0	73	73
RT Vol	0	13	0	24	0	1	0	6
Lane Flow Rate	137	113	57	26	47	1	80	84
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.197	0.155	0.09	0.035	0.074	0.001	0.115	0.118
Departure Headway (Hd)	5.178	4.952	5.671	4.882	5.698	4.924	5.142	5.068
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	693	724	631	731	627	724	696	707
Service Time	2.912	2.685	3.415	2.626	3.446	2.671	2.878	2.804
HCM Lane V/C Ratio	0.198	0.156	0.09	0.036	0.075	0.001	0.115	0.119
HCM Control Delay, s/veh	9.2	8.6	9	7.8	8.9	7.7	8.5	8.5
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.7	0.5	0.3	0.1	0.2	0	0.4	0.4

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	9	321	27	382	11	118	58	104
Future Volume (vph)	9	321	27	382	11	118	58	104
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	28.1	28.1	28.1	28.1	30.7	30.7	30.7	30.7
Total Split (s)	67.0	67.0	67.0	67.0	53.0	53.0	53.0	53.0
Total Split (%)	55.8%	55.8%	55.8%	55.8%	44.2%	44.2%	44.2%	44.2%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1		4.7		4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)	12.8	12.8	12.8	12.8		12.7		12.7
Actuated g/C Ratio	0.36	0.36	0.36	0.36		0.35		0.35
v/c Ratio	0.03	0.29	0.08	0.45		0.16		0.18
Control Delay (s/veh)	9.3	9.4	9.6	9.6		7.0		8.4
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	9.3	9.4	9.6	9.6		7.0		8.4
LOS	A	A	A	A		A		A
Approach Delay (s/veh)		9.4		9.6		7.0		8.4
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 36	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay (s/veh): 9.0	Intersection LOS: A
Intersection Capacity Utilization 56.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: Calle El Segundo & Tahquitz Canyon Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	321	20	27	382	131	11	118	40	58	104	14
Future Volume (veh/h)	9	321	20	27	382	131	11	118	40	58	104	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	345	19	29	411	113	12	127	27	62	112	12
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	434	1222	67	511	980	266	155	946	189	439	722	80
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	874	3421	188	1012	2744	746	86	2784	557	765	2124	235
Grp Volume(v), veh/h	10	179	185	29	264	260	89	0	77	102	0	84
Grp Sat Flow(s),veh/h/ln	874	1777	1831	1012	1777	1712	1829	0	1598	1469	0	1654
Q Serve(g_s), s	0.3	2.3	2.3	0.7	3.6	3.7	0.0	0.0	1.1	0.0	0.0	1.1
Cycle Q Clear(g_c), s	4.0	2.3	2.3	3.0	3.6	3.7	1.1	0.0	1.1	1.2	0.0	1.1
Prop In Lane	1.00		0.10	1.00		0.44	0.14		0.35	0.61		0.14
Lane Grp Cap(c), veh/h	434	635	654	511	635	612	748	0	543	678	0	562
V/C Ratio(X)	0.02	0.28	0.28	0.06	0.42	0.42	0.12	0.00	0.14	0.15	0.00	0.15
Avail Cap(c_a), veh/h	1793	3399	3503	2086	3399	3276	2771	0	2385	2312	0	2469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.4	7.4	7.4	8.5	7.9	7.9	7.4	0.0	7.4	7.5	0.0	7.4
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	0.4	0.5	0.1	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.6	0.1	0.9	0.9	0.3	0.0	0.3	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.4	7.7	7.7	8.6	8.3	8.3	7.5	0.0	7.5	7.6	0.0	7.6
LnGrp LOS	A	A	A	A	A	A	A		A	A		A
Approach Vol, veh/h		374			553			166			186	
Approach Delay, s/veh		7.7			8.3			7.5			7.6	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.7		16.7		15.7		16.7				
Change Period (Y+Rc), s		4.7		5.1		4.7		5.1				
Max Green Setting (Gmax), s		48.3		61.9		48.3		61.9				
Max Q Clear Time (g_c+I1), s		3.1		6.0		3.2		5.7				
Green Ext Time (p_c), s		1.0		2.3		1.2		3.6				

Intersection Summary												
HCM 7th Control Delay, s/veh			7.9									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	45	0	0	37	0	0	0	0	0	1	11
Future Vol, veh/h	12	45	0	0	37	0	0	0	0	0	1	11
Conflicting Peds, #/hr	0	0	14	0	0	0	0	0	4	0	0	3
Sign Control	Free	Free	Free	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	57	57	57	57	57	57	57	57	57	57
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	79	0	0	65	0	0	0	0	0	2	19

Major/Minor	Major1			Minor1			Major2			
Conflicting Flow All	24	0	0	137	159	97	93	0	0	
Stage 1	-	-	-	135	135	-	-	-	-	
Stage 2	-	-	-	2	24	-	-	-	-	
Critical Hdwy	4.12	-	-	6.42	6.52	6.22	4.12	-	-	
Critical Hdwy Stg 1	-	-	-	5.42	5.52	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	5.42	5.52	-	-	-	-	
Follow-up Hdwy	2.218	-	-	3.518	4.018	3.318	2.218	-	-	
Pot Cap-1 Maneuver	1591	-	-	857	733	959	1501	-	-	
Stage 1	-	-	-	891	785	-	-	-	-	
Stage 2	-	-	-	1021	875	-	-	-	-	
Platoon blocked, %		-	-					-	-	
Mov Cap-1 Maneuver	1591	-	-	833	0	943	1481	-	-	
Mov Cap-2 Maneuver	-	-	-	833	0	-	-	-	-	
Stage 1	-	-	-	867	0	-	-	-	-	
Stage 2	-	-	-	1021	0	-	-	-	-	

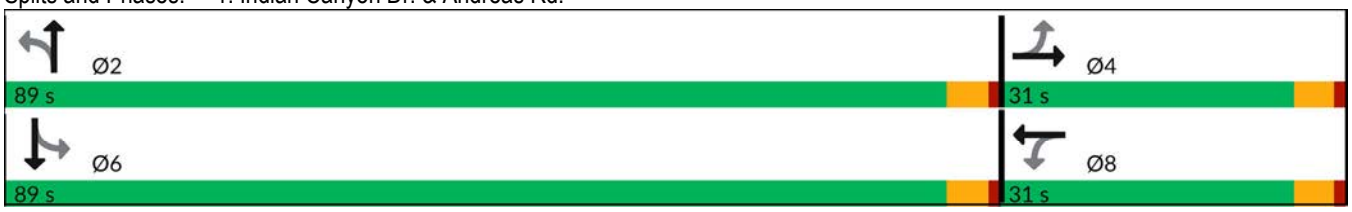
Approach	EB	NB	SB
HCM Control Delay, s/v	1.54	0	0
HCM LOS		A	

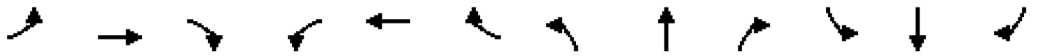
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	SBL	SBT	SBR
Capacity (veh/h)	-	379	-	-	1481	-	-
HCM Lane V/C Ratio	-	0.013	-	-	-	-	-
HCM Control Delay (s/veh)	0	7.3	0	-	0	-	-
HCM Lane LOS	A	A	A	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	52	91	28	92	39	784	41	516
Future Volume (vph)	52	91	28	92	39	784	41	516
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
Total Split (s)	31.0	31.0	31.0	31.0	89.0	89.0	89.0	89.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	74.2%	74.2%	74.2%	74.2%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.7		4.7	4.7	4.7	4.7	4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)		12.1		12.1	22.4	22.4	22.4	22.4
Actuated g/C Ratio		0.27		0.27	0.50	0.50	0.50	0.50
v/c Ratio		0.40		0.40	0.14	0.51	0.17	0.65
Control Delay (s/veh)		18.6		17.4	7.0	8.0	7.6	11.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		18.6		17.4	7.0	8.0	7.6	11.5
LOS		B		B	A	A	A	B
Approach Delay (s/veh)		18.6		17.4		8.0		11.3
Approach LOS		B		B		A		B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 44.4	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay (s/veh): 10.9	Intersection LOS: B
Intersection Capacity Utilization 57.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Indian Canyon Dr. & Andreas Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	91	16	28	92	48	39	784	49	41	516	43
Future Volume (veh/h)	52	91	16	28	92	48	39	784	49	41	516	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.98		0.92	0.96		0.97	0.99		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	98	15	30	99	37	42	843	49	44	555	46
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	317	41	142	326	106	379	1714	100	378	853	71
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	359	1136	146	157	1168	380	813	3407	198	623	1696	141
Grp Volume(v), veh/h	169	0	0	166	0	0	42	440	452	44	0	601
Grp Sat Flow(s),veh/h/ln	1641	0	0	1705	0	0	813	1777	1828	623	0	1837
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.7	7.1	7.1	2.2	0.0	10.4
Cycle Q Clear(g_c), s	3.2	0.0	0.0	3.2	0.0	0.0	12.2	7.1	7.1	9.2	0.0	10.4
Prop In Lane	0.33		0.09	0.18		0.22	1.00		0.11	1.00		0.08
Lane Grp Cap(c), veh/h	569	0	0	575	0	0	379	894	919	378	0	924
V/C Ratio(X)	0.30	0.00	0.00	0.29	0.00	0.00	0.11	0.49	0.49	0.12	0.00	0.65
Avail Cap(c_a), veh/h	1084	0	0	1114	0	0	1558	3470	3569	1281	0	3587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	0.0	0.0	12.4	0.0	0.0	12.4	7.1	7.1	10.1	0.0	7.9
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.3	0.0	0.0	0.1	0.4	0.4	0.1	0.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	1.1	0.0	0.0	0.3	1.9	2.0	0.3	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.6	0.0	0.0	12.6	0.0	0.0	12.5	7.5	7.5	10.3	0.0	8.7
LnGrp LOS	B			B			B	A	A	B		A
Approach Vol, veh/h		169			166			934			645	
Approach Delay, s/veh		12.6			12.6			7.7			8.8	
Approach LOS		B			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.4		16.8		26.4		16.8				
Change Period (Y+Rc), s		4.7		4.7		4.7		4.7				
Max Green Setting (Gmax), s		84.3		26.3		84.3		26.3				
Max Q Clear Time (g_c+I1), s		14.2		5.2		12.4		5.2				
Green Ext Time (p_c), s		7.5		0.9		5.4		0.9				

Intersection Summary												
HCM 7th Control Delay, s/veh			9.0									
HCM 7th LOS			A									

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	114	40	3	118	9	23	111	9	2	104	20
Future Vol, veh/h	20	114	40	3	118	9	23	111	9	2	104	20
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	133	47	3	137	10	27	129	10	2	121	23
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	11	9.8	9.9	10
HCM LOS	B	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	11%	2%	0%	100%	0%
Vol Thru, %	0%	93%	66%	98%	0%	0%	84%
Vol Right, %	0%	8%	23%	0%	100%	0%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	120	174	121	9	2	124
LT Vol	23	0	20	3	0	2	0
Through Vol	0	111	114	118	0	0	104
RT Vol	0	9	40	0	9	0	20
Lane Flow Rate	27	140	202	141	10	2	144
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.046	0.217	0.308	0.22	0.014	0.004	0.223
Departure Headway (Hd)	6.168	5.61	5.475	5.626	4.908	6.198	5.579
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	575	633	649	632	720	572	636
Service Time	3.965	3.406	3.561	3.417	2.698	3.997	3.377
HCM Lane V/C Ratio	0.047	0.221	0.311	0.223	0.014	0.003	0.226
HCM Control Delay, s/veh	9.3	10	11	10	7.8	9	10
HCM Lane LOS	A	A	B	A	A	A	A
HCM 95th-tile Q	0.1	0.8	1.3	0.8	0	0	0.8

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	69	46	10	81	4	41	259	14	4	169	11
Future Vol, veh/h	7	69	46	10	81	4	41	259	14	4	169	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	73	49	11	86	4	44	276	15	4	180	12
Number of Lanes	0	1	1	0	1	1	0	2	0	0	2	0

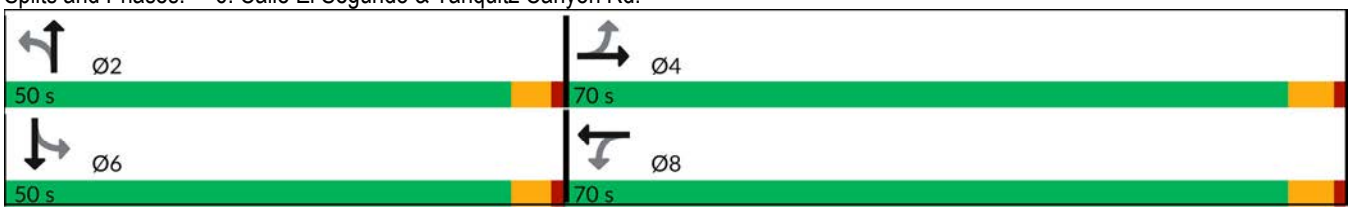
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	9.3	10	10.1	9.3
HCM LOS	A	A	B	A

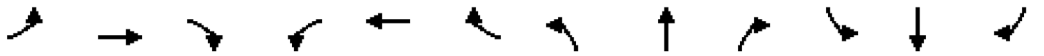
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	24%	0%	9%	0%	11%	0%	5%	0%
Vol Thru, %	76%	90%	91%	0%	89%	0%	95%	88%
Vol Right, %	0%	10%	0%	100%	0%	100%	0%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	171	144	76	46	91	4	89	96
LT Vol	41	0	7	0	10	0	4	0
Through Vol	130	130	69	0	81	0	85	85
RT Vol	0	14	0	46	0	4	0	11
Lane Flow Rate	181	153	81	49	97	4	94	102
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.278	0.226	0.137	0.073	0.166	0.006	0.148	0.157
Departure Headway (Hd)	5.508	5.318	6.12	5.365	6.166	5.401	5.669	5.565
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	646	667	589	670	585	665	636	648
Service Time	3.304	3.114	3.831	3.076	3.877	3.112	3.369	3.265
HCM Lane V/C Ratio	0.28	0.229	0.138	0.073	0.166	0.006	0.148	0.157
HCM Control Delay, s/veh	10.4	9.7	9.8	8.5	10.1	8.1	9.4	9.3
HCM Lane LOS	B	A	A	A	B	A	A	A
HCM 95th-tile Q	1.1	0.9	0.5	0.2	0.6	0	0.5	0.6

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	14	498	60	622	25	121	83	135
Future Volume (vph)	14	498	60	622	25	121	83	135
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	28.1	28.1	28.1	28.1	30.7	30.7	30.7	30.7
Total Split (s)	70.0	70.0	70.0	70.0	50.0	50.0	50.0	50.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%	41.7%	41.7%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1		4.7		4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)	17.1	17.1	17.1	17.1		12.8		12.8
Actuated g/C Ratio	0.42	0.42	0.42	0.42		0.32		0.32
v/c Ratio	0.06	0.35	0.17	0.56		0.20		0.27
Control Delay (s/veh)	9.0	9.0	9.7	10.4		9.2		11.4
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	9.0	9.0	9.7	10.4		9.2		11.4
LOS	A	A	A	B		A		B
Approach Delay (s/veh)		9.0		10.3		9.2		11.4
Approach LOS		A		B		A		B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 40.3	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay (s/veh): 10.0	Intersection LOS: A
Intersection Capacity Utilization 71.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Calle El Segundo & Tahquitz Canyon Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	498	11	60	622	180	25	121	46	83	135	16
Future Volume (veh/h)	14	498	11	60	622	180	25	121	46	83	135	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	513	9	62	641	149	26	125	25	86	139	11
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	374	1529	27	487	1218	283	209	785	150	415	628	52
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	683	3572	63	877	2846	660	274	2564	491	822	2052	169
Grp Volume(v), veh/h	14	255	267	62	400	390	94	0	82	127	0	109
Grp Sat Flow(s),veh/h/ln	683	1777	1858	877	1777	1729	1727	0	1602	1375	0	1667
Q Serve(g_s), s	0.6	3.5	3.5	1.9	6.1	6.1	0.0	0.0	1.4	1.3	0.0	1.8
Cycle Q Clear(g_c), s	6.7	3.5	3.5	5.4	6.1	6.1	1.4	0.0	1.4	2.7	0.0	1.8
Prop In Lane	1.00		0.03	1.00		0.38	0.28		0.31	0.68		0.10
Lane Grp Cap(c), veh/h	374	761	795	487	761	740	653	0	490	584	0	510
V/C Ratio(X)	0.04	0.34	0.34	0.13	0.53	0.53	0.14	0.00	0.17	0.22	0.00	0.21
Avail Cap(c_a), veh/h	1284	3128	3270	1655	3128	3045	2163	0	1968	1862	0	2049
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.3	7.0	7.0	8.8	7.8	7.8	9.3	0.0	9.4	9.7	0.0	9.5
Incr Delay (d2), s/veh	0.0	0.3	0.2	0.1	0.6	0.6	0.1	0.0	0.2	0.2	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.9	0.9	0.3	1.5	1.5	0.4	0.0	0.4	0.6	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.3	7.3	7.3	9.0	8.3	8.4	9.4	0.0	9.5	9.9	0.0	9.7
LnGrp LOS	B	A	A	A	A	A	A		A	A		A
Approach Vol, veh/h		536			852			176			236	
Approach Delay, s/veh		7.4			8.4			9.5			9.8	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.0		20.9		16.0		20.9				
Change Period (Y+Rc), s		4.7		5.1		4.7		5.1				
Max Green Setting (Gmax), s		45.3		64.9		45.3		64.9				
Max Q Clear Time (g_c+I1), s		3.4		8.7		4.7		8.1				
Green Ext Time (p_c), s		1.1		3.5		1.5		6.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			8.4									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	66	0	0	77	0	0	2	0	0	1	14
Future Vol, veh/h	26	66	0	0	77	0	0	2	0	0	1	14
Conflicting Peds, #/hr	0	0	16	0	0	0	0	0	10	0	0	2
Sign Control	Free	Free	Free	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	78	0	0	91	0	0	2	0	0	1	16

Major/Minor	Major1			Minor1			Major2			
Conflicting Flow All	20	0	0	156	174	104	94	0	0
Stage 1	-	-	-	155	155	-	-	-	-
Stage 2	-	-	-	1	20	-	-	-	-
Critical Hdwy	4.12	-	-	6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	-	-	-	5.42	5.52	-	-	-	-
Critical Hdwy Stg 2	-	-	-	5.42	5.52	-	-	-	-
Follow-up Hdwy	2.218	-	-	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	1597	-	-	835	719	951	1501	-	-
Stage 1	-	-	-	873	769	-	-	-	-
Stage 2	-	-	-	1022	879	-	-	-	-
Platoon blocked, %		-	-					-	-
Mov Cap-1 Maneuver	1597	-	-	806	0	928	1478	-	-
Mov Cap-2 Maneuver	-	-	-	806	0	-	-	-	-
Stage 1	-	-	-	843	0	-	-	-	-
Stage 2	-	-	-	1022	0	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	2.06		0
HCM LOS		-	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	SBL	SBT	SBR
Capacity (veh/h)	-	509	-	-	1478	-	-
HCM Lane V/C Ratio	-	0.019	-	-	-	-	-
HCM Control Delay (s/veh)	-	7.3	0	-	0	-	-
HCM Lane LOS	-	A	A	-	A	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-

APPENDIX 6.2: EAC (2027) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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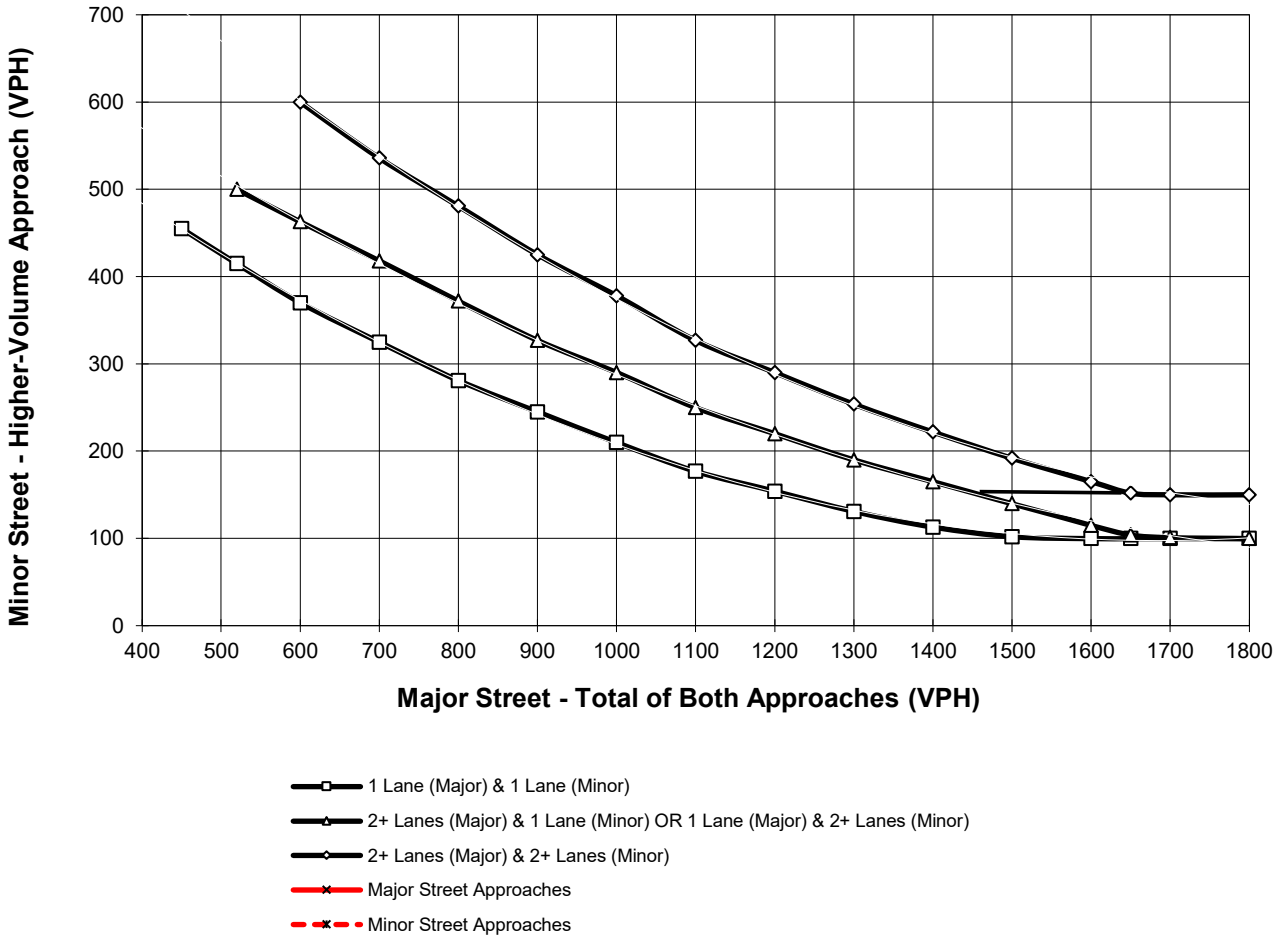
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **2027 Without Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Calle Encilla**
Total of Both Approaches (VPH) = **269**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Andreas Rd.**
High Volume Approach (VPH) = **174**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

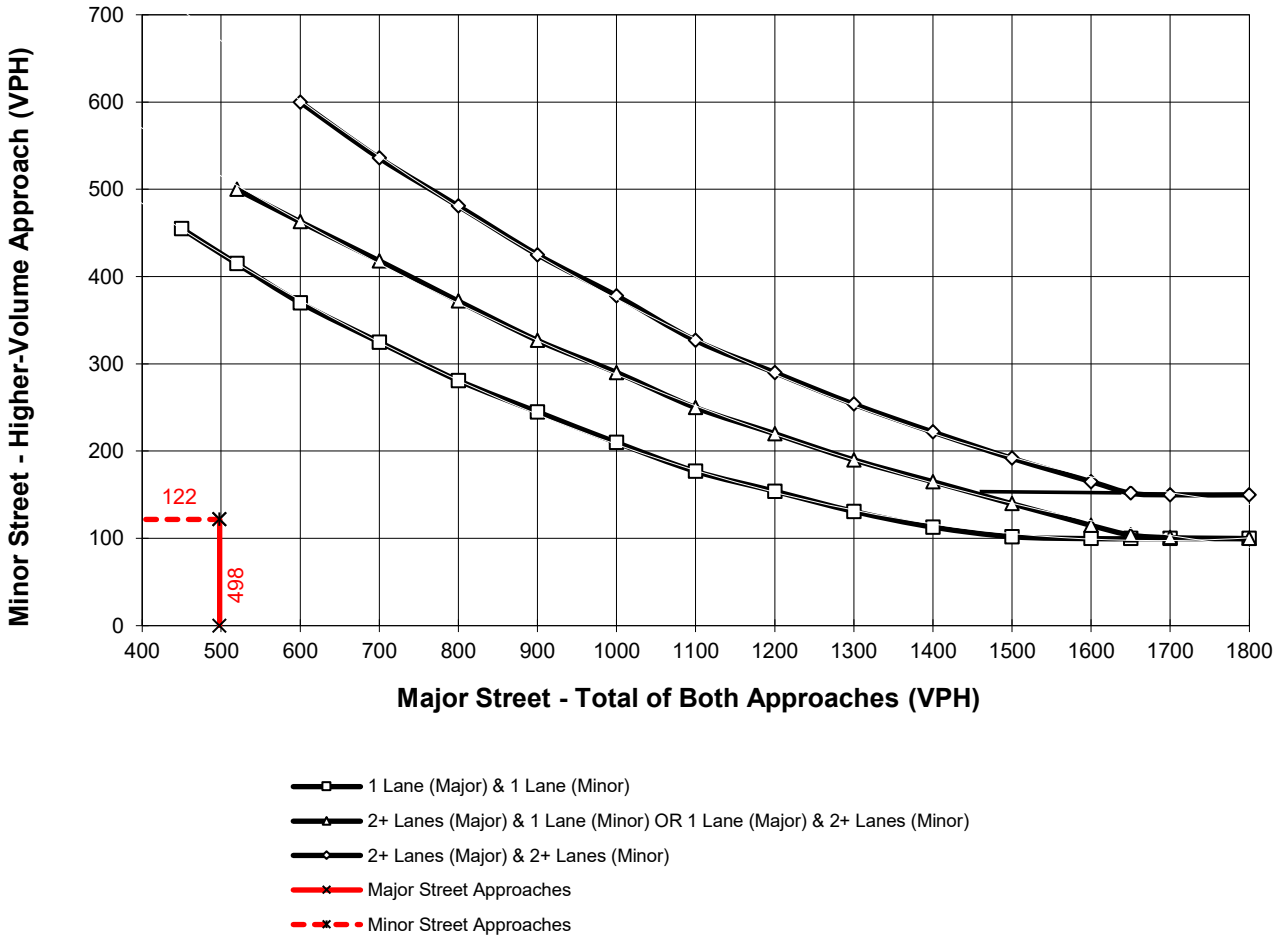
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **2027 Without Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Calle El Segundo**
Total of Both Approaches (VPH) = **498**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Andreas Rd.**
High Volume Approach (VPH) = **122**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

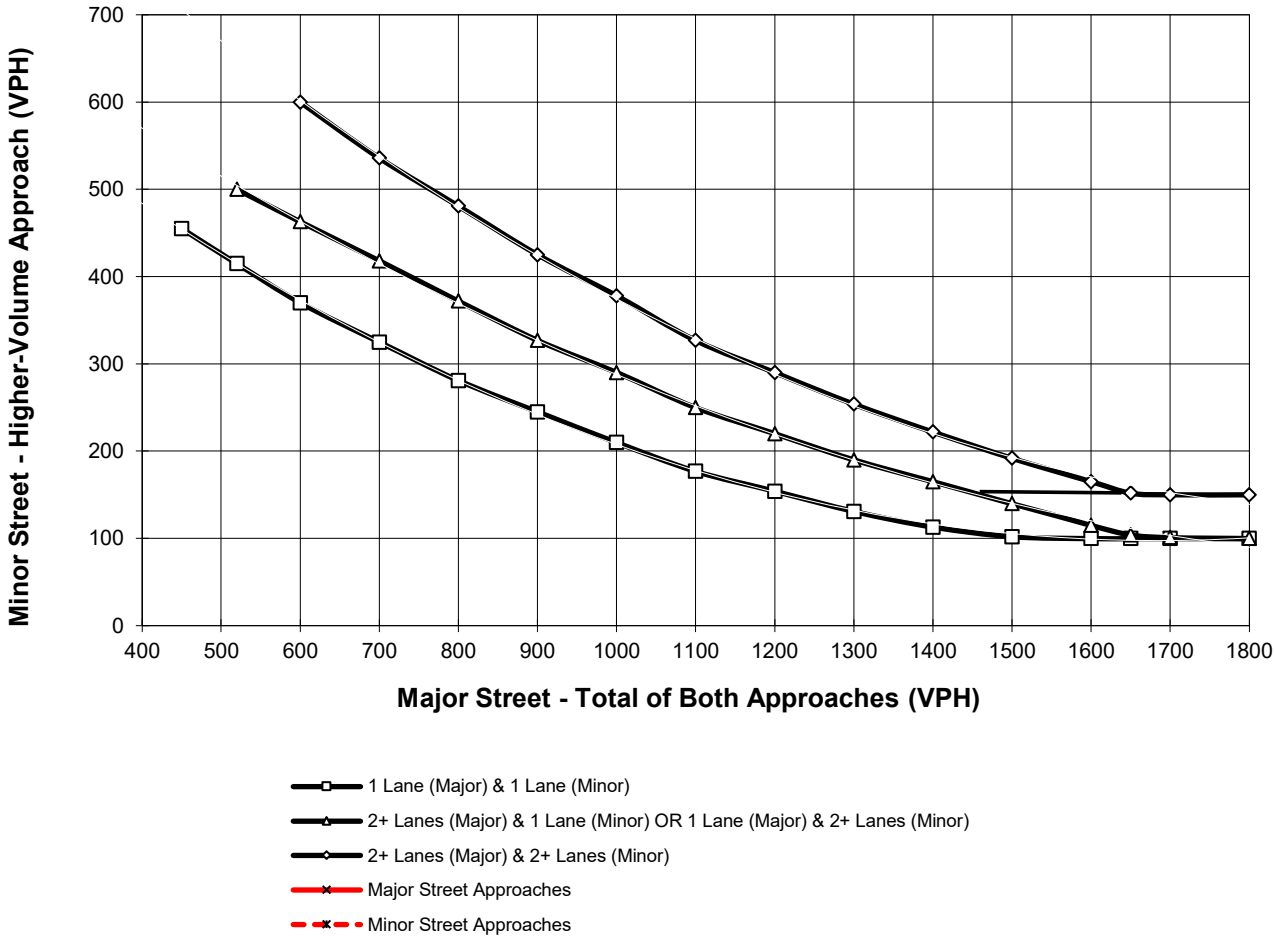
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **2027 Without Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Andreas Rd.** Total of Both Approaches (VPH) = **188**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Calle Alvarado/Driveway 3** High Volume Approach (VPH) = **26**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 7.1: EAPC (2025) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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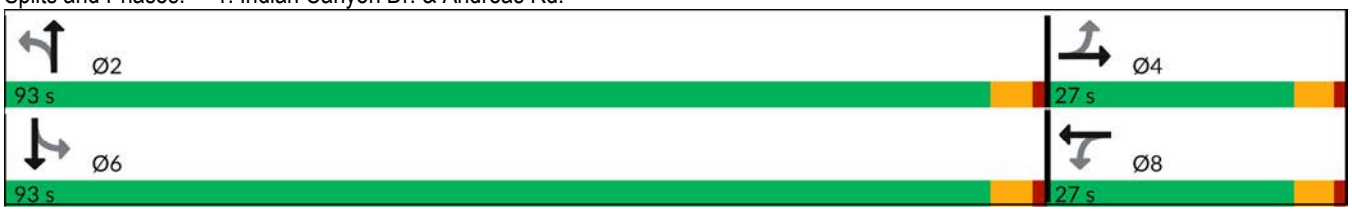
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	55	8	53	20	520	26	294
Future Volume (vph)	25	55	8	53	20	520	26	294
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
Total Split (s)	27.0	27.0	27.0	27.0	93.0	93.0	93.0	93.0
Total Split (%)	22.5%	22.5%	22.5%	22.5%	77.5%	77.5%	77.5%	77.5%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.7		4.7	4.7	4.7	4.7	4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)		11.6		11.6	20.5	20.5	20.5	20.5
Actuated g/C Ratio		0.36		0.36	0.64	0.64	0.64	0.64
v/c Ratio		0.16		0.16	0.04	0.28	0.06	0.31
Control Delay (s/veh)		9.0		7.9	7.5	6.6	7.8	7.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		9.0		7.9	7.5	6.6	7.8	7.7
LOS		A		A	A	A	A	A
Approach Delay (s/veh)		9.0		7.9		6.6		7.7
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 31.9	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.31	
Intersection Signal Delay (s/veh): 7.3	Intersection LOS: A
Intersection Capacity Utilization 39.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Indian Canyon Dr. & Andreas Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	55	1	8	53	25	20	520	14	26	294	21
Future Volume (veh/h)	25	55	1	8	53	25	20	520	14	26	294	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	65	1	9	62	29	24	612	16	31	346	25
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	399	5	151	328	141	499	1419	37	466	690	50
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	285	1439	18	62	1182	508	1009	3535	92	796	1720	124
Grp Volume(v), veh/h	95	0	0	100	0	0	24	307	321	31	0	371
Grp Sat Flow(s),veh/h/ln	1742	0	0	1752	0	0	1009	1777	1850	796	0	1844
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.5	3.7	3.7	0.9	0.0	4.4
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.3	0.0	0.0	4.9	3.7	3.7	4.5	0.0	4.4
Prop In Lane	0.31		0.01	0.09		0.29	1.00		0.05	1.00		0.07
Lane Grp Cap(c), veh/h	643	0	0	620	0	0	499	713	743	466	0	740
V/C Ratio(X)	0.15	0.00	0.00	0.16	0.00	0.00	0.05	0.43	0.43	0.07	0.00	0.50
Avail Cap(c_a), veh/h	1444	0	0	1454	0	0	3142	5368	5590	2550	0	5572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.0	0.0	0.0	8.1	0.0	0.0	8.4	6.3	6.3	8.0	0.0	6.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.4	0.1	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.3	0.0	0.0	0.1	0.8	0.8	0.1	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.2	0.0	0.0	8.2	0.0	0.0	8.4	6.7	6.7	8.0	0.0	7.1
LnGrp LOS	A			A			A	A	A	A		A
Approach Vol, veh/h		95			100			652			402	
Approach Delay, s/veh		8.2			8.2			6.8			7.2	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.4	12.8	16.4	12.8
Change Period (Y+Rc), s	4.7	4.7	4.7	4.7
Max Green Setting (Gmax), s	88.3	22.3	88.3	22.3
Max Q Clear Time (g_c+I1), s	6.9	3.1	6.5	3.3
Green Ext Time (p_c), s	4.6	0.4	2.8	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	7.1
HCM 7th LOS	A

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	84	4	2	84	3	4	56	3	6	42	7
Future Vol, veh/h	7	84	4	2	84	3	4	56	3	6	42	7
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	94	4	2	94	3	4	63	3	7	47	8
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	8.9	8.4	8.3	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	7%	2%	0%	100%	0%
Vol Thru, %	0%	95%	88%	98%	0%	0%	86%
Vol Right, %	0%	5%	4%	0%	100%	0%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	59	95	86	3	6	49
LT Vol	4	0	7	2	0	6	0
Through Vol	0	56	84	84	0	0	42
RT Vol	0	3	4	0	3	0	7
Lane Flow Rate	4	66	107	97	3	7	55
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.007	0.094	0.148	0.134	0.004	0.011	0.077
Departure Headway (Hd)	5.628	5.089	4.987	4.982	4.268	5.637	5.034
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	637	705	721	721	840	636	713
Service Time	3.348	2.81	3.006	2.701	1.987	3.358	2.755
HCM Lane V/C Ratio	0.006	0.094	0.148	0.135	0.004	0.011	0.077
HCM Control Delay, s/veh	8.4	8.3	8.9	8.5	7	8.4	8.2
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0.3	0.5	0.5	0	0	0.2

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	56	28	6	51	1	41	194	13	3	151	6
Future Vol, veh/h	9	56	28	6	51	1	41	194	13	3	151	6
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	60	30	6	54	1	44	206	14	3	161	6
Number of Lanes	0	1	1	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	8.8	9.1	9.2	8.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	30%	0%	14%	0%	11%	0%	4%	0%
Vol Thru, %	70%	88%	86%	0%	89%	0%	96%	93%
Vol Right, %	0%	12%	0%	100%	0%	100%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	138	110	65	28	57	1	79	82
LT Vol	41	0	9	0	6	0	3	0
Through Vol	97	97	56	0	51	0	76	76
RT Vol	0	13	0	28	0	1	0	6
Lane Flow Rate	147	117	69	30	61	1	84	87
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.215	0.164	0.11	0.041	0.097	0.001	0.122	0.125
Departure Headway (Hd)	5.284	5.052	5.734	4.958	5.763	5.004	5.251	5.18
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	678	708	623	718	619	711	681	690
Service Time	3.028	2.796	3.489	2.714	3.522	2.763	2.997	2.926
HCM Lane V/C Ratio	0.217	0.165	0.111	0.042	0.099	0.001	0.123	0.126
HCM Control Delay, s/veh	9.5	8.8	9.2	7.9	9.1	7.8	8.7	8.7
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.8	0.6	0.4	0.1	0.3	0	0.4	0.4

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	5	243	6	4	180
Future Vol, veh/h	8	5	243	6	4	180
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	5	264	7	4	196

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	374	135	0	0	271	0
Stage 1	267	-	-	-	-	-
Stage 2	107	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	600	889	-	-	1290	-
Stage 1	753	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	598	889	-	-	1290	-
Mov Cap-2 Maneuver	598	-	-	-	-	-
Stage 1	753	-	-	-	-	-
Stage 2	903	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.37	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	684	78	-
HCM Lane V/C Ratio	-	-	0.021	0.003	-
HCM Control Delay (s/veh)	-	-	10.4	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	8	241	8	6	182
Future Vol, veh/h	10	8	241	8	6	182
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	9	262	9	7	198

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	378	135	0	0	271	0
Stage 1	266	-	-	-	-	-
Stage 2	112	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	596	889	-	-	1290	-
Stage 1	754	-	-	-	-	-
Stage 2	900	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	593	889	-	-	1290	-
Mov Cap-2 Maneuver	593	-	-	-	-	-
Stage 1	754	-	-	-	-	-
Stage 2	896	-	-	-	-	-

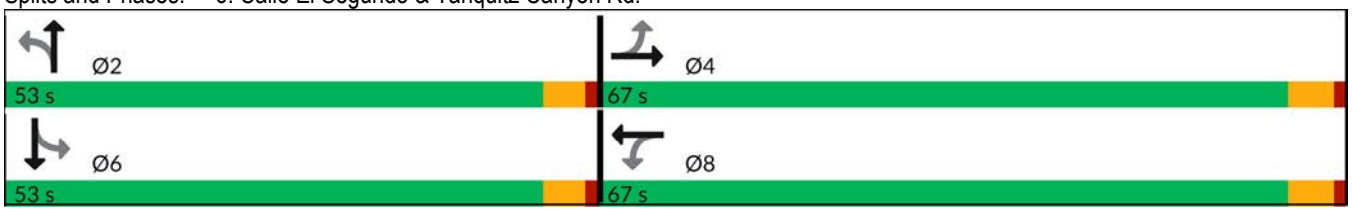
Approach	WB	NB	SB
HCM Control Delay, s/v	10.32	0	0.29
HCM LOS	B		

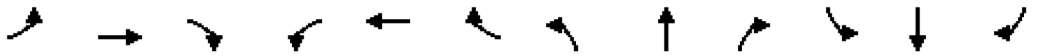
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	696	115	-
HCM Lane V/C Ratio	-	-	0.028	0.005	-
HCM Control Delay (s/veh)	-	-	10.3	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	15	321	27	382	11	122	63	109
Future Volume (vph)	15	321	27	382	11	122	63	109
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	28.1	28.1	28.1	28.1	30.7	30.7	30.7	30.7
Total Split (s)	67.0	67.0	67.0	67.0	53.0	53.0	53.0	53.0
Total Split (%)	55.8%	55.8%	55.8%	55.8%	44.2%	44.2%	44.2%	44.2%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1		4.7		4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)	12.8	12.8	12.8	12.8		12.7		12.7
Actuated g/C Ratio	0.36	0.36	0.36	0.36		0.35		0.35
v/c Ratio	0.05	0.29	0.08	0.45		0.16		0.21
Control Delay (s/veh)	9.6	9.3	9.6	9.6		7.1		8.4
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	9.6	9.3	9.6	9.6		7.1		8.4
LOS	A	A	A	A		A		A
Approach Delay (s/veh)		9.4		9.6		7.1		8.4
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 36	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay (s/veh): 9.0	Intersection LOS: A
Intersection Capacity Utilization 56.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: Calle El Segundo & Tahquitz Canyon Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	321	20	27	382	135	11	122	40	63	109	22
Future Volume (veh/h)	15	321	20	27	382	135	11	122	40	63	109	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	345	19	29	411	117	12	131	27	68	117	21
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	433	1222	67	511	972	273	154	952	185	435	672	124
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	870	3421	188	1012	2720	765	82	2803	544	756	1977	365
Grp Volume(v), veh/h	16	179	185	29	267	261	91	0	79	112	0	94
Grp Sat Flow(s),veh/h/ln	870	1777	1831	1012	1777	1708	1829	0	1600	1470	0	1628
Q Serve(g_s), s	0.5	2.3	2.3	0.7	3.7	3.8	0.0	0.0	1.1	0.1	0.0	1.3
Cycle Q Clear(g_c), s	4.2	2.3	2.3	3.0	3.7	3.8	1.1	0.0	1.1	1.4	0.0	1.3
Prop In Lane	1.00		0.10	1.00		0.45	0.13		0.34	0.60		0.22
Lane Grp Cap(c), veh/h	433	635	654	511	635	610	747	0	544	678	0	553
V/C Ratio(X)	0.04	0.28	0.28	0.06	0.42	0.43	0.12	0.00	0.15	0.17	0.00	0.17
Avail Cap(c_a), veh/h	1787	3399	3503	2086	3399	3268	2769	0	2388	2311	0	2430
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.5	7.4	7.4	8.5	7.9	7.9	7.4	0.0	7.4	7.5	0.0	7.5
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	0.4	0.5	0.1	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.6	0.6	0.1	0.9	0.9	0.3	0.0	0.3	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.5	7.7	7.7	8.6	8.3	8.4	7.5	0.0	7.5	7.6	0.0	7.6
LnGrp LOS	A	A	A	A	A	A	A		A	A		A
Approach Vol, veh/h		380			557			170			206	
Approach Delay, s/veh		7.7			8.3			7.5			7.6	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.7		16.7		15.7		16.7				
Change Period (Y+Rc), s		4.7		5.1		4.7		5.1				
Max Green Setting (Gmax), s		48.3		61.9		48.3		61.9				
Max Q Clear Time (g_c+I1), s		3.1		6.2		3.4		5.8				
Green Ext Time (p_c), s		1.0		2.3		1.3		3.7				

Intersection Summary												
HCM 7th Control Delay, s/veh			8.0									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	45	11	0	37	0	13	8	0	0	7	11
Future Vol, veh/h	12	45	11	0	37	0	13	8	0	0	7	11
Conflicting Peds, #/hr	0	0	14	0	0	0	0	0	4	0	0	3
Sign Control	Free	Free	Free	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	57	57	57	57	57	57	57	57	57	57
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	79	19	0	65	0	23	14	0	0	12	19

Major/Minor	Major1			Minor1			Major2			
Conflicting Flow All	35	0	0	157	179	107	112	0	0	
Stage 1	-	-	-	145	145	-	-	-	-	
Stage 2	-	-	-	12	35	-	-	-	-	
Critical Hdwy	4.12	-	-	6.42	6.52	6.22	4.12	-	-	
Critical Hdwy Stg 1	-	-	-	5.42	5.52	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	5.42	5.52	-	-	-	-	
Follow-up Hdwy	2.218	-	-	3.518	4.018	3.318	2.218	-	-	
Pot Cap-1 Maneuver	1577	-	-	834	715	948	1477	-	-	
Stage 1	-	-	-	883	777	-	-	-	-	
Stage 2	-	-	-	1011	866	-	-	-	-	
Platoon blocked, %		-	-					-	-	
Mov Cap-1 Maneuver	1577	-	-	812	0	931	1458	-	-	
Mov Cap-2 Maneuver	-	-	-	812	0	-	-	-	-	
Stage 1	-	-	-	858	0	-	-	-	-	
Stage 2	-	-	-	1011	0	-	-	-	-	

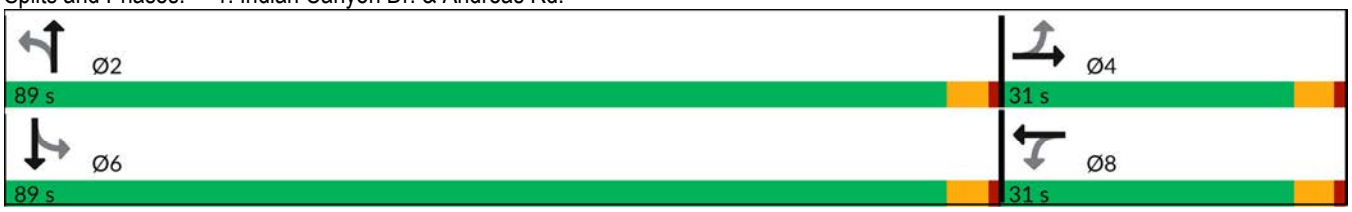
Approach	EB	NB	SB
HCM Control Delay, s/v	1.29	9.65	0
HCM LOS		A	

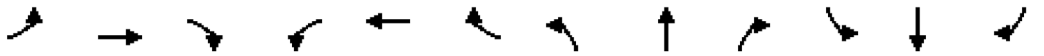
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	SBL	SBT	SBR
Capacity (veh/h)	812	306	-	-	1458	-	-
HCM Lane V/C Ratio	0.045	0.013	-	-	-	-	-
HCM Control Delay (s/veh)	9.6	7.3	0	-	0	-	-
HCM Lane LOS	A	A	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	52	102	28	100	39	784	56	516
Future Volume (vph)	52	102	28	100	39	784	56	516
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
Total Split (s)	31.0	31.0	31.0	31.0	89.0	89.0	89.0	89.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	74.2%	74.2%	74.2%	74.2%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.7		4.7	4.7	4.7	4.7	4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)		12.4		12.4	23.0	23.0	23.0	23.0
Actuated g/C Ratio		0.27		0.27	0.51	0.51	0.51	0.51
v/c Ratio		0.42		0.44	0.14	0.50	0.23	0.65
Control Delay (s/veh)		18.9		17.9	7.1	8.1	8.7	11.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		18.9		17.9	7.1	8.1	8.7	11.7
LOS		B		B	A	A	A	B
Approach Delay (s/veh)		18.9		17.9		8.1		11.4
Approach LOS		B		B		A		B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 45.3	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay (s/veh): 11.2	Intersection LOS: B
Intersection Capacity Utilization 67.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Indian Canyon Dr. & Andreas Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	102	16	28	100	59	39	784	49	56	516	43
Future Volume (veh/h)	52	102	16	28	100	59	39	784	49	56	516	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.98		0.92	0.96		0.97	0.99		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	110	15	30	108	48	42	843	49	60	555	46
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	333	38	136	314	123	379	1713	100	378	853	71
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	325	1191	137	140	1121	438	813	3407	198	623	1696	141
Grp Volume(v), veh/h	181	0	0	186	0	0	42	440	452	60	0	601
Grp Sat Flow(s),veh/h/ln	1653	0	0	1699	0	0	813	1777	1828	623	0	1837
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.7	7.1	7.1	3.0	0.0	10.5
Cycle Q Clear(g_c), s	3.4	0.0	0.0	3.7	0.0	0.0	12.2	7.1	7.1	10.1	0.0	10.5
Prop In Lane	0.31		0.08	0.16		0.26	1.00		0.11	1.00		0.08
Lane Grp Cap(c), veh/h	571	0	0	572	0	0	379	893	919	378	0	924
V/C Ratio(X)	0.32	0.00	0.00	0.33	0.00	0.00	0.11	0.49	0.49	0.16	0.00	0.65
Avail Cap(c_a), veh/h	1086	0	0	1109	0	0	1555	3464	3564	1279	0	3581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	0.0	0.0	12.5	0.0	0.0	12.5	7.1	7.1	10.4	0.0	7.9
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.3	0.0	0.0	0.1	0.4	0.4	0.2	0.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	1.3	0.0	0.0	0.3	1.9	2.0	0.4	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.8	0.0	0.0	12.9	0.0	0.0	12.6	7.5	7.5	10.6	0.0	8.7
LnGrp LOS	B			B			B	A	A	B		A
Approach Vol, veh/h		181			186			934			661	
Approach Delay, s/veh		12.8			12.9			7.7			8.9	
Approach LOS		B			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.4		16.8		26.4		16.8				
Change Period (Y+Rc), s		4.7		4.7		4.7		4.7				
Max Green Setting (Gmax), s		84.3		26.3		84.3		26.3				
Max Q Clear Time (g_c+I1), s		14.2		5.4		12.5		5.7				
Green Ext Time (p_c), s		7.5		1.0		5.7		1.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			9.1									
HCM 7th LOS			A									

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	140	40	3	137	9	23	111	9	2	104	20
Future Vol, veh/h	20	140	40	3	137	9	23	111	9	2	104	20
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	163	47	3	159	10	27	129	10	2	121	23
Number of Lanes	0	1	0	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	11.9	10.4	10.2	10.4
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	10%	2%	0%	100%	0%
Vol Thru, %	0%	93%	70%	98%	0%	0%	84%
Vol Right, %	0%	8%	20%	0%	100%	0%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	120	200	140	9	2	124
LT Vol	23	0	20	3	0	2	0
Through Vol	0	111	140	137	0	0	104
RT Vol	0	9	40	0	9	0	20
Lane Flow Rate	27	140	233	163	10	2	144
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.048	0.228	0.365	0.262	0.015	0.004	0.234
Departure Headway (Hd)	6.442	5.882	5.643	5.789	5.071	6.475	5.854
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	557	611	640	622	706	553	614
Service Time	4.171	3.611	3.668	3.515	2.797	4.206	3.585
HCM Lane V/C Ratio	0.048	0.229	0.364	0.262	0.014	0.004	0.235
HCM Control Delay, s/veh	9.5	10.3	11.9	10.6	7.9	9.2	10.4
HCM Lane LOS	A	B	B	B	A	A	B
HCM 95th-tile Q	0.2	0.9	1.7	1	0	0	0.9

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	88	53	10	95	4	46	267	14	4	180	11
Future Vol, veh/h	7	88	53	10	95	4	46	267	14	4	180	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	94	56	11	101	4	49	284	15	4	191	12
Number of Lanes	0	1	1	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	9.7	10.5	10.6	9.7
HCM LOS	A	B	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	26%	0%	7%	0%	10%	0%	4%	0%
Vol Thru, %	74%	91%	93%	0%	90%	0%	96%	89%
Vol Right, %	0%	9%	0%	100%	0%	100%	0%	11%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	180	148	95	53	105	4	94	101
LT Vol	46	0	7	0	10	0	4	0
Through Vol	134	134	88	0	95	0	90	90
RT Vol	0	14	0	53	0	4	0	11
Lane Flow Rate	191	157	101	56	112	4	100	107
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.306	0.243	0.175	0.086	0.196	0.007	0.162	0.171
Departure Headway (Hd)	5.765	5.569	6.236	5.489	6.304	5.546	5.837	5.738
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	624	645	576	653	570	645	615	625
Service Time	3.493	3.297	3.968	3.222	4.036	3.278	3.57	3.471
HCM Lane V/C Ratio	0.306	0.243	0.175	0.086	0.196	0.006	0.163	0.171
HCM Control Delay, s/veh	11	10.1	10.3	8.7	10.6	8.3	9.7	9.7
HCM Lane LOS	B	B	B	A	B	A	A	A
HCM 95th-tile Q	1.3	0.9	0.6	0.3	0.7	0	0.6	0.6

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	5	43	11	7	52
Future Vol, veh/h	8	5	43	11	7	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	5	47	12	8	57

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	96	29	0	0	59	0
Stage 1	53	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	893	1039	-	-	1543	-
Stage 1	963	-	-	-	-	-
Stage 2	973	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	888	1039	-	-	1543	-
Mov Cap-2 Maneuver	888	-	-	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	969	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.89	0	0.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	941	427	-
HCM Lane V/C Ratio	-	-	0.015	0.005	-
HCM Control Delay (s/veh)	-	-	8.9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	8	46	15	11	49
Future Vol, veh/h	11	8	46	15	11	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	9	50	16	12	53

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	109	33	0	0	66	0
Stage 1	58	-	-	-	-	-
Stage 2	51	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	877	1033	-	-	1533	-
Stage 1	957	-	-	-	-	-
Stage 2	966	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	870	1033	-	-	1533	-
Mov Cap-2 Maneuver	870	-	-	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	958	-	-	-	-	-

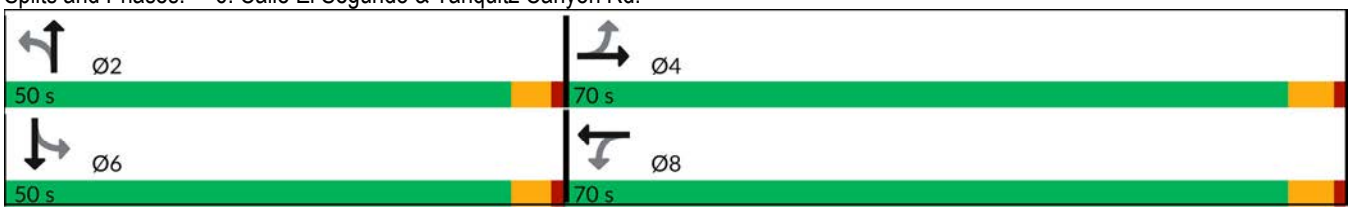
Approach	WB	NB	SB
HCM Control Delay, s/v	8.95	0	1.38
HCM LOS	A		

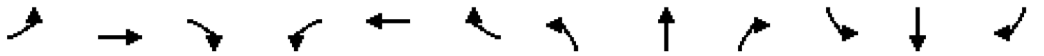
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	932	660	-
HCM Lane V/C Ratio	-	-	0.022	0.008	-
HCM Control Delay (s/veh)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	498	60	622	25	128	88	140
Future Volume (vph)	25	498	60	622	25	128	88	140
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	28.1	28.1	28.1	28.1	30.7	30.7	30.7	30.7
Total Split (s)	70.0	70.0	70.0	70.0	50.0	50.0	50.0	50.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%	41.7%	41.7%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.7	3.7	3.7	3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1		4.7		4.7
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)	17.3	17.3	17.3	17.3		12.8		12.8
Actuated g/C Ratio	0.43	0.43	0.43	0.43		0.32		0.32
v/c Ratio	0.11	0.35	0.17	0.57		0.21		0.30
Control Delay (s/veh)	9.8	9.0	9.7	10.4		9.4		11.5
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	9.8	9.0	9.7	10.4		9.4		11.5
LOS	A	A	A	B		A		B
Approach Delay (s/veh)		9.0		10.3		9.4		11.5
Approach LOS		A		B		A		B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 40.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay (s/veh): 10.0	Intersection LOS: B
Intersection Capacity Utilization 71.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Calle El Segundo & Tahquitz Canyon Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	498	11	60	622	187	25	128	46	88	140	24
Future Volume (veh/h)	25	498	11	60	622	187	25	128	46	88	140	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	513	9	62	641	156	26	132	25	91	144	20
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	372	1537	27	488	1212	294	202	795	144	406	592	85
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	679	3572	63	877	2817	684	258	2606	473	801	1941	279
Grp Volume(v), veh/h	26	255	267	62	404	393	98	0	85	137	0	118
Grp Sat Flow(s),veh/h/ln	679	1777	1858	877	1777	1724	1731	0	1605	1377	0	1645
Q Serve(g_s), s	1.1	3.5	3.5	1.9	6.2	6.2	0.0	0.0	1.4	1.5	0.0	2.0
Cycle Q Clear(g_c), s	7.3	3.5	3.5	5.4	6.2	6.2	1.4	0.0	1.4	2.9	0.0	2.0
Prop In Lane	1.00		0.03	1.00		0.40	0.27		0.29	0.66		0.17
Lane Grp Cap(c), veh/h	372	764	799	488	764	742	651	0	490	582	0	502
V/C Ratio(X)	0.07	0.33	0.33	0.13	0.53	0.53	0.15	0.00	0.17	0.24	0.00	0.23
Avail Cap(c_a), veh/h	1271	3116	3258	1649	3116	3024	2154	0	1965	1854	0	2013
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.5	7.0	7.0	8.8	7.8	7.8	9.4	0.0	9.4	9.9	0.0	9.6
Incr Delay (d2), s/veh	0.1	0.3	0.2	0.1	0.6	0.6	0.1	0.0	0.2	0.2	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.9	0.9	0.3	1.6	1.5	0.5	0.0	0.4	0.7	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.6	7.3	7.3	8.9	8.3	8.4	9.5	0.0	9.6	10.1	0.0	9.9
LnGrp LOS	B	A	A	A	A	A	A		A	B		A
Approach Vol, veh/h		548			859			183			255	
Approach Delay, s/veh		7.4			8.4			9.6			10.0	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.0		21.0		16.0		21.0				
Change Period (Y+Rc), s		4.7		5.1		4.7		5.1				
Max Green Setting (Gmax), s		45.3		64.9		45.3		64.9				
Max Q Clear Time (g_c+I1), s		3.4		9.3		4.9		8.2				
Green Ext Time (p_c), s		1.1		3.6		1.7		6.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			8.4									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	66	19	0	77	0	14	10	0	0	12	14
Future Vol, veh/h	26	66	19	0	77	0	14	10	0	0	12	14
Conflicting Peds, #/hr	0	0	16	0	0	0	0	0	10	0	0	2
Sign Control	Free	Free	Free	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	78	22	0	91	0	16	12	0	0	14	16

Major/Minor	Major1			Minor1			Major2			
Conflicting Flow All	33	0	0	180	199	115	116	0	0	
Stage 1	-	-	-	166	166	-	-	-	-	
Stage 2	-	-	-	14	33	-	-	-	-	
Critical Hdwy	4.12	-	-	6.42	6.52	6.22	4.12	-	-	
Critical Hdwy Stg 1	-	-	-	5.42	5.52	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	5.42	5.52	-	-	-	-	
Follow-up Hdwy	2.218	-	-	3.518	4.018	3.318	2.218	-	-	
Pot Cap-1 Maneuver	1579	-	-	809	697	938	1473	-	-	
Stage 1	-	-	-	863	761	-	-	-	-	
Stage 2	-	-	-	1009	868	-	-	-	-	
Platoon blocked, %		-	-					-	-	
Mov Cap-1 Maneuver	1579	-	-	781	0	915	1450	-	-	
Mov Cap-2 Maneuver	-	-	-	781	0	-	-	-	-	
Stage 1	-	-	-	833	0	-	-	-	-	
Stage 2	-	-	-	1009	0	-	-	-	-	

Approach	EB	NB	SB
HCM Control Delay, s/v	1.72	9.78	0
HCM LOS		A	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	SBL	SBT	SBR
Capacity (veh/h)	781	404	-	-	1450	-	-
HCM Lane V/C Ratio	0.036	0.019	-	-	-	-	-
HCM Control Delay (s/veh)	9.8	7.3	0	-	0	-	-
HCM Lane LOS	A	A	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-

APPENDIX 7.2: EAPC (2027) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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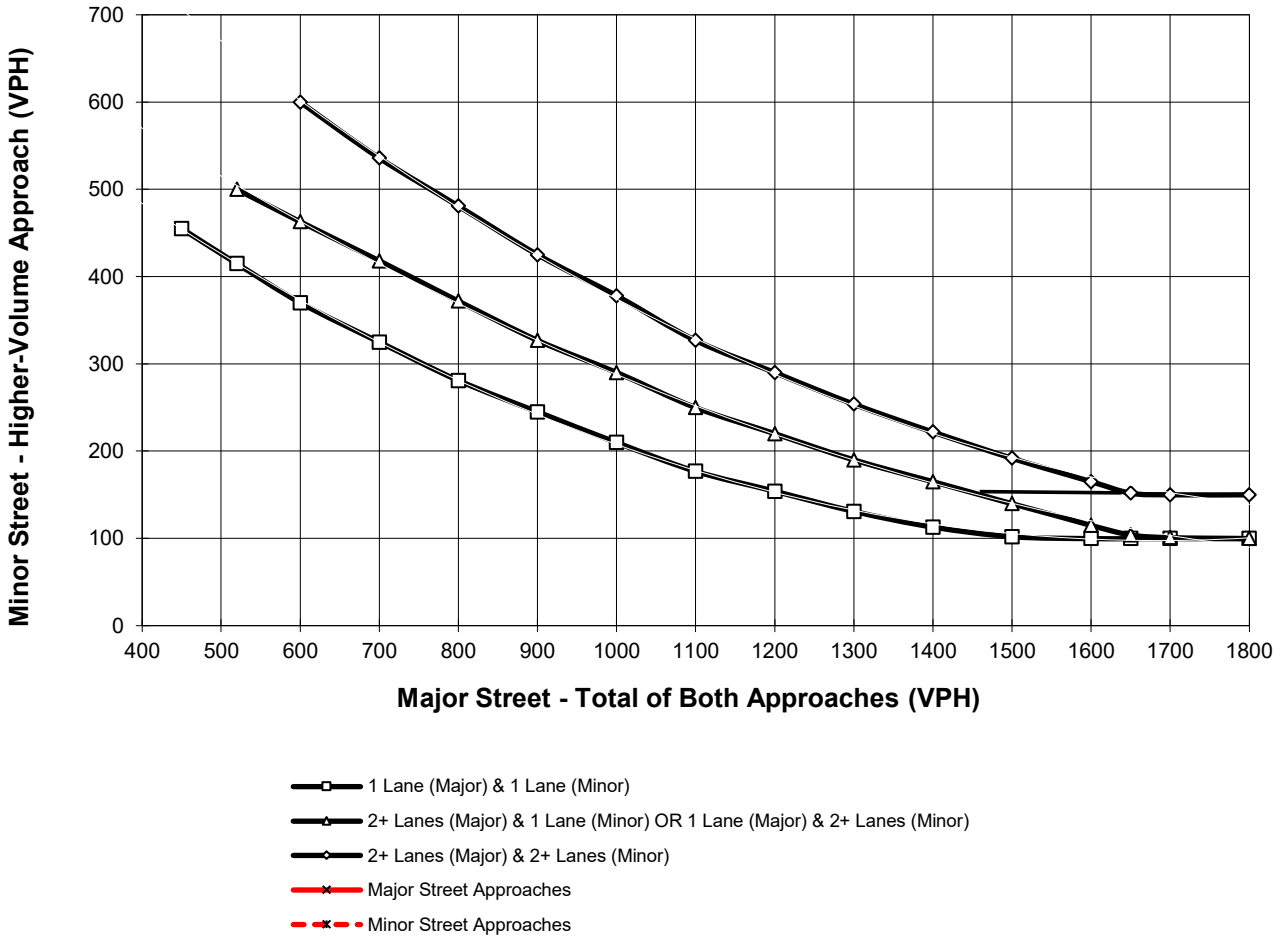
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **2027 With Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Calle Encilla**
Total of Both Approaches (VPH) = **269**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Andreas Rd.**
High Volume Approach (VPH) = **200**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

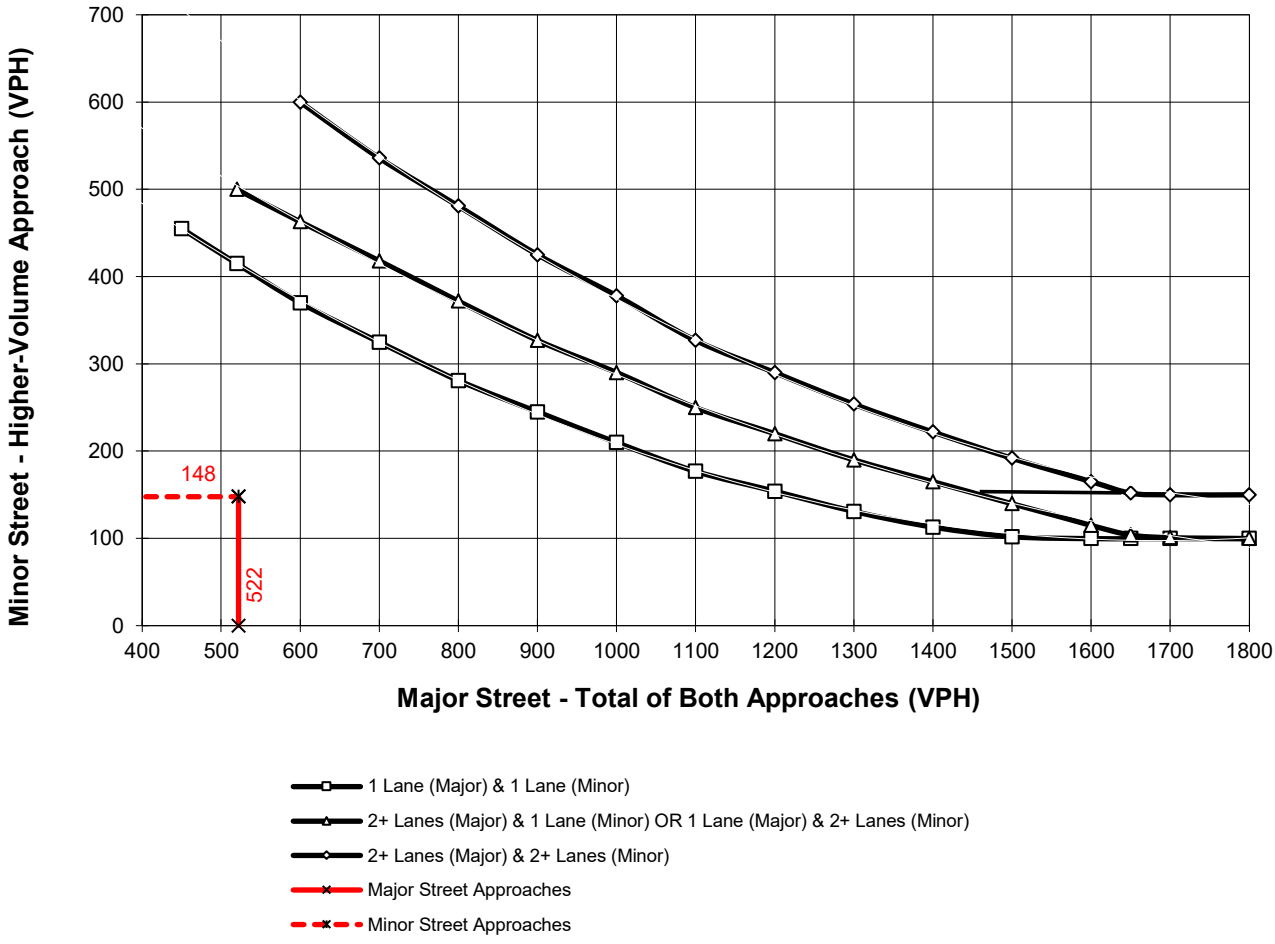
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **2027 With Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Calle El Segundo**
Total of Both Approaches (VPH) = **522**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Andreas Rd.**
High Volume Approach (VPH) = **148**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2027 WP
				CALC CS	DATE	09/11/24
Jurisdiction: City of Palm Springs				CHK CS	DATE	09/11/24
Major Street: Calle El Segundo				Critical Approach Speed (Major)		30 mph
Minor Street: Driveway 1				Critical Approach Speed (Minor)		25 mph

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

Major Street Future ADT = **1,354** vpd Minor Street Future ADT = **172** vpd

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

or

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

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **1,354**	*1* **172**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **1,354**	*1* **172**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 7% **B** 11%

2 CONDITIONS 80%

2 CONDITIONS 80%

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

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

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

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2027 WP
				CALC CS	DATE	09/11/24
Jurisdiction: City of Palm Springs				CHK CS	DATE	09/11/24
Major Street: Calle El Segundo				Critical Approach Speed (Major)		30 mph
Minor Street: Driveway 1				Critical Approach Speed (Minor)		25 mph

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

Major Street Future ADT = **1,423** vpd Minor Street Future ADT = **241** vpd

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

or **URBAN (U)**

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

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street: *1* **1,423** / Minor Street: *1* **241**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach	Urban	Rural	Urban	Rural
Major Street: *1* **1,423** / Minor Street: *1* **241**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 10% B: 12%				

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

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

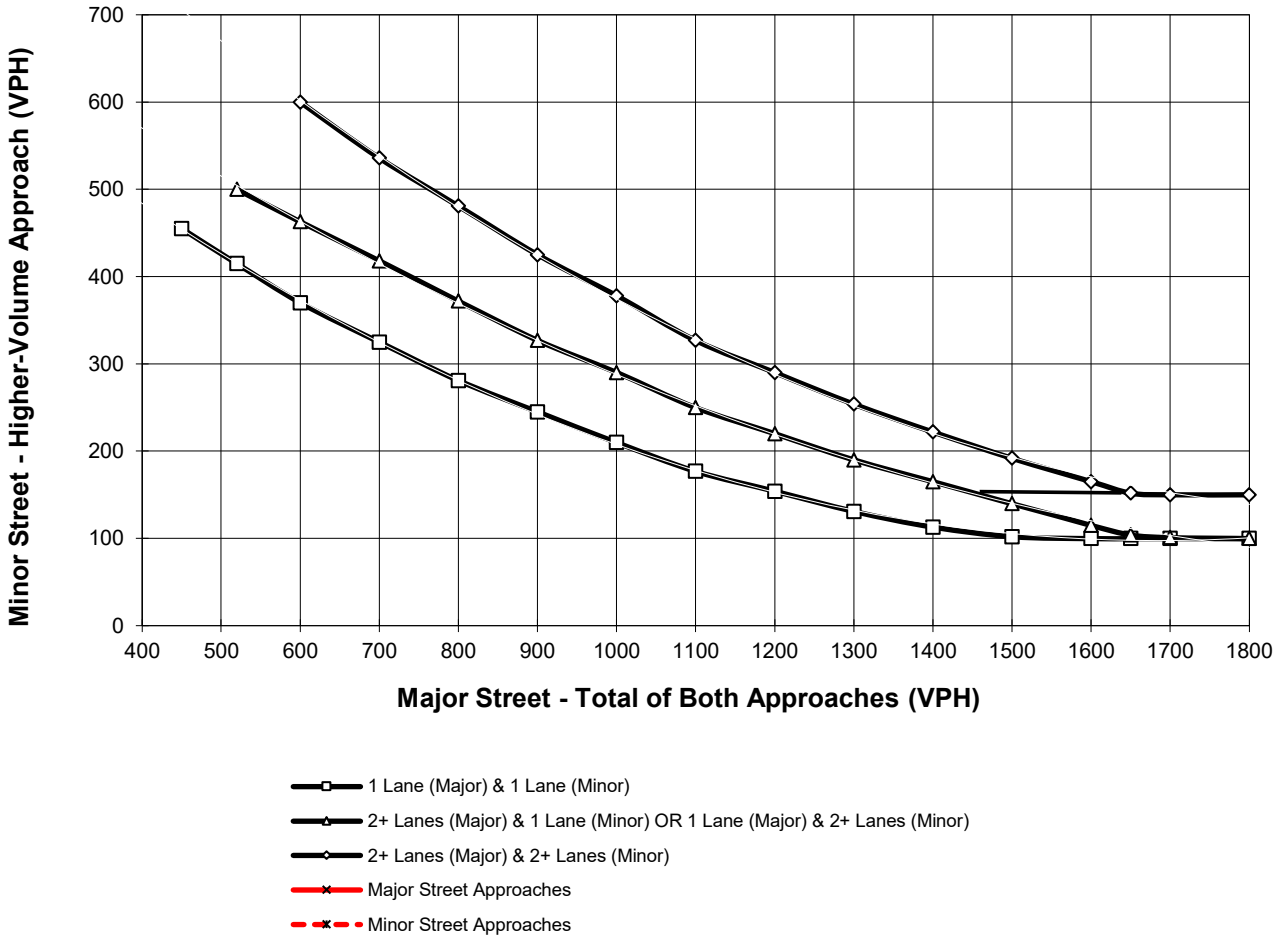
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **2027 With Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Andreas Rd.** Total of Both Approaches (VPH) = **188**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Calle Alvarado/Driveway 3** High Volume Approach (VPH) = **24**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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